



SMD Power Inductors



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SMD Power Inductor

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LMax SMD Shielded Power Inductor



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Inductance Range: 0.47 - 470 μ H
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Inductance Range: 0.47 - 470 μ H
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LMax Low Profile Power Inductor



LMLP Series – Style C 49

Inductance Range: 0.47 - 470 μ H
Rated Current: 0.53 - 30 A



LMLP Series – Style D 57

Inductance Range: 0.47 - 470 μ H
Rated Current: 0.53 - 30 A

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LMax SMD Power Inductor

LMXN Series – Non-Shielded Style B



FEATURES

- Miniature surface mount design
- High power, High saturation inductors
- Very low resistance
- Maximum power density
- Ideal inductors for DC–DC converters
- Available on tape and reel for auto surface mounting

APPLICATIONS

- Notebook Computers
- Handheld Communications
- LCD Televisions
- Power Supply For VTRs
- DC/DC Converters, etc.

CHARACTERISTICS

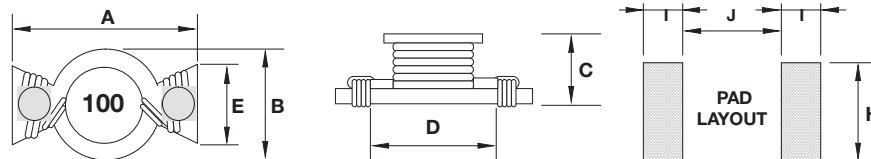
- Saturation Rated Current: The current when the inductance becomes 30% lower than its initial value. (Ta=25°C)
- Operating temperature range: -40 ~ 85°C

INDUCTANCE AND RATED CURRENT RANGES

- 0705 0.47μH ~ 22.0μH 7.7 ~ 0.70A
- 0906 0.56μH ~ 100μH 7.7 ~ 0.53A
- 1310 0.47μH ~ 100μH 11.4 ~ 0.95A
- 1913 0.47μH ~ 100μH 25.1 ~ 1.80A
- 2216 0.78μH ~ 470μH 30.0 ~ 0.8A
- Electrical specifications at 25°C



DIMENSIONS



mm (inches)

| Type | A max. | B max. | C max. | D | E | H | I | J |
|------|------------------|------------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|
| 0705 | 7.50 (0.295) | 5.20 (0.205) | 3.20 (0.126) | 4.60 (0.181) | 2.50 (0.098) | 4.00 (0.157) | 2.00 (0.079) | 4.00 (0.157) |
| 0906 | 8.89 (0.350) | 6.40 (0.252) | 5.00 (0.197) | 5.84 (0.230) | 2.60 (0.103) | 4.06 (0.160) | 2.00 (0.079) | 5.08 (0.200) |
| 1310 | 13.20 (0.560) | 9.90 (0.390) | 6.35 (0.250) | 9.50 (0.374) | 4.50 (0.177) | 6.50 (0.256) | 2.30 (0.091) | 9.00 (0.344) |
| 1913 | 19.40 (0.764) | 13.30 (0.524) | 6.80 (0.268) | 12.7 (0.500) | 6.60 (0.260) | 8.00 (0.315) | 3.80 (0.150) | 11.7 (0.460) |
| 2216 | 22.35 (0.880) | 16.26 (0.604) | 8.00 (0.315) | 16.0 (0.630) | 8.00 (0.315) | 8.64 (0.340) | 4.30 (0.169) | 14.35 (0.565) |

HOW TO ORDER

| | | | | | | | | |
|---------------------|-------------------|-----------------------------------|------------------------------|---|--------------|--------------------|----------------|------------------|
| LM | XN | 0705 | M | R04 | B | T | A | S |
| Family | Series | Size | Tolerance | Inductance | Style | Termination | Special | Packaging |
| LM = Power Inductor | XN = Non-Shielded | 0705 = 7x5xh (h = see catalog) | M = ±20% P = +40% -20% | R04 = 0.039μH R39 = 0.390μH 3R9 = 3.900μH 390 = 39.00μH 391 = 390.0μH 392 = 3900μH | | T = Sn Plate | A = Standard | S = 13" Reel |



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LMax SMD Power Inductor

LMXN Series – Non-Shielded Style B

ELECTRICAL CHARACTERISTICS

0705/0906/1310/1913/2216

| Codes | L (μ H) | Tolerance | | | Test Condition | DCR (Ω) max. | | | | | I sat (A) max* | | | | |
|-------|-----------------|-----------|--------------|--------------|-------------------|-----------------------|-------|-------|-------|-------|----------------|------|------|------|------|
| | | 705 | 0906 2216 | 1310 1913 | | 0705 | 0906 | 1310 | 1913 | 2216 | 0705 | 0906 | 1310 | 1913 | 2216 |
| R47 | 0.47 | P | - | P | 100KHz, 0.1V | 0.025 | - | 0.005 | 0.003 | - | 7.7 | - | 11.4 | 25.1 | - |
| R56 | 0.56 | - | M | - | 100KHz, 0.1V | - | 0.010 | - | - | - | - | 7.7 | - | - | - |
| R78 | 0.78 | - | M | - | 100KHz, 0.1V | - | - | - | - | 0.003 | - | - | - | - | 30 |
| 1R0 | 1.0 | M | - | P | 100KHz, 0.1V | 0.050 | - | 0.006 | 0.004 | - | 2.9 | - | 9.9 | 15.3 | - |
| 1R5 | 1.5 | M | M | P | 100KHz, 0.1V | 0.050 | - | 0.008 | 0.006 | 0.004 | 2.6 | - | 7.9 | 12 | 25 |
| 2R2 | 2.2 | M | M | M | 100KHz, 0.1V | 0.070 | 0.035 | 0.011 | 0.008 | 0.006 | 2.3 | 3.5 | 6.1 | 10.2 | 20 |
| 3R3 | 3.3 | M | M | M | 100KHz, 0.1V | 0.080 | 0.040 | 0.014 | 0.009 | 0.009 | 2 | 3 | 5.1 | 9.3 | 17 |
| 3R9 | 3.9 | - | M | - | 100KHz, 0.1V | - | - | - | - | 0.010 | - | - | - | - | 15 |
| 4R7 | 4.7 | M | M | M | 100KHz, 0.1V | 0.090 | 0.054 | 0.018 | 0.012 | 0.014 | 1.5 | 2.6 | 4.2 | 7.7 | 13 |
| 6R0 | 6.0 | - | M | - | 100KHz, 0.1V | - | - | - | - | 0.017 | - | - | - | - | 12 |
| 6R8 | 6.8 | M | M | M | 100KHz, 0.1V | 0.130 | 0.08 | 0.027 | 0.019 | - | 1.2 | 2.2 | 3.6 | 6.2 | - |
| 7R8 | 7.8 | - | M | - | 100KHz, 0.1V | - | - | - | - | 0.018 | - | - | - | - | 11 |
| 100 | 10 | M | M | M | 100KHz, 0.1V | 0.160 | 0.111 | 0.038 | 0.027 | 0.026 | 1.1 | 1.9 | 3.3 | 5.2 | 10 |
| 150 | 15 | M | M | M | 100KHz, 0.1V | 0.230 | 0.170 | 0.045 | 0.032 | 0.032 | 0.9 | 1.5 | 2.4 | 4.3 | 8 |
| 220 | 22 | M | M | M | 100KHz, 0.1V | 0.370 | 0.250 | 0.070 | 0.050 | 0.043 | 0.7 | 1.2 | 2 | 3.7 | 7 |
| 330 | 33 | - | M | M | 100KHz, 0.1V | - | 0.350 | 0.100 | 0.069 | 0.066 | - | 0.99 | 1.7 | 3 | 6 |
| 470 | 47 | - | M | M | 100KHz, 0.1V | - | 0.470 | 0.150 | 0.109 | 0.096 | - | 0.87 | 1.4 | 2.4 | 5 |
| 680 | 68 | - | M | M | 100KHz, 0.1V | - | 0.730 | 0.220 | 0.156 | 0.115 | - | 0.68 | 1.2 | 2 | 4 |
| 101 | 100 | - | M | M | 100KHz, 0.1V | - | 1.110 | 0.280 | 0.206 | 0.165 | - | 0.53 | 0.95 | 1.8 | 3 |
| 221 | 220 | - | M | - | 100KHz, 0.1V | - | - | - | - | 0.396 | - | - | - | - | 2.4 |
| 331 | 330 | - | M | - | 100KHz, 0.1V | - | - | - | - | 0.588 | - | - | - | - | 1 |
| 471 | 470 | - | M | - | 100KHz, 0.1V | - | - | - | - | 0.950 | - | - | - | - | 0.8 |

*Saturation Current: The current when the inductance becomes 30% lower than its initial value. (Ta=25°C)

LMax SMD Power Inductor

LMXN Series – Non-Shielded Style C

FEATURES

- High power, High saturation inductors
- Ideal inductors for DC-DC converters in notebook computers, PDAs, Step-up or step-down converters, flash memory programmers, etc.
- 0705 has ceramic base with gold-plating
- Others have LCP plastic base

APPLICATIONS

- Portable Telephones
- Personal Computers
- DC/DC Converters
- Various Electronic Appliances

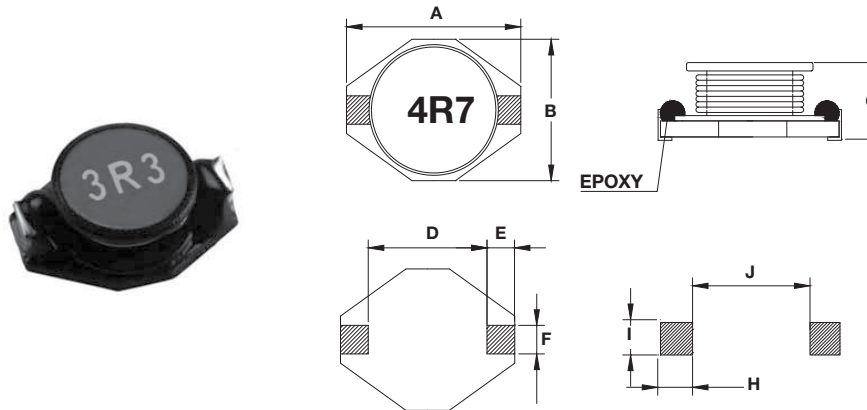
DIMENSIONS

CHARACTERISTICS

- Saturation Rated Current: The current when the inductance becomes 10% lower than its initial value. (Ta=25°C)
- Operating temperature range: -40 ~ 125°C

INDUCTANCE AND RATED CURRENT RANGES

- 0705 1.0μH ~ 1000μH 2.9 ~ 0.10A
- 1309 4.7μH ~ 1000μH 4.2 ~ 0.29A
- 13E9 1.0μH ~ 1000μH 9.0 ~ 0.30A
- 13L9 0.47μH ~ 1000μH 40 ~ 0.8A
- 1915 1.0μH ~ 1000μH 20 ~ 1.0A
- Electrical specifications at 25°C



mm (inches)

| Type | A max. | B max. | C max. | D | E | F | H | I | J |
|------|------------------|------------------|------------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|
| 0705 | 6.60 (0.260) | 4.45 (0.175) | 2.92 (0.115) | 4.32 (0.170) | 1.27 (0.050) | 1.02 (0.040) | 3.56 (0.140) | 1.40 (0.055) | 4.06 (0.160) |
| 1309 | 12.95 (0.510) | 9.40 (0.370) | 3.00 (0.118) | 7.62 (0.300) | 2.54 (0.100) | 2.54 (0.100) | 2.79 (0.110) | 2.92 (0.115) | 7.37 (0.290) |
| 13E9 | 12.95 (0.510) | 9.40 (0.370) | 5.21 (0.205) | 7.62 (0.300) | 2.54 (0.100) | 2.54 (0.100) | 2.79 (0.110) | 2.92 (0.115) | 7.37 (0.290) |
| 13L9 | 12.95 (0.510) | 9.40 (0.370) | 11.43 (0.450) | 7.62 (0.300) | 2.54 (0.100) | 2.54 (0.100) | 2.79 (0.110) | 2.92 (0.115) | 7.37 (0.290) |
| 1915 | 18.54 (0.730) | 15.24 (0.600) | 7.11 (0.280) | 12.7 (0.500) | 2.54 (0.100) | 2.54 (0.100) | 2.79 (0.110) | 2.92 (0.115) | 12.45 (0.490) |

HOW TO ORDER

| | | | | | | | | |
|---------------------|-------------------|--|----------------------|---|--------------|--------------------|----------------|------------------|
| LM | XN | 1309 | M | R04 | C | T | A | S |
| Family | Series | Size | Tolerance | Inductance | Style | Termination | Special | Packaging |
| LM = Power Inductor | XN = Non-Shielded | 1309 = 13x9xh 13E9 = 13x9xE(h) (h = see catalog) | M = ±20% N = ±30% | R04 = 0.039μH R39 = 0.390μH 3R9 = 3.900μH 390 = 39.00μH 391 = 390.0μH 392 = 3900μH | T = Sn Plate | A = Standard | S = 13" Reel | |

LMax SMD Power Inductor

LMXN Series – Non-Shielded Style C



ELECTRICAL CHARACTERISTICS

0705

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | I sat (A) max* |
|-------|--------|-----------|----------------|--------------|----------------|
| 1R0 | 1.0 | M | 100KHz, 0.1V | 0.05 | 2.90 |
| 1R5 | 1.5 | M | 100KHz, 0.1V | 0.06 | 2.60 |
| 2R2 | 2.2 | M | 100KHz, 0.1V | 0.07 | 2.30 |
| 3R3 | 3.3 | M | 100KHz, 0.1V | 0.08 | 2.00 |
| 4R7 | 4.7 | M | 100KHz, 0.1V | 0.09 | 1.50 |
| 6R8 | 6.8 | M | 100KHz, 0.1V | 0.13 | 1.20 |
| 8R2 | 8.2 | M | 100KHz, 0.1V | 0.16 | 1.15 |
| 100 | 10 | M | 100KHz, 0.1V | 0.16 | 1.10 |
| 150 | 15 | M | 100KHz, 0.1V | 0.23 | 0.90 |
| 220 | 22 | M | 100KHz, 0.1V | 0.37 | 0.70 |
| 330 | 33 | M | 100KHz, 0.1V | 0.51 | 0.58 |
| 470 | 47 | M | 100KHz, 0.1V | 0.64 | 0.50 |
| 680 | 68 | M | 100KHz, 0.1V | 0.86 | 0.40 |
| 101 | 100 | M | 100KHz, 0.1V | 1.27 | 0.31 |
| 151 | 150 | M | 100KHz, 0.1V | 2.00 | 0.27 |
| 221 | 220 | M | 100KHz, 0.1V | 3.11 | 0.22 |
| 331 | 330 | M | 100KHz, 0.1V | 3.80 | 0.18 |
| 471 | 470 | M | 100KHz, 0.1V | 5.06 | 0.16 |
| 681 | 680 | M | 100KHz, 0.1V | 9.20 | 0.14 |
| 102 | 1000 | M | 100KHz, 0.1V | 13.8 | 0.10 |

10309

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | I sat (A) max* |
|-------|--------|-----------|----------------|--------------|----------------|
| 4R7 | 4.7 | M | 100KHz, 0.1V | 0.036 | 4.20 |
| 6R8 | 6.8 | M | 100KHz, 0.1V | 0.060 | 3.90 |
| 100 | 10 | M | 100KHz, 0.1V | 0.085 | 2.70 |
| 150 | 15 | M | 100KHz, 0.1V | 0.12 | 2.30 |
| 220 | 22 | M | 100KHz, 0.1V | 0.18 | 1.80 |
| 330 | 33 | M | 100KHz, 0.1V | 0.25 | 1.60 |
| 470 | 47 | M | 100KHz, 0.1V | 0.32 | 1.30 |
| 680 | 68 | M | 100KHz, 0.1V | 0.54 | 1.10 |
| 101 | 100 | M | 100KHz, 0.1V | 0.69 | 0.87 |
| 151 | 150 | M | 100KHz, 0.1V | 0.94 | 0.74 |
| 221 | 220 | M | 100KHz, 0.1V | 1.60 | 0.56 |
| 331 | 330 | M | 100KHz, 0.1V | 2.15 | 0.50 |
| 471 | 470 | M | 100KHz, 0.1V | 3.30 | 0.40 |
| 681 | 680 | M | 100KHz, 0.1V | 4.40 | 0.33 |
| 102 | 1000 | M | 100KHz, 0.1V | 7.00 | 0.29 |

*Saturation Current: The current when the inductance becomes 10% lower than its initial value. (Ta=25°C)

LMax SMD Power Inductor

LMXN Series – Non-Shielded Style C



13E9

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | I sat (A) max* |
|-------|--------|-----------|----------------|--------------|----------------|
| 1R0 | 1.0 | M | 100KHz, 0.1V | 0.009 | 9.00 |
| 1R5 | 1.5 | M | 100KHz, 0.1V | 0.010 | 8.00 |
| 2R2 | 2.2 | M | 100KHz, 0.1V | 0.012 | 7.00 |
| 3R3 | 3.3 | M | 100KHz, 0.1V | 0.015 | 6.40 |
| 4R7 | 4.7 | M | 100KHz, 0.1V | 0.018 | 5.40 |
| 6R8 | 6.8 | M | 100KHz, 0.1V | 0.027 | 4.60 |
| 100 | 10 | M | 100KHz, 0.1V | 0.038 | 3.80 |
| 150 | 15 | M | 100KHz, 0.1V | 0.046 | 3.00 |
| 220 | 22 | M | 100KHz, 0.1V | 0.085 | 2.60 |
| 330 | 33 | M | 100KHz, 0.1V | 0.100 | 2.00 |
| 470 | 47 | M | 100KHz, 0.1V | 0.140 | 1.60 |
| 680 | 68 | M | 100KHz, 0.1V | 0.200 | 1.40 |
| 101 | 100 | M | 100KHz, 0.1V | 0.280 | 1.20 |
| 151 | 150 | M | 100KHz, 0.1V | 0.400 | 1.00 |
| 221 | 220 | M | 100KHz, 0.1V | 0.610 | 0.80 |
| 331 | 330 | M | 100KHz, 0.1V | 1.020 | 0.60 |
| 471 | 470 | M | 100KHz, 0.1V | 1.270 | 0.50 |
| 681 | 680 | M | 100KHz, 0.1V | 2.020 | 0.40 |
| 102 | 1000 | M | 100KHz, 0.1V | 3.000 | 0.30 |

13L9

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | I sat (A) max* |
|-------|--------|-----------|----------------|--------------|----------------|
| R47 | 0.47 | N | 100KHz, 0.1V | 0.008 | 40.0 |
| R82 | 0.82 | N | 100KHz, 0.1V | 0.009 | 34.7 |
| 1R2 | 1.2 | N | 100KHz, 0.1V | 0.010 | 28.4 |
| 1R5 | 1.5 | N | 100KHz, 0.1V | 0.010 | 25.7 |
| 2R2 | 2.2 | N | 100KHz, 0.1V | 0.012 | 23.0 |
| 3R5 | 3.5 | N | 100KHz, 0.1V | 0.015 | 21.0 |
| 4R7 | 4.7 | N | 100KHz, 0.1V | 0.020 | 18.0 |
| 5R6 | 5.6 | N | 100KHz, 0.1V | 0.022 | 16.0 |
| 6R8 | 6.8 | N | 100KHz, 0.1V | 0.030 | 15.0 |
| 8R2 | 8.2 | N | 100KHz, 0.1V | 0.033 | 10.0 |
| 100 | 10 | M | 100KHz, 0.1V | 0.040 | 8.00 |
| 150 | 15 | M | 100KHz, 0.1V | 0.050 | 7.00 |
| 220 | 22 | M | 100KHz, 0.1V | 0.066 | 5.50 |
| 330 | 33 | M | 100KHz, 0.1V | 0.080 | 4.00 |
| 470 | 47 | M | 100KHz, 0.1V | 0.11 | 3.80 |
| 680 | 68 | M | 100KHz, 0.1V | 0.17 | 3.00 |
| 101 | 100 | M | 100KHz, 0.1V | 0.22 | 2.50 |
| 151 | 150 | M | 100KHz, 0.1V | 0.34 | 2.00 |
| 221 | 220 | M | 100KHz, 0.1V | 0.44 | 1.60 |
| 331 | 330 | M | 100KHz, 0.1V | 0.70 | 1.20 |
| 471 | 470 | M | 100KHz, 0.1V | 0.95 | 1.00 |
| 681 | 680 | M | 100KHz, 0.1V | 1.20 | 1.00 |
| 102 | 1000 | M | 100KHz, 0.1V | 2.00 | 0.80 |

*Saturation Current: The current when the inductance becomes 10% lower than its initial value. (Ta=25°C)

LMax SMD Power Inductor

LMXN Series – Non-Shielded Style C



1915

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | I sat (A) max* |
|-------|--------|-----------|----------------|--------------|----------------|
| 1R0 | 1.0 | M | 100KHz, 0.1V | 0.009 | 20 |
| 2R2 | 2.2 | M | 100KHz, 0.1V | 0.014 | 16 |
| 3R3 | 3.3 | M | 100KHz, 0.1V | 0.018 | 14 |
| 5R6 | 5.6 | M | 100KHz, 0.1V | 0.020 | 12 |
| 100 | 10 | M | 100KHz, 0.1V | 0.031 | 10 |
| 150 | 15 | M | 100KHz, 0.1V | 0.036 | 8.0 |
| 220 | 22 | M | 100KHz, 0.1V | 0.047 | 7.0 |
| 330 | 33 | M | 100KHz, 0.1V | 0.066 | 5.5 |
| 470 | 47 | M | 100KHz, 0.1V | 0.095 | 4.5 |
| 680 | 68 | M | 100KHz, 0.1V | 0.130 | 3.5 |
| 101 | 100 | M | 100KHz, 0.1V | 0.190 | 3.0 |
| 151 | 150 | M | 100KHz, 0.1V | 0.250 | 2.6 |
| 221 | 220 | M | 100KHz, 0.1V | 0.380 | 2.4 |
| 331 | 330 | M | 100KHz, 0.1V | 0.560 | 1.9 |
| 471 | 470 | M | 100KHz, 0.1V | 0.850 | 1.4 |
| 681 | 680 | M | 100KHz, 0.1V | 1.100 | 1.2 |
| 102 | 1000 | M | 100KHz, 0.1V | 1.800 | 1.0 |

*Saturation Current: The current when the inductance becomes 10% lower than its initial value. (Ta=25°C)

LMax SMD Power Inductor

LMXN Series – Non-Shielded Style D

FEATURES

- Open Magnetic Circuit Construction
- Small Surface Area

APPLICATIONS

- LCD Televisions
- Notebooks
- Portable Communication
- DC/DC Converters, etc.

CHARACTERISTICS

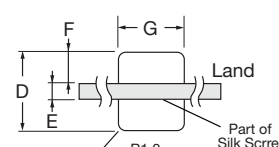
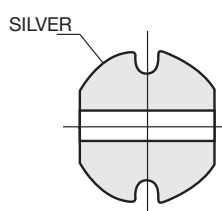
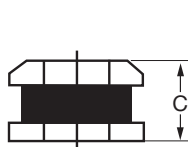
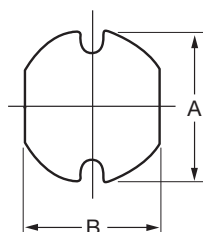
- Rated Current (IDC): The DC current that will cause an approximate ΔT of 40°C. (Ta=25°C)
- Operating temperature range: -40°C ~ +125°C

INDUCTANCE AND RATED CURRENT RANGES

- 0504 1.0 μ H ~ 33 μ H 3.30 ~ 0.56A
- 0605 10.0 μ H ~ 220 μ H 1.44 ~ 0.35A
- 0808 10.0 μ H ~ 330 μ H 1.44 ~ 0.28A
- 08G8 10.0 μ H ~ 470 μ H 2.30 ~ 0.34A
- 1009 10.0 μ H ~ 560 μ H 2.38 ~ 0.32A
- 10F9 10.0 μ H ~ 820 μ H 2.6 ~ 0.24A
- Electrical specifications at 25°C



DIMENSIONS



mm (inches)

| Type | A | B | C | D | E | F | G |
|------|-------------------------------|--------------------------------|--------------------------------|-----------------|-----------------|-----------------|-----------------|
| 0504 | 4.50 ± 0.30 (0.177 ± .012) | 4.00 ± 0.30 (0.158 ± 0.012) | 3.20 ± 0.30 (0.126 ± 0.012) | 5.00 (0.197) | 1.50 (0.059) | 1.75 (0.069) | 4.50 (0.177) |
| 0605 | 5.80 ± 0.30 (0.228 ± .012) | 5.20 ± 0.30 (0.205 ± 0.012) | 4.50 ± 0.35 (0.177 ± 0.014) | 6.00 (0.236) | 1.70 (0.067) | 2.15 (0.085) | 5.50 (0.217) |
| 0808 | 7.80 ± 0.30 (0.307 ± .012) | 7.30 ± 0.30 (0.276 ± 0.012) | 3.50 ± 0.50 (0.140 ± 0.020) | 8.00 (0.315) | 2.00 (0.079) | 3.00 (0.118) | 7.50 (0.295) |
| 08G8 | 7.80 ± 0.30 (0.307 ± .012) | 7.30 ± 0.30 (0.287 ± 0.012) | 5.08 ± 0.50 (0.200 ± 0.020) | 8.00 (0.315) | 2.00 (0.079) | 3.00 (0.118) | 7.50 (0.295) |
| 1009 | 10.0 ± 0.30 (0.394 ± .012) | 9.00 ± 0.30 (0.354 ± 0.012) | 4.00 ± 0.50 (0.158 ± 0.020) | 10.0 (0.394) | 2.50 (0.098) | 3.75 (0.148) | 9.50 (0.374) |
| 10F9 | 10.0 ± 0.40 (0.394 ± .016) | 9.00 ± 0.40 (0.354 ± 0.016) | 5.40 ± 0.40 (0.213 ± 0.016) | 10.0 (0.394) | 2.50 (0.098) | 3.75 (0.148) | 9.50 (0.374) |

HOW TO ORDER

| | | | | | | | | |
|---------------------|-------------------|--|------------------|--|--------------|--------------------|----------------|------------------|
| LM | XN | 1009 | M | R04 | D | T | A | S |
| Family | Series | Size | Tolerance | Inductance | Style | Termination | Special | Packaging |
| LM = Power Inductor | XN = Non-Shielded | 1009 = 10x9xh 10F9 = 10x9xF(h) (h = see catalog) | M = ±20% | 1R0 = 1.00 μ H 390 = 39.00 μ H 391 = 390.0 μ H | | T = Sn Plate | A = Standard | S = 13" Reel |

LMax SMD Power Inductor

LMXN Series – Non-Shielded Style D

ELECTRICAL CHARACTERISTICS

0504

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 1R0 | 1.0 | M | 100KHz, 1.0V | 0.048 | 3.30 |
| 1R4 | 1.4 | M | 100KHz, 1.0V | 0.056 | 2.80 |
| 1R8 | 1.8 | M | 100KHz, 1.0V | 0.063 | 2.45 |
| 2R2 | 2.2 | M | 100KHz, 1.0V | 0.071 | 2.21 |
| 2R7 | 2.7 | M | 100KHz, 1.0V | 0.078 | 2.00 |
| 3R3 | 3.3 | M | 100KHz, 1.0V | 0.086 | 1.81 |
| 3R9 | 3.9 | M | 100KHz, 1.0V | 0.093 | 1.66 |
| 4R7 | 4.7 | M | 100KHz, 1.0V | 0.108 | 1.51 |
| 5R6 | 5.6 | M | 100KHz, 1.0V | 0.125 | 1.40 |
| 6R8 | 6.8 | M | 100KHz, 1.0V | 0.131 | 1.26 |
| 8R2 | 8.2 | M | 100KHz, 1.0V | 0.146 | 1.14 |
| 100 | 10 | M | 100KHz, 1.0V | 0.182 | 1.04 |
| 120 | 12 | M | 100KHz, 1.0V | 0.210 | 0.97 |
| 150 | 15 | M | 100KHz, 1.0V | 0.235 | 0.85 |
| 180 | 18 | M | 100KHz, 1.0V | 0.338 | 0.74 |
| 220 | 22 | M | 100KHz, 1.0V | 0.378 | 0.68 |
| 270 | 27 | M | 100KHz, 1.0V | 0.522 | 0.62 |
| 330 | 33 | M | 100KHz, 1.0V | 0.540 | 0.56 |

0605

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 100 | 10 | M | 100KHz, 1.0V | 0.100 | 1.44 |
| 120 | 12 | M | 100KHz, 1.0V | 0.120 | 1.40 |
| 150 | 15 | M | 100KHz, 1.0V | 0.140 | 1.30 |
| 180 | 18 | M | 100KHz, 1.0V | 0.150 | 1.23 |
| 220 | 22 | M | 100KHz, 1.0V | 0.180 | 1.11 |
| 270 | 27 | M | 100KHz, 1.0V | 0.200 | 0.97 |
| 330 | 33 | M | 100KHz, 1.0V | 0.230 | 0.88 |
| 390 | 39 | M | 100KHz, 1.0V | 0.320 | 0.80 |
| 470 | 47 | M | 100KHz, 1.0V | 0.370 | 0.72 |
| 560 | 56 | M | 100KHz, 1.0V | 0.420 | 0.68 |
| 680 | 68 | M | 100KHz, 1.0V | 0.460 | 0.61 |
| 820 | 82 | M | 100KHz, 1.0V | 0.600 | 0.58 |
| 101 | 100 | M | 100KHz, 1.0V | 0.700 | 0.52 |
| 121 | 120 | M | 100KHz, 1.0V | 0.930 | 0.48 |
| 151 | 150 | M | 100KHz, 1.0V | 1.100 | 0.40 |
| 181 | 180 | M | 100KHz, 1.0V | 1.380 | 0.38 |
| 221 | 220 | M | 100KHz, 1.0V | 1.570 | 0.35 |

LMax SMD Power Inductor

LMXN Series – Non-Shielded Style D

0808

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 100 | 10 | M | 100KHz, 1.0V | 1.44 | 0.081 |
| 120 | 12 | M | 100KHz, 1.0V | 1.39 | 0.089 |
| 150 | 15 | M | 100KHz, 1.0V | 1.24 | 0.104 |
| 180 | 18 | M | 100KHz, 1.0V | 1.12 | 0.111 |
| 220 | 22 | M | 100KHz, 1.0V | 1.07 | 0.129 |
| 270 | 27 | M | 100KHz, 1.0V | 0.94 | 0.153 |
| 330 | 33 | M | 100KHz, 1.0V | 0.85 | 0.170 |
| 390 | 39 | M | 100KHz, 1.0V | 0.74 | 0.217 |
| 470 | 47 | M | 100KHz, 1.0V | 0.68 | 0.252 |
| 560 | 56 | M | 100KHz, 1.0V | 0.64 | 0.282 |
| 680 | 68 | M | 100KHz, 1.0V | 0.59 | 0.332 |
| 820 | 82 | M | 100KHz, 1.0V | 0.54 | 0.406 |
| 101 | 100 | M | 100KHz, 1.0V | 0.51 | 0.481 |
| 121 | 120 | M | 100KHz, 1.0V | 0.49 | 0.536 |
| 151 | 150 | M | 100KHz, 1.0V | 0.40 | 0.755 |
| 181 | 180 | M | 100KHz, 1.0V | 0.36 | 1.022 |
| 221 | 220 | M | 100KHz, 1.0V | 0.31 | 1.200 |
| 271 | 270 | M | 100KHz, 1.0V | 0.29 | 1.306 |
| 331 | 330 | M | 100KHz, 1.0V | 0.28 | 1.495 |

08G8

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 100 | 10 | M | 100KHz, 1.0V | 0.070 | 2.30 |
| 120 | 12 | M | 100KHz, 1.0V | 0.080 | 2.00 |
| 150 | 15 | M | 100KHz, 1.0V | 0.090 | 1.80 |
| 180 | 18 | M | 100KHz, 1.0V | 0.100 | 1.60 |
| 220 | 22 | M | 100KHz, 1.0V | 0.110 | 1.50 |
| 270 | 27 | M | 100KHz, 1.0V | 0.120 | 1.30 |
| 330 | 33 | M | 100KHz, 1.0V | 0.130 | 1.20 |
| 470 | 47 | M | 100KHz, 1.0V | 0.180 | 1.00 |
| 560 | 56 | M | 100KHz, 1.0V | 0.240 | 0.94 |
| 680 | 68 | M | 100KHz, 1.0V | 0.280 | 0.85 |
| 820 | 82 | M | 100KHz, 1.0V | 0.370 | 0.78 |
| 101 | 100 | M | 100KHz, 1.0V | 0.430 | 0.72 |
| 121 | 120 | M | 100KHz, 1.0V | 0.470 | 0.66 |
| 151 | 150 | M | 100KHz, 1.0V | 0.640 | 0.58 |
| 221 | 220 | M | 100KHz, 1.0V | 0.960 | 0.49 |
| 331 | 330 | M | 100KHz, 1.0V | 1.260 | 0.40 |
| 391 | 390 | M | 100KHz, 1.0V | 1.770 | 0.36 |
| 471 | 470 | M | 100KHz, 1.0V | 1.960 | 0.34 |

LMax SMD Power Inductor

LMXN Series – Non-Shielded Style D



1009

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 100 | 10 | M | 100KHz, 1.0V | 0.053 | 2.38 |
| 120 | 12 | M | 100KHz, 1.0V | 0.061 | 2.13 |
| 150 | 15 | M | 100KHz, 1.0V | 0.070 | 1.87 |
| 180 | 18 | M | 100KHz, 1.0V | 0.081 | 1.73 |
| 220 | 22 | M | 100KHz, 1.0V | 0.088 | 1.60 |
| 330 | 33 | M | 100KHz, 1.0V | 0.120 | 1.26 |
| 470 | 47 | M | 100KHz, 1.0V | 0.170 | 1.10 |
| 560 | 56 | M | 100KHz, 1.0V | 0.199 | 1.01 |
| 680 | 68 | M | 100KHz, 1.0V | 0.223 | 0.91 |
| 820 | 82 | M | 100KHz, 1.0V | 0.252 | 0.85 |
| 101 | 100 | M | 100KHz, 1.0V | 0.344 | 0.74 |
| 121 | 120 | M | 100KHz, 1.0V | 0.396 | 0.69 |
| 181 | 180 | M | 100KHz, 1.0V | 0.621 | 0.56 |
| 221 | 220 | M | 100KHz, 1.0V | 0.721 | 0.53 |
| 331 | 330 | M | 100KHz, 1.0V | 1.100 | 0.42 |
| 471 | 470 | M | 100KHz, 1.0V | 1.526 | 0.35 |
| 561 | 560 | M | 100KHz, 1.0V | 1.904 | 0.32 |

10F9

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 100 | 10 | M | 100KHz, 1.0V | 0.060 | 2.60 |
| 120 | 12 | M | 100KHz, 1.0V | 0.070 | 2.45 |
| 150 | 15 | M | 100KHz, 1.0V | 0.080 | 2.27 |
| 220 | 22 | M | 100KHz, 1.0V | 0.100 | 1.95 |
| 330 | 33 | M | 100KHz, 1.0V | 0.120 | 1.50 |
| 390 | 39 | M | 100KHz, 1.0V | 0.140 | 1.37 |
| 470 | 47 | M | 100KHz, 1.0V | 0.170 | 1.28 |
| 560 | 56 | M | 100KHz, 1.0V | 0.190 | 1.17 |
| 680 | 68 | M | 100KHz, 1.0V | 0.220 | 1.11 |
| 820 | 82 | M | 100KHz, 1.0V | 0.250 | 1.00 |
| 101 | 100 | M | 100KHz, 1.0V | 0.350 | 0.97 |
| 121 | 120 | M | 100KHz, 1.0V | 0.400 | 0.89 |
| 151 | 150 | M | 100KHz, 1.0V | 0.470 | 0.78 |
| 221 | 220 | M | 100KHz, 1.0V | 0.730 | 0.66 |
| 271 | 270 | M | 100KHz, 1.0V | 0.970 | 0.57 |
| 331 | 330 | M | 100KHz, 1.0V | 1.150 | 0.52 |
| 471 | 470 | M | 100KHz, 1.0V | 1.480 | 0.42 |
| 561 | 560 | M | 100KHz, 1.0V | 1.900 | 0.33 |
| 821 | 820 | M | 100KHz, 1.0V | 2.550 | 0.24 |

LMax SMD Shielded Power Inductor

LMXS Series – Shielded Style B

FEATURES

- Directly connected electrode on ferrite core
- Excellent property with high saturation for surface mounting

APPLICATIONS

- OA Equipment
- Notebook PCs
- LCD Monitor
- Portable Terminal Equipment
- DC/DC Converters, etc.
- Power Supply for VTR

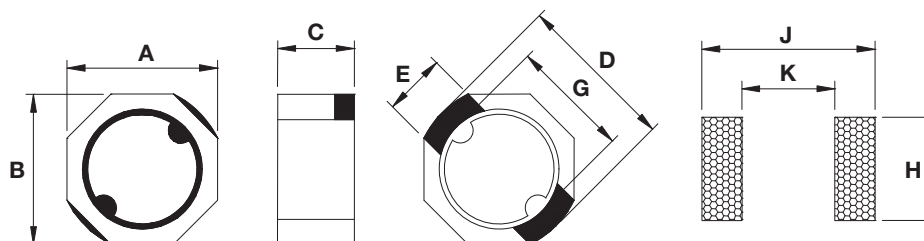
DIMENSIONS

CHARACTERISTICS

- Rated DC Current: The current when the inductance becomes 30% lower than its initial value.
- Operating temperature: -40 ~ 85°C

INDUCTANCE AND RATED CURRENT RANGES

- | | | |
|--------|---------------|---------------|
| • 04B4 | 0.47 ~ 2200μH | 1.84 ~ 0.035A |
| • 04C4 | 1.0 ~ 6800μH | 1.90 ~ 0.017A |
| • 04A4 | 1.0 ~ 100μH | 1.50 ~ 0.100A |
| • 0505 | 0.47 ~ 820μH | 2.33 ~ 0.030A |
| • 05C5 | 0.47 ~ 2500μH | 4.82 ~ 0.045A |
| • 0606 | 1.0 ~ 3300μH | 4.70 ~ 0.026A |
- Electrical specifications at 25°C



mm (inches)

| Type | A | B | C max. | D | E | G | H | K | J |
|------|--------------------------------|--------------------------------|-----------------|-------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| 04B4 | 3.85 ± 0.30 (0.152 ± 0.012) | 3.85 ± 0.30 (0.152 ± 0.012) | 2.00 (0.079) | 3.9 ± 0.20 (0.154 ± 0.008) | 1.60 (0.063) | 3.20 (0.126) | 1.90 (0.075) | 3.00 (0.118) | 4.55 (0.179) |
| 04C4 | 3.85 ± 0.30 (0.152 ± 0.012) | 3.85 ± 0.30 (0.152 ± 0.012) | 3.00 (0.118) | 3.9 ± 0.20 (0.154 ± 0.008) | 1.60 (0.063) | 3.20 (0.126) | 1.90 (0.075) | 3.00 (0.118) | 4.55 (0.179) |
| 04A4 | 3.85 ± 0.30 (0.152 ± 0.012) | 3.85 ± 0.30 (0.152 ± 0.012) | 1.50 (0.059) | 4.80 max. (0.189 max.) | 1.60 (0.063) | 3.00 (0.118) | 2.00 (0.079) | 2.60 (0.102) | 5.20 (0.205) |
| 0505 | 5.30 max. (0.207 max.) | 5.30 max. (0.207 max.) | 2.00 (0.079) | 5.7 ± 0.40 (0.224 ± 0.016) | 1.60 (0.063) | 4.20 (0.165) | 1.90 (0.075) | 3.90 (0.154) | 5.70 (0.224) |
| 05C5 | 5.30 max. (0.207 max.) | 5.30 max. (0.207 max.) | 3.00 (0.118) | 5.7 ± 0.40 (0.224 ± 0.016) | 1.60 (0.063) | 4.20 (0.165) | 1.90 (0.075) | 3.90 (0.154) | 5.70 (0.224) |
| 0606 | 5.90 ± 0.20 (0.232 ± 0.008) | 5.90 ± 0.20 (0.232 ± 0.008) | 3.00 (0.118) | 6.4 ± 0.30 (0.252 ± 0.012) | 2.40 (0.094) | 4.70 (0.185) | 2.70 (0.106) | 4.40 (0.173) | 6.50 (0.256) |

HOW TO ORDER

| | | | | | | | | |
|---------------------|---------------|--|----------------------------------|---|--------------|--------------------|----------------|------------------|
| LM | XS | 0505 | M | R04 | B | T | A | S |
| Family | Series | Size | Tolerance | Inductance | Style | Termination | Special | Packaging |
| LM = Power Inductor | XS = Shielded | 0505 = 5x5xh 05A5 = 5x5xA(h) (h = see catalog) | M = ±20% N = ±30% P = ±40% | R04 = 0.039μH R39 = 0.390μH 3R9 = 3.900μH 390 = 39.00μH 391 = 390.0μH 392 = 3900μH | | T = Sn Plate | A = Standard | S = 13" Reel |

LMax SMD Power Inductor

LMXS Series – Shielded Style B



ELECTRICAL CHARACTERISTICS

04B4/04C4

| Codes | L (µH) | Tolerance | Test | DCR (Ω) max. | | I sat (A) max* | |
|-------|--------|-----------|----------------|--------------|-------|----------------|-------|
| | | | Condition | 04B4 | 04C4 | 04B4 | 04C4 |
| R47 | 0.47 | N | 100 KHz, 0.25V | 0.017 | – | 1.84 | – |
| 1R0 | 1.0 | N | 100 KHz, 0.25V | 0.030 | 0.009 | 1.80 | 1.90 |
| 1R2 | 1.2 | N | 100 KHz, 0.25V | 0.043 | 0.010 | 1.70 | 1.75 |
| 1R5 | 1.5 | N | 100 KHz, 0.25V | 0.052 | 0.013 | 1.60 | 1.45 |
| 1R8 | 1.8 | N | 100 KHz, 0.25V | 0.056 | – | 1.55 | – |
| 2R0 | 2.0 | N | 100 KHz, 0.25V | 0.057 | 0.016 | 1.51 | 1.25 |
| 2R2 | 2.2 | N | 100 KHz, 0.25V | 0.058 | 0.025 | 1.50 | 1.15 |
| 2R4 | 2.4 | N | 100 KHz, 0.25V | 0.059 | – | 1.41 | – |
| 2R5 | 2.5 | N | 100 KHz, 0.25V | 0.059 | 0.018 | 1.40 | 1.05 |
| 2R7 | 2.7 | N | 100 KHz, 0.25V | 0.060 | 0.020 | 1.35 | 1.00 |
| 3R3 | 3.3 | N | 100 KHz, 0.25V | 0.064 | 0.030 | 1.30 | 0.96 |
| 3R5 | 3.5 | N | 100 KHz, 0.25V | 0.127 | 0.025 | 1.30 | 0.95 |
| 3R9 | 3.9 | N | 100 KHz, 0.25V | – | 0.033 | – | 0.87 |
| 4R7 | 4.7 | N | 100 KHz, 0.25V | 0.146 | 0.039 | 1.10 | 0.78 |
| 5R6 | 5.6 | N | 100 KHz, 0.25V | 0.176 | 0.044 | 0.95 | 0.74 |
| 6R2 | 6.2 | N | 100 KHz, 0.25V | 0.220 | – | 0.91 | – |
| 6R8 | 6.8 | N | 100 KHz, 0.25V | 0.238 | 0.051 | 0.90 | 0.68 |
| 8R2 | 8.2 | N | 100 KHz, 0.25V | 0.272 | 0.065 | 0.80 | 0.57 |
| 100 | 10 | M | 1KHz, 0.25V | 0.299 | 0.092 | 0.70 | 0.43 |
| 120 | 12 | M | 1KHz, 0.25V | – | 0.100 | – | 0.38 |
| 150 | 15 | M | 1KHz, 0.25V | 0.472 | 0.113 | 0.61 | 0.33 |
| 180 | 18 | M | 1KHz, 0.25V | 0.552 | 0.125 | 0.58 | 0.30 |
| 220 | 22 | M | 1KHz, 0.25V | 0.592 | 0.146 | 0.52 | 0.28 |
| 270 | 27 | M | 1KHz, 0.25V | 0.630 | 0.176 | 0.44 | 0.26 |
| 330 | 33 | M | 1KHz, 0.25V | 1.075 | 0.214 | 0.43 | 0.23 |
| 390 | 39 | M | 1KHz, 0.25V | 1.269 | 0.225 | 0.37 | 0.21 |
| 470 | 47 | M | 1KHz, 0.25V | 1.309 | 0.304 | 0.34 | 0.19 |
| 500 | 50 | M | 1KHz, 0.25V | – | – | – | – |
| 560 | 56 | M | 1KHz, 0.25V | 1.960 | 0.324 | 0.29 | 0.170 |
| 680 | 68 | M | 1KHz, 0.25V | 2.613 | 0.472 | 0.25 | 0.156 |
| 820 | 82 | M | 1KHz, 0.25V | 2.950 | 0.539 | 0.20 | 0.142 |
| 101 | 100 | M | 1KHz, 0.25V | 3.255 | 0.608 | 0.19 | 0.128 |
| 121 | 120 | M | 1KHz, 0.25V | 3.350 | 0.757 | 0.15 | 0.116 |
| 151 | 150 | M | 1KHz, 0.25V | 3.550 | 0.882 | 0.12 | 0.106 |
| 181 | 180 | M | 1KHz, 0.25V | 4.000 | 1.130 | 0.10 | 0.095 |
| 221 | 220 | M | 1KHz, 0.25V | 4.900 | 1.269 | 0.09 | 0.087 |
| 271 | 270 | M | 1KHz, 0.25V | – | 1.570 | – | 0.080 |
| 331 | 330 | M | 1KHz, 0.25V | 7.280 | 1.930 | 0.08 | 0.078 |
| 391 | 390 | M | 1KHz, 0.25V | – | 2.360 | – | 0.073 |
| 471 | 470 | M | 1KHz, 0.25V | – | 2.770 | – | 0.068 |
| 561 | 560 | M | 1KHz, 0.25V | – | 3.520 | – | 0.065 |
| 681 | 680 | M | 1KHz, 0.25V | 13.37 | 4.250 | 0.07 | 0.056 |
| 821 | 820 | M | 1KHz, 0.25V | – | 4.830 | – | 0.050 |
| 102 | 1000 | M | 1KHz, 0.25V | 19.55 | 6.260 | 0.065 | 0.047 |
| 122 | 1200 | M | 1KHz, 0.25V | – | 7.860 | – | 0.043 |
| 152 | 1500 | M | 1KHz, 0.25V | 36.15 | 9.980 | 0.038 | 0.039 |

*Saturation Current: The current when the inductance becomes 30% lower than its initial value.

LMax SMD Power Inductor

LMXS Series – Shielded Style B



04A4

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | I sat (A) max* |
|-------|--------|-----------|----------------|--------------|----------------|
| 1R0 | 1.0 | N | 100KHz, 0.1V | 0.058 | 1.50 |
| 1R2 | 1.2 | N | 100KHz, 0.1V | 0.070 | 1.40 |
| 2R2 | 2.2 | N | 100KHz, 0.1V | 0.082 | 1.00 |
| 3R3 | 3.3 | N | 100KHz, 0.1V | 0.105 | 0.92 |
| 3R9 | 3.9 | N | 100KHz, 0.1V | 0.120 | 0.80 |
| 4R7 | 4.7 | N | 100KHz, 0.1V | 0.150 | 0.76 |
| 5R6 | 5.6 | N | 100KHz, 0.1V | 0.180 | 0.69 |
| 6R8 | 6.8 | N | 100KHz, 0.1V | 0.220 | 0.62 |
| 8R2 | 8.2 | N | 100KHz, 0.1V | 0.240 | 0.56 |
| 100 | 10 | N | 100KHz, 0.1V | 0.255 | 0.50 |
| 150 | 15 | N | 100KHz, 0.1V | 0.390 | 0.40 |
| 220 | 22 | M | 100KHz, 0.1V | 0.610 | 0.32 |
| 330 | 33 | M | 100KHz, 0.1V | 0.920 | 0.28 |
| 470 | 47 | M | 100KHz, 0.1V | 1.130 | 0.20 |
| 680 | 68 | M | 100KHz, 0.1V | 1.520 | 0.15 |
| 101 | 100 | M | 100KHz, 0.1V | 2.120 | 0.10 |

*Saturation Current: The current when the inductance becomes 30% lower than its initial value.

LMax SMD Power Inductor

LMXS Series – Shielded Style B



0505/05C5/0606

| Codes | L (µH) | Tolerance | Test Condition | DCR (Ω) max. | | | I sat (A) max* | | |
|-------|--------|-----------|----------------|--------------|-------|-------|----------------|-------|-------|
| | | | | 0505 | 05C5 | 0606 | 0505 | 05C5 | 0606 |
| R47 | 0.47 | N | 100KHz, 0.25V | 0.015 | 0.010 | - | 2.33 | 4.82 | - |
| 1R0 | 1.0 | N | 100KHz, 0.25V | 0.024 | 0.015 | 0.014 | 2.27 | 4.00 | 4.70 |
| 1R1 | 1.1 | N | 100KHz, 0.25V | - | 0.020 | - | - | 3.87 | - |
| 1R2 | 1.2 | N | 100KHz, 0.25V | 0.044 | 0.022 | 0.016 | 2.15 | 3.80 | 3.90 |
| 1R5 | 1.5 | N | 100KHz, 0.25V | - | - | 0.018 | - | - | 3.52 |
| 1R8 | 1.8 | N | 100KHz, 0.25V | - | - | 0.019 | - | - | 3.25 |
| 2R0 | 2.0 | N | 100KHz, 0.25V | 0.046 | 0.027 | 0.022 | 1.90 | 2.92 | 2.95 |
| 2R2 | 2.2 | N | 100KHz, 0.25V | 0.059 | 0.029 | 0.022 | 1.63 | 2.41 | 2.95 |
| 2R4 | 2.4 | N | 100KHz, 0.25V | 0.062 | 0.034 | 0.024 | 1.50 | 2.36 | 2.75 |
| 2R7 | 2.7 | N | 100KHz, 0.25V | - | - | 0.027 | - | - | 2.55 |
| 3R3 | 3.3 | N | 100KHz, 0.25V | 0.073 | 0.040 | 0.030 | 1.34 | 1.95 | 2.45 |
| 3R9 | 3.9 | N | 100KHz, 0.25V | 0.081 | - | 0.034 | 1.20 | - | 2.35 |
| 4R1 | 4.1 | N | 100KHz, 0.25V | 0.087 | 0.045 | - | 1.14 | 1.87 | - |
| 4R7 | 4.7 | N | 100KHz, 0.25V | - | 0.052 | 0.042 | - | 1.60 | 2.25 |
| 5R6 | 5.6 | N | 100KHz, 0.25V | - | - | 0.048 | - | - | 2.05 |
| 6R8 | 6.8 | N | 100KHz, 0.25V | 0.105 | 0.068 | 0.054 | 0.95 | 1.51 | 1.85 |
| 8R2 | 8.2 | N | 100KHz, 0.25V | 0.139 | 0.084 | 0.058 | 0.90 | 1.38 | 1.65 |
| 100 | 10 | M | 1KHz, 0.25V | 0.150 | 0.090 | 0.065 | 0.76 | 1.33 | 1.45 |
| 120 | 12 | M | 1KHz, 0.25V | - | 0.120 | 0.082 | - | 1.06 | 1.35 |
| 150 | 15 | M | 1KHz, 0.25V | 0.210 | 0.142 | 0.096 | 0.63 | 1.05 | 1.25 |
| 180 | 18 | M | 1KHz, 0.25V | - | 0.192 | 0.110 | - | 0.90 | 1.15 |
| 220 | 22 | M | 1KHz, 0.25V | 0.275 | 0.208 | 0.140 | 0.56 | 0.86 | 0.98 |
| 270 | 27 | M | 1KHz, 0.25V | 0.452 | 0.222 | 0.170 | 0.48 | 0.75 | 0.90 |
| 330 | 33 | M | 1KHz, 0.25V | 0.455 | 0.257 | 0.210 | 0.44 | 0.72 | 0.80 |
| 390 | 39 | M | 1KHz, 0.25V | - | 0.320 | 0.240 | - | 0.64 | 0.72 |
| 470 | 47 | M | 1KHz, 0.25V | 0.730 | 0.352 | 0.280 | 0.35 | 0.62 | 0.70 |
| 560 | 56 | M | 1KHz, 0.25V | - | 0.459 | 0.340 | - | 0.53 | 0.66 |
| 680 | 68 | M | 1KHz, 0.25V | 0.935 | 0.525 | 0.410 | 0.30 | 0.51 | 0.58 |
| 820 | 82 | M | 1KHz, 0.25V | 1.300 | 0.770 | 0.490 | 0.27 | 0.48 | 0.52 |
| 101 | 100 | M | 1KHz, 0.25V | 1.500 | 0.801 | 0.550 | 0.23 | 0.43 | 0.46 |
| 121 | 120 | M | 1KHz, 0.25V | 1.910 | 0.850 | 0.700 | 0.22 | 0.34 | 0.42 |
| 151 | 150 | M | 1KHz, 0.25V | 2.680 | 1.100 | 0.780 | 0.21 | 0.26 | 0.36 |
| 181 | 180 | M | 1KHz, 0.25V | 3.040 | 1.190 | 0.960 | 0.20 | 0.24 | 0.34 |
| 221 | 220 | M | 1KHz, 0.25V | 3.520 | 1.530 | 1.080 | 0.195 | 0.20 | 0.32 |
| 271 | 270 | M | 1KHz, 0.25V | 4.380 | - | 1.360 | 0.193 | - | 0.28 |
| 331 | 330 | M | 1KHz, 0.25V | 5.560 | 2.030 | 1.820 | 0.190 | 0.19 | 0.24 |
| 391 | 390 | M | 1KHz, 0.25V | - | 3.000 | 2.050 | - | 0.16 | 0.22 |
| 471 | 470 | M | 1KHz, 0.25V | 7.820 | 3.500 | 2.580 | 0.180 | 0.15 | 0.20 |
| 561 | 560 | M | 1KHz, 0.25V | - | 4.080 | 3.160 | - | 0.14 | 0.18 |
| 681 | 680 | M | 1KHz, 0.25V | - | - | 4.040 | - | - | 0.16 |
| 821 | 820 | M | 1KHz, 0.25V | 15.00 | - | 4.900 | 0.120 | - | 0.14 |
| 102 | 1000 | M | 1KHz, 0.25V | - | - | 6.000 | - | - | 0.13 |
| 122 | 1200 | M | 1KHz, 0.25V | - | 8.500 | 7.600 | - | 0.070 | 0.12 |
| 152 | 1522 | M | 1KHz, 0.25V | - | 10.00 | 9.440 | - | 0.065 | 0.10 |
| 182 | 1800 | M | 1KHz, 0.25V | - | 13.15 | 11.70 | - | 0.062 | 0.098 |
| 222 | 2200 | M | 1KHz, 0.25V | - | 19.00 | 13.40 | - | 0.050 | 0.095 |
| 252 | 2500 | M | 1KHz, 0.25V | - | 20.00 | - | - | 0.045 | - |
| 272 | 2700 | M | 1KHz, 0.25V | - | - | 17.30 | - | - | 0.086 |
| 332 | 3300 | M | 1KHz, 0.25V | - | - | 22.10 | - | - | 0.078 |

*Saturation Current: The current when the inductance becomes 30% lower than its initial value.

LMax SMD Power Inductor

LMXS Series – Shielded Style C

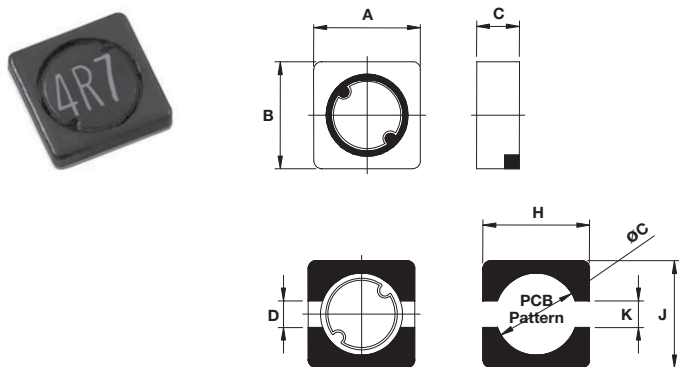
FEATURES

- Directly connected electrode on ferrite core
- Available in magnetically shielded
- Low DC resistance
- Suitable for large current
- Available on tape and reel for auto surface mounting

APPLICATIONS

- Power Supply For VTRs
- OA Equipment.
- Notebook PCs
- Portable Communication Equipment
- DC/DC Converters, etc.

DIMENSIONS



CHARACTERISTICS

- Rated Current:
0404/04B4/0505/05B5/05C5/0707/07B7/07D7: The DC current when the inductance becomes 30% lower than its initial value.
04C4/101B/101D/101H: The DC current when the inductance becomes 35% lower than its initial value. (Ta=25°C)
- Operating temperature range: -40 ~ +105°C

INDUCTANCE AND RATED CURRENT RANGES

- | | | |
|--------|---------------|---------------|
| • 0404 | 1.0 ~ 180µH | 1.60 ~ 0.110A |
| • 04B4 | 0.47 ~ 1800µH | 1.84 ~ 0.036A |
| • 04C4 | 1.5 ~ 560µH | 1.90 ~ 0.090A |
| • 0505 | 1.2 ~ 1000µH | 1.77 ~ 0.067A |
| • 05B5 | 1.0 ~ 820µH | 2.70 ~ 0.026A |
| • 05C5 | 1.0 ~ 2500µH | 4.00 ~ 0.045A |
| • 0707 | 1.0 ~ 820µH | 3.28 ~ 0.100A |
| • 07B7 | 1.0 ~ 1500µH | 3.52 ~ 0.095A |
| • 07D7 | 0.36 ~ 1000µH | 9.24 ~ 0.180A |
- Electrical specifications at 25°C



mm (inches)

| Type | A | B | C max. | D | H | J | K | øC |
|------|--------------------------------|--------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| 0404 | 3.80 ± 0.30 (0.150 ± 0.012) | 3.80 ± 0.30 (0.150 ± 0.012) | 1.25 (0.049) | 1.20 (0.047) | 4.40 (0.173) | 4.40 (0.173) | 1.10 (0.043) | 3.00 (0.118) |
| 04B4 | 3.80 ± 0.30 (0.150 ± 0.012) | 3.80 ± 0.30 (0.150 ± 0.012) | 2.00 (0.079) | 1.20 (0.047) | 4.40 (0.173) | 4.40 (0.173) | 1.10 (0.043) | 3.00 (0.118) |
| 04C4 | 3.80 ± 0.30 (0.150 ± 0.012) | 3.80 ± 0.30 (0.150 ± 0.012) | 3.00 (0.118) | 1.20 (0.047) | 4.40 (0.173) | 4.40 (0.173) | 1.10 (0.043) | 3.00 (0.118) |
| 0505 | 5.00 ± 0.30 (0.197 ± 0.012) | 5.00 ± 0.30 (0.197 ± 0.012) | 1.20 (0.047) | 2.00 (0.079) | 5.90 (0.232) | 5.90 (0.232) | 1.90 (0.075) | 4.20 (0.165) |
| 05B5 | 5.00 ± 0.30 (0.197 ± 0.012) | 5.00 ± 0.30 (0.197 ± 0.012) | 2.00 (0.079) | 2.00 (0.079) | 5.90 (0.232) | 5.90 (0.232) | 1.90 (0.075) | 4.20 (0.165) |
| 05C5 | 5.00 ± 0.30 (0.197 ± 0.012) | 5.00 ± 0.30 (0.197 ± 0.012) | 3.00 (0.118) | 2.00 (0.079) | 5.90 (0.232) | 5.90 (0.232) | 1.90 (0.075) | 4.20 (0.165) |
| 0707 | 6.90 ± 0.30 (0.272 ± 0.012) | 6.90 ± 0.30 (0.272 ± 0.012) | 1.50 (0.059) | 2.50 (0.098) | 7.30 (0.287) | 7.30 (0.287) | 2.00 (0.079) | 5.30 (0.209) |
| 07B7 | 6.90 ± 0.30 (0.272 ± 0.012) | 6.90 ± 0.30 (0.272 ± 0.012) | 1.90 (0.075) | 2.50 (0.098) | 7.30 (0.287) | 7.30 (0.287) | 2.00 (0.079) | 5.30 (0.209) |
| 07D7 | 7.00 ± 0.40 (0.276 ± 0.016) | 7.00 ± 0.40 (0.276 ± 0.016) | 4.30 (0.169) | 1.80 (0.071) | 8.00 (0.315) | 8.00 (0.315) | 1.60 (0.063) | 6.00 (0.236) |

LMax SMD Power Inductor

LMXS Series – Shielded Style C

HOW TO ORDER

| | | | | | | | | |
|---------------------|---------------|--|----------------------|---|----------|--------------|--------------|--------------|
| LM | XS | 0707 | M | R04 | C | T | A | S |
| Family | Series | Size | Tolerance | Inductance | Style | Termination | Special | Packaging |
| LM = Power Inductor | XS = Shielded | 0707 = 7x7xh 07D7 = 7x7xD(h) (h = see catalog) | M = ±20% N = ±30% | R04 = 0.039µH R39 = 0.390µH 3R9 = 3.900µH 390 = 39.00µH 391 = 390.0µH 392 = 3900µH | | T = Sn Plate | A = Standard | S = 13" Reel |

ELECTRICAL CHARACTERISTICS

0404/04B4/04C4

| Codes | L (µH) | Tolerance | Test Condition | DCR (Ω) max. | | | I sat (A) max* | | |
|-------|--------|-----------|----------------|--------------|--------|-------|----------------|-------|-------|
| | | | | 0404 | 04B4 | 04C4 | 0404 | 04B4 | 04C4 |
| R47 | 0.47 | N | 100KHz, 0.25V | – | 0.017 | – | – | 1.840 | – |
| 1R0 | 1.0 | M, N | 100KHz, 0.25V | 0.060 | 0.030 | – | 1.600 | 1.800 | – |
| 1R2 | 1.2 | M, N | 100KHz, 0.25V | 0.065 | 0.043 | – | 1.400 | 1.700 | – |
| 1R5 | 1.5 | M, N | 100KHz, 0.25V | 0.077 | 0.052 | 0.015 | 1.240 | 1.600 | 1.900 |
| 1R8 | 1.8 | M, N | 100KHz, 0.25V | 0.093 | – | 0.018 | 1.220 | – | 1.760 |
| 2R2 | 2.2 | M, N | 100KHz, 0.25V | 0.125 | 0.058 | 0.020 | 1.200 | 1.500 | 1.670 |
| 2R4 | 2.4 | M, N | 100KHz, 0.25V | 0.139 | – | 0.022 | 0.980 | – | 1.650 |
| 2R5 | 2.5 | M, N | 100KHz, 0.25V | – | 0.059 | – | – | 1.400 | – |
| 2R7 | 2.7 | M, N | 100KHz, 0.25V | – | 0.059 | 0.028 | – | 1.400 | 1.450 |
| 3R3 | 3.3 | M, N | 100KHz, 0.25V | 0.187 | 0.064 | 0.032 | 0.890 | 1.300 | 1.440 |
| 3R5 | 3.5 | M, N | 100KHz, 0.25V | 0.210 | 0.127 | – | 0.850 | 1.300 | – |
| 3R6 | 3.6 | M, N | 100KHz, 0.25V | – | – | 0.035 | – | – | 1.430 |
| 3R9 | 3.9 | M, N | 100KHz, 0.25V | 0.220 | 0.135 | 0.037 | 0.780 | 1.120 | 1.320 |
| 4R3 | 4.3 | M, N | 100KHz, 0.25V | – | – | 0.043 | – | – | 1.000 |
| 4R7 | 4.7 | M, N | 100KHz, 0.25V | 0.240 | 0.146 | 0.045 | 0.710 | 1.100 | 0.970 |
| 5R1 | 5.1 | M, N | 100KHz, 0.25V | – | – | 0.046 | – | – | 0.940 |
| 5R6 | 5.6 | M, N | 100KHz, 0.25V | 0.320 | 0.176 | – | 0.620 | 0.950 | – |
| 6R2 | 6.2 | M, N | 100KHz, 0.25V | – | 0.220 | – | – | 0.910 | – |
| 6R8 | 6.8 | M, N | 100KHz, 0.25V | 0.350 | 0.238 | 0.065 | 0.570 | 0.900 | 0.870 |
| 7R5 | 7.5 | M, N | 100KHz, 0.25V | – | – | 0.079 | – | – | 0.820 |
| 8R2 | 8.2 | M, N | 100KHz, 0.25V | 0.470 | 0.272 | 0.071 | 0.520 | 0.800 | 0.770 |
| 100 | 10 | M | 1KHz, 0.25V | 0.570 | 0.299 | 0.105 | 0.470 | 0.700 | 0.700 |
| 120 | 12 | M | 1KHz, 0.25V | 0.750 | – | 0.119 | 0.430 | – | 0.670 |
| 150 | 15 | M | 1KHz, 0.25V | 0.810 | 0.472 | 0.140 | 0.380 | 0.610 | 0.540 |
| 180 | 18 | M | 1KHz, 0.25V | 1.060 | – | 0.175 | 0.350 | – | 0.500 |
| 220 | 22 | M | 1KHz, 0.25V | 1.150 | 0.592 | 0.201 | 0.320 | 0.520 | 0.480 |
| 270 | 27 | M | 1KHz, 0.25V | 1.670 | 0.630 | 0.227 | 0.290 | 0.440 | 0.400 |
| 330 | 33 | M | 1KHz, 0.25V | 1.840 | 1.075 | 0.287 | 0.280 | 0.430 | 0.350 |
| 390 | 39 | M | 1KHz, 0.25V | 2.310 | – | 0.341 | 0.250 | – | 0.330 |
| 470 | 47 | M | 1KHz, 0.25V | 2.630 | 1.309 | 0.430 | 0.220 | 0.340 | 0.320 |
| 560 | 56 | M | 1KHz, 0.25V | 2.860 | – | 0.471 | 0.200 | – | 0.300 |
| 680 | 68 | M | 1KHz, 0.25V | 3.940 | 2.613 | 0.532 | 0.180 | 0.250 | 0.270 |
| 820 | 82 | M | 1KHz, 0.25V | 4.900 | 2.950 | 0.675 | 0.160 | 0.200 | 0.230 |
| 101 | 100 | M | 1KHz, 0.25V | 5.740 | 3.255 | 0.850 | 0.140 | 0.190 | 0.210 |
| 121 | 120 | M | 1KHz, 0.25V | 7.310 | – | 1.110 | 0.130 | – | 0.200 |
| 151 | 150 | M | 1KHz, 0.25V | 9.080 | 3.550 | 1.230 | 0.120 | 0.120 | 0.170 |
| 181 | 180 | M | 1KHz, 0.25V | 9.500 | – | 1.560 | 0.110 | – | 0.150 |
| 221 | 220 | M | 1KHz, 0.25V | – | 4.900 | 1.800 | – | 0.090 | 0.140 |
| 271 | 270 | M | 1KHz, 0.25V | – | – | 2.200 | – | – | 0.130 |
| 331 | 330 | M | 1KHz, 0.25V | – | 7.280 | 2.640 | – | 0.080 | 0.120 |
| 471 | 470 | M | 1KHz, 0.25V | – | – | 3.820 | – | – | 0.100 |
| 561 | 560 | M | 1KHz, 0.25V | – | – | 4.620 | – | – | 0.090 |
| 681 | 680 | M | 1KHz, 0.25V | – | 13.370 | – | – | 0.070 | – |
| 102 | 1000 | M | 1KHz, 0.25V | – | 19.550 | – | – | 0.065 | – |
| 152 | 1500 | M | 1KHz, 0.25V | – | 36.150 | – | – | 0.038 | – |
| 182 | 1800 | M | 1KHz, 0.25V | – | 57.620 | – | – | 0.036 | – |

*Saturation Current (0404/04B4): The DC current when the inductance becomes 30% lower than its initial value. (Ta=25°C)

*Saturation Current (04C4): The DC current when the inductance becomes 35% lower than its initial value. (Ta=25°C)

LMax SMD Power Inductor

LMXS Series – Shielded Style C



0505/05B5/05C5

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | | | I sat (A) max* | | |
|-------|--------|-----------|----------------|--------------|-------|-------|----------------|-------|-------|
| | | | | 0505 | 05B5 | 05C5 | 0505 | 05B5 | 05C5 |
| 1R0 | 1.0 | M, N | 100KHz, 0.25V | – | 0.030 | 0.015 | – | 2.700 | 4.000 |
| 1R1 | 1.1 | M, N | 100KHz, 0.25V | – | – | 0.020 | – | – | 3.870 |
| 1R2 | 1.2 | M, N | 100KHz, 0.25V | 0.050 | 0.044 | 0.022 | 1.770 | 2.150 | 3.800 |
| 1R5 | 1.5 | M, N | 100KHz, 0.25V | 0.069 | – | – | 1.710 | – | – |
| 2R0 | 2.0 | M, N | 100KHz, 0.25V | 0.100 | 0.046 | 0.027 | 1.440 | 1.900 | 2.920 |
| 2R2 | 2.2 | M, N | 100KHz, 0.25V | 0.110 | 0.059 | 0.029 | 1.400 | 1.630 | 2.410 |
| 3R3 | 3.3 | M, N | 100KHz, 0.25V | 0.140 | 0.062 | 0.034 | 1.140 | 1.500 | 2.360 |
| 3R5 | 3.5 | M, N | 100KHz, 0.25V | 0.150 | 0.073 | – | 1.100 | 1.340 | – |
| 4R1 | 4.1 | M, N | 100KHz, 0.25V | – | 0.081 | – | – | 1.200 | – |
| 4R7 | 4.7 | M, N | 100KHz, 0.25V | 0.190 | 0.087 | 0.045 | 0.950 | 1.140 | 1.870 |
| 5R6 | 5.6 | M, N | 100KHz, 0.25V | 0.193 | 0.093 | 0.052 | 0.900 | 1.000 | 1.600 |
| 6R2 | 6.2 | M, N | 100KHz, 0.25V | 0.200 | – | – | 0.840 | – | – |
| 6R8 | 6.8 | M, N | 100KHz, 0.25V | 0.200 | 0.105 | 0.068 | 0.800 | 0.950 | 1.510 |
| 8R2 | 8.2 | M, N | 100KHz, 0.25V | 0.300 | 0.139 | 0.084 | 0.750 | 0.900 | 1.380 |
| 100 | 10 | M | 1KHz, 0.25V | 0.350 | 0.150 | 0.090 | 0.660 | 0.760 | 1.330 |
| 120 | 12 | M | 1KHz, 0.25V | 0.430 | 0.170 | – | 0.620 | 0.660 | – |
| 150 | 15 | M | 1KHz, 0.25V | 0.440 | 0.210 | 0.142 | 0.590 | 0.630 | 1.050 |
| 180 | 18 | M | 1KHz, 0.25V | 0.750 | – | – | 0.570 | – | – |
| 220 | 22 | M | 1KHz, 0.25V | 0.820 | 0.275 | 0.208 | 0.560 | 0.560 | 0.860 |
| 270 | 27 | M | 1KHz, 0.25V | – | – | 0.222 | – | – | 0.750 |
| 330 | 33 | M | 1KHz, 0.25V | 1.160 | 0.455 | 0.257 | 0.430 | 0.440 | 0.720 |
| 390 | 39 | M | 1KHz, 0.25V | – | 0.540 | – | – | 0.380 | – |
| 470 | 47 | M | 1KHz, 0.25V | 1.590 | 0.730 | 0.352 | 0.340 | 0.350 | 0.620 |
| 560 | 56 | M | 1KHz, 0.25V | – | 0.800 | – | – | 0.320 | – |
| 680 | 68 | M | 1KHz, 0.25V | 2.140 | 0.935 | 0.525 | 0.290 | 0.300 | 0.510 |
| 820 | 82 | M | 1KHz, 0.25V | 2.720 | – | – | 0.250 | – | – |
| 101 | 100 | M | 1KHz, 0.25V | 3.550 | 1.500 | 0.801 | 0.220 | 0.230 | 0.430 |
| 121 | 120 | M | 1KHz, 0.25V | 4.890 | 1.910 | 0.850 | 0.200 | 0.220 | 0.340 |
| 151 | 150 | M | 1KHz, 0.25V | 5.200 | 2.680 | 1.100 | 0.190 | 0.210 | 0.260 |
| 181 | 180 | M | 1KHz, 0.25V | 7.550 | 3.045 | 1.190 | 0.170 | 0.200 | 0.240 |
| 221 | 220 | M | 1KHz, 0.25V | 7.760 | 3.520 | 1.530 | 0.150 | 0.195 | 0.200 |
| 271 | 270 | M | 1KHz, 0.25V | 10.13 | 4.380 | – | 0.145 | 0.193 | – |
| 331 | 330 | M | 1KHz, 0.25V | 11.23 | 5.560 | 2.030 | 0.140 | 0.190 | 0.190 |
| 391 | 390 | M | 1KHz, 0.25V | – | – | 3.000 | – | – | 0.160 |
| 471 | 470 | M | 1KHz, 0.25V | 16.86 | 7.820 | 3.500 | 0.098 | 0.180 | 0.150 |
| 561 | 560 | M | 1KHz, 0.25V | 22.78 | 9.790 | 4.450 | 0.097 | 0.170 | 0.140 |
| 681 | 680 | M | 1KHz, 0.25V | 24.87 | – | – | 0.085 | – | – |
| 821 | 820 | M | 1KHz, 0.25V | 28.09 | 15.00 | – | 0.077 | 0.120 | – |
| 102 | 1000 | M | 1KHz, 0.25V | 45.07 | – | – | 0.067 | – | – |
| 122 | 1200 | M | 1KHz, 0.25V | – | – | 8.500 | – | – | 0.070 |
| 152 | 1500 | M | 1KHz, 0.25V | – | – | 10.00 | – | – | 0.065 |
| 182 | 1800 | M | 1KHz, 0.25V | – | – | 13.15 | – | – | 0.062 |
| 222 | 2200 | M | 1KHz, 0.25V | – | – | 19.00 | – | – | 0.050 |
| 252 | 2500 | M | 1KHz, 0.25V | – | – | 20.00 | – | – | 0.045 |

*Saturation Current (0505/05B5/05C5): The DC current when the inductance becomes 30% lower than its initial value.

LMax SMD Power Inductor

LMXS Series – Shielded Style C



0707/07B7/07D7

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | | | I sat (A) max* | | |
|-------|--------|-----------|----------------|--------------|-------|--------|----------------|-------|-------|
| | | | | 0707 | 07B7 | 07D7 | 0707 | 07B7 | 07D7 |
| R36 | 0.36 | N | 100KHz, 0.25V | - | - | 0.005 | - | - | 9.240 |
| R56 | 0.56 | N | 100KHz, 0.25V | - | - | 0.006 | - | - | 8.500 |
| R80 | 0.80 | N | 100KHz, 0.25V | - | - | 0.009 | - | - | 5.800 |
| 1R0 | 1.0 | M, N | 100KHz, 0.25V | 0.050 | 0.035 | 0.040 | 3.280 | 3.520 | 2.100 |
| 1R2 | 1.2 | M, N | 100KHz, 0.25V | - | - | 0.040 | - | - | 2.100 |
| 1R5 | 1.5 | M, N | 100KHz, 0.25V | 0.067 | - | 0.040 | 2.530 | - | 2.100 |
| 1R8 | 1.8 | M, N | 100KHz, 0.25V | - | 0.052 | 0.040 | - | 3.050 | 2.090 |
| 2R0 | 2.0 | M, N | 100KHz, 0.25V | 0.085 | - | - | 2.060 | - | - |
| 2R2 | 2.2 | M, N | 100KHz, 0.25V | - | 0.071 | 0.0410 | - | 2.500 | 2.080 |
| 2R5 | 2.5 | M, N | 100KHz, 0.25V | - | - | 0.0410 | - | - | 2.080 |
| 2R7 | 2.7 | M, N | 100KHz, 0.25V | 0.110 | - | - | 1.870 | - | - |
| 3R0 | 3.0 | M, N | 100KHz, 0.25V | - | 0.086 | - | - | 2.150 | - |
| 3R3 | 3.3 | M, N | 100KHz, 0.25V | 0.130 | - | 0.0410 | 1.580 | - | 2.070 |
| 3R9 | 3.9 | M, N | 100KHz, 0.25V | 0.160 | 0.110 | - | 1.460 | 2.010 | - |
| 4R3 | 4.3 | M, N | 100KHz, 0.25V | - | - | 0.041 | - | - | 2.060 |
| 4R7 | 4.7 | M, N | 100KHz, 0.25V | 0.200 | 0.130 | 0.042 | 1.300 | 1.950 | 2.050 |
| 5R6 | 5.6 | M, N | 100KHz, 0.25V | 0.230 | 0.150 | 0.043 | 1.220 | 1.820 | 2.040 |
| 6R8 | 6.8 | M, N | 100KHz, 0.25V | 0.280 | 0.170 | 0.044 | 1.160 | 1.670 | 2.040 |
| 8R2 | 8.2 | M, N | 100KHz, 0.25V | 0.310 | 0.190 | - | 1.130 | 1.520 | - |
| 100 | 10 | M | 1KHz, 0.25V | 0.330 | 0.240 | 0.049 | 1.030 | 1.390 | 2.000 |
| 120 | 12 | M | 1KHz, 0.25V | 0.460 | 0.290 | 0.058 | 0.870 | 1.220 | 1.900 |
| 150 | 15 | M | 1KHz, 0.25V | 0.530 | 0.380 | 0.081 | 0.800 | 1.090 | 1.600 |
| 180 | 18 | M | 1KHz, 0.25V | 0.620 | 0.440 | 0.091 | 0.730 | 1.030 | 1.480 |
| 220 | 22 | M | 1KHz, 0.25V | 0.700 | 0.490 | 0.110 | 0.710 | 0.950 | 1.320 |
| 270 | 27 | M | 1KHz, 0.25V | 0.910 | 0.640 | 0.150 | 0.650 | 0.840 | 1.260 |
| 330 | 33 | M | 1KHz, 0.25V | 1.150 | 0.740 | 0.170 | 0.570 | 0.800 | 1.100 |
| 390 | 39 | M | 1KHz, 0.25V | 1.380 | 0.910 | 0.230 | 0.500 | 0.750 | 1.050 |
| 470 | 47 | M | 1KHz, 0.25V | 1.540 | 1.020 | 0.260 | 0.480 | 0.690 | 1.000 |
| 560 | 56 | M | 1KHz, 0.25V | 1.860 | 1.260 | 0.350 | 0.450 | 0.630 | 0.850 |
| 680 | 68 | M | 1KHz, 0.25V | 2.320 | 1.570 | 0.380 | 0.410 | 0.560 | 0.780 |
| 820 | 82 | M | 1KHz, 0.25V | 2.540 | 1.890 | 0.430 | 0.370 | 0.510 | 0.740 |
| 101 | 100 | M | 1KHz, 0.25V | 3.20 | 2.12 | 0.61 | 0.32 | 0.47 | 0.70 |
| 121 | 120 | M | 1KHz, 0.25V | 4.24 | 2.55 | 0.66 | 0.29 | 0.42 | 0.60 |
| 151 | 150 | M | 1KHz, 0.25V | 4.77 | 3.37 | 0.88 | 0.27 | 0.37 | 0.52 |
| 181 | 180 | M | 1KHz, 0.25V | 6.04 | 3.73 | 0.98 | 0.24 | 0.32 | 0.46 |
| 221 | 220 | M | 1KHz, 0.25V | 7.95 | 4.54 | 1.17 | 0.22 | 0.29 | 0.40 |
| 271 | 270 | M | 1KHz, 0.25V | 10.51 | 5.97 | 1.64 | 0.19 | 0.25 | 0.36 |
| 331 | 330 | M | 1KHz, 0.25V | 11.63 | 7.74 | 1.86 | 0.18 | 0.23 | 0.32 |
| 391 | 390 | M | 1KHz, 0.25V | 12.97 | 9.92 | 2.85 | 0.16 | 0.21 | 0.28 |
| 471 | 470 | M | 1KHz, 0.25V | 16.87 | 12.95 | 3.01 | 0.15 | 0.18 | 0.26 |
| 561 | 560 | M | 1KHz, 0.25V | 22.3 | 14.36 | 3.62 | 0.13 | 0.16 | 0.24 |
| 681 | 680 | M | 1KHz, 0.25V | 25.11 | 18.52 | 4.63 | 0.12 | 0.14 | 0.22 |
| 821 | 820 | M | 1KHz, 0.25V | 28.41 | 20.23 | 5.20 | 0.10 | 0.13 | 0.20 |
| 102 | 1000 | M | 1KHz, 0.25V | - | 28.25 | 6.00 | - | 0.11 | 0.18 |
| 122 | 1200 | M | 1KHz, 0.25V | - | 31.85 | - | - | 0.10 | - |
| 152 | 1500 | M | 1KHz, 0.25V | - | 36.72 | - | - | 0.095 | - |

*Saturation Current (0707/07B7/07D7): The DC current when the inductance becomes 30% lower than its initial value.

LMax SMD Power Inductor

LMXS Series – Shielded Style D

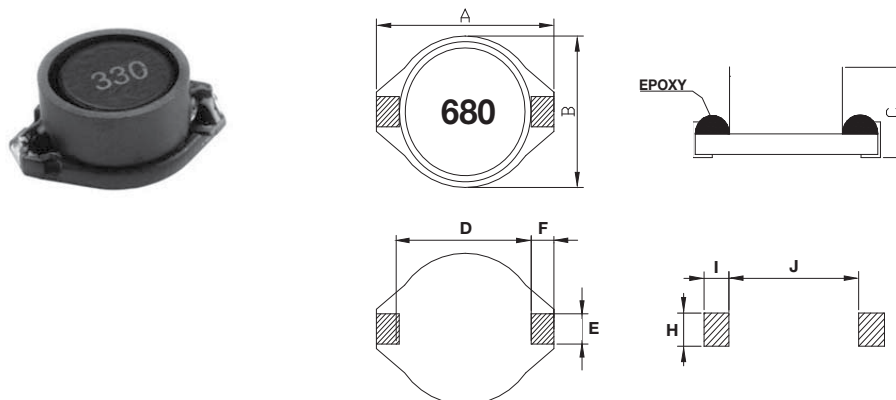
FEATURES

- Magnetically shielded against radiation
- 0704 can help achieve longer battery life significantly in handheld communication devices.
- 1309 / 1915 designed for the higher current requirements of portable computers.
- 0704 has ceramic base with gold-plating
- 1309 / 1915 has LCP plastic base

APPLICATIONS

- Portable Telephones
- Personal Computers
- Other Various Electronic Appliances
- DC/DC Converters, etc.

DIMENSIONS



CHARACTERISTICS

- Saturation Rated Current (IDC): The DC current when the inductance becomes 10% lower than its initial value. (Ta=25°C)
- Temperature Rise Current (I rms): The actual current when temperature of coil becomes Δ40°C. (Ta=25°C)
- Operating temperature range: -40 ~ 85°C

INDUCTANCE AND RATED CURRENT RANGES

- 0704 1.0 ~ 10000μH 3.0 ~ 0.02A
- 1309 1.0 ~ 1000μH 5.0 ~ 0.17A
- 1915 10 ~ 1000μH 3.9 ~ 0.53A
- Electrical specifications at 25°C



mm (inches)

| Type | A max. | B max. | C max. | D | E | F | H | I | J |
|------|------------------|------------------|-----------------|------------------|-----------------|-----------------|-----------------|-----------------|------------------|
| 0704 | 6.60 (0.260) | 4.45 (0.175) | 2.92 (0.115) | 4.32 (0.170) | 1.27 (0.050) | 1.02 (0.040) | 3.56 (0.140) | 1.40 (0.055) | 4.06 (0.160) |
| 1309 | 12.95 (0.510) | 9.40 (0.370) | 5.21 (0.205) | 7.62 (0.300) | 2.54 (0.100) | 2.54 (0.100) | 2.79 (0.110) | 2.92 (0.115) | 7.37 (0.290) |
| 1915 | 18.54 (0.730) | 15.24 (0.600) | 7.62 (0.300) | 12.70 (0.500) | 2.54 (0.100) | 2.54 (0.100) | 2.79 (0.110) | 2.92 (0.115) | 12.45 (0.490) |

HOW TO ORDER

| | | | | | | | | |
|---------------------|---------------|--|------------------|---|--------------|--------------------|----------------|------------------|
| LM | XS | 0704 | M | R04 | D | T | A | S |
| Family | Series | Size | Tolerance | Inductance | Style | Termination | Special | Packaging |
| LM = Power Inductor | XS = Shielded | 0704 = 7x4xh 1309 = 13x9xh (h = see catalog) | M = ±20% | R04 = 0.039μH R39 = 0.390μH 3R9 = 3.900μH 390 = 39.00μH 391 = 390.0μH 392 = 3900μH | | T = Sn Plate | A = Standard | S = 13" Reel |

LMax SMD Power Inductor

LMXS Series – Shielded Style D



ELECTRICAL CHARACTERISTICS

0704

| Codes | L (μ H) | Tolerance | Test Condition | | DCR (Ω) max. | SRF ref (MHz) | Q min. | I rms (A) max. |
|-------|-----------------|-----------|----------------|--------------|--------------------------|------------------|--------|-------------------|
| | | | L | Q | | | | |
| 1R0 | 1.0 | M | 100KHz, 0.1V | 200KHz, 0.1V | 0.040 | 250 | 30 | 3.00 |
| 1R5 | 1.5 | M | 100KHz, 0.1V | 200KHz, 0.1V | 0.045 | 125 | 30 | 2.30 |
| 2R2 | 2.2 | M | 100KHz, 0.1V | 200KHz, 0.1V | 0.050 | 120 | 40 | 1.80 |
| 3R3 | 3.3 | M | 100KHz, 0.1V | 200KHz, 0.1V | 0.055 | 120 | 40 | 1.60 |
| 4R7 | 4.7 | M | 100KHz, 0.1V | 200KHz, 0.1V | 0.060 | 105 | 40 | 1.40 |
| 6R8 | 6.8 | M | 100KHz, 0.1V | 200KHz, 0.1V | 0.065 | 50 | 40 | 1.20 |
| 100 | 10 | M | 100KHz, 0.1V | 200KHz, 0.1V | 0.075 | 38 | 40 | 1.00 |
| 150 | 15 | M | 100KHz, 0.1V | 100KHz, 0.1V | 0.090 | 33 | 40 | 0.80 |
| 220 | 22 | M | 100KHz, 0.1V | 100KHz, 0.1V | 0.11 | 25 | 40 | 0.70 |
| 330 | 33 | M | 100KHz, 0.1V | 100KHz, 0.1V | 0.19 | 20 | 40 | 0.60 |
| 470 | 47 | M | 100KHz, 0.1V | 100KHz, 0.1V | 0.23 | 20 | 40 | 0.50 |
| 680 | 68 | M | 100KHz, 0.1V | 100KHz, 0.1V | 0.29 | 15 | 40 | 0.40 |
| 101 | 100 | M | 100KHz, 0.1V | 100KHz, 0.1V | 0.48 | 10 | 40 | 0.30 |
| 151 | 150 | M | 100KHz, 0.1V | 100KHz, 0.1V | 0.59 | 9 | 40 | 0.26 |
| 221 | 220 | M | 100KHz, 0.1V | 100KHz, 0.1V | 0.90 | 6 | 40 | 0.22 |
| 331 | 330 | M | 100KHz, 0.1V | 100KHz, 0.1V | 1.40 | 5 | 40 | 0.20 |
| 471 | 470 | M | 100KHz, 0.1V | 100KHz, 0.1V | 1.80 | 4 | 40 | 0.19 |
| 681 | 680 | M | 100KHz, 0.1V | 100KHz, 0.1V | 2.20 | 3 | 40 | 0.18 |
| 102 | 1000 | M | 100KHz, 0.1V | 100KHz, 0.1V | 3.40 | 2 | 40 | 0.15 |
| 152 | 1500 | M | 100KHz, 0.1V | 100KHz, 0.1V | 4.20 | 2 | 50 | 0.12 |
| 222 | 2200 | M | 100KHz, 0.1V | 100KHz, 0.1V | 8.50 | 2 | 50 | 0.10 |
| 332 | 3300 | M | 100KHz, 0.1V | 100KHz, 0.1V | 11.0 | 1 | 50 | 0.08 |
| 472 | 4700 | M | 100KHz, 0.1V | 100KHz, 0.1V | 13.9 | 1 | 50 | 0.06 |
| 682 | 6800 | M | 100KHz, 0.1V | 100KHz, 0.1V | 25.0 | 1 | 50 | 0.04 |
| 103 | 10000 | M | 100KHz, 0.1V | 100KHz, 0.1V | 32.8 | 0.8 | 50 | 0.02 |

1309

| Codes | L (μ H) | Tolerance | Test Condition | DCR (Ω) max. | SRF ref (MHz) | IDC (A) max | I rms (A) max. |
|-------|-----------------|-----------|----------------|--------------------------|------------------|----------------|-------------------|
| 1R0 | 1.0 | M | 100KHz, 0.1V | 0.021 | 140 | 5.6 | 5.0 |
| 1R5 | 1.5 | M | 100KHz, 0.1V | 0.022 | 120 | 5.2 | 4.5 |
| 2R2 | 2.2 | M | 100KHz, 0.1V | 0.032 | 80 | 5.0 | 3.8 |
| 3R3 | 3.3 | M | 100KHz, 0.1V | 0.039 | 70 | 3.9 | 3.3 |
| 4R7 | 4.7 | M | 100KHz, 0.1V | 0.054 | 40 | 3.2 | 2.7 |
| 6R8 | 6.8 | M | 100KHz, 0.1V | 0.075 | 38 | 2.8 | 2.2 |
| 100 | 10 | M | 100KHz, 0.1V | 0.101 | 35 | 2.4 | 2.0 |
| 150 | 15 | M | 100KHz, 0.1V | 0.150 | 25 | 2.0 | 1.5 |
| 220 | 22 | M | 100KHz, 0.1V | 0.207 | 19 | 1.6 | 1.3 |
| 330 | 33 | M | 100KHz, 0.1V | 0.334 | 15 | 1.4 | 1.1 |
| 470 | 47 | M | 100KHz, 0.1V | 0.472 | 13 | 1.0 | 0.8 |
| 680 | 68 | M | 100KHz, 0.1V | 0.660 | 10 | 0.9 | 0.7 |
| 101 | 100 | M | 100KHz, 0.1V | 1.110 | 7 | 0.8 | 0.6 |
| 151 | 150 | M | 100KHz, 0.1V | 1.550 | 6 | 0.6 | 0.5 |
| 221 | 220 | M | 100KHz, 0.1V | 2.000 | 5 | 0.5 | 0.37 |
| 102 | 1000 | M | 100KHz, 0.1V | 8.300 | 2 | 0.32 | 0.17 |

LMax SMD Power Inductor

LMXS Series – Shielded Style D



1915

| Codes | L (μ H) | Tolerance | Test Condition | DCR (Ω) max. | SRF ref (MHz) | IDC (A) max. | I rms (A) max. |
|-------|-----------------|-----------|-------------------|--------------------------|------------------|-----------------|-------------------|
| 100 | 10 | M | 100KHz, 0.1V | 0.040 | 30 | 8.0 | 3.9 |
| 150 | 15 | M | 100KHz, 0.1V | 0.048 | 20 | 7.00 | 3.4 |
| 220 | 22 | M | 100KHz, 0.1V | 0.059 | 18 | 6.00 | 3.1 |
| 330 | 33 | M | 100KHz, 0.1V | 0.075 | 14 | 5.00 | 2.8 |
| 470 | 47 | M | 100KHz, 0.1V | 0.097 | 10 | 4.00 | 2.4 |
| 680 | 68 | M | 100KHz, 0.1V | 0.138 | 9.0 | 3.00 | 2.0 |
| 101 | 100 | M | 100KHz, 0.1V | 0.207 | 7.0 | 2.40 | 1.7 |
| 151 | 150 | M | 100KHz, 0.1V | 0.293 | 6.0 | 2.10 | 1.3 |
| 221 | 220 | M | 100KHz, 0.1V | 0.470 | 5.0 | 1.90 | 1.1 |
| 331 | 330 | M | 100KHz, 0.1V | 0.780 | 4.0 | 1.10 | 0.86 |
| 471 | 470 | M | 100KHz, 0.1V | 1.080 | 3.0 | 1.10 | 0.73 |
| 681 | 680 | M | 100KHz, 0.1V | 1.400 | 2.5 | 0.96 | 0.64 |
| 102 | 1000 | M | 100KHz, 0.1V | 2.010 | 2.0 | 0.80 | 0.53 |

LMax SMD Power Inductor

LMXS Series – Shielded Style F

FEATURES

- Magnetically Shielded Construction
- Large Current
- Low DCR

APPLICATIONS

- Telephones
- PCs
- Notebooks
- Hard Disk Drives
- Peripherals

CHARACTERISTICS

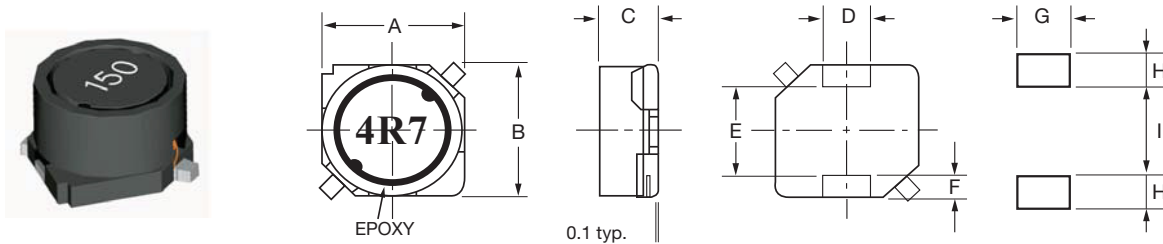
- Rated Current (IDC): The DC current that will cause an approximate ΔT of 40°C. ($T_a=25^\circ\text{C}$)
- Operating temperature range: $-40^\circ\text{C} \sim +125^\circ\text{C}$

INDUCTANCE AND RATED CURRENT RANGES

- 0606 4.7 μH ~ 100.0 μH 1.50 ~ 0.33A
- 06C6 4.7 μH ~ 100.0 μH 1.60 ~ 0.42A
- 0707 3.3 μH ~ 47.0 μH 1.60 ~ 0.54A
- 07C7 3.3 μH ~ 1000.0 μH 1.90 ~ 0.13A
- 07E7 3.3 μH ~ 1000.0 μH 2.30 ~ 0.14A
- 1010 10.0 μH ~ 1500.0 μH 2.50 ~ 0.22A
- 1313 6.0 μH ~ 1500.0 μH 3.60 ~ 0.29A
- 131H 2.0 μH ~ 220.0 μH 6.20 ~ 1.00A
- 131J 1.2 μH ~ 220.0 μH 8.20 ~ 1.30A
- Electrical specifications at 25°C



DIMENSIONS



mm (inches)

| Type | A | B | C | D | E | F | G | H | I |
|------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|-----------------|-----------------|-----------------|
| 0606 | 6.00 ± 0.20 (0.236 ± 0.008) | 6.00 ± 0.20 (0.236 ± 0.008) | 2.50 ± 0.20 (0.099 ± 0.008) | 2.00 ± 0.10 (0.079 ± 0.004) | 3.00 typ (0.118 typ) | 1.50 typ (0.059 typ) | 2.20 (0.087) | 2.00 (0.079) | 2.60 (0.103) |
| 06C6 | 6.00 ± 0.20 (0.236 ± 0.008) | 6.00 ± 0.20 (0.236 ± 0.008) | 2.80 ± 0.20 (0.110 ± 0.008) | 2.00 ± 0.10 (0.079 ± 0.004) | 3.00 typ (0.118 typ) | 1.50 typ (0.059 typ) | 2.20 (0.087) | 2.00 (0.079) | 2.60 (0.103) |
| 0707 | 7.00 ± 0.20 (0.276 ± 0.008) | 7.00 ± 0.20 (0.276 ± 0.008) | 2.80 ± 0.20 (0.110 ± 0.008) | 2.00 ± 0.10 (0.079 ± 0.004) | 4.00 typ (0.193 typ) | 1.50 typ (0.059 typ) | 2.20 (0.087) | 2.00 (0.079) | 3.60 (0.103) |
| 07C7 | 7.00 ± 0.20 (0.276 ± 0.008) | 7.00 ± 0.20 (0.276 ± 0.008) | 3.20 ± 0.20 (0.126 ± 0.008) | 2.00 ± 0.10 (0.079 ± 0.004) | 4.00 typ (0.193 typ) | 1.50 typ (0.059 typ) | 2.20 (0.087) | 2.00 (0.079) | 3.60 (0.142) |
| 07E7 | 7.00 ± 0.20 (0.276 ± 0.008) | 7.00 ± 0.20 (0.276 ± 0.008) | 4.50 ± 0.30 (0.177 ± 0.012) | 2.00 ± 0.10 (0.079 ± 0.004) | 4.00 typ (0.193 typ) | 1.50 typ (0.059 typ) | 2.20 (0.087) | 2.00 (0.079) | 3.60 (0.142) |
| 1010 | 10.1 ± 0.30 (0.398 ± 0.012) | 10.1 ± 0.30 (0.398 ± 0.012) | 4.50 ± 0.30 (0.177 ± 0.012) | 3.00 ± 0.10 (0.118 ± 0.004) | 6.00 ± 0.20 (0.236 ± 0.008) | 2.00 ± 0.15 (0.079 ± 0.006) | 3.20 (0.126) | 2.50 (0.099) | 5.60 (0.220) |
| 1313 | 12.5 ± 0.30 (0.492 ± 0.012) | 12.5 ± 0.30 (0.492 ± 0.012) | 5.50 ± 0.30 (0.217 ± 0.012) | 3.00 ± 0.10 (0.118 ± 0.004) | 8.60 ± 0.30 (0.339 ± 0.012) | 2.00 ± 0.15 (0.079 ± 0.006) | 3.20 (0.126) | 2.50 (0.099) | 8.20 (0.322) |
| 131H | 12.5 ± 0.30 (0.492 ± 0.012) | 12.5 ± 0.30 (0.492 ± 0.012) | 6.50 ± 0.35 (0.256 ± 0.014) | 3.00 ± 0.10 (0.118 ± 0.004) | 8.60 ± 0.30 (0.339 ± 0.012) | 2.00 ± 0.15 (0.079 ± 0.006) | 3.20 (0.126) | 2.50 (0.099) | 8.20 (0.322) |
| 131J | 12.5 ± 0.30 (0.492 ± 0.012) | 12.5 ± 0.30 (0.492 ± 0.012) | 7.50 ± 0.35 (0.295 ± 0.014) | 3.00 ± 0.10 (0.118 ± 0.004) | 8.60 ± 0.30 (0.339 ± 0.012) | 2.00 ± 0.15 (0.079 ± 0.006) | 3.20 (0.126) | 2.50 (0.099) | 8.20 (0.322) |

HOW TO ORDER

| | | | | | | | | |
|---------------------|---------------|--|------------------|--|--------------|--------------------|----------------|------------------|
| LM | XS | 0707 | M | 2R2 | F | T | A | S |
| Family | Series | Size | Tolerance | Inductance | Style | Termination | Special | Packaging |
| LM = Power Inductor | XS = Shielded | 0707 = 7x7xh 07C7 = 7x7xC(h) (h = see catalog) | M = ±20% | 2R2 = 2.20 μH 6R0 = 68.0 μH 152 = 1500 μH | | T = Sn Plate | A = Standard | S = 13" Reel |

LMax SMD Power Inductor

LMXS Series – Shielded Style F



ELECTRICAL CHARACTERISTICS

0606

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 4R7 | 4.7 | M | 100KHz, 1.0V | 0.050 | 1.50 |
| 6R8 | 6.8 | M | 100KHz, 1.0V | 0.080 | 1.30 |
| 100 | 10 | M | 100KHz, 1.0V | 0.098 | 1.00 |
| 150 | 15 | M | 100KHz, 1.0V | 0.140 | 0.88 |
| 220 | 22 | M | 100KHz, 1.0V | 0.208 | 0.73 |
| 330 | 33 | M | 100KHz, 1.0V | 0.310 | 0.59 |
| 470 | 47 | M | 100KHz, 1.0V | 0.390 | 0.48 |
| 680 | 68 | M | 100KHz, 1.0V | 0.540 | 0.42 |
| 101 | 100 | M | 100KHz, 1.0V | 0.810 | 0.33 |

06C6

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 4R7 | 4.7 | M | 100KHz, 1.0V | 0.050 | 1.60 |
| 6R8 | 6.8 | M | 100KHz, 1.0V | 0.073 | 1.50 |
| 100 | 10 | M | 100KHz, 1.0V | 0.098 | 1.30 |
| 150 | 15 | M | 100KHz, 1.0V | 0.128 | 1.00 |
| 220 | 22 | M | 100KHz, 1.0V | 0.172 | 0.77 |
| 330 | 33 | M | 100KHz, 1.0V | 0.290 | 0.69 |
| 470 | 47 | M | 100KHz, 1.0V | 0.420 | 0.59 |
| 680 | 68 | M | 100KHz, 1.0V | 0.533 | 0.50 |
| 101 | 100 | M | 100KHz, 1.0V | 0.730 | 0.42 |

0707

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 3R3 | 3.3 | M | 100KHz, 1.0V | 0.045 | 1.60 |
| 4R7 | 4.7 | M | 100KHz, 1.0V | 0.054 | 1.50 |
| 6R8 | 6.8 | M | 100KHz, 1.0V | 0.071 | 1.30 |
| 100 | 10 | M | 100KHz, 1.0V | 0.100 | 1.10 |
| 150 | 15 | M | 100KHz, 1.0V | 0.156 | 0.88 |
| 220 | 22 | M | 100KHz, 1.0V | 0.220 | 0.75 |
| 330 | 33 | M | 100KHz, 1.0V | 0.290 | 0.65 |
| 470 | 47 | M | 100KHz, 1.0V | 0.410 | 0.54 |

07C7

| Codes | L(μH) | Tolerance | TestCondition | DCR(Ω)max. | IDC(A)max. |
|-------|-------|-----------|---------------|------------|------------|
| 3R3 | 3.3 | M | 100KHz, 1.0V | 0.028 | 1.90 |
| 4R7 | 4.7 | M | 100KHz, 1.0V | 0.044 | 1.70 |
| 6R8 | 6.8 | M | 100KHz, 1.0V | 0.050 | 1.60 |
| 100 | 10 | M | 100KHz, 1.0V | 0.064 | 1.40 |
| 150 | 15 | M | 100KHz, 1.0V | 0.090 | 1.10 |
| 220 | 22 | M | 100KHz, 1.0V | 0.132 | 0.96 |
| 330 | 33 | M | 100KHz, 1.0V | 0.192 | 0.75 |
| 470 | 47 | M | 100KHz, 1.0V | 0.290 | 0.67 |
| 680 | 68 | M | 100KHz, 1.0V | 0.372 | 0.59 |
| 101 | 100 | M | 100KHz, 1.0V | 0.540 | 0.45 |
| 151 | 150 | M | 100KHz, 1.0V | 0.780 | 0.37 |
| 221 | 220 | M | 100KHz, 1.0V | 1.260 | 0.29 |
| 331 | 330 | M | 100KHz, 1.0V | 2.000 | 0.22 |
| 471 | 470 | M | 100KHz, 1.0V | 2.460 | 0.20 |
| 681 | 680 | M | 100KHz, 1.0V | 3.780 | 0.16 |
| 102 | 1000 | M | 100KHz, 1.0V | 5.740 | 0.13 |

LMax SMD Power Inductor

LMXS Series – Shielded Style F



07E7

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 3R3 | 3.3 | M | 100KHz, 1.0V | 0.024 | 2.30 |
| 4R7 | 4.7 | M | 100KHz, 1.0V | 0.036 | 2.00 |
| 6R8 | 6.8 | M | 100KHz, 1.0V | 0.047 | 1.70 |
| 100 | 10 | M | 100KHz, 1.0V | 0.045 | 1.30 |
| 150 | 15 | M | 100KHz, 1.0V | 0.063 | 1.10 |
| 220 | 22 | M | 100KHz, 1.0V | 0.075 | 0.90 |
| 330 | 33 | M | 100KHz, 1.0V | 0.120 | 0.82 |
| 470 | 47 | M | 100KHz, 1.0V | 0.150 | 0.75 |
| 680 | 68 | M | 100KHz, 1.0V | 0.210 | 0.60 |
| 101 | 100 | M | 100KHz, 1.0V | 0.300 | 0.50 |
| 151 | 150 | M | 100KHz, 1.0V | 0.410 | 0.40 |
| 221 | 220 | M | 100KHz, 1.0V | 0.624 | 0.33 |
| 331 | 330 | M | 100KHz, 1.0V | 0.890 | 0.25 |
| 471 | 470 | M | 100KHz, 1.0V | 1.260 | 0.22 |
| 681 | 680 | M | 100KHz, 1.0V | 1.780 | 0.20 |
| 102 | 1000 | M | 100KHz, 1.0V | 2.740 | 0.14 |

1010

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 100 | 10 | M | 100KHz, 1.0V | 0.044 | 2.50 |
| 150 | 15 | M | 100KHz, 1.0V | 0.057 | 2.20 |
| 220 | 22 | M | 100KHz, 1.0V | 0.071 | 1.90 |
| 330 | 33 | M | 100KHz, 1.0V | 0.100 | 1.60 |
| 470 | 47 | M | 100KHz, 1.0V | 0.120 | 1.40 |
| 680 | 68 | M | 100KHz, 1.0V | 0.170 | 1.20 |
| 101 | 100 | M | 100KHz, 1.0V | 0.240 | 1.00 |
| 151 | 150 | M | 100KHz, 1.0V | 0.420 | 0.79 |
| 221 | 220 | M | 100KHz, 1.0V | 0.570 | 0.65 |
| 331 | 330 | M | 100KHz, 1.0V | 0.820 | 0.54 |
| 471 | 470 | M | 100KHz, 1.0V | 1.240 | 0.47 |
| 681 | 680 | M | 100KHz, 1.0V | 1.920 | 0.38 |
| 102 | 1000 | M | 100KHz, 1.0V | 3.360 | 0.29 |
| 152 | 1500 | M | 100KHz, 1.0V | 4.080 | 0.22 |

1313

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 6R0 | 6 | M | 100KHz,1.0V | 0.020 | 3.60 |
| 100 | 10 | M | 100KHz,1.0V | 0.026 | 3.40 |
| 150 | 15 | M | 100KHz,1.0V | 0.032 | 2.80 |
| 220 | 22 | M | 100KHz,1.0V | 0.041 | 2.30 |
| 330 | 33 | M | 100KHz,1.0V | 0.050 | 1.90 |
| 470 | 47 | M | 100KHz,1.0V | 0.075 | 1.60 |
| 680 | 68 | M | 100KHz,1.0V | 0.100 | 1.30 |
| 101 | 100 | M | 100KHz,1.0V | 0.140 | 1.10 |
| 151 | 150 | M | 100KHz,1.0V | 0.230 | 0.88 |
| 221 | 220 | M | 100KHz,1.0V | 0.330 | 0.72 |
| 331 | 330 | M | 100KHz,1.0V | 0.500 | 0.59 |
| 471 | 470 | M | 100KHz,1.0V | 0.630 | 0.49 |
| 681 | 680 | M | 100KHz,1.0V | 0.920 | 0.43 |
| 102 | 1000 | M | 100KHz,1.0V | 1.350 | 0.34 |
| 152 | 1500 | M | 100KHz,1.0V | 2.080 | 0.29 |

LMax SMD Power Inductor

LMXS Series – Shielded Style F

131H

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 2R0 | 2.0 | M | 100KHz,1.0V | 0.014 | 6.20 |
| 4R2 | 4.2 | M | 100KHz,1.0V | 0.018 | 5.50 |
| 7R0 | 7.0 | M | 100KHz,1.0V | 0.022 | 5.00 |
| 100 | 10 | M | 100KHz,1.0V | 0.025 | 4.80 |
| 150 | 15 | M | 100KHz,1.0V | 0.029 | 4.20 |
| 220 | 22 | M | 100KHz,1.0V | 0.038 | 3.50 |
| 330 | 33 | M | 100KHz,1.0V | 0.049 | 2.80 |
| 470 | 47 | M | 100KHz,1.0V | 0.070 | 2.40 |
| 680 | 68 | M | 100KHz,1.0V | 0.095 | 2.00 |
| 101 | 100 | M | 100KHz,1.0V | 0.150 | 1.60 |
| 221 | 220 | M | 100KHz,1.0V | 0.330 | 1.00 |

131J

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 1R2 | 1.2 | M | 100KHz,1.0V | 0.009 | 8.20 |
| 2R7 | 2.7 | M | 100KHz,1.0V | 0.012 | 7.00 |
| 3R9 | 3.9 | M | 100KHz,1.0V | 0.013 | 6.70 |
| 5R6 | 5.6 | M | 100KHz,1.0V | 0.014 | 6.30 |
| 6R8 | 6.8 | M | 100KHz,1.0V | 0.016 | 5.90 |
| 100 | 10 | M | 100KHz,1.0V | 0.019 | 5.40 |
| 150 | 15 | M | 100KHz,1.0V | 0.022 | 4.70 |
| 220 | 22 | M | 100KHz,1.0V | 0.032 | 4.00 |
| 330 | 33 | M | 100KHz,1.0V | 0.048 | 3.20 |
| 470 | 47 | M | 100KHz,1.0V | 0.064 | 2.70 |
| 680 | 68 | M | 100KHz,1.0V | 0.094 | 2.00 |
| 101 | 100 | M | 100KHz,1.0V | 0.150 | 1.90 |
| 151 | 150 | M | 100KHz,1.0V | 0.210 | 1.50 |
| 221 | 220 | M | 100KHz,1.0V | 0.310 | 1.30 |

LMax SMD Power Inductor

LMXS Series – Shielded Style G

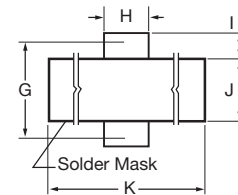
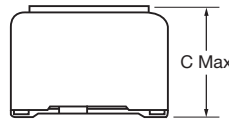
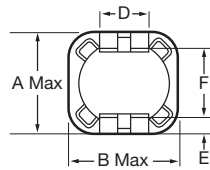
FEATURES

- Magnetically Shielded Construction
- Large Current
- Low DCR

APPLICATIONS

- LCD Televisions
- Notebooks
- Handheld Communication
- DC/DC Converters, etc.

DIMENSIONS



mm (inches)

| Type | A max. | B max. | C max. | D | E | F | G | H | I | J | K |
|------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| 0707 | 7.50 (0.295) | 7.50 (0.295) | 3.50 (0.138) | 2.00 (0.079) | 1.10 (0.043) | 5.08 (0.200) | 6.30 (0.248) | 3.00 (0.118) | 1.91 (0.075) | 4.50 (0.177) | 10.5 (0.413) |
| 07D7 | 7.50 (0.295) | 7.50 (0.295) | 4.50 (0.177) | 2.00 (0.079) | 1.10 (0.043) | 5.08 (0.200) | 6.30 (0.248) | 3.00 (0.118) | 1.91 (0.075) | 4.50 (0.177) | 10.5 (0.413) |

CHARACTERISTICS

- Rated Current (IDC): The DC current that will cause an approximate ΔT of 40°C. (Ta=25°C)
- Operating temperature range: -40°C ~ +125°C

INDUCTANCE AND RATED CURRENT RANGES

- 0707 10 μ H ~ 1000 μ H 1.68 ~ 0.16A
- 07D7 10 μ H ~ 1000 μ H 1.84 ~ 0.18A
- Electrical specifications at 25°C



HOW TO ORDER

| | | | | | | | | |
|---------------------|---------------|--|------------------|---|--------------|--------------------|----------------|------------------|
| LM | XS | 0707 | M | R04 | G | T | A | S |
| Family | Series | Size | Tolerance | Inductance | Style | Termination | Special | Packaging |
| LM = Power Inductor | XS = Shielded | 0707 = 7x7xh 07C7 = 7x7xC(h) (h = see catalog) | M = $\pm 20\%$ | 3R9 = 3.900 μ H 390 = 39.00 μ H 391 = 390 μ H 102 = 1000 μ H | | T = Sn Plate | A = Standard | S = 13" Reel |

LMax SMD Power Inductor

LMXS Series – Shielded Style G

ELECTRICAL CHARACTERISTICS

0707

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 100 | 10 | M | 100KHz, 1.0V | 0.072 | 1.68 |
| 120 | 12 | M | 100KHz, 1.0V | 0.098 | 1.52 |
| 150 | 15 | M | 100KHz, 1.0V | 0.130 | 1.33 |
| 180 | 18 | M | 100KHz, 1.0V | 0.140 | 1.20 |
| 220 | 22 | M | 100KHz, 1.0V | 0.190 | 1.07 |
| 270 | 27 | M | 100KHz, 1.0V | 0.210 | 0.96 |
| 330 | 33 | M | 100KHz, 1.0V | 0.240 | 0.91 |
| 390 | 39 | M | 100KHz, 1.0V | 0.320 | 0.77 |
| 470 | 47 | M | 100KHz, 1.0V | 0.360 | 0.76 |
| 560 | 56 | M | 100KHz, 1.0V | 0.470 | 0.68 |
| 680 | 68 | M | 100KHz, 1.0V | 0.520 | 0.61 |
| 820 | 82 | M | 100KHz, 1.0V | 0.690 | 0.57 |
| 101 | 100 | M | 100KHz, 1.0V | 0.790 | 0.50 |
| 121 | 120 | M | 100KHz, 1.0V | 0.890 | 0.49 |
| 151 | 150 | M | 100KHz, 1.0V | 1.270 | 0.43 |
| 181 | 180 | M | 100KHz, 1.0V | 1.450 | 0.39 |
| 221 | 220 | M | 100KHz, 1.0V | 1.650 | 0.35 |
| 271 | 270 | M | 100KHz, 1.0V | 2.310 | 0.32 |
| 331 | 330 | M | 100KHz, 1.0V | 2.620 | 0.28 |
| 391 | 390 | M | 100KHz, 1.0V | 2.940 | 0.26 |
| 471 | 470 | M | 100KHz, 1.0V | 4.180 | 0.24 |
| 561 | 560 | M | 100KHz, 1.0V | 4.670 | 0.22 |
| 681 | 680 | M | 100KHz, 1.0V | 5.730 | 0.19 |
| 821 | 820 | M | 100KHz, 1.0V | 6.540 | 0.18 |
| 102 | 1000 | M | 100KHz, 1.0V | 9.440 | 0.16 |

07D7

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 100 | 10 | M | 100KHz, 1.0V | 0.060 | 1.84 |
| 120 | 12 | M | 100KHz, 1.0V | 0.070 | 1.71 |
| 150 | 15 | M | 100KHz, 1.0V | 0.081 | 1.47 |
| 180 | 18 | M | 100KHz, 1.0V | 0.091 | 1.31 |
| 220 | 22 | M | 100KHz, 1.0V | 0.110 | 1.23 |
| 270 | 27 | M | 100KHz, 1.0V | 0.150 | 1.12 |
| 330 | 33 | M | 100KHz, 1.0V | 0.170 | 0.96 |
| 390 | 39 | M | 100KHz, 1.0V | 0.230 | 0.91 |
| 470 | 47 | M | 100KHz, 1.0V | 0.260 | 0.88 |
| 560 | 56 | M | 100KHz, 1.0V | 0.350 | 0.75 |
| 680 | 68 | M | 100KHz, 1.0V | 0.380 | 0.69 |
| 820 | 82 | M | 100KHz, 1.0V | 0.430 | 0.61 |
| 101 | 100 | M | 100KHz, 1.0V | 0.610 | 0.60 |
| 121 | 120 | M | 100KHz, 1.0V | 0.660 | 0.52 |
| 151 | 150 | M | 100KHz, 1.0V | 0.880 | 0.46 |
| 181 | 180 | M | 100KHz, 1.0V | 0.980 | 0.42 |
| 221 | 220 | M | 100KHz, 1.0V | 1.170 | 0.36 |
| 271 | 270 | M | 100KHz, 1.0V | 1.640 | 0.34 |
| 331 | 330 | M | 100KHz, 1.0V | 1.860 | 0.32 |
| 391 | 390 | M | 100KHz, 1.0V | 2.850 | 0.29 |
| 561 | 560 | M | 100KHz, 1.0V | 3.620 | 0.23 |
| 681 | 680 | M | 100KHz, 1.0V | 4.630 | 0.22 |
| 821 | 820 | M | 100KHz, 1.0V | 5.200 | 0.20 |
| 102 | 1000 | M | 100KHz, 1.0V | 6.000 | 0.18 |

LMax SMD Power Inductor

LMXS Series – Shielded Style H

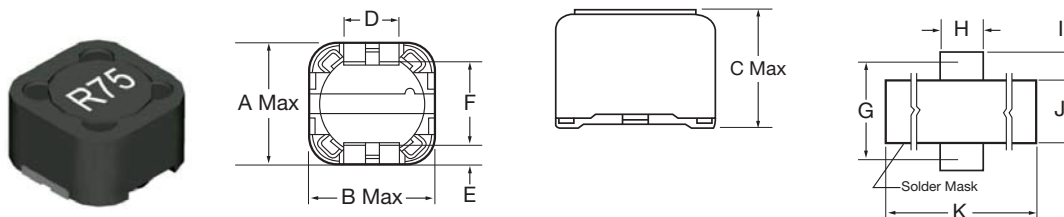
FEATURES

- Magnetically Shielded Construction
- Large Current
- Low DCR

APPLICATIONS

- LCD Televisions
- Notebooks
- Handheld Communication
- DC/DC Converters, etc.

DIMENSIONS



CHARACTERISTICS

- Rated Current (IDC): The DC Current that will cause a drop in inductance value of approximately 20%.
- Operating temperature range: -40°C ~ +125°C

INDUCTANCE AND RATED CURRENT RANGES

- 1212 3.9μH ~ 330μH 6.5 ~ 0.50A
- 121G 2.4μH ~ 47μH 8.0 ~ 2.5A
- 121J 10μH ~ 1000μH 4.0 ~ 0.40A
- Electrical specifications at 25°C



mm (inches)

| Type | A max. | B max. | C max. | D | E | F | G | H | I | J | K |
|------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|-----------------|-----------------|
| 1212 | 12.5 (0.492) | 12.5 (0.492) | 4.50 (0.177) | 5.00 (0.197) | 2.00 (0.079) | 7.60 (0.299) | 10.00 (0.393) | 6.00 (0.236) | 3.00 (0.118) | 7.00 (0.276) | 18.0 (0.709) |
| 121G | 12.5 (0.492) | 12.5 (0.492) | 6.20 (0.244) | 5.00 (0.197) | 2.00 (0.079) | 7.60 (0.299) | 10.00 (0.394) | 6.00 (0.236) | 3.00 (0.118) | 7.00 (0.276) | 18.0 (0.709) |
| 121J | 12.5 (0.492) | 12.5 (0.492) | 8.00 (0.315) | 5.00 (0.197) | 2.00 (0.079) | 7.60 (0.299) | 10.00 (0.394) | 6.00 (0.236) | 3.00 (0.118) | 7.00 (0.276) | 18.0 (0.709) |

HOW TO ORDER

| | | | | | | | | |
|---------------------|---------------|--|------------------|---|--------------|--------------------|----------------|------------------|
| LM | XS | 1212 | M | R04 | H | T | A | S |
| Family | Series | Size | Tolerance | Inductance | Style | Termination | Special | Packaging |
| LM = Power Inductor | XS = Shielded | 1212 = 12x12xh 121G = 12x12xG(h) (h = see catalog) | M = ±20% | 3R9 = 3.900μH 390 = 39.00μH 391 = 390μH 102 = 1000μH | | T = Sn Plate | A = Standard | S = 13" Reel |

LMax SMD Power Inductor

LMXS Series – Shielded Style H

ELECTRICAL CHARACTERISTICS

1212

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 3R9 | 3.9 | M | 100KHz, 1.0V | 0.015 | 6.50 |
| 4R7 | 4.7 | M | 100KHz, 1.0V | 0.018 | 5.70 |
| 6R8 | 6.8 | M | 100KHz, 1.0V | 0.023 | 4.90 |
| 100 | 10 | M | 100KHz, 1.0V | 0.028 | 4.50 |
| 120 | 12 | M | 100KHz, 1.0V | 0.038 | 4.00 |
| 150 | 15 | M | 100KHz, 1.0V | 0.050 | 3.20 |
| 180 | 18 | M | 100KHz, 1.0V | 0.057 | 3.10 |
| 220 | 22 | M | 100KHz, 1.0V | 0.066 | 2.90 |
| 270 | 27 | M | 100KHz, 1.0V | 0.080 | 2.80 |
| 330 | 33 | M | 100KHz, 1.0V | 0.097 | 2.70 |
| 390 | 39 | M | 100KHz, 1.0V | 0.132 | 2.10 |
| 470 | 47 | M | 100KHz, 1.0V | 0.150 | 1.90 |
| 560 | 56 | M | 100KHz, 1.0V | 0.190 | 1.80 |
| 680 | 68 | M | 100KHz, 1.0V | 0.220 | 1.50 |
| 820 | 82 | M | 100KHz, 1.0V | 0.260 | 1.30 |
| 101 | 100 | M | 100KHz, 1.0V | 0.308 | 1.20 |
| 121 | 120 | M | 100KHz, 1.0V | 0.380 | 1.10 |
| 151 | 150 | M | 100KHz, 1.0V | 0.530 | 0.95 |
| 181 | 180 | M | 100KHz, 1.0V | 0.620 | 0.85 |
| 221 | 220 | M | 100KHz, 1.0V | 0.700 | 0.80 |
| 271 | 270 | M | 100KHz, 1.0V | 0.876 | 0.60 |
| 331 | 330 | M | 100KHz, 1.0V | 0.990 | 0.50 |

121G

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 100 | 10 | M | 100KHz, 1.0V | 0.025 | 4.00 |
| 120 | 12 | M | 100KHz, 1.0V | 0.027 | 3.50 |
| 150 | 15 | M | 100KHz, 1.0V | 0.030 | 3.30 |
| 180 | 18 | M | 100KHz, 1.0V | 0.038 | 3.00 |
| 220 | 22 | M | 100KHz, 1.0V | 0.045 | 2.80 |
| 270 | 27 | M | 100KHz, 1.0V | 0.055 | 2.30 |
| 330 | 33 | M | 100KHz, 1.0V | 0.063 | 2.10 |
| 390 | 39 | M | 100KHz, 1.0V | 0.075 | 2.00 |
| 470 | 47 | M | 100KHz, 1.0V | 0.085 | 1.80 |
| 560 | 56 | M | 100KHz, 1.0V | 0.110 | 1.70 |
| 680 | 68 | M | 100KHz, 1.0V | 0.120 | 1.50 |
| 820 | 82 | M | 100KHz, 1.0V | 0.140 | 1.040 |
| 101 | 100 | M | 100KHz, 1.0V | 0.165 | 1.30 |
| 121 | 120 | M | 100KHz, 1.0V | 0.195 | 1.10 |
| 151 | 150 | M | 100KHz, 1.0V | 0.250 | 1.00 |
| 181 | 180 | M | 100KHz, 1.0V | 0.290 | 0.90 |
| 221 | 220 | M | 100KHz, 1.0V | 0.400 | 0.80 |
| 271 | 270 | M | 100KHz, 1.0V | 0.460 | 0.75 |
| 331 | 330 | M | 100KHz, 1.0V | 0.510 | 0.68 |
| 391 | 390 | M | 100KHz, 1.0V | 0.690 | 0.65 |
| 471 | 470 | M | 100KHz, 1.0V | 0.770 | 0.58 |
| 561 | 560 | M | 100KHz, 1.0V | 0.880 | 0.54 |
| 681 | 680 | M | 100KHz, 1.0V | 1.200 | 0.048 |
| 821 | 820 | M | 100KHz, 1.0V | 1.340 | 0.043 |
| 102 | 1000 | M | 100KHz, 1.0V | 1.530 | 0.040 |

LMax SMD Power Inductor

LMXS Series – Shielded Style H



121J

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 2R4 | 2.4 | M | 100KHz, 1.0V | 0.012 | 8.00 |
| 4R7 | 4.7 | M | 100KHz, 1.0V | 0.016 | 6.80 |
| 7R6 | 7.6 | M | 100KHz, 1.0V | 0.020 | 5.90 |
| 100 | 10 | M | 100KHz, 1.0V | 0.022 | 5.40 |
| 120 | 12 | M | 100KHz, 1.0V | 0.025 | 4.90 |
| 150 | 15 | M | 100KHz, 1.0V | 0.027 | 4.50 |
| 180 | 18 | M | 100KHz, 1.0V | 0.039 | 3.90 |
| 220 | 22 | M | 100KHz, 1.0V | 0.043 | 3.60 |
| 270 | 27 | M | 100KHz, 1.0V | 0.046 | 3.40 |
| 330 | 33 | M | 100KHz, 1.0V | 0.065 | 3.00 |
| 390 | 39 | M | 100KHz, 1.0V | 0.073 | 2.75 |
| 470 | 47 | M | 100KHz, 1.0V | 0.100 | 2.50 |

LMax SMD Power Inductor

LMXS Series – Shielded Style J

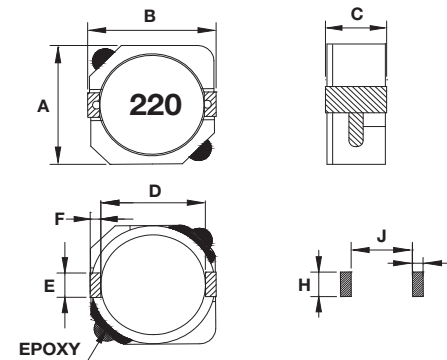
FEATURES

- Directly connected electrode on ferrite core
- High power, High saturation inductors
- Ideal inductors for DC/DC converters
- Magnetically shielded against radiation
- Available on tape and reel for automatic surface mounting

APPLICATIONS

- Power Supply for VTRs
- LCD Televisions
- Notebook PCs
- Portable Communication
- DC/DC Converters, etc.

DIMENSIONS



CHARACTERISTICS

- Rated DC current: The current when the inductance becomes 35% lower than its initial value or the actual current when the temperature of coil increases to $\Delta T=40^{\circ}\text{C}$. The smaller one is defined as Rated DC Current. ($T_a=25^{\circ}\text{C}$)
- Operating temperature range: $-40 \sim 85^{\circ}\text{C}$

INDUCTANCE AND RATED CURRENT RANGES

- 0606 2.5 ~ 100 μH 2.60 ~ 0.40A
- 1010 10 ~ 150 μH 2.70 ~ 0.70A
- 101D 1.3 ~ 330 μH 10.0 ~ 0.70A
- 101E 1.5 ~ 1000 μH 10.5 ~ 0.35A
- Electrical specifications at 25°C



| Type | A max. | B max. | C max. | D | E | F | H | I | J |
|------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| 0606 | 6.20 (0.244) | 6.30 (0.248) | 3.00 (0.118) | 4.70 (0.185) | 2.00 (0.079) | 0.60 (0.024) | 2.60 (0.102) | 1.00 (0.039) | 4.60 (0.181) |
| 1010 | 10.3 (0.406) | 10.4 (0.409) | 3.10 (0.122) | 7.70 (0.303) | 3.00 (0.118) | 1.20 (0.047) | 3.20 (0.126) | 1.60 (0.063) | 7.30 (0.287) |
| 101D | 10.3 (0.406) | 10.4 (0.409) | 4.00 (0.157) | 7.70 (0.303) | 3.00 (0.118) | 1.20 (0.047) | 3.20 (0.126) | 1.60 (0.063) | 7.30 (0.287) |
| 101E | 10.3 (0.406) | 10.4 (0.409) | 5.00 (0.197) | 7.70 (0.303) | 3.00 (0.118) | 1.20 (0.047) | 3.20 (0.126) | 1.60 (0.063) | 7.30 (0.287) |

mm (inches)

HOW TO ORDER

| | | | | | | | | |
|---------------------|---------------|--|----------------|---|----------|--------------|--------------|--------------|
| LM | XS | 0606 | N | R04 | J | T | A | S |
| Family | Series | Size | Tolerance | Inductance | Style | Termination | Special | Packaging |
| LM = Power Inductor | XS = Shielded | 0606 = 6x6xh 1010 = 10x10xh 101D = 10x10xD(h) (h = see catalog) | N = $\pm 30\%$ | R04 = 0.039 μH R39 = 0.390 μH 3R9 = 3.900 μH 390 = 39.00 μH 391 = 390.0 μH 392 = 3900 μH | | T = Sn Plate | A = Standard | S = 13" Reel |

LMax SMD Power Inductor

LMXS Series – Shielded Style J



0606/1010/101D/101E

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | | | | IDC (A) max. | | | |
|-------|--------|-----------|----------------|--------------|-------|-------|-------|--------------|------|------|------|
| | | | | 0606 | 1010 | 101D | 101E | 0606 | 1010 | 101D | 101E |
| 1R3 | 1.3 | N | 100KHz, 0.1V | - | - | 0.008 | - | - | - | 10.0 | - |
| 1R5 | 1.5 | N | 100KHz, 0.1V | - | - | 0.008 | 0.006 | - | - | 10.0 | 10.5 |
| 2R2 | 2.2 | N | 100KHz, 0.1V | - | - | 0.011 | 0.007 | - | - | 8.00 | 9.25 |
| 2R5 | 2.5 | N | 100KHz, 0.1V | 0.0176 | - | 0.012 | - | 2.60 | - | 7.50 | - |
| 3R3 | 3.3 | N | 100KHz, 0.1V | 0.0203 | - | 0.013 | 0.010 | 2.30 | - | 6.50 | 7.80 |
| 3R8 | 3.8 | N | 100KHz, 0.1V | - | - | 0.017 | - | - | - | 6.00 | - |
| 4R0 | 4.0 | N | 100KHz, 0.1V | 0.027 | - | - | - | 2.10 | - | - | - |
| 4R7 | 4.7 | N | 100KHz, 0.1V | - | - | 0.021 | 0.012 | - | - | 5.70 | 6.40 |
| 5R0 | 5.0 | N | 100KHz, 0.1V | 0.0311 | - | - | - | 1.85 | - | - | - |
| 5R2 | 5.2 | N | 100KHz, 0.1V | - | - | 0.022 | - | - | - | 5.50 | - |
| 5R6 | 5.6 | N | 100KHz, 0.1V | - | - | 0.025 | - | - | - | 5.20 | - |
| 6R0 | 6.0 | N | 100KHz, 0.1V | 0.0419 | - | - | - | 1.70 | - | - | - |
| 6R8 | 6.8 | N | 100KHz, 0.1V | - | - | 0.026 | 0.018 | - | - | 4.90 | 5.40 |
| 7R0 | 7.0 | N | 100KHz, 0.1V | - | - | 0.027 | - | - | - | 4.80 | - |
| 8R0 | 8.0 | N | 100KHz, 0.1V | 0.0499 | - | - | - | 1.50 | - | - | - |
| 8R2 | 8.2 | N | 100KHz, 0.1V | - | - | - | 0.020 | - | - | - | 4.85 |
| 100 | 10 | N | 100KHz, 0.1V | 0.054 | 0.058 | 0.035 | 0.026 | 1.30 | 2.70 | 4.40 | 3.45 |
| 120 | 12 | N | 100KHz, 0.1V | 0.0716 | 0.072 | - | 0.033 | 1.20 | 2.25 | - | 3.40 |
| 150 | 15 | N | 100KHz, 0.1V | 0.0824 | 0.086 | 0.050 | 0.041 | 1.10 | 2.22 | 3.60 | 2.83 |
| 180 | 18 | N | 100KHz, 0.1V | 0.1015 | 0.116 | - | 0.046 | 1.05 | 1.90 | - | 2.62 |
| 220 | 22 | N | 100KHz, 0.1V | 0.119 | 0.145 | 0.073 | 61 | 0.95 | 1.78 | 2.90 | 2.44 |
| 270 | 27 | N | 100KHz, 0.1V | 0.146 | 0.176 | 0.083 | 0.069 | 0.85 | 1.63 | 2.80 | 2.24 |
| 330 | 33 | N | 100KHz, 0.1V | 0.1825 | 0.213 | 0.093 | 0.084 | 0.76 | 1.46 | 2.30 | 1.88 |
| 390 | 39 | N | 100KHz, 0.1V | 0.2095 | 0.270 | - | 0.106 | 0.68 | 1.32 | - | 1.70 |
| 470 | 47 | N | 100KHz, 0.1V | 0.2295 | 0.299 | 0.128 | 0.130 | 0.60 | 1.18 | 2.10 | 1.56 |
| 560 | 56 | N | 100KHz, 0.1V | 0.305 | 0.335 | - | 0.149 | 0.55 | 1.10 | - | 1.39 |
| 680 | 68 | N | 100KHz, 0.1V | 0.351 | 0.451 | 0.213 | 0.201 | 0.48 | 1.04 | 1.50 | 1.36 |
| 820 | 82 | N | 100KHz, 0.1V | 0.4185 | 0.513 | - | 0.227 | 0.45 | 0.94 | - | 1.20 |
| 101 | 100 | N | 100KHz, 0.1V | 0.520 | 0.700 | 0.304 | 0.253 | 0.40 | 0.84 | 1.35 | 1.09 |
| 121 | 120 | N | 100KHz, 0.1V | - | 0.765 | - | 0.303 | - | 0.76 | - | 1.00 |
| 151 | 150 | N | 100KHz, 0.1V | - | 0.876 | 0.506 | 0.370 | - | 0.70 | 1.15 | 0.91 |
| 181 | 180 | N | 100KHz, 0.1V | - | - | 0.631 | 0.419 | - | - | 1.03 | 0.84 |
| 221 | 220 | N | 100KHz, 0.1V | - | - | 0.756 | 0.500 | - | - | 0.92 | 0.75 |
| 271 | 270 | N | 100KHz, 0.1V | - | - | - | 0.672 | - | - | - | 0.68 |
| 331 | 330 | N | 100KHz, 0.1V | - | - | 1.09 | 0.812 | - | - | 0.70 | 0.60 |
| 391 | 390 | N | 100KHz, 0.1V | - | - | - | 0.953 | - | - | - | 0.57 |
| 471 | 470 | N | 100KHz, 0.1V | - | - | - | 1.289 | - | - | - | 0.50 |
| 561 | 560 | N | 100KHz, 0.1V | - | - | - | 1.430 | - | - | - | 0.47 |
| 681 | 680 | N | 100KHz, 0.1V | - | - | - | 1.599 | - | - | - | 0.43 |
| 821 | 820 | N | 100KHz, 0.1V | - | - | - | 1.768 | - | - | - | 0.39 |
| 102 | 1000 | N | 100KHz, 0.1V | - | - | - | 1.989 | - | - | - | 0.35 |

LMax SMD Power Inductor

LMXS Series – Shielded Style L

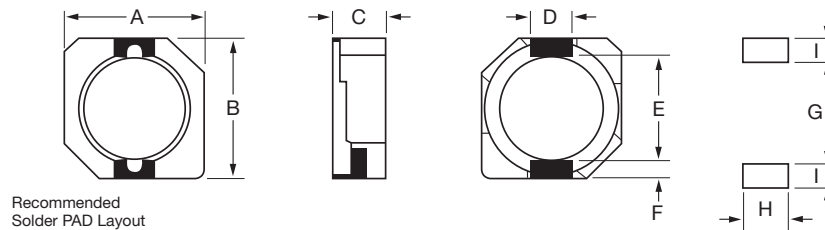
FEATURES

- Magnetically Shielded Construction
- Large Current
- Low DCR

APPLICATIONS

- LCD Televisions
- Notebooks
- Camcorders
- Digital Cameras
- DC/DC Converters for Portable Devices

DIMENSIONS



| Type | A max | B max | C max | D | E | F | G | H | I |
|------|-----------------|-----------------|--------------------------------|--------------------------------|--------------------------------|---------------------------------|-----------------|-----------------|-----------------|
| 1010 | 10.3 (0.398) | 10.5 (0.414) | 3.10 (0.122) | 3.00 ± 0.10 (0.119 ± 0.004) | 7.70 ± 0.30 (0.303 ± 0.012) | 1.20 ± 0.150 (0.048 ± 0.006) | 7.30 (0.288) | 3.20 (0.126) | 1.60 (0.630) |
| 101D | 10.3 (0.398) | 10.5 (0.414) | 3.80 ± 0.20 (0.150 ± 0.008) | 3.00 ± 0.1 (0.119 ± 0.004) | 7.70 ± 0.30 (0.303 ± 0.012) | 1.2 ± 0.15 (0.048 ± 0.006) | 7.30 (0.288) | 3.20 (0.126) | 1.60 (0.630) |

mm (inches)

HOW TO ORDER

| | | | | | | | | |
|---------------------|---------------|--|------------------|---|--------------|--------------------|----------------|------------------|
| LM | XS | 1010 | N | 2R2 | L | T | A | S |
| Family | Series | Size | Tolerance | Inductance | Style | Termination | Special | Packaging |
| LM = Power Inductor | XS = Shielded | 1010 = 10x10xh 101D = 10x10xD(h) (h = see catalog) | N = ±30% | 0R8 = 0.8µH 470 = 47.00µH 331 = 330.0µH | | T = Sn Plate | A = Standard | S = 13" Reel |

LMax SMD Power Inductor

LMXS Series – Shielded Style L



ELECTRICAL CHARACTERISTICS

1010

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 0R8 | 0.8 | N | 100KHz, 1.0V | 0.0057 | 11.2 |
| 1R5 | 1.5 | N | 100KHz, 1.0V | 0.011 | 8.00 |
| 2R2 | 2.2 | N | 100KHz, 1.0V | 0.0159 | 6.70 |
| 3R3 | 3.3 | N | 100KHz, 1.0V | 0.021 | 5.56 |
| 4R7 | 4.7 | N | 100KHz, 1.0V | 0.030 | 4.55 |
| 6R8 | 6.8 | N | 100KHz, 1.0V | 0.035 | 3.84 |
| 8R0 | 8.0 | N | 100KHz, 1.0V | 0.050 | 3.54 |
| 100 | 10 | N | 100KHz, 1.0V | 0.059 | 3.18 |
| 150 | 15 | N | 100KHz, 1.0V | 0.091 | 2.60 |
| 220 | 22 | N | 100KHz, 1.0V | 0.143 | 2.16 |
| 330 | 33 | N | 100KHz, 1.0V | 0.202 | 1.74 |
| 470 | 47 | N | 100KHz, 1.0V | 0.299 | 1.43 |

101D

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 1R5 | 1.5 | N | 100KHz, 1.0V | 0.0081 | 10.0 |
| 2R5 | 2.5 | N | 100KHz, 1.0V | 0.010 | 7.50 |
| 3R8 | 3.8 | N | 100KHz, 1.0V | 0.013 | 6.00 |
| 4R7 | 4.7 | N | 100KHz, 1.0V | 0.022 | 5.50 |
| 5R2 | 5.2 | N | 100KHz, 1.0V | 0.022 | 5.50 |
| 7R0 | 7.0 | N | 100KHz, 1.0V | 0.027 | 4.80 |
| 100 | 10 | N | 100KHz, 1.0V | 0.035 | 4.40 |
| 150 | 15 | N | 100KHz, 1.0V | 0.050 | 3.60 |
| 220 | 22 | N | 100KHz, 1.0V | 0.073 | 2.90 |
| 330 | 33 | N | 100KHz, 1.0V | 0.093 | 2.30 |
| 470 | 47 | N | 100KHz, 1.0V | 0.128 | 2.10 |
| 680 | 68 | N | 100KHz, 1.0V | 0.213 | 1.50 |
| 101 | 100 | N | 100KHz, 1.0V | 0.304 | 1.35 |
| 151 | 150 | N | 100KHz, 1.0V | 0.506 | 1.15 |
| 221 | 220 | N | 100KHz, 1.0V | 0.756 | 0.92 |
| 331 | 330 | N | 100KHz, 1.0V | 1.090 | 0.70 |

LMax SMD Power Inductor

LMXS Series – Shielded Style M

FEATURES

- Magnetically shielded construction
- RoHS compliance

APPLICATIONS

- LCD TV
- DC to DC Converters
- Notebook PC

INDUCTANCE AND RATED CURRENT RANGES

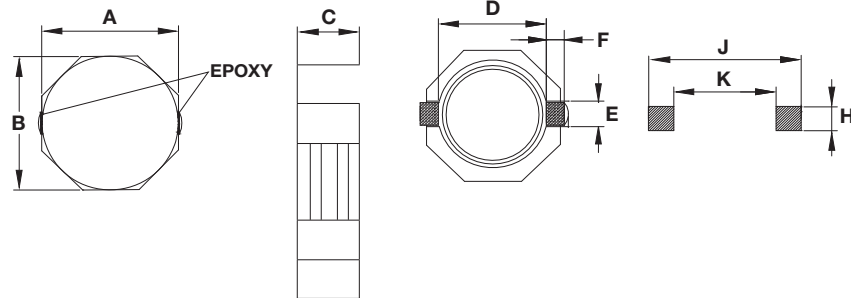
- 0808 1.0 ~ 100μH 6.5 ~ 0.75A
- 08D8 1.8 ~ 100μH 7.0 ~ 1.05A
- 08E8 1.0 ~ 100μH 9.0 ~ 1.30A
- Electrical specifications at 25°C



CHARACTERISTICS

- Rated DC Current: The current when the inductance becomes 35% lower than its initial value.
- Operating temperature: -40 ~ 85°C

DIMENSIONS



mm (inches)

| Type | A | B | C max. | D Ref. | E Ref. | F Ref. | H | J | K |
|------|--------------------------------|--------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| 0808 | 8.00 ± 0.30 (0.315 ± 0.012) | 8.00 ± 0.30 (0.315 ± 0.012) | 3.00 (0.118) | 6.30 (0.248) | 2.50 (0.098) | 1.20 (0.047) | 2.80 (0.110) | 10.1 (0.398) | 6.10 (0.240) |
| 08D8 | 8.00 ± 0.30 (0.315 ± 0.012) | 8.00 ± 0.30 (0.315 ± 0.012) | 4.00 (0.157) | 6.30 (0.248) | 2.50 (0.098) | 1.20 (0.047) | 2.80 (0.110) | 10.1 (0.398) | 6.10 (0.240) |
| 08E8 | 8.0 ± 0.30 (0.315 ± 0.012) | 8.00 ± 0.30 (0.315 ± 0.012) | 4.50 (0.177) | 6.30 (0.248) | 2.50 (0.098) | 1.20 (0.047) | 2.80 (0.110) | 10.1 (0.398) | 6.10 (0.240) |

HOW TO ORDER

| | | | | | | | | |
|---------------------|-------------------|--|------------------|---|--------------|--------------------|----------------|------------------|
| LM | XS | 0808 | N | R04 | M | T | A | S |
| Family | Series | Size | Tolerance | Inductance | Style | Termination | Special | Packaging |
| LM = Power Inductor | XN = Non-shielded | 0808 = 8x8xh 08D8 = 8x8xD(h) (h = see catalog) | N = ±30% | 3R9 = 3.900μH 390 = 39.00μH 391 = 390.0μH 392 = 3900μH | | T = Sn Plate | A = Standard | S = 13" Reel |

LMax SMD Power Inductor

LMXS Series – Shielded Style M



ELECTRICAL CHARACTERISTICS

0808/08D8/08E8

| Codes | L (μ H) | Tolerance | Test Condition | | DCR (Ω) max. | | | I sat (A) max* | | |
|-------|-----------------|-----------|----------------|--------------|-----------------------|--------|--------|----------------|------|------|
| | | | 0808 | 08D8/08E8 | 0808 | 08D8 | 08E8 | 0808 | 08D8 | 0838 |
| 1R0 | 1.0 | N | 100KHz, 0.25V | 100KHz, 0.1V | 0.011 | - | 0.0095 | 6.5 | - | 9.0 |
| 1R2 | 1.2 | N | 100KHz, 0.25V | 100KHz, 0.1V | - | - | 0.0122 | - | - | 8.0 |
| 1R8 | 1.8 | N | 100KHz, 0.25V | 100KHz, 0.1V | - | 0.0156 | - | - | 7.0 | - |
| 2R0 | 2.0 | N | 100KHz, 0.25V | 100KHz, 0.1V | - | - | 0.014 | - | - | 7.0 |
| 2R5 | 2.5 | N | 100KHz, 0.25V | 100KHz, 0.1V | 0.0156 | 0.0175 | - | 4.5 | 6.5 | - |
| 3R3 | 3.3 | N | 100KHz, 0.25V | 100KHz, 0.1V | 0.0182 | - | - | 4.0 | - | - |
| 3R5 | 3.5 | N | 100KHz, 0.25V | 100KHz, 0.1V | - | 0.024 | - | - | 5.0 | - |
| 3R9 | 3.9 | N | 100KHz, 0.25V | 100KHz, 0.1V | - | - | 0.019 | - | - | 5.9 |
| 4R7 | 4.7 | N | 100KHz, 0.25V | 100KHz, 0.1V | 0.0247 | 0.029 | 0.022 | 3.4 | 4.6 | 5.6 |
| 6R0 | 6.0 | N | 100KHz, 0.25V | 100KHz, 0.1V | - | 0.032 | - | - | 4.2 | - |
| 6R8 | 6.8 | N | 100KHz, 0.25V | 100KHz, 0.1V | - | - | 0.025 | - | - | 4.4 |
| 7R3 | 7.3 | N | 100KHz, 0.25V | 100KHz, 0.1V | 0.039 | - | - | 2.80 | - | - |
| 100 | 10 | N | 100KHz, 0.25V | 100KHz, 0.1V | 0.047 | 0.048 | 0.036 | 2.50 | 3.00 | 4.0 |
| 150 | 15 | N | 100KHz, 0.25V | 100KHz, 0.1V | 0.069 | 0.067 | 0.053 | 1.90 | 2.75 | 2.9 |
| 220 | 22 | N | 100KHz, 0.25V | 100KHz, 0.1V | 0.099 | 0.105 | 0.075 | 1.60 | 2.30 | 2.6 |
| 330 | 33 | N | 100KHz, 0.25V | 100KHz, 0.1V | 0.156 | 0.157 | 0.125 | 1.30 | 1.75 | 2.2 |
| 470 | 47 | N | 100KHz, 0.25V | 100KHz, 0.1V | 0.159 | 0.189 | 0.150 | 1.15 | 1.52 | 1.8 |
| 680 | 68 | N | 100KHz, 0.25V | 100KHz, 0.1V | 0.286 | 0.290 | 0.240 | 0.92 | 1.30 | 1.5 |
| 101 | 100 | N | 100KHz, 0.25V | 100KHz, 0.1V | 0.430 | 0.410 | 0.360 | 0.75 | 1.05 | 1.3 |

*Saturation Current: The current when the inductance becomes 35% lower than its initial value.

LMax SMD Power Inductor

LMXS Series – Shielded Style P

FEATURES

- Magnetically Shielded Construction
- Large Current
- Low DCR

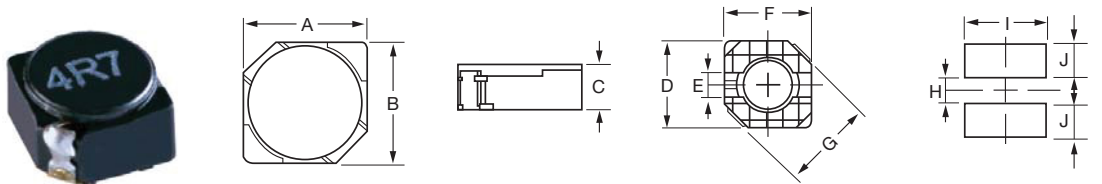
APPLICATIONS

- LCD Televisions
- Notebooks
- Camcorders
- Digital Cameras
- DC/DC Converters for Portable Devices

CHARACTERISTICS

- Rated Current (IDC): The DC current that will cause an approximate ΔT of 40°C. (Ta=25°C)
- Operating temperature range: -40°C ~ +125°C

DIMENSIONS



Recommended Solder PAD Layout



| Type | A | B max | C max | D | E | F max | G max | H | I |
|------|--------------------------------|--------------------------------|--------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| 0404 | 3.80 ± 0.50 (0.150 ± 0.012) | 3.80 ± 0.50 (0.150 ± 0.012) | 1.80 ± 0.20 (0.071 ± 0.008) | 3.80 (0.150) | 1.10 (0.044) | 3.80 (0.150) | 5.00 (0.196) | 1.10 (0.044) | 4.60 (0.181) |
| 0505 | 4.70 ± 0.50 (0.185 ± 0.012) | 4.70 ± 0.50 (0.185 ± 0.012) | 2.00 (0.079) | 4.50 (0.177) | 1.50 (0.059) | 4.50 (0.177) | 6.90 (0.272) | 1.50 (0.059) | 5.30 (0.209) |
| 05C5 | 4.70 ± 0.50 (0.185 ± 0.012) | 4.70 ± 0.50 (0.185 ± 0.012) | 3.00 (0.119) | 4.50 (0.177) | 1.50 (0.059) | 4.50 (0.177) | 6.90 (0.272) | 1.50 (0.059) | 5.30 (0.209) |
| 0606 | 5.7 ± 0.50 (0.225 ± 0.012) | 5.70 ± 0.50 (0.225 ± 0.012) | 2.10 (0.083) | 5.50 (0.217) | 2.00 (0.079) | 5.50 (0.217) | 8.20 (0.323) | 2.00 (0.079) | 6.30 (0.248) |
| 06C6 | 5.70 ± 0.50 (0.225 ± 0.012) | 5.70 ± 0.50 (0.225 ± 0.012) | 3.00 (0.119) | 5.50 (0.217) | 2.00 (0.079) | 5.50 (0.217) | 8.20 (0.323) | 2.00 (0.079) | 6.30 (0.248) |
| 0707 | 6.70 ± 0.40 (0.264 ± 0.158) | 6.70 ± 0.40 (0.264 ± 0.158) | 1.90 (0.075) | 6.50 (0.256) | 2.00 (0.079) | 6.50 (0.256) | 9.50 (0.375) | 2.00 (0.079) | 7.30 (0.288) |
| 07C7 | 6.70 ± 0.50 (0.264 ± 0.012) | 6.70 ± 0.50 (0.264 ± 0.012) | 3.00 (0.119) | 6.50 (0.256) | 2.00 (0.079) | 6.50 (0.256) | 9.50 (0.375) | 2.00 (0.079) | 7.30 (0.288) |
| 07D7 | 6.70 ± 0.50 (0.264 ± 0.012) | 6.70 ± 0.50 (0.264 ± 0.012) | 4.00 (0.158) | 6.50 (0.256) | 2.00 (0.079) | 6.50 (0.256) | 9.50 (0.375) | 2.00 (0.079) | 7.30 (0.288) |

mm (inches)

HOW TO ORDER

| | | | | | | | | |
|---------------------|---------------|--|------------------|---|--------------|--------------------|----------------|------------------|
| LM | XS | 0505 | M | 2R2 | P | T | A | S |
| Family | Series | Size | Tolerance | Inductance | Style | Termination | Special | Packaging |
| LM = Power Inductor | XS = Shielded | 0505 = 5x5xh 05C5 = 5x5xC(h) (h = see catalog) | M = ±20% | 0R8 = 0.8µH 470 = 47.00µH 331 = 330.0µH | | T = Sn Plate | A = Standard | S = 13" Reel |

LMax SMD Power Inductor

LMXS Series – Shielded Style P

ELECTRICAL CHARACTERISTICS

0404

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 1R5 | 1.5 | M | 100KHz, 1.0V | 0.052 | 1.55 |
| 2R2 | 2.2 | M | 100KHz, 1.0V | 0.072 | 1.20 |
| 3R3 | 3.3 | M | 100KHz, 1.0V | 0.085 | 1.10 |
| 4R7 | 4.7 | M | 100KHz, 1.0V | 0.105 | 0.90 |
| 6R8 | 6.8 | M | 100KHz, 1.0V | 0.170 | 0.73 |
| 100 | 10 | M | 100KHz, 1.0V | 0.210 | 0.55 |
| 150 | 15 | M | 100KHz, 1.0V | 0.295 | 0.45 |
| 220 | 22 | M | 100KHz, 1.0V | 0.430 | 0.40 |
| 330 | 33 | M | 100KHz, 1.0V | 0.675 | 0.32 |

0505

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 1R0 | 1.0 | M | 100KHz, 1.0V | 0.045 | 1.72 |
| 2R2 | 2.2 | M | 100KHz, 1.0V | 0.060 | 1.32 |
| 2R7 | 2.7 | M | 100KHz, 1.0V | 0.070 | 1.28 |
| 3R3 | 3.3 | M | 100KHz, 1.0V | 0.085 | 1.04 |
| 3R9 | 3.9 | M | 100KHz, 1.0V | 0.110 | 0.88 |
| 4R7 | 4.7 | M | 100KHz, 1.0V | 0.128 | 0.84 |
| 5R6 | 5.6 | M | 100KHz, 1.0V | 0.145 | 0.80 |
| 6R8 | 6.8 | M | 100KHz, 1.0V | 0.158 | 0.76 |
| 8R2 | 8.2 | M | 100KHz, 1.0V | 0.185 | 0.68 |
| 100 | 10 | M | 100KHz, 1.0V | 0.200 | 0.61 |
| 120 | 12 | M | 100KHz, 1.0V | 0.210 | 0.56 |
| 150 | 15 | M | 100KHz, 1.0V | 0.240 | 0.50 |
| 180 | 18 | M | 100KHz, 1.0V | 0.338 | 0.48 |
| 220 | 22 | M | 100KHz, 1.0V | 0.397 | 0.41 |
| 270 | 27 | M | 100KHz, 1.0V | 0.441 | 0.35 |
| 330 | 33 | M | 100KHz, 1.0V | 0.694 | 0.32 |
| 390 | 39 | M | 100KHz, 1.0V | 0.709 | 0.30 |

05C5

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 1R2 | 1.2 | M | 100KHz, 1.0V | 0.0236 | 2.56 |
| 1R8 | 1.8 | M | 100KHz, 1.0V | 0.0275 | 2.20 |
| 2R2 | 2.2 | M | 100KHz, 1.0V | 0.0313 | 2.04 |
| 2R7 | 2.7 | M | 100KHz, 1.0V | 0.0433 | 1.60 |
| 3R3 | 3.3 | M | 100KHz, 1.0V | 0.0492 | 1.57 |
| 3R9 | 3.9 | M | 100KHz, 1.0V | 0.0648 | 1.44 |
| 4R7 | 4.7 | M | 100KHz, 1.0V | 0.0720 | 1.32 |
| 5R6 | 5.6 | M | 100KHz, 1.0V | 0.1009 | 1.17 |
| 6R8 | 6.8 | M | 100KHz, 1.0V | 0.1089 | 1.12 |
| 8R2 | 8.2 | M | 100KHz, 1.0V | 0.1175 | 1.04 |
| 100 | 10 | M | 100KHz, 1.0V | 0.1283 | 1.00 |
| 120 | 12 | M | 100KHz, 1.0V | 0.1316 | 0.84 |
| 150 | 15 | M | 100KHz, 1.0V | 0.1490 | 0.76 |
| 180 | 18 | M | 100KHz, 1.0V | 0.1660 | 0.72 |
| 220 | 22 | M | 100KHz, 1.0V | 0.2350 | 0.70 |
| 270 | 27 | M | 100KHz, 1.0V | 0.2610 | 0.58 |
| 330 | 33 | M | 100KHz, 1.0V | 0.3780 | 0.56 |
| 390 | 39 | M | 100KHz, 1.0V | 0.3837 | 0.50 |
| 470 | 47 | M | 100KHz, 1.0V | 0.5870 | 0.48 |
| 560 | 56 | M | 100KHz, 1.0V | 0.6245 | 0.41 |
| 680 | 68 | M | 100KHz, 1.0V | 0.6990 | 0.35 |
| 820 | 82 | M | 100KHz, 1.0V | 0.9148 | 0.32 |
| 101 | 100 | M | 100KHz, 1.0V | 1.020 | 0.29 |
| 121 | 120 | M | 100KHz, 1.0V | 1.270 | 0.27 |
| 151 | 150 | M | 100KHz, 1.0V | 1.350 | 0.24 |
| 181 | 180 | M | 100KHz, 1.0V | 1.540 | 0.22 |

LMax SMD Power Inductor

LMXS Series – Shielded Style P

0606

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 4R1 | 4.1 | M | 100KHz, 1.0V | 0.057 | 1.95 |
| 5R4 | 5.4 | M | 100KHz, 1.0V | 0.076 | 1.6 |
| 6R2 | 6.2 | M | 100KHz, 1.0V | 0.096 | 1.4 |
| 8R9 | 8.9 | M | 100KHz, 1.0V | 0.116 | 1.25 |
| 100 | 10 | M | 100KHz, 1.0V | 0.124 | 1.2 |
| 120 | 12 | M | 100KHz, 1.0V | 0.153 | 1.1 |
| 150 | 15 | M | 100KHz, 1.0V | 0.196 | 0.97 |
| 180 | 18 | M | 100KHz, 1.0V | 0.21 | 0.85 |
| 220 | 22 | M | 100KHz, 1.0V | 0.29 | 0.8 |
| 270 | 27 | M | 100KHz, 1.0V | 0.33 | 0.75 |
| 330 | 33 | M | 100KHz, 1.0V | 0.386 | 0.65 |
| 390 | 39 | M | 100KHz, 1.0V | 0.52 | 0.57 |
| 470 | 47 | M | 100KHz, 1.0V | 0.595 | 0.54 |
| 560 | 56 | M | 100KHz, 1.0V | 0.665 | 0.5 |
| 680 | 68 | M | 100KHz, 1.0V | 0.84 | 0.43 |
| 820 | 82 | M | 100KHz, 1.0V | 0.978 | 0.41 |
| 101 | 100 | M | 100KHz, 1.0V | 1.2 | 0.36 |

06C6

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 2R6 | 2.6 | M | 100KHz, 1.0V | 0.018 | 2.6 |
| 3R0 | 3 | M | 100KHz, 1.0V | 0.024 | 2.4 |
| 4R2 | 4.2 | M | 100KHz, 1.0V | 0.031 | 2.2 |
| 5R3 | 5.3 | M | 100KHz, 1.0V | 0.038 | 1.9 |
| 6R2 | 6.2 | M | 100KHz, 1.0V | 0.045 | 1.8 |
| 8R2 | 8.2 | M | 100KHz, 1.0V | 0.053 | 1.6 |
| 100 | 10 | M | 100KHz, 1.0V | 0.065 | 1.3 |
| 120 | 12 | M | 100KHz, 1.0V | 0.076 | 1.2 |
| 150 | 15 | M | 100KHz, 1.0V | 0.103 | 1.1 |
| 180 | 18 | M | 100KHz, 1.0V | 0.11 | 1 |
| 220 | 22 | M | 100KHz, 1.0V | 0.122 | 0.9 |
| 270 | 27 | M | 100KHz, 1.0V | 0.175 | 0.85 |
| 330 | 33 | M | 100KHz, 1.0V | 0.189 | 0.75 |
| 390 | 39 | M | 100KHz, 1.0V | 0.212 | 0.7 |
| 470 | 47 | M | 100KHz, 1.0V | 0.26 | 0.62 |
| 560 | 56 | M | 100KHz, 1.0V | 0.305 | 0.58 |
| 680 | 68 | M | 100KHz, 1.0V | 0.355 | 0.52 |
| 820 | 82 | M | 100KHz, 1.0V | 0.463 | 0.46 |
| 101 | 100 | M | 100KHz, 1.0V | 0.52 | 0.42 |

LMax SMD Power Inductor

LMXS Series – Shielded Style P



07007

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 3R3 | 3.3 | M | 100KHz, 1.0V | 0.069 | 3 |
| 4R7 | 4.7 | M | 100KHz, 1.0V | 0.075 | 2.4 |
| 6R8 | 6.8 | M | 100KHz, 1.0V | 0.106 | 2.2 |
| 100 | 10 | M | 100KHz, 1.0V | 0.15 | 1.8 |

07C7

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 3R0 | 3 | M | 100KHz, 1.0V | 0.024 | 3 |
| 3R9 | 3.9 | M | 100KHz, 1.0V | 0.027 | 2.6 |
| 5R0 | 5 | M | 100KHz, 1.0V | 0.031 | 2.4 |
| 6R0 | 6 | M | 100KHz, 1.0V | 0.035 | 2.25 |
| 7R3 | 7.3 | M | 100KHz, 1.0V | 0.054 | 2.1 |
| 8R6 | 8.6 | M | 100KHz, 1.0V | 0.058 | 1.85 |
| 100 | 10 | M | 100KHz, 1.0V | 0.065 | 1.7 |
| 120 | 12 | M | 100KHz, 1.0V | 0.07 | 1.55 |
| 150 | 15 | M | 100KHz, 1.0V | 0.084 | 1.4 |
| 180 | 18 | M | 100KHz, 1.0V | 0.095 | 1.32 |
| 220 | 22 | M | 100KHz, 1.0V | 0.128 | 1.2 |
| 270 | 27 | M | 100KHz, 1.0V | 0.142 | 1.05 |
| 330 | 33 | M | 100KHz, 1.0V | 0.165 | 0.97 |
| 390 | 39 | M | 100KHz, 1.0V | 0.21 | 0.86 |
| 470 | 47 | M | 100KHz, 1.0V | 0.238 | 0.8 |
| 560 | 56 | M | 100KHz, 1.0V | 0.277 | 0.73 |
| 680 | 68 | M | 100KHz, 1.0V | 0.304 | 0.65 |
| 820 | 82 | M | 100KHz, 1.0V | 0.39 | 0.6 |
| 101 | 100 | M | 100KHz, 1.0V | 0.535 | 0.54 |

07D7

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 3R3 | 3.3 | M | 100KHz, 1.0V | 0.02 | 3.5 |
| 5R0 | 5 | M | 100KHz, 1.0V | 0.024 | 2.9 |
| 6R0 | 6 | M | 100KHz, 1.0V | 0.027 | 2.5 |
| 7R3 | 7.3 | M | 100KHz, 1.0V | 0.031 | 2.3 |
| 8R6 | 8.6 | M | 100KHz, 1.0V | 0.034 | 2.2 |
| 100 | 10 | M | 100KHz, 1.0V | 0.038 | 2 |
| 120 | 12 | M | 100KHz, 1.0V | 0.053 | 1.7 |
| 150 | 15 | M | 100KHz, 1.0V | 0.057 | 1.6 |
| 180 | 18 | M | 100KHz, 1.0V | 0.092 | 1.5 |
| 220 | 22 | M | 100KHz, 1.0V | 0.096 | 1.3 |
| 270 | 27 | M | 100KHz, 1.0V | 0.109 | 1.2 |
| 330 | 33 | M | 100KHz, 1.0V | 0.124 | 1.1 |
| 390 | 39 | M | 100KHz, 1.0V | 0.138 | 1 |
| 470 | 47 | M | 100KHz, 1.0V | 0.155 | 0.95 |
| 560 | 56 | M | 100KHz, 1.0V | 0.202 | 0.85 |
| 680 | 68 | M | 100KHz, 1.0V | 0.234 | 0.75 |
| 820 | 82 | M | 100KHz, 1.0V | 0.324 | 0.7 |
| 101 | 100 | M | 100KHz, 1.0V | 0.358 | 0.65 |

LMax SMD Miniature Power Inductor

LMMN Series – Miniature Style M

FEATURES

- LMMN series miniature chip inductors are wound on a special ferrite core.
- 0302/ 03A2/ 0403 are high Q value at high frequency and low DC resistance.
- 0302/03A2/ 0403/ 0605 are low DC resistance, high current capacity, and high impedance characteristics. They are excellent for using as a choke coil in DC power supply circuits.
- Operating temperature range (0202, 02A2, 02B2, 0302): -40°C to 105°C
- Operating temperature range (03A2, 0403, 0605): -40°C to 85°C

INDUCTANCE AND RATED CURRENT RANGES

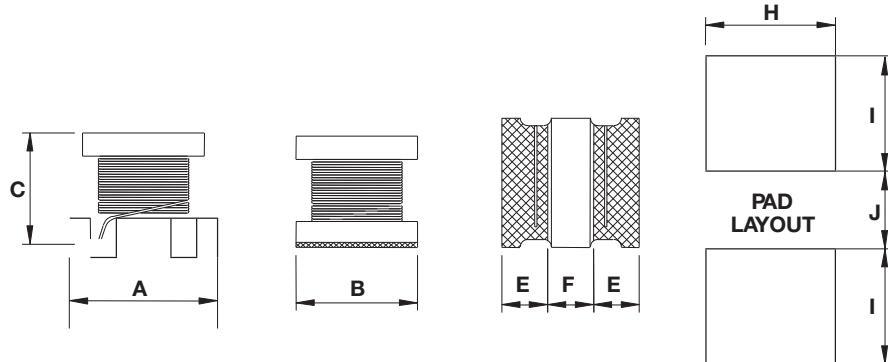
- 0202 1.00 ~ 10μH 2.80 ~ 0.65A
- 02A2 1.00 ~ 10μH 3.70 ~ 0.90A
- 02B2 1.00 ~ 22μH 2.30 ~ 0.51A
- 0302 1.00 ~ 100μH 1.00 ~ 0.1A
- 03A2 1.00 ~ 560μH 0.445 ~ 0.04A
- 0403 1.00 ~ 2200μH 0.50 ~ 0.03A
- 0302 (C) 0.47 ~ 120μH 3.40 ~ 0.17A
- 03A2 (C) 1.00 ~ 560μH 1.00 ~ 0.06A
- 0403 (C) 1.00 ~ 470μH 1.08 ~ 0.09A
- 0605 (C) 0.12 ~ 10000μH 6.00 ~ 0.05A
- Electrical specifications at 25°C



APPLICATIONS

- High Frequency Communication Products
- Personal Computers
- Disk Drives And Computer Peripherals
- DC Power Supply Circuits

DIMENSIONS



mm (inches)

| Type | A | B | C | E | F | H | I | J |
|-----------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|-----------------|-----------------|-----------------|
| 0202 | 2.50 ± 0.20 (0.098 ± 0.008) | 2.00 ± 0.20 (0.079 ± 0.008) | 1.00 max. (0.039) | 0.40 ± 0.20 (0.016 ± 0.008) | 1.00 min. (0.039) | 2.10 (0.083) | 0.90 (0.035) | 0.80 (0.031) |
| 02A2 | 2.50 ± 0.20 (0.098 ± 0.008) | 2.00 ± 0.20 (0.079 ± 0.008) | 1.25 max. (0.049) | 0.40 ± 0.20 (0.016 ± 0.008) | 1.00 min. (0.039) | 2.10 (0.083) | 0.90 (0.035) | 0.80 (0.031) |
| 02B2 | 2.50 ± 0.20 (0.098 ± 0.008) | 2.50 ± 0.20 (0.098 ± 0.008) | 1.05 max. (0.041) | 0.85 ref (0.033) | 0.85 ref (0.033) | 2.50 (0.098) | 1.20 (0.047) | 0.80 (0.031) |
| 0302 / 0302 (C) | 3.20 ± 0.30 (0.126 ± 0.012) | 2.50 ± 0.20 (0.098 ± 0.008) | 1.55 ± 0.30 (0.061 ± 0.012) | 1.05 ± 0.30 (0.041 ± 0.012) | 1.05 ± 0.30 (0.041 ± 0.012) | 2.00 (0.079) | 1.50 (0.059) | 1.00 (0.039) |
| 03A2 / 03A2 (C) | 3.20 ± 0.30 (0.126 ± 0.012) | 2.50 ± 0.20 (0.098 ± 0.008) | 2.00 ± 0.30 (0.079 ± 0.012) | 1.05 ± 0.30 (0.041 ± 0.012) | 1.05 ± 0.30 (0.041 ± 0.012) | 2.00 (0.079) | 1.50 (0.059) | 1.00 (0.039) |
| 0403 / 0403 (C) | 4.50 ± 0.30 (0.177 ± 0.012) | 3.20 ± 0.20 (0.126 ± 0.008) | 2.60 ± 0.30 (0.102 ± 0.012) | 1.00 min. (0.039) | 1.00 min. (0.039) | 3.00 (0.118) | 2.00 (0.079) | 1.20 (0.047) |
| 0605 (C) | 5.70 ± 0.30 (0.224 ± 0.012) | 5.00 ± 0.30 (0.197 ± 0.012) | 4.70 ± 0.50 (0.185 ± 0.020) | 1.30 min. (0.051) | 1.70 min. (0.067) | 5.00 (0.197) | 2.00 (0.079) | 2.00 (0.079) |

LMax SMD Power Inductor

LMMN Series – Miniature Style M

HOW TO ORDER

| | | | | | | | | |
|---------------------|----------------|-----------------------------------|---|--|----------|--------------|--|------------------------------|
| LM | MN | 0202 | N | R04 | M | T | A | R |
| Family | Series | Size | Tolerance | Inductance | Style | Termination | Special | Packaging |
| LM = Power Inductor | MN = Miniature | 0202 = 2x2xh (h = see catalog) | J = ±5% K = ±10% M = ±20% N = ±30% | R39 = 0.390µH 3R9 = 3.900µH 390 = 39.00µH 391 = 390.0µH 392 = 3900µH | | T = Sn Plate | A = Standard C = Choke* | R = 7" Reel S = 13" Reel* |
| | | | | | | | *Available for 0302, 03A2, 0402 and 0605 sizes only | *0605 size only |

ELECTRICAL CHARACTERISTICS

0202

| AVX PN | L (µH) | Tolerance | Test Condition | DCR (Ω) max. | I _{RMS} ¹ (A) Typical | I _{SAT} ² (A) Typical |
|------------------|--------|-----------|----------------|--------------|---|---|
| LMMN0202M1R0MTAR | 1.0 | M | 1MHz, 0.1V | 0.085 | 1.7 | 2 |
| LMMN0202M1R5MTAR | 1.5 | M | 1MHz, 0.1V | 0.128 | 1.4 | 1.7 |
| LMMN0202M2R2MTAR | 2.2 | M | 1MHz, 0.1V | 0.19 | 1.1 | 1.4 |
| LMMN0202M3R3MTAR | 3.3 | M | 1MHz, 0.1V | 0.304 | 0.94 | 1.2 |
| LMMN0202M4R7MTAR | 4.7 | M | 1MHz, 0.1V | 0.44 | 0.78 | 0.98 |
| LMMN0202M6R8MTAR | 6.8 | M | 1MHz, 0.1V | 0.541 | 0.7 | 0.82 |
| LMMN0202M100MTAR | 10 | M | 1MHz, 0.1V | 0.854 | 0.52 | 0.65 |

¹ The temperature rise current value (I_{RMS}) is the DC current value that increases component temperature by up to 40°C. (Ta=25°C)

² The saturation current value (I_{SAT}) is the DC current value when the inductance decreases by 30% of its initial value. (Ta=25°C)

02A2

| AVX PN | L (µH) | Tolerance | Test Condition | DCR (Ω) max. | I _{RMS} ¹ (A) Typical | I _{SAT} ² (A) Typical |
|------------------|--------|-----------|----------------|--------------|---|---|
| LMMN02A2M1R0MTAR | 1.0 | M | 1MHz, 0.1V | 0.088 | 1.8 | 2.7 |
| LMMN02A2M1R5MTAR | 1.5 | M | 1MHz, 0.1V | 0.126 | 1.5 | 2.2 |
| LMMN02A2M2R2MTAR | 2.2 | M | 1MHz, 0.1V | 0.155 | 1.3 | 2 |
| LMMN02A2M3R3MTAR | 3.3 | M | 1MHz, 0.1V | 0.272 | 1 | 1.6 |
| LMMN02A2M4R7MTAR | 4.7 | M | 1MHz, 0.1V | 0.45 | 0.81 | 1.2 |
| LMMN02A2M5R6MTAR | 5.6 | M | 1MHz, 0.1V | 0.45 | 0.72 | 1.15 |
| LMMN02A2M6R8MTAR | 6.8 | M | 1MHz, 0.1V | 0.612 | 0.66 | 1.1 |
| LMMN02A2M100MTAR | 10 | M | 1MHz, 0.1V | 0.756 | 0.59 | 0.9 |

¹ The temperature rise current value (I_{RMS}) is the DC current value that increases component temperature by up to 40°C. (Ta=25°C)

² The saturation current value (I_{SAT}) is the DC current value when the inductance decreases by 30% of its initial value. (Ta=25°C)

02B2

| AVX PN | L (µH) | Tolerance | Test Condition | DCR (Ω) max. | I _{RMS} ¹ (A) Typical | I _{SAT} ² (A) Typical |
|------------------|--------|-----------|----------------|--------------|---|---|
| LMMN02B2M1R0MTAR | 1.0 | M | 1MHz, 0.1V | 0.085 | 1.9 | 2.3 |
| LMMN02B2M1R5MTAR | 1.5 | M | 1MHz, 0.1V | 0.115 | 1.5 | 1.9 |
| LMMN02B2M2R2MTAR | 2.2 | M | 1MHz, 0.1V | 0.168 | 1.2 | 1.5 |
| LMMN02B2M3R3MTAR | 3.3 | M | 1MHz, 0.1V | 0.239 | 1.1 | 1.3 |
| LMMN02B2M4R7MTAR | 4.7 | M | 1MHz, 0.1V | 0.316 | 0.9 | 1.1 |
| LMMN02B2M5R6MTAR | 5.6 | M | 1MHz, 0.1V | 0.42 | 0.83 | 0.98 |
| LMMN02B2M6R8MTAR | 6.8 | M | 1MHz, 0.1V | 0.487 | 0.8 | 0.9 |
| LMMN02B2M8R2MTAR | 8.2 | M | 1MHz, 0.1V | 0.548 | 0.71 | 0.84 |
| LMMN02B2M100MTAR | 10 | M | 1MHz, 0.1V | 0.61 | 0.68 | 0.79 |
| LMMN02B2M220MTAR | 22 | M | 1MHz, 0.1V | 1.552 | 0.4 | 0.51 |

¹ The temperature rise current value (I_{RMS}) is the DC current value that increases component temperature by up to 40°C. (Ta=25°C)

² The saturation current value (I_{SAT}) is the DC current value when the inductance decreases by 30% of its initial value. (Ta=25°C)

LMax SMD Power Inductor

LMMN Series – Miniature Style M

0302

| AVX PN | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | I _{dc} ¹ (A) Typical | SRF (MHz) min |
|------------------|--------|-----------|----------------|--------------|--|---------------|
| LMMN0302N1R0MTAR | 1.0 | N | 1MHz, 0.1V | 0.078 | 1 | 100 |
| LMMN0302N1R5MTAR | 1.5 | N | 1MHz, 0.1V | 0.068 | 1.2 | 100 |
| LMMN0302M2R2MTAR | 2.2 | M | 1MHz, 0.1V | 0.126 | 0.79 | 64 |
| LMMN0302M3R3MTAR | 3.3 | M | 1MHz, 0.1V | 0.18 | 0.7 | 50 |
| LMMN0302M4R7MTAR | 4.7 | M | 1MHz, 0.1V | 0.195 | 0.65 | 43 |
| LMMN0302K100MTAR | 10 | K | 1MHz, 0.1V | 0.42 | 0.45 | 26 |
| LMMN0302K150MTAR | 15 | K | 1MHz, 0.1V | 0.75 | 0.3 | 22 |
| LMMN0302K220MTAR | 22 | K | 1MHz, 0.1V | 1 | 0.25 | 19 |
| LMMN0302K330MTAR | 33 | K | 1MHz, 0.1V | 1.4 | 0.2 | 17 |
| LMMN0302K470MTAR | 47 | K | 1MHz, 0.1V | 2.2 | 0.17 | 13 |
| LMMN0302K680MTAR | 68 | K | 1MHz, 0.1V | 3.2 | 0.13 | 9 |
| LMMN0302K101MTAR | 100 | K | 1MHz, 0.1V | 4.5 | 0.1 | 8 |

¹I_{dc}: The current when the inductance becomes 10% lower than its initial value or the current when the temperature of the coil increases by 20°C.
The smaller one is defined as the rated DC current. (Ta=25°C)

* Inductance Tolerance: J=±5%, K=±10%, M=±20%

0403

| AVX PN | L (μH) | Tolerance | Test Condition | Quality Factor | | DCR (Ω) max. | I _{dc} ¹ (A) Typical | SRF (MHz) min |
|------------------|--------|-----------|----------------|----------------|----------------|--------------|--|---------------|
| | | | | Q | Test Condition | | | |
| LMMN03A2M1R0MTAR | 1.0 | M | 1MHz, 0.1V | 20 | 1MHz, 0.1V | 0.5 | 0.445 | 100 |
| LMMN03A2M1R2MTAR | 1.2 | M | 1MHz, 0.1V | 20 | 1MHz, 0.1V | 0.6 | 0.425 | 100 |
| LMMN03A2*1R5MTAR | 1.5 | K, M | 1MHz, 0.1V | 20 | 1MHz, 0.1V | 0.6 | 0.4 | 75 |
| LMMN03A2*1R8MTAR | 1.8 | K, M | 1MHz, 0.1V | 20 | 1MHz, 0.1V | 0.7 | 0.39 | 60 |
| LMMN03A2*2R2MTAR | 2.2 | K, M | 1MHz, 0.1V | 20 | 1MHz, 0.1V | 0.8 | 0.37 | 50 |
| LMMN03A2*2R7MTAR | 2.7 | K, M | 1MHz, 0.1V | 20 | 1MHz, 0.1V | 0.9 | 0.32 | 43 |
| LMMN03A2*3R3MTAR | 3.3 | K, M | 1MHz, 0.1V | 20 | 1MHz, 0.1V | 1 | 0.3 | 38 |
| LMMN03A2*3R9MTAR | 3.9 | K, M | 1MHz, 0.1V | 20 | 1MHz, 0.1V | 1.1 | 0.29 | 35 |
| LMMN03A2*4R7MTAR | 4.7 | K, M | 1MHz, 0.1V | 20 | 1MHz, 0.1V | 1.2 | 0.27 | 31 |
| LMMN03A2*5R6MTAR | 5.6 | K, M | 1MHz, 0.1V | 20 | 1MHz, 0.1V | 1.3 | 0.25 | 28 |
| LMMN03A2*6R8MTAR | 6.8 | K, M | 1MHz, 0.1V | 20 | 1MHz, 0.1V | 1.5 | 0.24 | 25 |
| LMMN03A2*8R2MTAR | 8.2 | K, M | 1MHz, 0.1V | 20 | 1MHz, 0.1V | 1.6 | 0.225 | 23 |
| LMMN03A2*100MTAR | 10 | J, K | 1MHz, 0.1V | 35 | 1MHz, 0.1V | 1.8 | 0.19 | 20 |
| LMMN03A2*120MTAR | 12 | J, K | 1MHz, 0.1V | 35 | 1MHz, 0.1V | 2 | 0.18 | 18 |
| LMMN03A2*150MTAR | 15 | J, K | 1MHz, 0.1V | 35 | 1MHz, 0.1V | 2.2 | 0.17 | 16 |
| LMMN03A2*180MTAR | 18 | J, K | 1MHz, 0.1V | 35 | 1MHz, 0.1V | 2.5 | 0.165 | 15 |
| LMMN03A2*220MTAR | 22 | J, K | 1MHz, 0.1V | 35 | 1MHz, 0.1V | 2.8 | 0.15 | 14 |
| LMMN03A2*270MTAR | 27 | J, K | 1MHz, 0.1V | 35 | 1MHz, 0.1V | 3.1 | 0.125 | 13 |
| LMMN03A2*330MTAR | 33 | J, K | 1MHz, 0.1V | 40 | 1MHz, 0.1V | 3.5 | 0.115 | 12 |
| LMMN03A2*390MTAR | 39 | J, K | 1MHz, 0.1V | 40 | 1MHz, 0.1V | 3.9 | 0.11 | 11 |
| LMMN03A2*470MTAR | 47 | J, K | 1MHz, 0.1V | 40 | 1MHz, 0.1V | 4.3 | 0.1 | 11 |
| LMMN03A2*560MTAR | 56 | J, K | 1MHz, 0.1V | 40 | 1MHz, 0.1V | 4.9 | 0.085 | 10 |
| LMMN03A2*680MTAR | 68 | J, K | 1MHz, 0.1V | 40 | 1MHz, 0.1V | 5.5 | 0.08 | 9 |
| LMMN03A2*820MTAR | 82 | J, K | 1MHz, 0.1V | 40 | 1MHz, 0.1V | 6.2 | 0.07 | 8.5 |
| LMMN03A2*101MTAR | 100 | J, K | 1MHz, 0.1V | 40 | 796KHz, 0.1V | 7 | 0.08 | 8 |
| LMMN03A2*121MTAR | 120 | J, K | 1MHz, 0.1V | 40 | 796KHz, 0.1V | 8 | 0.075 | 7.5 |
| LMMN03A2*151MTAR | 150 | J, K | 1MHz, 0.1V | 40 | 796KHz, 0.1V | 9.3 | 0.07 | 7 |
| LMMN03A2*181MTAR | 180 | J, K | 1MHz, 0.1V | 40 | 796KHz, 0.1V | 10.2 | 0.065 | 6 |
| LMMN03A2*221MTAR | 220 | J, K | 1MHz, 0.1V | 40 | 796KHz, 0.1V | 11.8 | 0.065 | 5.5 |
| LMMN03A2*271MTAR | 270 | J, K | 1MHz, 0.1V | 40 | 796KHz, 0.1V | 12.5 | 0.065 | 5 |
| LMMN03A2*331MTAR | 330 | J, K | 1MHz, 0.1V | 40 | 796KHz, 0.1V | 15 | 0.065 | 5 |
| LMMN03A2*391MTAR | 390 | J, K | 1MHz, 0.1V | 50 | 796KHz, 0.1V | 22 | 0.05 | 5 |
| LMMN03A2*471MTAR | 470 | J, K | 1KHz, 0.1V | 50 | 796KHz, 0.1V | 25 | 0.045 | 5 |
| LMMN03A2*561MTAR | 560 | J, K | 1KHz, 0.1V | 50 | 796KHz, 0.1V | 28 | 0.04 | 5 ref |

¹I_{dc}: The current when the inductance becomes 10% lower than its initial value or the current when the temperature of the coil increases by 20°C.
The smaller one is defined as the rated DC current. (Ta=25°C)

* Inductance Tolerance: J=±5%, K=±10%, M=±20%

LMax SMD Power Inductor

LMMN Series – Miniature Style M

0403

| AVX PN | L (μ H) | Tolerance | Test Condition | Quality Factor | | DCR (Ω) max. | I_{dc}^1 (A) Typical | SRF (MHz) min |
|------------------|-----------------|-----------|-------------------|----------------|----------------|--------------------------|---------------------------|------------------|
| | | | | SPEC | Test Contition | | | |
| LMMN0403M1R0MTAR | 1.0 | M | 1MHz, 0.1V | 20 | 1MHz, 0.1V | 0.2 | 0.5 | 120 |
| LMMN0403M1R2MTAR | 1.2 | M | 1MHz, 0.1V | 20 | 1MHz, 0.1V | 0.2 | 0.5 | 100 |
| LMMN0403M1R5MTAR | 1.5 | M | 1MHz, 0.1V | 20 | 1MHz, 0.1V | 0.3 | 0.5 | 85 |
| LMMN0403M1R8MTAR | 1.8 | M | 1MHz, 0.1V | 20 | 1MHz, 0.1V | 0.3 | 0.5 | 75 |
| LMMN0403M2R2MTAR | 2.2 | M | 1MHz, 0.1V | 20 | 1MHz, 0.1V | 0.3 | 0.5 | 62 |
| LMMN0403M2R7MTAR | 2.7 | M | 1MHz, 0.1V | 20 | 1MHz, 0.1V | 0.32 | 0.5 | 53 |
| LMMN0403M3R3MTAR | 3.3 | M | 1MHz, 0.1V | 20 | 1MHz, 0.1V | 0.35 | 0.5 | 47 |
| LMMN0403M3R9MTAR | 3.9 | M | 1MHz, 0.1V | 20 | 1MHz, 0.1V | 0.38 | 0.5 | 41 |
| LMMN0403*4R7MTAR | 4.7 | K, M | 1MHz, 0.1V | 30 | 1MHz, 0.1V | 0.4 | 0.5 | 38 |
| LMMN0403*5R6MTAR | 5.6 | K, M | 1MHz, 0.1V | 30 | 1MHz, 0.1V | 0.47 | 0.5 | 33 |
| LMMN0403*6R8MTAR | 6.8 | K, M | 1MHz, 0.1V | 30 | 1MHz, 0.1V | 0.5 | 0.45 | 31 |
| LMMN0403*8R2MTAR | 8.2 | K, M | 1MHz, 0.1V | 30 | 1MHz, 0.1V | 0.56 | 0.45 | 27 |
| LMMN0403*100MTAR | 10 | J, K | 1MHz, 0.1V | 35 | 1MHz, 0.1V | 0.56 | 0.4 | 23 |
| LMMN0403*120MTAR | 12 | J, K | 1MHz, 0.1V | 35 | 1MHz, 0.1V | 0.62 | 0.38 | 21 |
| LMMN0403*150MTAR | 15 | J, K | 1MHz, 0.1V | 35 | 1MHz, 0.1V | 0.73 | 0.36 | 19 |
| LMMN0403*180MTAR | 18 | J, K | 1MHz, 0.1V | 35 | 1MHz, 0.1V | 0.82 | 0.34 | 17 |
| LMMN0403*220MTAR | 22 | J, K | 1MHz, 0.1V | 35 | 1MHz, 0.1V | 0.94 | 0.32 | 15 |
| LMMN0403*270MTAR | 27 | J, K | 1MHz, 0.1V | 35 | 1MHz, 0.1V | 1.1 | 0.3 | 14 |
| LMMN0403*330MTAR | 33 | J, K | 1MHz, 0.1V | 35 | 1MHz, 0.1V | 1.2 | 0.27 | 12 |
| LMMN0403*390MTAR | 39 | J, K | 1MHz, 0.1V | 35 | 1MHz, 0.1V | 1.4 | 0.24 | 11 |
| LMMN0403*470MTAR | 47 | J, K | 1MHz, 0.1V | 35 | 1MHz, 0.1V | 1.5 | 0.22 | 10 |
| LMMN0403*560MTAR | 56 | J, K | 1MHz, 0.1V | 35 | 1MHz, 0.1V | 1.7 | 0.2 | 9.3 |
| LMMN0403*680MTAR | 68 | J, K | 1MHz, 0.1V | 35 | 1MHz, 0.1V | 1.9 | 0.18 | 8.4 |
| LMMN0403*820MTAR | 82 | J, K | 1MHz, 0.1V | 35 | 1MHz, 0.1V | 2.2 | 0.17 | 7.5 |
| LMMN0403*101MTAR | 100 | J, K | 1MHz, 0.1V | 40 | 796KHz, 0.1V | 2.5 | 0.16 | 6.8 |
| LMMN0403*121MTAR | 120 | J, K | 1MHz, 0.1V | 40 | 796KHz, 0.1V | 3 | 0.15 | 6.2 |
| LMMN0403*151MTAR | 150 | J, K | 1MHz, 0.1V | 40 | 796KHz, 0.1V | 3.7 | 0.13 | 5.5 |
| LMMN0403*181MTAR | 180 | J, K | 1MHz, 0.1V | 40 | 796KHz, 0.1V | 4.5 | 0.12 | 5 |
| LMMN0403*221MTAR | 220 | J, K | 1MHz, 0.1V | 40 | 796KHz, 0.1V | 5.4 | 0.11 | 4.5 |
| LMMN0403*271MTAR | 270 | J, K | 1MHz, 0.1V | 40 | 796KHz, 0.1V | 6.8 | 0.1 | 4 |
| LMMN0403*331MTAR | 330 | J, K | 1MHz, 0.1V | 40 | 796KHz, 0.1V | 8.2 | 0.095 | 3.6 |
| LMMN0403*391MTAR | 390 | J, K | 1MHz, 0.1V | 40 | 796KHz, 0.1V | 9.7 | 0.09 | 3.3 |
| LMMN0403*471MTAR | 470 | J, K | 1KHz, 0.1V | 40 | 796KHz, 0.1V | 11.8 | 0.08 | 3 |
| LMMN0403*561MTAR | 560 | J, K | 1KHz, 0.1V | 40 | 796KHz, 0.1V | 14.5 | 0.07 | 2.7 |
| LMMN0403*681MTAR | 680 | J, K | 1KHz, 0.1V | 40 | 796KHz, 0.1V | 17 | 0.065 | 2.5 |
| LMMN0403*821MTAR | 820 | J, K | 1KHz, 0.1V | 40 | 796KHz, 0.1V | 20.5 | 0.06 | 2.2 |
| LMMN0403*102MTAR | 1000 | J, K | 1KHz, 0.1V | 40 | 252KHz, 0.1V | 25 | 0.05 | 2 |
| LMMN0403*122MTAR | 1200 | J, K | 1KHz, 0.1V | 40 | 252KHz, 0.1V | 30 | 0.045 | 1.8 |
| LMMN0403*152MTAR | 1500 | J, K | 1KHz, 0.1V | 40 | 252KHz, 0.1V | 37 | 0.04 | 1.6 |
| LMMN0403*182MTAR | 1800 | J, K | 1KHz, 0.1V | 40 | 252KHz, 0.1V | 45 | 0.035 | 1.5 |
| LMMN0403*222MTAR | 2200 | J, K | 1KHz, 0.1V | 40 | 252KHz, 0.1V | 50 | 0.03 | 1.3 |

¹ I_{dc} : The current when the inductance becomes 10% lower than its initial value or the current when the temperature of the coil increases by 20°C.
The smaller one is defined as the rated DC current. (Ta=25°C)

* Inductance Tolerance: J=±5%, K=±10%, M=±20%

LMax SMD Power Inductor

LMMN Series – Miniature Style M

0302 (C)

| AVX PN | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | I _{RMS} ¹ (A) Typ. | I _{SAT} ² (A) Typ. | SRF (MHz) min |
|------------------|--------|-----------|----------------|--------------|--|--|---------------|
| LMMN0302NR47MTCR | 0.47 | N | 1MHz, 0.1V | 0.03 | 2.55 | 3.4 | 100 |
| LMMN0302N1R0MTCR | 1.0 | N | 1MHz, 0.1V | 0.045 | 2.05 | 2.3 | 100 |
| LMMN0302N1R5MTCR | 1.5 | N | 1MHz, 0.1V | 0.057 | 1.75 | 1.75 | 70 |
| LMMN0302N2R2MTCR | 2.2 | N | 1MHz, 0.1V | 0.076 | 1.6 | 1.55 | 70 |
| LMMN0302N3R3MTCR | 3.3 | N | 1MHz, 0.1V | 0.12 | 1.2 | 1.25 | 50 |
| LMMN0302N4R7MTCR | 4.7 | N | 1MHz, 0.1V | 0.18 | 1 | 1 | 40 |
| LMMN0302N6R8MTCR | 6.8 | N | 1MHz, 0.1V | 0.24 | 0.85 | 0.85 | 40 |
| LMMN0302M100MTCR | 10 | M | 1MHz, 0.1V | 0.38 | 0.7 | 0.75 | 30 |
| LMMN0302M150MTCR | 15 | M | 1MHz, 0.1V | 0.57 | 0.52 | 0.6 | 20 |
| LMMN0302M220MTCR | 22 | M | 1MHz, 0.1V | 0.81 | 0.45 | 0.5 | 20 |
| LMMN0302M330MTCR | 33 | M | 1MHz, 0.1V | 1.15 | 0.39 | 0.38 | 13 |
| LMMN0302M470MTCR | 47 | M | 1MHz, 0.1V | 1.78 | 0.31 | 0.33 | 11 |
| LMMN0302M680MTCR | 68 | M | 1MHz, 0.1V | 2.28 | 0.275 | 0.28 | 11 |
| LMMN0302M101MTCR | 100 | M | 1MHz, 0.1V | 2.7 | 0.25 | 0.18 | 8 |
| LMMN0302M121MTCR | 120 | M | 1MHz, 0.1V | 4.38 | 0.2 | 0.17 | 8 |

¹ The temperature rise current value (IRMS) is the DC current value that increases component temperature by up to 40°C. (Ta=25°C)

² The saturation current value (ISAT) is the DC current value when the inductance decreases by 30% of its initial value. (Ta=25°C)

03A2 (C)

| AVX PN | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | I _{DC} ¹ (A) Typical | SRF (MHz) min |
|------------------|--------|-----------|----------------|--------------|--|---------------|
| LMMN03A2M1R0MTCR | 1.0 | M | 1MHz, 0.1V | 0.078 | 1 | 100 |
| LMMN03A2M2R2MTCR | 2.2 | M | 1MHz, 0.1V | 0.126 | 0.79 | 64 |
| LMMN03A2M3R3MTCR | 3.3 | M | 1MHz, 0.1V | 0.165 | 0.5 | 50 |
| LMMN03A2M4R7MTCR | 4.7 | M | 1MHz, 0.1V | 0.195 | 0.45 | 43 |
| LMMN03A2M6R8MTCR | 6.8 | M | 1MHz, 0.1V | 0.33 | 0.45 | 38 |
| LMMN03A2M100MTCR | 10 | M | 1MHz, 0.1V | 0.572 | 0.3 | 26 |
| LMMN03A2*220MTCR | 22 | K, M | 1MHz, 0.1V | 0.923 | 0.25 | 19 |
| LMMN03A2*470MTCR | 47 | K, M | 1MHz, 0.1V | 1.69 | 0.17 | 12 |
| LMMN03A2*101MTCR | 100 | J, K | 1MHz, 0.1V | 4.55 | 0.1 | 8 |
| LMMN03A2*151MTCR | 150 | J, K | 1MHz, 0.1V | 9.1 | 0.08 | 7 |
| LMMN03A2*221MTCR | 220 | J, K | 1MHz, 0.1V | 10.92 | 0.07 | 5.5 |
| LMMN03A2*331MTCR | 330 | J, K | 1MHz, 0.1V | 13 | 0.06 | 4.5 |
| LMMN03A2*391MTCR | 390 | J, K | 1MHz, 0.1V | 22.1 | 0.06 | 4 |
| LMMN03A2*471MTCR | 470 | J, K | 1MHz, 0.1V | 24.7 | 0.06 | 3.7 |
| LMMN03A2*561MTCR | 560 | J, K | 1MHz, 0.1V | 28.6 | 0.06 | 3.4 |

¹I_{DC}: The current when the inductance becomes 10% lower than its initial value or the current when the temperature of the coil increases by 20°C.

The smaller one is defined as the rated DC current. (Ta=25°C)

* Inductance Tolerance: J=±5%, K=±10%, M=±20%

LMax SMD Power Inductor

LMMN Series – Miniature Style M

0403 (C)

| AVX PN | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | I _{dc} ¹ (A) Typical | SRF (MHz) min |
|------------------|--------|-----------|----------------|--------------|--|---------------|
| LMMN0403M1R0MTCR | 1.0 | M | 1MHz, 0.1V | 0.08 | 1.08 | 100 |
| LMMN0403M1R5MTCR | 1.5 | M | 1MHz, 0.1V | 0.09 | 1 | 85 |
| LMMN0403M2R2MTCR | 2.2 | M | 1MHz, 0.1V | 0.11 | 0.9 | 60 |
| LMMN0403M3R3MTCR | 3.3 | M | 1MHz, 0.1V | 0.13 | 0.8 | 47 |
| LMMN0403*4R7MTCR | 4.7 | K, M | 1MHz, 0.1V | 0.15 | 0.75 | 35 |
| LMMN0403*6R8MTCR | 6.8 | K, M | 1MHz, 0.1V | 0.2 | 0.72 | 30 |
| LMMN0403*100MTCR | 10 | J, K | 1MHz, 0.1V | 0.24 | 0.65 | 23 |
| LMMN0403*150MTCR | 15 | J, K | 1MHz, 0.1V | 0.32 | 0.57 | 20 |
| LMMN0403*220MTCR | 22 | J, K | 1MHz, 0.1V | 0.6 | 0.42 | 15 |
| LMMN0403*330MTCR | 33 | J, K | 1MHz, 0.1V | 1 | 0.31 | 12 |
| LMMN0403*470MTCR | 47 | J, K | 1MHz, 0.1V | 1.1 | 0.28 | 10 |
| LMMN0403*680MTCR | 68 | J, K | 1MHz, 0.1V | 1.7 | 0.22 | 8.4 |
| LMMN0403*101MTCR | 100 | J, K | 1MHz, 0.1V | 2.2 | 0.19 | 6.8 |
| LMMN0403*151MTCR | 150 | J, K | 1MHz, 0.1V | 3.5 | 0.13 | 5.5 |
| LMMN0403*221MTCR | 220 | J, K | 1MHz, 0.1V | 4 | 0.11 | 4.5 |
| LMMN0403*331MTCR | 330 | J, K | 1MHz, 0.1V | 6.8 | 0.1 | 3.6 |
| LMMN0403*471MTCR | 470 | J, K | 1MHz, 0.1V | 8.5 | 0.09 | 3 |

¹I_{dc}: The current when the inductance becomes 10% lower than its initial value or the current when the temperature of the coil increases by 20°C.
The smaller one is defined as the rated DC current. (Ta=25°C)

* Inductance Tolerance: J=±5%, K=±10%, M=±20%

0605 (C)

| AVX PN | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | I _{dc} ¹ (A) Typical | SRF (MHz) min |
|------------------|--------|-----------|----------------|--------------|--|---------------|
| LMMN0605MR12MTCS | 0.12 | M | 1MHz, 0.1V | 0.0098 | 6 | 450 |
| LMMN0605MR27MTCS | 0.27 | M | 1MHz, 0.1V | 0.014 | 5.3 | 300 |
| LMMN0605MR47MTCS | 0.47 | M | 1MHz, 0.1V | 0.0182 | 4.8 | 200 |
| LMMN0605M1R0MTCR | 1.0 | M | 1MHz, 0.1V | 0.027 | 4 | 150 |
| LMMN0605M1R5MTCR | 1.5 | M | 1MHz, 0.1V | 0.031 | 3.7 | 110 |
| LMMN0605M2R2MTCR | 2.2 | M | 1MHz, 0.1V | 0.041 | 3.2 | 80 |
| LMMN0605M3R3MTCR | 3.3 | M | 1MHz, 0.1V | 0.05 | 2.9 | 40 |
| LMMN0605M4R7MTCR | 4.7 | M | 1MHz, 0.1V | 0.0574 | 2.7 | 30 |
| LMMN0605M6R8MTCR | 6.8 | M | 1MHz, 0.1V | 0.104 | 2 | 25 |
| LMMN0605*100MTCR | 10 | K, M | 1MHz, 0.1V | 0.13 | 1.7 | 20 |
| LMMN0605*150MTCR | 15 | K, M | 1MHz, 0.1V | 0.21 | 1.4 | 17 |
| LMMN0605*220MTCR | 22 | K, M | 1MHz, 0.1V | 0.266 | 1.2 | 15 |
| LMMN0605*330MTCR | 33 | K, M | 1MHz, 0.1V | 0.448 | 0.9 | 12 |
| LMMN0605*470MTCR | 47 | K, M | 1MHz, 0.1V | 0.56 | 0.8 | 10 ref |
| LMMN0605*680MTCR | 68 | K, M | 1MHz, 0.1V | 0.938 | 0.64 | 7.6 |
| LMMN0605*101MTCR | 100 | K, M | 100KHz, 0.1V | 1.204 | 0.56 | 6.5 |
| LMMN0605*151MTCR | 150 | K, M | 100KHz, 0.1V | 2.66 | 0.42 | 5 |
| LMMN0605*221MTCR | 220 | K, M | 100KHz, 0.1V | 3.36 | 0.32 | 4 |
| LMMN0605*331MTCR | 330 | K, M | 100KHz, 0.1V | 6.16 | 0.27 | 3.1 |
| LMMN0605*471MTCR | 470 | K, M | 100KHz, 0.1V | 7.56 | 0.24 | 2.4 |
| LMMN0605*681MTCR | 680 | K, M | 100KHz, 0.1V | 11.34 | 0.19 | 1.9 |
| LMMN0605*102MTCR | 1000 | K, M | 10KHz, 0.1V | 14.42 | 0.15 | 1.7 |
| LMMN0605*222MTCR | 2200 | K, M | 10KHz, 0.1V | 30.1 | 0.1 | 1.2 |
| LMMN0605*472MTCR | 4700 | K, M | 10KHz, 0.1V | 61.04 | 0.07 | 0.8 |
| LMMN0605*103MTCR | 10000 | K, M | 10KHz, 0.1V | 140 | 0.05 | 0.5 |

¹I_{dc}: The current when the inductance becomes 10% lower than its initial value or the current when the temperature of the coil increases by 20°C.
The smaller one is defined as the rated DC current. (Ta=25°C)

* Inductance Tolerance: J=±5%, K=±10%, M=±20%

LMax SMD Power Inductor

LMMN Series – Miniature Style M

SHELF STORAGE SPECIFICATIONS

| Items | Specifications |
|--------------------------|--|
| Shelf Storage Conditions | Temperature range: 25±3°C • Humidity: <80% relative humidity. Recommendation: Product should be used within six months from the time of delivery. |

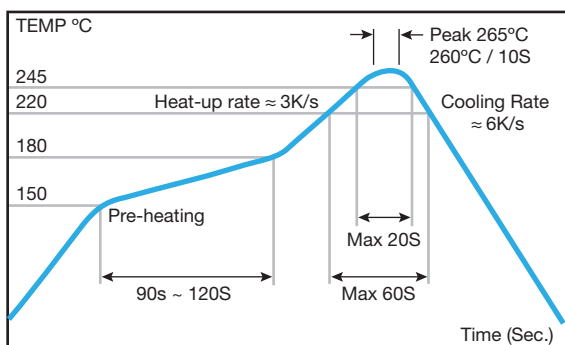
ENVIRONMENTAL SPECIFICATIONS

| Items | Specification | Test Method/Conditions |
|-------------------------------|---|---|
| High Temperature Storage Test | No case deformation or change in appearance $\Delta L/L \leq 10\%$ $\Delta Q/Q \leq 30\%$ | Temperature: 85±2°C Time: 48±2 hours Tested after 1 hour at room temperature. |
| Low Temperature Storage Test | | Temperature: -25±2°C Time: 48±2 hours Tested after 1 hour at room temperature. |
| Humidity Test | | Temperature: 40±2°C, 90~95% relative humidity Time: 96±2 hours Tested after 1 hour at room temperature. |
| Thermal Shock Test | | 1 Cycle: -25°C for 30 minutes +25°C for 10 minutes 85°C for 30 minutes Go through 5 cycles. Tested after 1 hour at room temperature. |

MECHANICAL SPECIFICATIONS

| Items | Specification | Test Method/Conditions |
|---------------------------|---|---|
| Solderability Test | Terminal area must have 90% minimum solder coverage | Lead-free termination: Dip pads in flux then dip in solder pot at 245±5°C for 3 seconds. |
| Resistance to solder heat | No case deformation or change in appearance. | Flux should cover the whole of the sample before heating, then be preheated for about 2 minutes over temperature 130 – 150°C. Immersing to 260±5°C for 10 seconds. |
| Vibration Test | No case deformation or change in appearance $\Delta L/L \leq 10\%$ $\Delta Q/Q \leq 30\%$ | Apply frequency at 10 – 55 Hz. 1.5mm amplitude in each of perpendicular direction for 2 hours. |
| Shock Resistance | | Drop down with 981m/s ² (100G) shock attitude upon a rubber block method shock testing machine – 1 time. In each three orientations. |

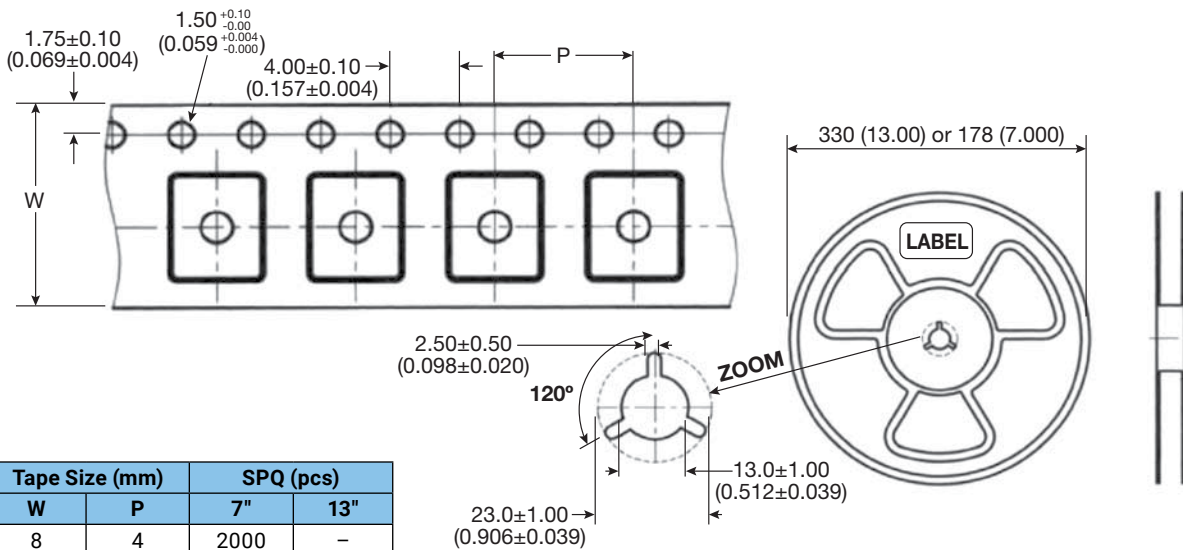
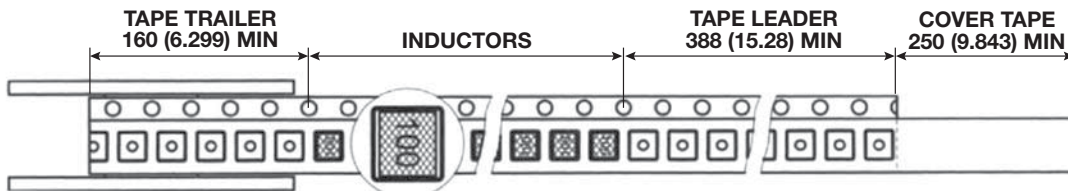
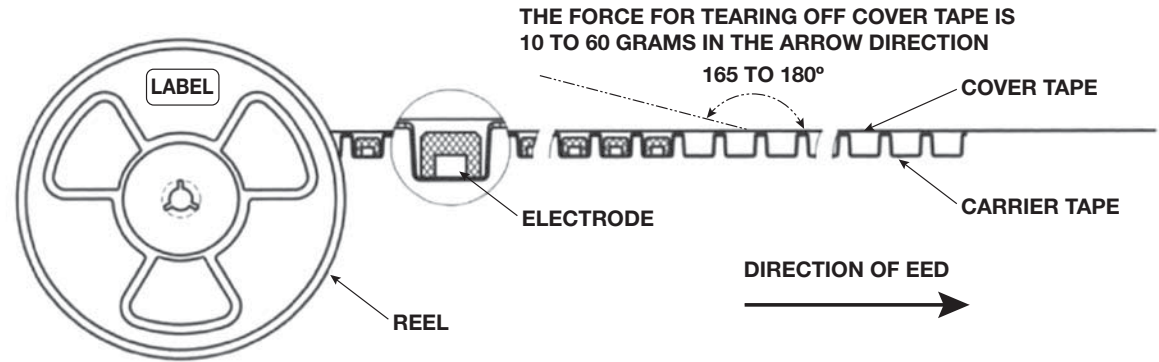
RELOW SOLDERING RECOMMENDATION



LMax SMD Power Inductor

LMMN Series – Miniature Style M

PACKAGING SPECIFICATIONS



| Size Code | Tape Size (mm) | | SPQ (pcs) | |
|-----------|----------------|----|-----------|------|
| | W | P | 7" | 13" |
| 0202 | 8 | 4 | 2000 | - |
| 02A2 | 8 | 4 | 2000 | - |
| 02B2 | 8 | 4 | 2000 | - |
| 0302 | 8 | 4 | 2000 | - |
| 03A2 | 8 | 4 | 2000 | - |
| 0403 | 12 | 8 | 500 | - |
| 0605 | 16 | 12 | - | 1000 |

LMax Low Profile Power Inductor

LMLP Series – Style C

FEATURES

- Small and low profile inductor
- It corresponds to high current
- Simple and original magnetic shield structure

APPLICATIONS

- For small DC/DC converter (cellular phone, HDD, DVC, DSC, PDA, LCD display etc.)

CHARACTERISTICS

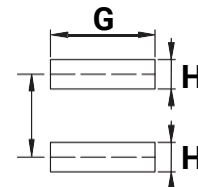
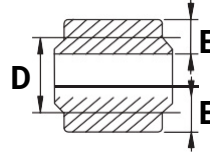
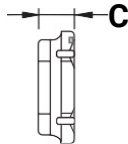
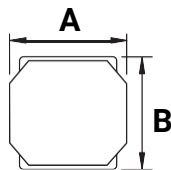
- Operating Temperature Range: -40°C to +125°C
- Storage Temperature Range: -40°C to +85°C
- Saturation Current: The saturation current value (ISAT) is the DC current value when the inductance decreases by 30% of its initial value (at 20°C).
- Temperature Rise Current: The temperature rise current value (IRMS) is the DC current value that increases component temperature by up to 40°C.

INDUCTANCE AND RATED CURRENT RANGES

| | | |
|--------|---------------|----------------|
| • 0202 | 2.2 ~ 22μH | 1.290 ~ 0.390A |
| • 0303 | 1.0 ~ 22μH | 1.30 ~ 0.350A |
| • 03A2 | 1.0 ~ 22μH | 1.50 ~ 0.370A |
| • 03B3 | 1.0 ~ 22μH | 2.10 ~ 0.470A |
| • 0404 | 1.0 ~ 22μH | 1.80 ~ 0.360A |
| • 04A4 | 1.0 ~ 22μH | 2.50 ~ 0.510A |
| • 04B4 | 1.0 ~ 220μH | 4.0 ~ 0.270A |
| • 0505 | 10μH | 1.00A |
| • 05B5 | 1.50 ~ 22.0μH | 3.35 ~ 0.90A |
| • 05D5 | 1.50 ~ 47.0μH | 6.00 ~ 1.10A |
| • 0606 | 4.7 ~ 10.0μH | 1.40 ~ 1.00A |
| • 06A6 | 2.50 ~ 100μH | 2.10 ~ 0.35A |
| • 06B6 | 0.80 ~ 22.0μH | 5.50 ~ 1.05A |
| • 06C6 | 1.50 ~ 100μH | 5.00 ~ 0.62A |
| • 06D6 | 1.30 ~ 100μH | 8.00 ~ 0.80A |
| • 0808 | 0.90 ~ 22μH | 11.0 ~ 2.2A |



DIMENSIONS



PCB Pattern

mm (inches)

| Type | A | B | C max | D | E | F | G | H |
|------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|-----------------|-----------------|-----------------|
| 0202 | 2.40 ± 0.10 (0.095 ± 0.004) | 2.40 ± 0.10 (0.095 ± 0.004) | 1.00 (0.039) | 1.45 ± 0.20 (0.057 ± 0.008) | 0.60 ± 0.20 (0.240 ± 0.008) | 1.45 (0.057) | 2.00 (0.079) | 0.70 (0.028) |
| 0303 | 3.00 ± 0.20 (0.118 ± 0.008) | 3.00 ± 0.20 (0.118 ± 0.008) | 1.00 (0.039) | 1.90 ± 0.20 (0.075 ± 0.008) | 0.90 ± 0.20 (0.035 ± 0.008) | 2.20 (0.087) | 2.70 (0.106) | 0.80 (0.032) |
| 03A2 | 3.00 ± 0.20 (0.118 ± 0.008) | 3.00 ± 0.20 (0.118 ± 0.008) | 1.20 (0.047) | 1.90 ± 0.20 (0.075 ± 0.008) | 0.90 ± 0.20 (0.035 ± 0.008) | 2.20 (0.087) | 2.70 (0.106) | 0.80 (0.032) |
| 03B3 | 3.00 ± 0.20 (0.118 ± 0.008) | 3.00 ± 0.20 (0.118 ± 0.008) | 1.50 (0.059) | 1.90 ± 0.20 (0.075 ± 0.008) | 0.90 ± 0.20 (0.035 ± 0.008) | 2.20 (0.087) | 2.70 (0.106) | 0.80 (0.032) |
| 0404 | 4.00 ± 0.20 (0.157 ± 0.008) | 4.00 ± 0.20 (0.157 ± 0.008) | 1.00 (0.039) | 2.50 ± 0.20 (0.099 ± 0.008) | 1.10 ± 0.20 (0.043 ± 0.008) | 2.80 (0.110) | 3.70 (0.146) | 1.20 (0.047) |
| 04A4 | 4.00 ± 0.20 (0.157 ± 0.008) | 4.00 ± 0.20 (0.157 ± 0.008) | 1.20 (0.047) | 2.50 ± 0.20 (0.099 ± 0.008) | 1.10 ± 0.20 (0.043 ± 0.008) | 2.80 (0.110) | 3.70 (0.146) | 1.20 (0.047) |
| 04B4 | 4.00 ± 0.20 (0.157 ± 0.008) | 4.00 ± 0.20 (0.157 ± 0.008) | 1.80 (0.071) | 2.50 ± 0.20 (0.099 ± 0.008) | 1.10 ± 0.20 (0.043 ± 0.008) | 2.80 (0.110) | 3.70 (0.146) | 1.20 (0.047) |
| 0505 | 5.00 ± 0.20 (0.197 ± 0.008) | 5.00 ± 0.20 (0.197 ± 0.008) | 1.00 (0.039) | 3.50 ± 0.20 (0.138 ± 0.008) | 1.50 ± 0.20 (0.059 ± 0.008) | 3.80 (0.150) | 4.70 (0.185) | 1.60 (0.063) |
| 05B5 | 5.00 ± 0.20 (0.197 ± 0.008) | 5.00 ± 0.20 (0.197 ± 0.008) | 2.00 (0.078) | 3.50 ± 0.20 (0.138 ± 0.008) | 1.50 ± 0.20 (0.059 ± 0.008) | 3.80 (0.150) | 4.70 (0.185) | 1.60 (0.063) |
| 05D5 | 5.00 ± 0.20 (0.197 ± 0.008) | 5.00 ± 0.20 (0.197 ± 0.008) | 4.00 (0.157) | 3.50 ± 0.20 (0.138 ± 0.008) | 1.50 ± 0.20 (0.059 ± 0.008) | 3.80 (0.150) | 4.70 (0.185) | 1.60 (0.063) |
| 0606 | 6.00 ± 0.20 (0.236 ± 0.008) | 6.00 ± 0.20 (0.236 ± 0.008) | 1.00 ± 0.10 (0.039 ± 0.004) | 4.00 ± 0.20 (0.157 ± 0.008) | 1.35 ± 0.20 (0.053 ± 0.008) | 4.70 (0.185) | 5.70 (0.224) | 1.60 (0.063) |
| 06A6 | 6.00 ± 0.20 (0.236 ± 0.008) | 6.00 ± 0.20 (0.236 ± 0.008) | 1.20 (0.047) | 4.00 ± 0.20 (0.157 ± 0.008) | 1.35 ± 0.20 (0.053 ± 0.008) | 4.70 (0.185) | 5.70 (0.224) | 1.60 (0.063) |
| 06B6 | 6.00 ± 0.20 (0.236 ± 0.008) | 6.00 ± 0.20 (0.236 ± 0.008) | 2.00 (0.078) | 4.00 ± 0.20 (0.157 ± 0.008) | 1.35 ± 0.20 (0.053 ± 0.008) | 4.70 (0.185) | 5.70 (0.224) | 1.60 (0.063) |
| 06C6 | 6.00 ± 0.20 (0.236 ± 0.008) | 6.00 ± 0.20 (0.236 ± 0.008) | 2.80 (0.110) | 4.00 ± 0.20 (0.157 ± 0.008) | 1.35 ± 0.20 (0.053 ± 0.008) | 4.70 (0.185) | 5.70 (0.224) | 1.60 (0.063) |
| 06D6 | 6.00 ± 0.20 (0.236 ± 0.008) | 6.00 ± 0.20 (0.236 ± 0.008) | 4.50 (0.177) | 4.00 ± 0.20 (0.157 ± 0.008) | 1.35 ± 0.20 (0.053 ± 0.008) | 4.70 (0.185) | 5.70 (0.224) | 1.60 (0.063) |
| 0808 | 8.00 ± 0.20 (0.315 ± 0.008) | 8.00 ± 0.20 (0.315 ± 0.008) | 4.20 (0.165) | 5.60 ± 0.30 (0.220 ± 0.011) | 1.60 ± 0.30 (0.063 ± 0.011) | 5.60 (0.220) | 7.50 (0.188) | 1.80 (0.071) |

LMax Low Profile Power Inductor

LMLP Series – Style C



HOW TO ORDER

| | | | | | | | | |
|---------------------|------------------|--|--------------------|--|----------|--------------|--------------|-----------------------------|
| LM | LP | 0303 | M | R04 | C | T | A | S |
| Family | Series | Size | Tolerance | Inductance | Style | Termination | Special | Packaging |
| LM = Power Inductor | LP = Low Profile | 0303 = 3x3xh 03A3 = 3x3xA(h) (h = see catalog) | M = 20% N = 30% | R39 = 0.390μH 3R9 = 3.900μH 390 = 39.00μH 391 = 390.0μH | | T = Sn Plate | A = Standard | R = 7" Reel S = 13" Reel |

ELECTRICAL CHARACTERISTICS

0202

| AVX PN | L (μH) at 100KHz 1.0V | Tolerance | I _{SAT} * (A) | I _{RMS} ** (A) | DCR ±20% (Ω) |
|------------------|--------------------------|-----------|---------------------------|----------------------------|-----------------|
| LMLP0202N2R2CTAR | 2.2 | ±30% | 1.29 | 0.97 | 0.15 |
| LMLP0202N3R3CTAR | 3.3 | ±30% | 1 | 0.77 | 0.22 |
| LMLP0202N4R7CTAR | 4.7 | ±30% | 0.88 | 0.67 | 0.29 |
| LMLP0202N6R8CTAR | 6.8 | ±30% | 0.75 | 0.57 | 0.41 |
| LMLP0202M100CTAR | 10 | ±20% | 0.55 | 0.45 | 0.69 |
| LMLP0202M150CTAR | 15 | ±20% | 0.47 | 0.37 | 1.02 |
| LMLP0202M220CTAR | 22 | ±20% | 0.39 | 0.3 | 1.47 |

0303

| AVX PN | L (μH) at 100KHz 1.0V | Tolerance | I _{SAT} * (A) | I _{RMS} ** (A) | DCR ±20% (Ω) |
|------------------|--------------------------|-----------|---------------------------|----------------------------|-----------------|
| LMLP0303N1R5CTAR | 1.5 | ±30% | 1.2 | 1.3 | 0.08 |
| LMLP0303N2R2CTAR | 2.2 | ±30% | 1.1 | 1.1 | 0.095 |
| LMLP0303N3R3CTAR | 3.3 | ±30% | 0.87 | 0.94 | 0.14 |
| LMLP0303N4R7CTAR | 4.7 | ±30% | 0.75 | 0.78 | 0.19 |
| LMLP0303N6R8CTAR | 6.8 | ±30% | 0.61 | 0.63 | 0.3 |
| LMLP0303M100CTAR | 10 | ±20% | 0.5 | 0.51 | 0.45 |
| LMLP0303M150CTAR | 15 | ±20% | 0.4 | 0.4 | 0.74 |
| LMLP0303M220CTAR | 22 | ±20% | 0.35 | 0.35 | 1.03 |

03A2

| AVX PN | L (μH) at 100KHz 1.0V | Tolerance | I _{SAT} * (A) | I _{RMS} ** (A) | DCR ±20% (Ω) |
|------------------|--------------------------|-----------|---------------------------|----------------------------|-----------------|
| LMLP03A2N1R0CTAR | 1.0 | ±30% | 1.5 | 1.49 | 0.05 |
| LMLP03A2N1R5CTAR | 1.5 | ±30% | 1.36 | 1.4 | 0.06 |
| LMLP03A2N2R2CTAR | 2.2 | ±30% | 1.1 | 1.2 | 0.08 |
| LMLP03A2N3R3CTAR | 3.3 | ±30% | 0.91 | 1.05 | 0.1 |
| LMLP03A2N4R7CTAR | 4.7 | ±30% | 0.77 | 0.98 | 0.13 |
| LMLP03A2N6R8CTAR | 6.8 | ±30% | 0.67 | 0.74 | 0.19 |
| LMLP03A2M100CTAR | 10 | ±20% | 0.54 | 0.63 | 0.29 |
| LMLP03A2M150CTAR | 15 | ±20% | 0.44 | 0.485 | 0.45 |
| LMLP03A2M220CTAR | 22 | ±20% | 0.37 | 0.42 | 0.63 |

*The saturation current value (ISAT) is the DC current value when the inductance decreases by 30% of its initial value (at 20°C).

**The temperature rise current value (IRMS) is the DC current value that increases component temperature by up to 40°C.

LMax Low Profile Power Inductor

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03B3

| AVX PN | L (μH) at 100KHz 1.0V | Tolerance | I _{SAT} * (A) | I _{RMS} ** (A) | DCR ±20% (Ω) |
|------------------|--------------------------|-----------|---------------------------|----------------------------|-----------------|
| LMLP03B3N1R0CTAR | 1.0 | ±30% | 2.1 | 2.1 | 0.03 |
| LMLP03B3N1R5CTAR | 1.5 | ±30% | 1.8 | 1.82 | 0.04 |
| LMLP03B3N2R2CTAR | 2.2 | ±30% | 1.48 | 1.5 | 0.06 |
| LMLP03B3N3R3CTAR | 3.3 | ±30% | 1.21 | 1.23 | 0.08 |
| LMLP03B3N4R7CTAR | 4.7 | ±30% | 1.02 | 1.04 | 0.12 |
| LMLP03B3N6R8CTAR | 6.8 | ±30% | 0.87 | 0.88 | 0.16 |
| LMLP03B3M100CTAR | 10 | ±20% | 0.7 | 0.71 | 0.23 |
| LMLP03B3M150CTAR | 15 | ±20% | 0.56 | 0.56 | 0.36 |
| LMLP03B3M220CTAR | 22 | ±20% | 0.47 | 0.47 | 0.52 |

0404

| AVX PN | L (μH) at 100KHz 1.0V | Tolerance | I _{SAT} * (A) | I _{RMS} ** (A) | DCR ±20% (Ω) |
|------------------|--------------------------|-----------|---------------------------|----------------------------|-----------------|
| LMLP0404N1R0CTAS | 1.0 | ±30% | 1.8 | 1.05 | 0.1 |
| LMLP0404N2R2CTAS | 2.2 | ±30% | 1.15 | 0.89 | 0.15 |
| LMLP0404N3R3CTAS | 3.3 | ±30% | 1.1 | 0.82 | 0.18 |
| LMLP0404N4R7CTAS | 4.7 | ±30% | 0.9 | 0.75 | 0.21 |
| LMLP0404N6R8CTAS | 6.8 | ±30% | 0.74 | 0.62 | 0.3 |
| LMLP0404N100CTAS | 10 | ±30% | 0.56 | 0.6 | 0.38 |
| LMLP0404M150CTAS | 15 | ±20% | 0.47 | 0.51 | 0.51 |
| LMLP0404M220CTAS | 22 | ±20% | 0.36 | 0.4 | 0.87 |

04A4

| AVX PN | L (μH) at 100KHz 1.0V | Tolerance | I _{SAT} * (A) | I _{RMS} ** (A) | DCR ±20% (Ω) |
|------------------|--------------------------|-----------|---------------------------|----------------------------|-----------------|
| LMLP04A4N1R0CTAS | 1.0 | ±30% | 2.5 | 1.5 | 0.06 |
| LMLP04A4N2R2CTAS | 2.2 | ±30% | 1.65 | 1.2 | 0.09 |
| LMLP04A4N3R3CTAS | 3.3 | ±30% | 1.2 | 0.98 | 0.13 |
| LMLP04A4N4R7CTAS | 4.7 | ±30% | 1.05 | 0.96 | 0.14 |
| LMLP04A4N6R8CTAS | 6.8 | ±30% | 0.9 | 0.84 | 0.18 |
| LMLP04A4M100CTAS | 10 | ±20% | 0.74 | 0.77 | 0.24 |
| LMLP04A4M150CTAS | 15 | ±20% | 0.56 | 0.6 | 0.4 |
| LMLP04A4M220CTAS | 22 | ±20% | 0.51 | 0.54 | 0.48 |

*The saturation current value (ISAT) is the DC current value when the inductance decreases by 30% of its initial value (at 20°C).

**The temperature rise current value (IRMS) is the DC current value that increases component temperature by up to 40°C.

LMax Low Profile Power Inductor

LMLP Series – Style C



04B4

| AVX PN | L (μH) at 100KHz 1.0V | Tolerance | I _{SAT} * (A) | I _{RMS} ** (A) | DCR ±20% (Ω) |
|------------------|-----------------------|-----------|------------------------|-------------------------|--------------|
| LMLP04B4N1R0CTAS | 1.0 | ±30% | 4 | 1.83 | 0.03 |
| LMLP04B4N2R2CTAS | 2.2 | ±30% | 2.7 | 1.44 | 0.06 |
| LMLP04B4N3R3CTAS | 3.3 | ±30% | 2 | 1.23 | 0.07 |
| LMLP04B4N4R7CTAS | 4.7 | ±30% | 1.7 | 1.2 | 0.09 |
| LMLP04B4N6R8CTAS | 6.8 | ±30% | 1.45 | 1.06 | 0.11 |
| LMLP04B4M100CTAS | 10 | ±20% | 1.2 | 0.84 | 0.18 |
| LMLP04B4M150CTAS | 15 | ±20% | 0.94 | 0.65 | 0.28 |
| LMLP04B4M220CTAS | 22 | ±20% | 0.8 | 0.59 | 0.36 |
| LMLP04B4M330CTAS | 33 | ±20% | 0.65 | 0.49 | 0.53 |
| LMLP04B4M470CTAS | 47 | ±20% | 0.57 | 0.42 | 0.65 |
| LMLP04B4M680CTAS | 68 | ±20% | 0.47 | 0.32 | 1 |
| LMLP04B4M101CTAS | 100 | ±20% | 0.4 | 0.27 | 1.5 |
| LMLP04B4M151CTAS | 150 | ±20% | 0.31 | 0.22 | 2.5 |
| LMLP04B4M221CTAS | 220 | ±20% | 0.27 | 0.17 | 4 |

0505

| AVX PN | L (μH) at 100KHz 1.0V | Tolerance | I _{SAT} * (A) | I _{RMS} ** (A) | DCR ±20% (Ω) |
|------------------|-----------------------|-----------|------------------------|-------------------------|--------------|
| LMLP0505M100CTAR | 10 | ±20% | 1 | 0.94 | 0.48 |

05B5

| AVX PN | L (μH) at 100KHz 1.0V | Tolerance | I _{SAT} * (A) | I _{RMS} ** (A) | DCR ±20% (Ω) |
|------------------|-----------------------|-----------|------------------------|-------------------------|--------------|
| LMLP05B5N1R5CTAR | 1.5 | ±30% | 3.35 | 3.2 | 0.026 |
| LMLP05B5N2R2CTAR | 2.2 | ±30% | 2.9 | 2.9 | 0.035 |
| LMLP05B5N3R3CTAR | 3.3 | ±30% | 2.4 | 2.4 | 0.048 |
| LMLP05B5N4R7CTAR | 4.7 | ±30% | 2 | 2 | 0.06 |
| LMLP05B5N6R8CTAR | 6.8 | ±30% | 1.6 | 1.65 | 0.09 |
| LMLP05B5M100CTAR | 10 | ±20% | 1.3 | 1.45 | 0.12 |
| LMLP05B5M150CTAR | 15 | ±20% | 1.1 | 1.2 | 0.165 |
| LMLP05B5M220CTAR | 22 | ±20% | 0.9 | 1 | 0.26 |

05D5

| AVX PN | L (μH) at 100KHz 1.0V | Tolerance | I _{SAT} * (A) | I _{RMS} ** (A) | DCR ±20% (Ω) |
|------------------|-----------------------|-----------|------------------------|-------------------------|--------------|
| LMLP05D5N1R5CTAS | 1.5 | ±30% | 6 | 3.6 | 0.02 |
| LMLP05D5N2R2CTAS | 2.2 | ±30% | 4.6 | 3.5 | 0.022 |
| LMLP05D5N3R3CTAS | 3.3 | ±30% | 3.8 | 3.3 | 0.027 |
| LMLP05D5N4R7CTAS | 4.7 | ±30% | 3.3 | 3.1 | 0.029 |
| LMLP05D5N6R8CTAS | 6.8 | ±30% | 2.6 | 2.3 | 0.049 |
| LMLP05D5M100CTAS | 10 | ±20% | 2.3 | 2.1 | 0.056 |
| LMLP05D5M150CTAS | 15 | ±20% | 2 | 1.8 | 0.08 |
| LMLP05D5M220CTAS | 22 | ±20% | 1.6 | 1.4 | 0.126 |
| LMLP05D5M330CTAS | 33 | ±20% | 1.3 | 1.2 | 0.18 |
| LMLP05D5M470CTAS | 47 | ±20% | 1.1 | 0.9 | 0.31 |

*The saturation current value (ISAT) is the DC current value when the inductance decreases by 30% of its initial value (at 20°C).

**The temperature rise current value (IRMS) is the DC current value that increases component temperature by up to 40°C.

LMax Low Profile Power Inductor

LMLP Series – Style C



0606

| AVX PN | L (μH) at 100KHz 1.0V | Tolerance | I _{SAT} * (A) | I _{RMS} ** (A) | DCR ±20% (Ω) |
|------------------|--------------------------|-----------|---------------------------|----------------------------|-----------------|
| LMLP0606N4R7CTAR | 4.7 | ±30% | 1.4 | 1.4 | 0.29 |
| LMLP0606N6R8CTAR | 6.8 | ±30% | 1.2 | 1 | 0.372 |
| LMLP0606M100CTAR | 10 | ±20% | 1 | 0.85 | 0.5 |

06A6

| AVX PN | L (μH) at 100KHz 1.0V | Tolerance | I _{SAT} * (A) | I _{RMS} ** (A) | DCR ±20% (Ω) |
|------------------|--------------------------|-----------|---------------------------|----------------------------|-----------------|
| LMLP06A6N2R5CTAR | 2.5 | ±30% | 2.1 | 1.73 | 0.09 |
| LMLP06A6N6R8CTAR | 6.8 | ±30% | 1.3 | 1.18 | 0.165 |
| LMLP06A6M100CTAR | 10 | ±20% | 1 | 1 | 0.235 |
| LMLP06A6M150CTAR | 15 | ±20% | 0.8 | 0.79 | 0.33 |
| LMLP06A6M220CTAR | 22 | ±20% | 0.76 | 0.63 | 0.53 |
| LMLP06A6M330CTAR | 33 | ±20% | 0.59 | 0.53 | 0.7 |
| LMLP06A6M470CTAR | 47 | ±20% | 0.52 | 0.46 | 1.05 |
| LMLP06A6M680CTAR | 68 | ±20% | 0.44 | 0.41 | 1.35 |
| LMLP06A6M101CTAR | 100 | ±20% | 0.35 | 0.32 | 2.18 |

06B6

| AVX PN | L (μH) at 100KHz 1.0V | Tolerance | I _{SAT} * (A) | I _{RMS} ** (A) | DCR ±20% (Ω) |
|------------------|--------------------------|-----------|---------------------------|----------------------------|-----------------|
| LMLP06B6N0R8CTAS | 0.8 | ±30% | 5.5 | 3.8 | 0.02 |
| LMLP06B6N1R5CTAS | 1.5 | ±30% | 4 | 3.2 | 0.026 |
| LMLP06B6N2R2CTAS | 2.2 | ±30% | 3.2 | 2.7 | 0.034 |
| LMLP06B6N3R3CTAS | 3.3 | ±30% | 2.8 | 2.6 | 0.04 |
| LMLP06B6N4R7CTAS | 4.7 | ±30% | 2.4 | 2 | 0.058 |
| LMLP06B6N6R8CTAS | 6.8 | ±30% | 2 | 1.8 | 0.085 |
| LMLP06B6M100CTAS | 10 | ±20% | 1.7 | 1.4 | 0.125 |
| LMLP06B6M220CTAS | 22 | ±20% | 1.05 | 0.95 | 0.29 |

06C6

| AVX PN | L (μH) at 100KHz 1.0V | Tolerance | I _{SAT} * (A) | I _{RMS} ** (A) | DCR ±20% (Ω) |
|------------------|--------------------------|-----------|---------------------------|----------------------------|-----------------|
| LMLP06C6N1R5CTAS | 1.5 | ±30% | 5 | 4.2 | 0.016 |
| LMLP06C6N2R2CTAS | 2.2 | ±30% | 4.2 | 3.7 | 0.02 |
| LMLP06C6N3R0CTAS | 3 | ±30% | 3.6 | 3.4 | 0.023 |
| LMLP06C6N4R7CTAS | 4.7 | ±30% | 2.7 | 3 | 0.031 |
| LMLP06C6N6R0CTAS | 6 | ±30% | 2.5 | 2.5 | 0.04 |
| LMLP06C6M100CTAS | 10 | ±20% | 1.9 | 1.9 | 0.065 |
| LMLP06C6M150CTAS | 15 | ±20% | 1.6 | 1.8 | 0.095 |
| LMLP06C6M220CTAS | 22 | ±20% | 1.3 | 1.4 | 0.135 |
| LMLP06C6M330CTAS | 33 | ±20% | 1.1 | 1.1 | 0.22 |
| LMLP06C6M470CTAS | 47 | ±20% | 0.95 | 0.92 | 0.3 |
| LMLP06C6M680CTAS | 68 | ±20% | 0.76 | 0.77 | 0.42 |
| LMLP06C6M101CTAS | 100 | ±20% | 0.62 | 0.66 | 0.6 |

*The saturation current value (ISAT) is the DC current value when the inductance decreases by 30% of its initial value (at 20°C).

**The temperature rise current value (IRMS) is the DC current value that increases component temperature by up to 40°C.

LMax Low Profile Power Inductor

LMLP Series – Style C

06D6

| AVX PN | L (μH) at 100KHz 1.0V | Tolerance | I _{SAT} * (A) | I _{RMS} ** (A) | DCR ±20% (Ω) |
|------------------|--------------------------|-----------|---------------------------|----------------------------|-----------------|
| LMLP06D6N1R3CTAS | 1.3 | ±30% | 8 | 4 | 0.016 |
| LMLP06D6N1R8CTAS | 1.8 | ±30% | 7 | 3.7 | 0.018 |
| LMLP06D6N2R3CTAS | 2.3 | ±30% | 6 | 3.5 | 0.021 |
| LMLP06D6N3R0CTAS | 3 | ±30% | 5 | 3.2 | 0.024 |
| LMLP06D6N4R5CTAS | 4.5 | ±30% | 4 | 3 | 0.031 |
| LMLP06D6N6R3CTAS | 6.3 | ±30% | 3.8 | 2.8 | 0.038 |
| LMLP06D6M100CTAS | 10 | ±20% | 3 | 2.5 | 0.047 |
| LMLP06D6M150CTAS | 15 | ±20% | 2.3 | 1.9 | 0.077 |
| LMLP06D6M220CTAS | 22 | ±20% | 1.9 | 1.5 | 0.115 |
| LMLP06D6M330CTAS | 33 | ±20% | 1.5 | 1.4 | 0.145 |
| LMLP06D6M470CTAS | 47 | ±20% | 1.3 | 1.1 | 0.22 |
| LMLP06D6M680CTAS | 68 | ±20% | 1 | 0.9 | 0.33 |
| LMLP06D6M101CTAS | 100 | ±20% | 0.8 | 0.7 | 0.5 |

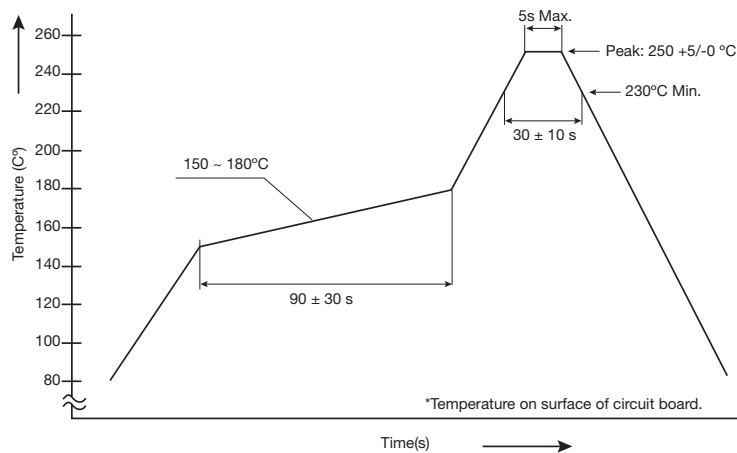
0808

| AVX PN | L (μH) at 100KHz 1.0V | Tolerance | I _{SAT} * (A) | I _{RMS} ** (A) | DCR ±20% (Ω) |
|------------------|--------------------------|-----------|---------------------------|----------------------------|-----------------|
| LMLP0808N0R9CTAS | 0.9 | ±30% | 11 | 7.8 | 0.006 |
| LMLP0808N1R4CTAS | 1.4 | ±30% | 9 | 7 | 0.007 |
| LMLP0808N2R0CTAS | 2 | ±30% | 7.4 | 6.3 | 0.009 |
| LMLP0808N3R6CTAS | 3.6 | ±30% | 5.3 | 4.9 | 0.015 |
| LMLP0808N4R7CTAS | 4.7 | ±30% | 4.7 | 4.1 | 0.018 |
| LMLP0808N6R8CTAS | 6.8 | ±30% | 4 | 3.7 | 0.025 |
| LMLP0808M100CTAS | 10 | ±20% | 3.4 | 3.1 | 0.034 |
| LMLP0808M150CTAS | 15 | ±20% | 2.7 | 2.4 | 0.05 |
| LMLP0808M220CTAS | 22 | ±20% | 2.2 | 2.2 | 0.066 |

*The saturation current value (ISAT) is the DC current value when the inductance decreases by 30% of its initial value (at 20°C).

**The temperature rise current value (IRMS) is the DC current value that increases component temperature by up to 40°C.

RECOMMENDED REFLOW PROFILE

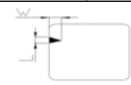
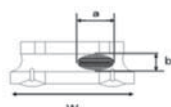
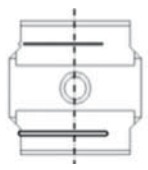



The products may be exposed to reflow soldering process of above profile up to two times.

LMax Low Profile Power Inductor

LMLP Series – Style C

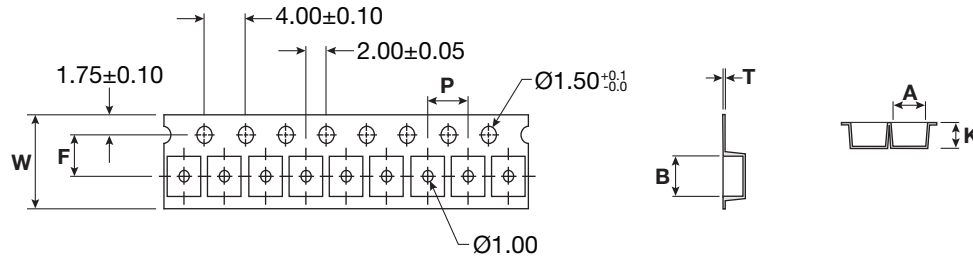
TEST CONDITIONS

| ITEM | SPECIFICATION DESCRIPTION | TEST METHOD |
|---|---|--|
| Temperature Range | Operation temp.: -40°C ~ +125°C (Including self-generated heat) Storage temp.: -40°C ~ +85°C | – |
| Appearance | No defects or abnormalities. | Visual inspection |
| Core Chipping | The appearance standard of the chipping size in top side, of bottom side ferrite core is following dimension. L: 0.5 mm (max) W: 0.5 mm (max) |  Using calipers |
| Void Appearance Exposed | Size of voids occurring to coating resin is specified as following. 1. Width direction (dimension a): acceptable when $a \leq w/2$ nonconforming when $a > w/2$ 2. Length direction (dimension b): it is not specified. 3. When total area of voids (including one exposing coil) occurring to each sides is not greater than 50% of coating resin area that is acceptable |  Using calipers |
| Electrode Appearance Criterion for Exposed Wire |  <Cross section of wire joint part> Only top side of wire exposed. (regardless of whole top side of wire exposed) | <Appearance judgement> Conforming |
| Solderability |  Wire is soldered insufficiently and less than half of outer diameter is covered with solder. | Less than 1/2 of joint side Length (More than 1/2 is selected as defect) Solder heat proof: 1. Preheating: 160±10°C 90s 2. Retention time: 245±5°C for 3 ± 1 sec |
| Vibration | Inductance change: within ± 10% without mechanical damage such as break | 1. Vibration frequency: (10Hz to 55Hz to 10Hz) in 60 sec. as a period 2. Vibration time: period cycled for 2 hr in each of 3 mutual perpendicular directions 3. Amplitude: 1.5mm max. |
| Terminal Strength | No detachment of terminal pin and no breakage of wire | Add static load 4.9N(500gf) to inductor through hole of test board for 10 ± 2 sec |
| Thermal Shock | Inductance change: within ± 10% without mechanical damage such as break | 1. Repeat 100 cycles as follow: (-40°C ± 2°C, 30 ± 3 minutes) → (room temperature, 5 minutes) → (+125°C ± 2°C, 30 ± 3 minutes) → (room temperature, 5 minutes) 2. Recovery: 48 +4/-0 hours of recovery under the standard condition after the test. |
| High Temperature Resistance | Inductance change: within ± 10% without mechanical damage such as break | 1. Environment condition: 85°C ± 2°C 2. Applied current: rated current 3. Duration: 500 +4/-0 hours |
| Humidity Resistance | Inductance change: within ± 10% without mechanical damage such as break | 1. Environment condition: 60°C ± 2°C 2. Humidity: 90~95% 3. Applied current: rated current 4. Duration: 500 +4/-0 hours |
| Low Temperature Storage | Inductance change: within ± 10% without mechanical damage such as break | Store temperature: -40°C ± 2°C for total 500 +4/-0 hours |
| High Temperature Storage | Inductance change: within ± 10% without mechanical damage such as break | Store temperature: +125°C ± 2°C for total 500 +4/-0 hours |
| Inductance | a. Temperature: 25 ± 3°C b. Relative Humidity: 45 to 75%RH c. Measuring equipment: Current measure: Chroma 3302 + Chroma 1320 | Within specified tolerance |
| DC Resistance | Measuring instrument: Chroma A165022 | In accordance with electrical specification. |

LMax Low Profile Power Inductor

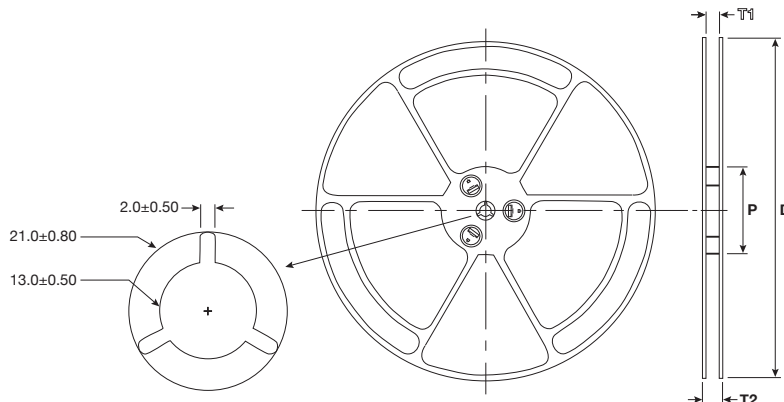
LMLP Series – Style C

PACKAGING SPECIFICATIONS – CARRIER TAPE DIMENSIONS



| AVX PN | A | B | P | F | W | T | K | Reel Size | SPQ |
|------------------|-------------------------------|-------------------------------|-------------------------------|------------------------------|-------------------------------|--------------------------------|------------------------------|-----------|------|
| LMLP0202****CTAR | 2.6 ± 0.1 (0.102 ± 0.004) | 2.6 ± 0.1 (0.102 ± 0.004) | 4 ± 0.1 (0.157 ± 0.004) | 3.5 ± 0.1 (0.138 ± 0.004) | 8.0 ± 0.2 (0.315 ± 0.008) | 0.25 ± 0.05 (0.009 ± 0.002) | 1.3 ± 0.1 (0.051 ± 0.004) | 7" | 2500 |
| LMLP0303****CTAR | 3.2 ± 0.1 (0.126 ± 0.004) | 3.2 ± 0.1 (0.126 ± 0.004) | 4.0 ± 0.1 (0.157 ± 0.004) | 3.5 ± 0.1 (0.138 ± 0.004) | 8.0 ± 0.2 (0.315 ± 0.008) | 0.3 ± 0.05 (0.012 ± 0.002) | 1.4 ± 0.1 (0.055 ± 0.004) | 7" | 2000 |
| LMLP03A2****CTAR | 3.2 ± 0.1 (0.126 ± 0.004) | 3.2 ± 0.1 (0.126 ± 0.004) | 4.0 ± 0.1 (0.157 ± 0.004) | 3.5 ± 0.1 (0.138 ± 0.004) | 8.0 ± 0.2 (0.315 ± 0.008) | 0.3 ± 0.05 (0.012 ± 0.002) | 1.6 ± 0.1 (0.063 ± 0.004) | 7" | 2000 |
| LMLP03B3****CTAR | 3.2 ± 0.1 (0.126 ± 0.004) | 3.2 ± 0.1 (0.126 ± 0.004) | 4.0 ± 0.1 (0.157 ± 0.004) | 3.5 ± 0.1 (0.138 ± 0.004) | 8.0 ± 0.2 (0.315 ± 0.008) | 0.3 ± 0.05 (0.012 ± 0.002) | 1.9 ± 0.1 (0.075 ± 0.004) | 7" | 2000 |
| LMLP0404****CTAS | 4.3 ± 0.1 (0.169 ± 0.004) | 4.3 ± 0.1 (0.169 ± 0.004) | 8.0 ± 0.1 (0.315 ± 0.004) | 5.5 ± 0.1 (0.217 ± 0.004) | 12.0 ± 0.3 (0.472 ± 0.012) | 0.3 ± 0.1 (0.012 ± 0.004) | 1.4 ± 0.1 (0.055 ± 0.004) | 13" | 5000 |
| LMLP04A4****CTAS | 4.3 ± 0.1 (0.169 ± 0.004) | 4.3 ± 0.1 (0.169 ± 0.004) | 8.0 ± 0.1 (0.315 ± 0.004) | 5.5 ± 0.1 (0.217 ± 0.004) | 12.0 ± 0.3 (0.472 ± 0.012) | 0.3 ± 0.1 (0.012 ± 0.004) | 1.6 ± 0.1 (0.063 ± 0.004) | 13" | 4500 |
| LMLP04B4****CTAS | 4.3 ± 0.1 (0.169 ± 0.004) | 4.3 ± 0.1 (0.169 ± 0.004) | 8.0 ± 0.1 (0.315 ± 0.004) | 5.5 ± 0.1 (0.217 ± 0.004) | 12.0 ± 0.3 (0.472 ± 0.012) | 0.3 ± 0.1 (0.012 ± 0.004) | 2.1 ± 0.1 (0.083 ± 0.004) | 13" | 3500 |
| LMLP0505****CTAR | 5.25 ± 0.1 (0.207 ± 0.004) | 5.25 ± 0.1 (0.207 ± 0.004) | 8.0 ± 0.1 (0.315 ± 0.004) | 5.5 ± 0.1 (0.217 ± 0.004) | 12.0 ± 0.3 (0.472 ± 0.012) | 0.3 ± 0.1 (0.012 ± 0.004) | 1.4 ± 0.1 (0.055 ± 0.004) | 7" | 1000 |
| LMLP05B5****CTAR | 5.25 ± 0.1 (0.207 ± 0.004) | 5.25 ± 0.1 (0.207 ± 0.004) | 8.0 ± 0.1 (0.315 ± 0.004) | 5.5 ± 0.1 (0.217 ± 0.004) | 12.0 ± 0.3 (0.472 ± 0.012) | 0.3 ± 0.1 (0.012 ± 0.004) | 2.3 ± 0.1 (0.091 ± 0.004) | 7" | 800 |
| LMLP05D5****CTAS | 5.15 ± 0.1 (0.203 ± 0.004) | 5.15 ± 0.1 (0.203 ± 0.004) | 8.0 ± 0.1 (0.315 ± 0.004) | 5.5 ± 0.1 (0.217 ± 0.004) | 12.0 ± 0.3 (0.472 ± 0.012) | 0.4 ± 0.1 (0.016 ± 0.004) | 4.2 ± 0.1 (0.165 ± 0.004) | 13" | 1500 |
| LMLP0606****CTAR | 6.3 ± 0.1 (0.248 ± 0.004) | 6.3 ± 0.1 (0.248 ± 0.004) | 8.0 ± 0.1 (0.315 ± 0.004) | 5.5 ± 0.1 (0.217 ± 0.004) | 12.0 ± 0.3 (0.472 ± 0.012) | 0.4 ± 0.1 (0.016 ± 0.004) | 1.4 ± 0.1 (0.055 ± 0.004) | 7" | 1000 |
| LMLP06A6****CTAR | 6.3 ± 0.1 (0.248 ± 0.004) | 6.3 ± 0.1 (0.248 ± 0.004) | 8.0 ± 0.1 (0.315 ± 0.004) | 5.5 ± 0.1 (0.217 ± 0.004) | 12.0 ± 0.3 (0.472 ± 0.012) | 0.4 ± 0.1 (0.016 ± 0.004) | 1.6 ± 0.1 (0.063 ± 0.004) | 7" | 1000 |
| LMLP06B6****CTAS | 6.3 ± 0.1 (0.248 ± 0.004) | 6.3 ± 0.1 (0.248 ± 0.004) | 8.0 ± 0.1 (0.315 ± 0.004) | 5.5 ± 0.1 (0.217 ± 0.004) | 12.0 ± 0.3 (0.472 ± 0.012) | 0.4 ± 0.1 (0.016 ± 0.004) | 2.3 ± 0.1 (0.091 ± 0.004) | 13" | 2500 |
| LMLP06C6****CTAS | 6.3 ± 0.1 (0.248 ± 0.004) | 6.3 ± 0.1 (0.248 ± 0.004) | 8.0 ± 0.1 (0.315 ± 0.004) | 5.5 ± 0.1 (0.217 ± 0.004) | 12.0 ± 0.3 (0.472 ± 0.012) | 0.4 ± 0.1 (0.016 ± 0.004) | 3.1 ± 0.1 (0.122 ± 0.004) | 13" | 2000 |
| LMLP06D6****CTAS | 6.3 ± 0.1 (0.248 ± 0.004) | 6.3 ± 0.1 (0.248 ± 0.004) | 8.0 ± 0.1 (0.315 ± 0.004) | 5.5 ± 0.1 (0.217 ± 0.004) | 12.0 ± 0.3 (0.472 ± 0.012) | 0.4 ± 0.1 (0.016 ± 0.004) | 4.7 ± 0.1 (0.185 ± 0.004) | 13" | 1500 |
| LMLP0808****CTAS | 8.3 ± 0.1 (0.327 ± 0.004) | 8.3 ± 0.1 (0.327 ± 0.004) | 12.0 ± 0.1 (0.472 ± 0.004) | 7.5 ± 0.1 (0.295 ± 0.004) | 16.0 ± 0.3 (0.630 ± 0.012) | 0.5 ± 0.1 (0.020 ± 0.004) | 4.5 ± 0.1 (0.177 ± 0.004) | 13" | 1000 |

PACKAGING SPECIFICATIONS – REEL DIMENSIONS



| Code | 7" Reel | 13" Reel |
|------|-----------|----------|
| D | 180±1.50 | 330±1.50 |
| P | 62.0±1.50 | 100±1.50 |

LMax Low Profile/High Current Power Inductor

LMLP Series – Style D

FEATURES

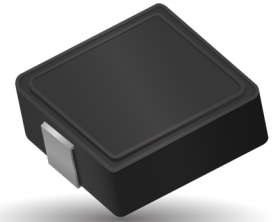
- Shielded Construction
- Large Current Rating
- Lower Temperature Rise
- Low Profile
- Available on tape and reel

APPLICATIONS

- Personal Computers
- Servers
- High Current POL Converters
- Low Profile High Current Power Supplies
- DC/DC Converters
- DC/DC Converters for FPGA

INDUCTANCE AND RATED CURRENT RANGES

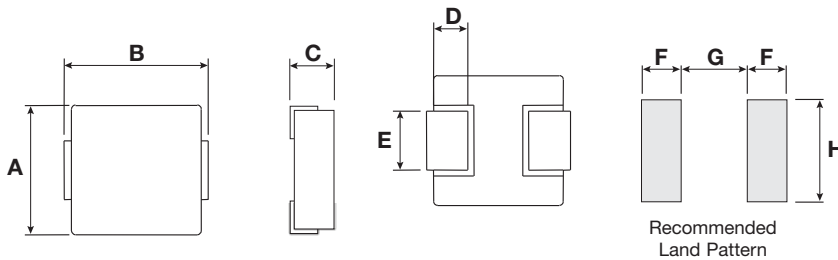
| | | |
|--------|---------------------------|--------------|
| • 0405 | 0.1 μ H ~ 3.3 μ H | 22 ~ 4 A |
| • 05A6 | 0.1 μ H ~ 4.7 μ H | 45 ~ 5 A |
| • 0506 | 0.1 μ H ~ 4.7 μ H | 27 ~ 8.2 A |
| • 0707 | 0.1 μ H ~ 4.7 μ H | 40 ~ 8 A |
| • 07A7 | 0.1 μ H ~ 10 μ H | 50 ~ 7 A |
| • 07B7 | 0.1 μ H ~ 10 μ H | 60 ~ 7 A |
| • 07C7 | 0.56 μ H ~ 10 μ H | 12 ~ 4.5 A |
| • 1011 | 0.19 μ H ~ 47 μ H | 90 ~ 3 A |
| • 13A3 | 0.1 μ H ~ 10 μ H | 84 ~ 14 A |
| • 1313 | 0.1 μ H ~ 10 μ H | 118 ~ 16 A |
| • 13B3 | 0.1 μ H ~ 10 μ H | 120 ~ 15.5 A |



- All test data taken at 25°C
- Operating Temperature Range: -55°C ~ +155°C
- I_{SAT} : The current that causes an inductance drop of approximately 25% (30% on 0405 size).
- I_{DC} : DC Current that causes an approximate ΔT of 40°C.



DIMENSIONS



mm

| Type | A | B | C | D | E | F | G | H |
|------|----------|------------|---------|---------|---------|------|------|-----|
| 0405 | 4.0±0.3 | 4.45±0.25 | 1.8±0.2 | 0.8±0.3 | 1.5±0.3 | 1.5 | 2.22 | 2.5 |
| 05A6 | 5.2±0.2 | 5.7±0.7 | 1.8±0.2 | 1.1±0.3 | 2.5±0.3 | 2 | 2.2 | 2.8 |
| 0506 | 5.2±0.3 | 5.4±0.3 | 3.0±MAX | 1.2±0.2 | 2.2±0.3 | 1.9 | 2.2 | 2.5 |
| 0707 | 6.6±0.3 | 7.0±0.3 | 1.8±0.2 | 1.8±0.3 | 3.0±0.3 | 2.6 | 2.5 | 3.5 |
| 07B7 | 6.6±0.3 | 7.3±0.3 | 2.2±0.2 | 1.8±0.3 | 3.0±0.3 | 2.6 | 2.5 | 3.5 |
| 07A7 | 6.6±0.2 | 7.3±MAX | 3.0±MAX | 1.6±0.3 | 3.0±0.3 | 1.85 | 3.7 | 3.5 |
| 07C7 | 6.6±0.3 | 7.3±0.3 | 4.8±0.2 | 1.8±0.3 | 3.0±0.3 | 2.95 | 2.5 | 3.5 |
| 1011 | 10.0±0.3 | 11.15±0.35 | 4.0±MAX | 2.0±0.5 | 3.0±0.5 | 4.05 | 5.4 | 4.4 |
| 1313 | 12.8±0.5 | 13.5±1.0 | 5.0±MAX | 2.5±0.5 | 3.8±0.5 | 3.25 | 8 | 5 |
| 13B3 | 12.8±0.5 | 13.5±1.0 | 6.5±MAX | 2.5±0.5 | 3.2±0.5 | 3.25 | 8 | 5 |

HOW TO ORDER

| | | | | | | | | |
|---------------------|------------------|--|------------------|--|--------------|--------------------|----------------|------------------|
| LM | LP | 0707 | M | R04 | D | T | A | S |
| Family | Series | Size | Tolerance | Inductance | Style | Termination | Special | Packaging |
| LM = Power Inductor | LP = Low Profile | 0707 = 7x7xh 07A7 = 7x7xA(h) (h = see catalog) | M = 20% | R39 = 0.390 μ H 3R9 = 3.900 μ H 390 = 39.00 μ H 391 = 390.0 μ H | | T = Sn Plate | A = Standard | S = 13" Reel |

LMax Low Profile/High Current Power Inductor

LMLP Series – Style D



ELECTRICAL CHARACTERISTICS

0405

| AVX PN | Inductance (μH) | Tolerance | Test Condition | DCR (mΩ) Typical | DCR (mΩ) Max | I _{DC} (A) Typical | I _{sat} (A) Typical |
|------------------|-----------------|-----------|----------------|---------------------|-----------------|--------------------------------|---------------------------------|
| LMLP0405MR10DTAS | 0.1 | ±20% | 100KHz, 0.25V | 3.5 | 4 | 12 | 22 |
| LMLP0405MR15DTAS | 0.15 | ±20% | 100KHz, 0.25V | 6 | 6.6 | 9 | 13 |
| LMLP0405MR22DTAS | 0.22 | ±20% | 100KHz, 0.25V | 6 | 6.6 | 9 | 12.5 |
| LMLP0405MR47DTAS | 0.47 | ±20% | 100KHz, 0.25V | 12.5 | 14 | 7 | 9.5 |
| LMLP0405MR56DTAS | 0.56 | ±20% | 100KHz, 0.25V | 14 | 16 | 6.5 | 10 |
| LMLP0405MR68DTAS | 0.68 | ±20% | 100KHz, 0.25V | 16 | 18 | 6 | 9 |
| LMLP0405M1R0DTAS | 1 | ±20% | 100KHz, 0.25V | 24 | 27 | 4.5 | 7 |
| LMLP0405M1R2DTAS | 1.2 | ±20% | 100KHz, 0.25V | 24 | 27 | 4.5 | 7 |
| LMLP0405M1R5DTAS | 1.5 | ±20% | 100KHz, 0.25V | 38 | 46 | 4 | 6 |
| LMLP0405M2R2DTAS | 2.2 | ±20% | 100KHz, 0.25V | 52 | 58 | 3 | 5 |
| LMLP0405M3R3DTAS | 3.3 | ±20% | 100KHz, 0.25V | 74 | 87 | 2.5 | 4 |
| LMLP0405M4R7DTAS | 4.7 | ±20% | 100KHz, 0.25V | 98 | 110 | 2.2 | 3.5 |
| LMLP0405M5R6DTAS | 5.6 | ±20% | 100KHz, 0.25V | 105 | 115 | 1.8 | 3.5 |
| LMLP0405M6R8DTAS | 6.8 | ±20% | 100KHz, 0.25V | 160 | 175 | 1.5 | 2.5 |
| LMLP0405M100DTAS | 10 | ±20% | 100KHz, 0.25V | 256 | 282 | 1.2 | 2.2 |

05A6

| AVX PN | Inductance (μH) | Tolerance | Test Condition | DCR (mΩ) Typical | DCR (mΩ) Max | I _{DC} (A) Typical | I _{sat} (A) Typical |
|------------------|-----------------|-----------|----------------|---------------------|-----------------|--------------------------------|---------------------------------|
| LMLP05A6MR10DTAS | 0.1 | ±20% | 100KHz, 0.25V | 3.6 | 4 | 18 | 45 |
| LMLP05A6MR15DTAS | 0.15 | ±20% | 100KHz, 0.25V | 3.8 | 4.6 | 16 | 27 |
| LMLP05A6MR22DTAS | 0.22 | ±20% | 100KHz, 0.25V | 4 | 5.5 | 15 | 25 |
| LMLP05A6MR24DTAS | 0.24 | ±20% | 100KHz, 0.25V | 6 | 7 | 13 | 23 |
| LMLP05A6MR33DTAS | 0.33 | ±20% | 100KHz, 0.25V | 6.3 | 7.3 | 12 | 21.3 |
| LMLP05A6MR47DTAS | 0.47 | ±20% | 100KHz, 0.25V | 7.3 | 8.6 | 11.5 | 18 |
| LMLP05A6MR68DTAS | 0.68 | ±20% | 100KHz, 0.25V | 11 | 12.4 | 10 | 12.8 |
| LMLP05A6M1R0DTAS | 1 | ±20% | 100KHz, 0.25V | 17.5 | 20 | 7 | 13.7 |
| LMLP05A6M1R2DTAS | 1.2 | ±20% | 100KHz, 0.25V | 23 | 28 | 6.2 | 11 |
| LMLP05A6M1R5DTAS | 1.5 | ±20% | 100KHz, 0.25V | 26.5 | 30.5 | 5.5 | 9.8 |
| LMLP05A6M2R2DTAS | 2.2 | ±20% | 100KHz, 0.25V | 42 | 50 | 4.2 | 9 |
| LMLP05A6M3R3DTAS | 3.3 | ±20% | 100KHz, 0.25V | 66 | 76 | 3.3 | 7.3 |
| LMLP05A6M4R7DTAS | 4.7 | ±20% | 100KHz, 0.25V | 103 | 116 | 2.8 | 5 |
| LMLP05A6M5R6DTAS | 5.6 | ±20% | 100KHz, 0.25V | 112 | 122 | 2.5 | 4 |
| LMLP05A6M6R8DTAS | 6.8 | ±20% | 100KHz, 0.25V | 130 | 150 | 2.4 | 3.8 |
| LMLP05A6M8R2DTAS | 8.2 | ±20% | 100KHz, 0.25V | 148 | 171 | 2.3 | 3.5 |
| LMLP05A6M100DTAS | 10 | ±20% | 100KHz, 0.25V | 180 | 199 | 2.3 | 3.4 |
| LMLP05A6M150DTAS | 15 | ±20% | 100KHz, 0.25V | 240 | 270 | 1.9 | 2.8 |
| LMLP05A6M220DTAS | 22 | ±20% | 100KHz, 0.25V | 350 | 390 | 1.5 | 1.8 |

I_{SAT}: The current that causes an inductance drop of approximately 25% (30% on 0405 size).
 I_{DC}: DC Current that causes an approximate ΔT of 40°C.

LMax Low Profile/High Current Power Inductor

LMLP Series – Style D



0506

| AVX PN | Inductance (μH) | Tolerance | Test Condition | DCR (mΩ) Typical | DCR (mΩ) Max | I _{DC} (A) Typical | I _{sat} (A) Typical |
|------------------|-----------------|-----------|----------------|------------------|--------------|-----------------------------|------------------------------|
| LMLP0506MR20DTAS | 0.2 | ±20% | 100KHz, 0.25V | 3.5 | 3.9 | 18 | 14.5 |
| LMLP0506MR47DTAS | 0.47 | ±20% | 100KHz, 0.25V | 7.4 | 8.5 | 13.5 | 12 |
| LMLP0506MR68DTAS | 0.68 | ±20% | 100KHz, 0.25V | 11 | 12 | 8.5 | 14 |
| LMLP0506M1R0DTAS | 1 | ±20% | 100KHz, 0.25V | 13 | 14 | 7 | 11 |
| LMLP0506M1R2DTAS | 1.2 | ±20% | 100KHz, 0.25V | 15 | 16 | 6.5 | 11 |
| LMLP0506M1R5DTAS | 1.5 | ±20% | 100KHz, 0.25V | 20 | 25 | 6 | 8.5 |
| LMLP0506M2R2DTAS | 2.2 | ±20% | 100KHz, 0.25V | 25 | 29 | 5.5 | 7.5 |
| LMLP0506M3R3DTAS | 3.3 | ±20% | 100KHz, 0.25V | 32 | 38 | 5 | 6 |
| LMLP0506M4R7DTAS | 4.7 | ±20% | 100KHz, 0.25V | 50 | 60 | 3.5 | 5 |
| LMLP0506M6R8DTAS | 6.8 | ±20% | 100KHz, 0.25V | 75 | 90 | 3 | 4 |
| LMLP0506M100DTAS | 10 | ±20% | 100KHz, 0.25V | 110 | 125 | 2.5 | 3.5 |

0707

| AVX PN | Inductance (μH) | Tolerance | Test Condition | DCR (mΩ) Typical | DCR (mΩ) Max | I _{DC} (A) Typical | I _{sat} (A) Typical |
|------------------|-----------------|-----------|----------------|------------------|--------------|-----------------------------|------------------------------|
| LMLP0707MR10DTAS | 0.1 | ±20% | 100KHz, 0.25V | 2 | 2.4 | 21 | 40 |
| LMLP0707MR15DTAS | 0.15 | ±20% | 100KHz, 0.25V | 2.3 | 2.7 | 18 | 39 |
| LMLP0707MR16DTAS | 0.16 | ±20% | 100KHz, 0.25V | 2.3 | 2.7 | 18 | 38 |
| LMLP0707MR18DTAS | 0.18 | ±20% | 100KHz, 0.25V | 2.4 | 2.9 | 18 | 36 |
| LMLP0707MR20DTAS | 0.2 | ±20% | 100KHz, 0.25V | 2.5 | 3 | 18 | 35 |
| LMLP0707MR22DTAS | 0.22 | ±20% | 100KHz, 0.25V | 3.5 | 4 | 15 | 32 |
| LMLP0707MR24DTAS | 0.24 | ±20% | 100KHz, 0.25V | 3.6 | 4.3 | 14.5 | 32 |
| LMLP0707MR33DTAS | 0.33 | ±20% | 100KHz, 0.25V | 4.5 | 5 | 14 | 25 |
| LMLP0707MR47DTAS | 0.47 | ±20% | 100KHz, 0.25V | 7.1 | 8.3 | 11.7 | 20 |
| LMLP0707MR56DTAS | 0.56 | ±20% | 100KHz, 0.25V | 7.9 | 9.3 | 11 | 18 |
| LMLP0707MR68DTAS | 0.68 | ±20% | 100KHz, 0.25V | 8.3 | 10 | 10.5 | 16 |
| LMLP0707M1R0DTAS | 1 | ±20% | 100KHz, 0.25V | 16.5 | 18 | 8 | 14 |
| LMLP0707M1R2DTAS | 1.2 | ±20% | 100KHz, 0.25V | 19 | 23 | 7.5 | 13 |
| LMLP0707M1R5DTAS | 1.5 | ±20% | 100KHz, 0.25V | 23 | 27 | 7 | 12 |
| LMLP0707M2R2DTAS | 2.2 | ±20% | 100KHz, 0.25V | 32 | 37 | 6 | 10 |
| LMLP0707M3R3DTAS | 3.3 | ±20% | 100KHz, 0.25V | 43 | 48 | 5 | 8 |
| LMLP0707M4R7DTAS | 4.7 | ±20% | 100KHz, 0.25V | 53 | 60 | 4.5 | 7 |
| LMLP0707M5R6DTAS | 5.6 | ±20% | 100KHz, 0.25V | 59 | 68 | 4 | 6 |
| LMLP0707M6R8DTAS | 6.8 | ±20% | 100KHz, 0.25V | 63 | 73 | 4 | 5.5 |
| LMLP0707M8R2DTAS | 8.2 | ±20% | 100KHz, 0.25V | 101 | 116 | 3.2 | 5 |
| LMLP0707M100DTAS | 10 | ±20% | 100KHz, 0.25V | 134 | 154 | 2.8 | 4 |
| LMLP0707M150DTAS | 15 | ±20% | 100KHz, 0.25V | 190 | 210 | 2.1 | 3.3 |
| LMLP0707M220DTAS | 22 | ±20% | 100KHz, 0.25V | 236 | 280 | 1.5 | 2.5 |

I_{SAT}: The current that causes an inductance drop of approximately 25% (30% on 0405 size).
 I_{DC}: DC Current that causes an approximate ΔT of 40°C.

LMax Low Profile/High Current Power Inductor

LMLP Series – Style D



07B7

| AVX PN | Inductance (µH) | Tolerance | Test Condition | DCR (mΩ) Typical | DCR (mΩ) Max | I _{DC} (A) Typical | I _{sat} (A) Typical |
|------------------|-----------------|-----------|----------------|------------------|--------------|-----------------------------|------------------------------|
| LMLP07B7MR10DTAS | 0.1 | ±20% | 100KHz, 0.25V | 1.4 | 1.7 | 30 | 70 |
| LMLP07B7MR15DTAS | 0.15 | ±20% | 100KHz, 0.25V | 1.8 | 2.3 | 30 | 45 |
| LMLP07B7MR20DTAS | 0.2 | ±20% | 100KHz, 0.25V | 1.9 | 2.8 | 23 | 40 |
| LMLP07B7MR22DTAS | 0.22 | ±20% | 100KHz, 0.25V | 2 | 3.2 | 21 | 34 |
| LMLP07B7MR33DTAS | 0.33 | ±20% | 100KHz, 0.25V | 3.6 | 4.4 | 18 | 30 |
| LMLP07B7MR36DTAS | 0.36 | ±20% | 100KHz, 0.25V | 3.8 | 4.6 | 17 | 29 |
| LMLP07B7MR47DTAS | 0.47 | ±20% | 100KHz, 0.25V | 4.8 | 5.1 | 15 | 26 |
| LMLP07B7MR56DTAS | 0.56 | ±20% | 100KHz, 0.25V | 5.5 | 6.5 | 13 | 24 |
| LMLP07B7MR60DTAS | 0.6 | ±20% | 100KHz, 0.25V | 5.7 | 6.9 | 13 | 22 |
| LMLP07B7MR68DTAS | 0.68 | ±20% | 100KHz, 0.25V | 6.4 | 7.2 | 13 | 21 |
| LMLP07B7MR82DTAS | 0.82 | ±20% | 100KHz, 0.25V | 8 | 9.5 | 11 | 17 |
| LMLP07B7M1R0DTAS | 1 | ±20% | 100KHz, 0.25V | 10.5 | 13.5 | 11 | 16 |
| LMLP07B7M1R5DTAS | 1.5 | ±20% | 100KHz, 0.25V | 17 | 20 | 9 | 15 |
| LMLP07B7M2R2DTAS | 2.2 | ±20% | 100KHz, 0.25V | 23 | 28 | 7 | 14 |
| LMLP07B7M3R3DTAS | 3.3 | ±20% | 100KHz, 0.25V | 34 | 39 | 6 | 10 |
| LMLP07B7M4R7DTAS | 4.7 | ±20% | 100KHz, 0.25V | 41 | 50 | 5.5 | 9 |
| LMLP07B7M5R6DTAS | 5.6 | ±20% | 100KHz, 0.25V | 56 | 62 | 5 | 8 |
| LMLP07B7M6R8DTAS | 6.8 | ±20% | 100KHz, 0.25V | 65 | 72 | 4 | 7 |
| LMLP07B7M8R2DTAS | 8.2 | ±20% | 100KHz, 0.25V | 81 | 95 | 3.6 | 6 |
| LMLP07B7M100DTAS | 10 | ±20% | 100KHz, 0.25V | 92 | 101 | 3.2 | 5 |
| LMLP07B7M150DTAS | 15 | ±20% | 100KHz, 0.25V | 150 | 180 | 2.5 | 3.5 |
| LMLP07B7M220DTAS | 22 | ±20% | 100KHz, 0.25V | 185 | 215 | 1.8 | 3 |

07A7

| AVX PN | Inductance (µH) | Tolerance | Test Condition | DCR (mΩ) Typical | DCR (mΩ) Max | I _{DC} (A) Typical | I _{sat} (A) Typical |
|------------------|-----------------|-----------|----------------|------------------|--------------|-----------------------------|------------------------------|
| LMLP07A7MR22DTAS | 0.22 | ±20% | 100KHz, 0.25V | 2.5 | 2.8 | 23 | 40 |
| LMLP07A7MR33DTAS | 0.33 | ±20% | 100KHz, 0.25V | 3.5 | 3.9 | 20 | 30 |
| LMLP07A7MR47DTAS | 0.47 | ±20% | 100KHz, 0.25V | 4 | 4.2 | 17.5 | 26 |
| LMLP07A7MR56DTAS | 0.56 | ±20% | 100KHz, 0.25V | 4.7 | 5 | 16.5 | 25.5 |
| LMLP07A7MR68DTAS | 0.68 | ±20% | 100KHz, 0.25V | 5 | 5.5 | 15.5 | 25 |
| LMLP07A7MR82DTAS | 0.82 | ±20% | 100KHz, 0.25V | 6.7 | 8 | 13 | 20 |
| LMLP07A7M1R0DTAS | 1 | ±20% | 100KHz, 0.25V | 9 | 10 | 11 | 20 |
| LMLP07A7M1R5DTAS | 1.5 | ±20% | 100KHz, 0.25V | 14 | 15 | 9 | 16 |
| LMLP07A7M2R2DTAS | 2.2 | ±20% | 100KHz, 0.25V | 17 | 20 | 8 | 12 |
| LMLP07A7M3R3DTAS | 3.3 | ±20% | 100KHz, 0.25V | 28 | 30 | 6 | 10 |
| LMLP07A7M4R7DTAS | 4.7 | ±20% | 100KHz, 0.25V | 37 | 40 | 5.5 | 7 |
| LMLP07A7M5R6DTAS | 5.6 | ±20% | 100KHz, 0.25V | 40 | 44 | 5.5 | 6 |
| LMLP07A7M6R8DTAS | 6.8 | ±20% | 100KHz, 0.25V | 54 | 60 | 4.5 | 6.5 |
| LMLP07A7M8R2DTAS | 8.2 | ±20% | 100KHz, 0.25V | 54 | 60 | 4.5 | 6 |
| LMLP07A7M100DTAS | 10 | ±20% | 100KHz, 0.25V | 62 | 68 | 4 | 5.5 |

I_{SAT}: The current that causes an inductance drop of approximately 25% (30% on 0405 size).
 I_{DC}: DC Current that causes an approximate ΔT of 40°C.

LMax Low Profile/High Current Power Inductor

LMLP Series – Style D



07C7

| AVX PN | Inductance (μH) | Tolerance | Test Condition | DCR (mΩ) Typical | DCR (mΩ) Max | I _{DC} (A) Typical | I _{sat} (A) Typical |
|------------------|-----------------|-----------|----------------|------------------|--------------|-----------------------------|------------------------------|
| LMLP07C7MR33DTAS | 0.33 | ±20% | 100KHz, 0.25V | 2.5 | 3 | 25 | 32 |
| LMLP07C7MR40DTAS | 0.4 | ±20% | 100KHz, 0.25V | 3.1 | 3.7 | 23 | 31 |
| LMLP07C7MR47DTAS | 0.47 | ±20% | 100KHz, 0.25V | 3.5 | 3.9 | 22 | 30 |
| LMLP07C7MR56DTAS | 0.56 | ±20% | 100KHz, 0.25V | 3.6 | 4.2 | 20 | 27 |
| LMLP07C7MR60DTAS | 0.6 | ±20% | 100KHz, 0.25V | 3.8 | 4.3 | 19 | 25 |
| LMLP07C7MR68DTAS | 0.68 | ±20% | 100KHz, 0.25V | 4 | 4.5 | 18 | 24 |
| LMLP07C7MR82DTAS | 0.82 | ±20% | 100KHz, 0.25V | 4.6 | 4.9 | 15 | 22 |
| LMLP07C7M1R0DTAS | 1 | ±20% | 100KHz, 0.25V | 6.1 | 6.5 | 15 | 20 |
| LMLP07C7M1R2DTAS | 1.2 | ±20% | 100KHz, 0.25V | 6.7 | 7.5 | 14 | 18 |
| LMLP07C7M1R5DTAS | 1.5 | ±20% | 100KHz, 0.25V | 8.6 | 9 | 12 | 16.5 |
| LMLP07C7M1R8DTAS | 1.8 | ±20% | 100KHz, 0.25V | 9.5 | 11 | 12 | 15 |
| LMLP07C7M2R2DTAS | 2.2 | ±20% | 100KHz, 0.25V | 11.2 | 12 | 10 | 14 |
| LMLP07C7M3R3DTAS | 3.3 | ±20% | 100KHz, 0.25V | 19 | 20.9 | 8 | 12 |
| LMLP07C7M4R7DTAS | 4.7 | ±20% | 100KHz, 0.25V | 28 | 30.8 | 6.5 | 10 |
| LMLP07C7M5R6DTAS | 5.6 | ±20% | 100KHz, 0.25V | 43.5 | 49 | 6 | 9 |
| LMLP07C7M6R8DTAS | 6.8 | ±20% | 100KHz, 0.25V | 46 | 51.5 | 5.5 | 8.5 |
| LMLP07C7M8R2DTAS | 8.2 | ±20% | 100KHz, 0.25V | 56 | 63 | 5 | 8 |
| LMLP07C7M100DTAS | 10 | ±20% | 100KHz, 0.25V | 60 | 69 | 4 | 7.5 |
| LMLP07C7M150DTAS | 15 | ±20% | 100KHz, 0.25V | 81 | 92 | 3.5 | 6 |
| LMLP07C7M220DTAS | 22 | ±20% | 100KHz, 0.25V | 140 | 170 | 2.5 | 5.5 |
| LMLP07C7M330DTAS | 33 | ±20% | 100KHz, 0.25V | 173 | 200 | 2 | 3.5 |
| LMLP07C7M470DTAS | 47 | ±20% | 100KHz, 0.25V | 290 | 330 | 1.9 | 2.7 |
| LMLP07C7M560DTAS | 56 | ±20% | 100KHz, 0.25V | 342 | 396 | 1.6 | 2.1 |
| LMLP07C7M680DTAS | 68 | ±20% | 100KHz, 0.25V | 386 | 445 | 1.2 | 2 |

1011

| AVX PN | Inductance (μH) | Tolerance | Test Condition | DCR (mΩ) Typical | DCR (mΩ) Max | I _{DC} (A) Typical | I _{sat} (A) Typical |
|------------------|-----------------|-----------|----------------|------------------|--------------|-----------------------------|------------------------------|
| LMLP1011MR22DTAS | 0.22 | ±20% | 100KHz, 0.25V | 0.8 | 1 | 30 | 50 |
| LMLP1011MR36DTAS | 0.36 | ±20% | 100KHz, 0.25V | 1.1 | 1.2 | 34 | 40 |
| LMLP1011MR47DTAS | 0.47 | ±20% | 100KHz, 0.25V | 1.3 | 1.55 | 25 | 35 |
| LMLP1011MR56DTAS | 0.56 | ±20% | 100KHz, 0.25V | 1.6 | 1.8 | 25 | 32 |
| LMLP1011MR68DTAS | 0.68 | ±20% | 100KHz, 0.25V | 2.4 | 2.7 | 22 | 30 |
| LMLP1011M1R0DTAS | 1 | ±20% | 100KHz, 0.25V | 3 | 3.3 | 18 | 28 |
| LMLP1011M1R5DTAS | 1.5 | ±20% | 100KHz, 0.25V | 3.8 | 4.2 | 16 | 21 |
| LMLP1011M2R2DTAS | 2.2 | ±20% | 100KHz, 0.25V | 6.7 | 7 | 12 | 18 |
| LMLP1011M3R3DTAS | 3.3 | ±20% | 100KHz, 0.25V | 10.8 | 11.8 | 10 | 16 |
| LMLP1011M4R7DTAS | 4.7 | ±20% | 100KHz, 0.25V | 17 | 20 | 8.5 | 15 |
| LMLP1011M6R8DTAS | 6.8 | ±20% | 100KHz, 0.25V | 22.5 | 25 | 6.5 | 9 |
| LMLP1011M8R2DTAS | 8.2 | ±20% | 100KHz, 0.25V | 26 | 29 | 7 | 9 |
| LMLP1011M100DTAS | 10 | ±20% | 100KHz, 0.25V | 27 | 30 | 7.5 | 8.5 |
| LMLP1011M150DTAS | 15 | ±20% | 100KHz, 0.25V | 40 | 45 | 6.25 | 7 |
| LMLP1011M220DTAS | 22 | ±20% | 100KHz, 0.25V | 60 | 66 | 5 | 5.5 |
| LMLP1011M470DTAS | 47 | ±20% | 100KHz, 0.25V | 130 | 145 | 3.3 | 3.5 |

I_{SAT}: The current that causes an inductance drop of approximately 25% (30% on 0405 size).
I_{DC}: DC Current that causes an approximate ΔT of 40°C.



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LMax Low Profile/High Current Power Inductor

LMLP Series – Style D



1313

| AVX PN | Inductance (μH) | Tolerance | Test Condition | DCR (mΩ) Typical | DCR (mΩ) Max | I _{DC} (A) Typical | I _{sat} (A) Typical |
|------------------|-----------------|-----------|----------------|------------------|--------------|-----------------------------|------------------------------|
| LMLP1313MR10DTAS | 0.1 | ±20% | 100KHz, 0.25V | 0.53 | 0.6 | 55 | 118 |
| LMLP1313MR22DTAS | 0.22 | ±20% | 100KHz, 0.25V | 0.64 | 0.8 | 51 | 110 |
| LMLP1313MR33DTAS | 0.33 | ±20% | 100KHz, 0.25V | 0.85 | 1.1 | 42 | 80 |
| LMLP1313MR47DTAS | 0.47 | ±20% | 100KHz, 0.25V | 1.1 | 1.3 | 38 | 65 |
| LMLP1313MR56DTAS | 0.56 | ±20% | 100KHz, 0.25V | 1.3 | 1.5 | 36 | 55 |
| LMLP1313MR68DTAS | 0.68 | ±20% | 100KHz, 0.25V | 1.5 | 1.7 | 34 | 54 |
| LMLP1313MR82DTAS | 0.82 | ±20% | 100KHz, 0.25V | 2 | 2.3 | 31 | 53 |
| LMLP1313M1R0DTAS | 1 | ±20% | 100KHz, 0.25V | 2.1 | 2.5 | 29 | 50 |
| LMLP1313M1R2DTAS | 1.2 | ±20% | 100KHz, 0.25V | 2.8 | 3.5 | 25 | 49 |
| LMLP1313M1R5DTAS | 1.5 | ±20% | 100KHz, 0.25V | 3.4 | 4.1 | 23 | 48 |
| LMLP1313M1R8DTAS | 1.8 | ±20% | 100KHz, 0.25V | 4.2 | 4.9 | 19 | 40 |
| LMLP1313M2R2DTAS | 2.2 | ±20% | 100KHz, 0.25V | 4.6 | 5.5 | 20 | 32 |
| LMLP1313M3R3DTAS | 3.3 | ±20% | 100KHz, 0.25V | 7.7 | 9.2 | 15 | 32 |
| LMLP1313M4R7DTAS | 4.7 | ±20% | 100KHz, 0.25V | 12.8 | 15 | 12 | 27 |
| LMLP1313M5R6DTAS | 5.6 | ±20% | 100KHz, 0.25V | 14 | 16.5 | 11.5 | 22 |
| LMLP1313M6R8DTAS | 6.8 | ±20% | 100KHz, 0.25V | 15.4 | 18.5 | 11 | 21 |
| LMLP1313M7R8DTAS | 7.8 | ±20% | 100KHz, 0.25V | 17.2 | 20.5 | 10 | 18 |
| LMLP1313M8R2DTAS | 8.2 | ±20% | 100KHz, 0.25V | 18.9 | 22.5 | 9.5 | 18 |
| LMLP1313M100DTAS | 10 | ±20% | 100KHz, 0.25V | 21.4 | 25.5 | 9 | 16 |

13B3

| AVX PN | Inductance (μH) | Tolerance | Test Condition | DCR (mΩ) Typical | DCR (mΩ) Max | I _{DC} (A) Typical | I _{sat} (A) Typical |
|------------------|-----------------|-----------|----------------|------------------|--------------|-----------------------------|------------------------------|
| LMLP13B3MR10DTAS | 0.1 | ±20% | 100KHz, 0.25V | 0.47 | 0.5 | 60 | 120 |
| LMLP13B3MR15DTAS | 0.15 | ±20% | 100KHz, 0.25V | 0.53 | 0.6 | 55 | 118 |
| LMLP13B3MR22DTAS | 0.22 | ±20% | 100KHz, 0.25V | 0.63 | 0.7 | 53 | 112 |
| LMLP13B3MR30DTAS | 0.3 | ±20% | 100KHz, 0.25V | 0.7 | 0.8 | 48 | 72 |
| LMLP13B3MR33DTAS | 0.33 | ±20% | 100KHz, 0.25V | 0.83 | 0.9 | 46 | 65 |
| LMLP13B3MR47DTAS | 0.47 | ±20% | 100KHz, 0.25V | 1 | 1.2 | 41 | 63 |
| LMLP13B3MR56DTAS | 0.56 | ±20% | 100KHz, 0.25V | 1.2 | 1.4 | 37 | 62 |
| LMLP13B3MR68DTAS | 0.68 | ±20% | 100KHz, 0.25V | 1.4 | 1.6 | 35 | 60 |
| LMLP13B3MR82DTAS | 0.82 | ±20% | 100KHz, 0.25V | 1.6 | 1.9 | 33 | 50 |
| LMLP13B3M1R0DTAS | 1 | ±20% | 100KHz, 0.25V | 1.7 | 2 | 32 | 49 |
| LMLP13B3M1R2DTAS | 1.2 | ±20% | 100KHz, 0.25V | 2.1 | 2.5 | 30 | 48 |
| LMLP13B3M1R5DTAS | 1.5 | ±20% | 100KHz, 0.25V | 2.5 | 3 | 27 | 45 |
| LMLP13B3M1R8DTAS | 1.8 | ±20% | 100KHz, 0.25V | 2.8 | 3.2 | 24 | 41 |
| LMLP13B3M2R2DTAS | 2.2 | ±20% | 100KHz, 0.25V | 3.5 | 4.2 | 22 | 40 |
| LMLP13B3M3R3DTAS | 3.3 | ±20% | 100KHz, 0.25V | 5.7 | 6.8 | 18 | 35 |
| LMLP13B3M4R7DTAS | 4.7 | ±20% | 100KHz, 0.25V | 9.3 | 11.2 | 13.5 | 30 |
| LMLP13B3M5R6DTAS | 5.6 | ±20% | 100KHz, 0.25V | 11.8 | 12.8 | 12 | 26.5 |
| LMLP13B3M6R8DTAS | 6.8 | ±20% | 100KHz, 0.25V | 13.1 | 14 | 11.5 | 16.5 |
| LMLP13B3M8R2DTAS | 8.2 | ±20% | 100KHz, 0.25V | 14.5 | 15.5 | 10.5 | 16 |
| LMLP13B3M100DTAS | 10 | ±20% | 100KHz, 0.25V | 15.8 | 16.8 | 10 | 15.5 |
| LMLP13B3M150DTAS | 15 | ±20% | 100KHz, 0.25V | 25 | 29 | 6 | 9 |
| LMLP13B3M220DTAS | 22 | ±20% | 100KHz, 0.25V | 34 | 39.5 | 5 | 7.5 |
| LMLP13B3M330DTAS | 33 | ±20% | 100KHz, 0.25V | 55 | 65 | 4 | 6 |
| LMLP13B3M470DTAS | 47 | ±20% | 100KHz, 0.25V | 80 | 92 | 3 | 5 |
| LMLP13B3M680DTAS | 68 | ±20% | 100KHz, 0.25V | 122 | 134 | 2 | 3.5 |

I_{SAT}: The current that causes an inductance drop of approximately 25% (30% on 0405 size).
 I_{DC}: DC Current that causes an approximate ΔT of 40°C.

LMax Low Profile/High Current Power Inductor

LMLP Series – Style D



GENERAL CHARACTERISTICS

| Items | Requirement | Test Methods | | |
|------------------------|---|---|------------------|-------------|
| Solderability | More than 90% of the terminal electrode should be covered with solder. | 230±5°C for 4±1 seconds | | |
| Solder Heat Resistance | Inductance value must remain within 20% of initial value. No disconnection or short circuit. No change in appearance. | 260±5°C for 4±1 seconds | | |
| Heat Resistance | Inductance value must remain within 20% of initial value. No disconnection or short circuit.No change in appearance. | Temperature: 125±5°C | | |
| | | Time: 500 hours Tested after 2 hours at room temperature | | |
| Cold Resistance | Inductance value must remain within 20% of initial value. No disconnection or short circuit.No change in appearance. | Temperature: -40±5°C | | |
| | | Time: 500 hours Tested after 2 hours at room temperature | | |
| Thermal Shock | Inductance value must remain within 20% of initial value. No disconnection or short circuit.No change in appearance. | One Cycle | | |
| | | Step | Temperature (°C) | Time (min.) |
| | | 1 | -40±5°C | 30 |
| | | 2 | Room Temperature | 3 |
| | | 3 | 125±5°C | 30 |
| 4 | Room Temperature | 3 | | |
| Humidity Resistance | Inductance value must remain within 20% of initial value. No disconnection or short circuit. No change in appearance. | Temperature: 40±2°C at 90~95% relative humidity . | | |
| | | Time: 500 Hours Tested after 2 hours at room temperature | | |
| Vibration Test | Inductance value must remain within ±5% of initial value. No change in appearance | After 1 hour of vibrations testing, in each of three orientations at 10Hz, then increase to 55Hz, then decrease to 10Hz with 1.52mm P-P amplitudes. | | |

LMax Low Profile/High Current Power Inductor

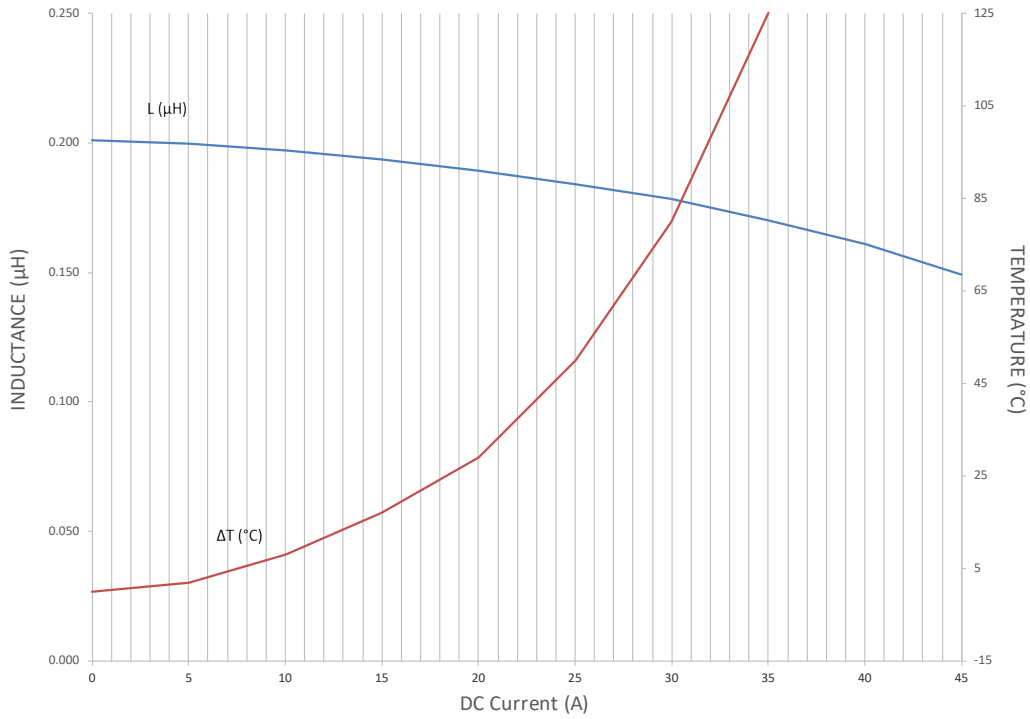
LMLP Series – Style D



LMLP07A7M-R22

L&I Curve

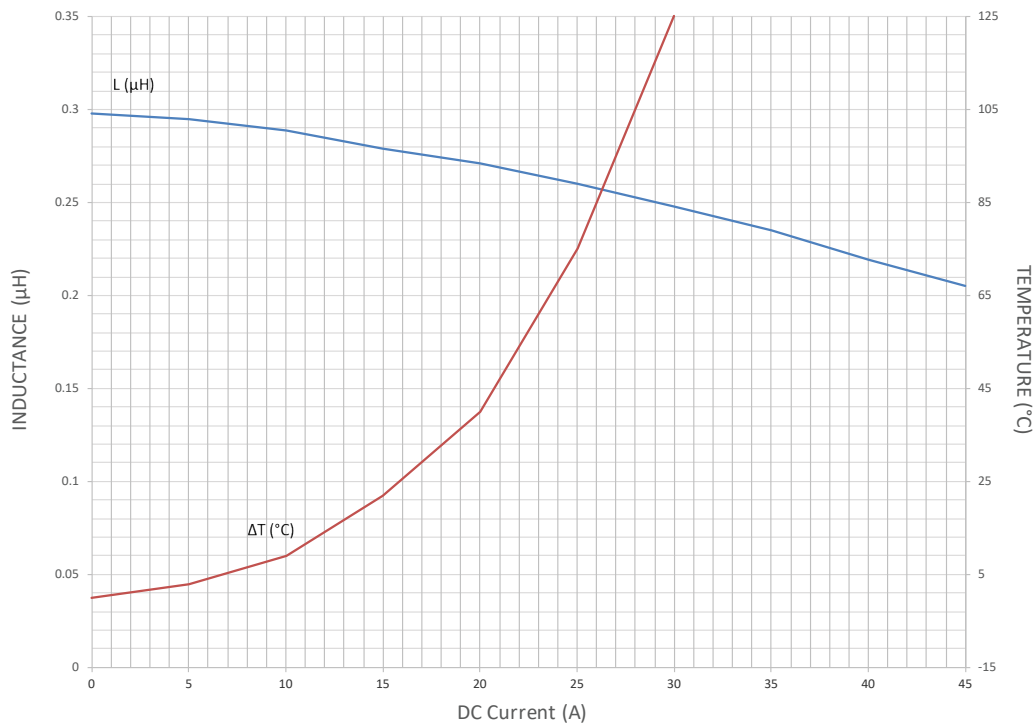
R22



LMLP07A7M-R33

L&I Curve

R33



LMax Low Profile/High Current Power Inductor

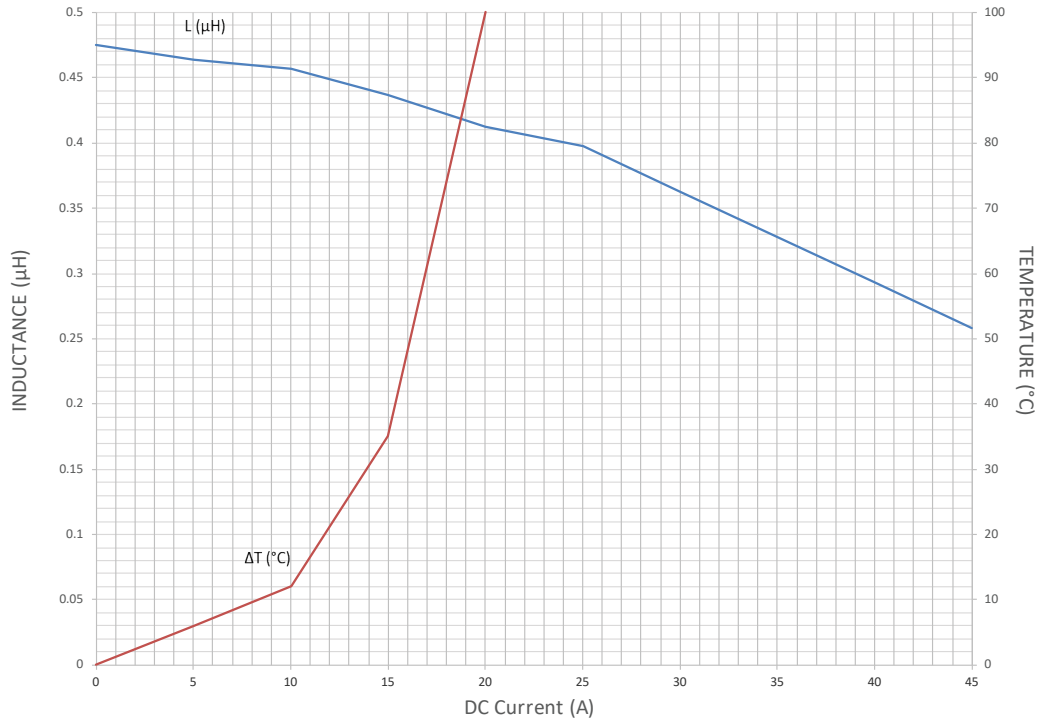
LMLP Series – Style D



LMLP07A7M-R47

L&I Curve

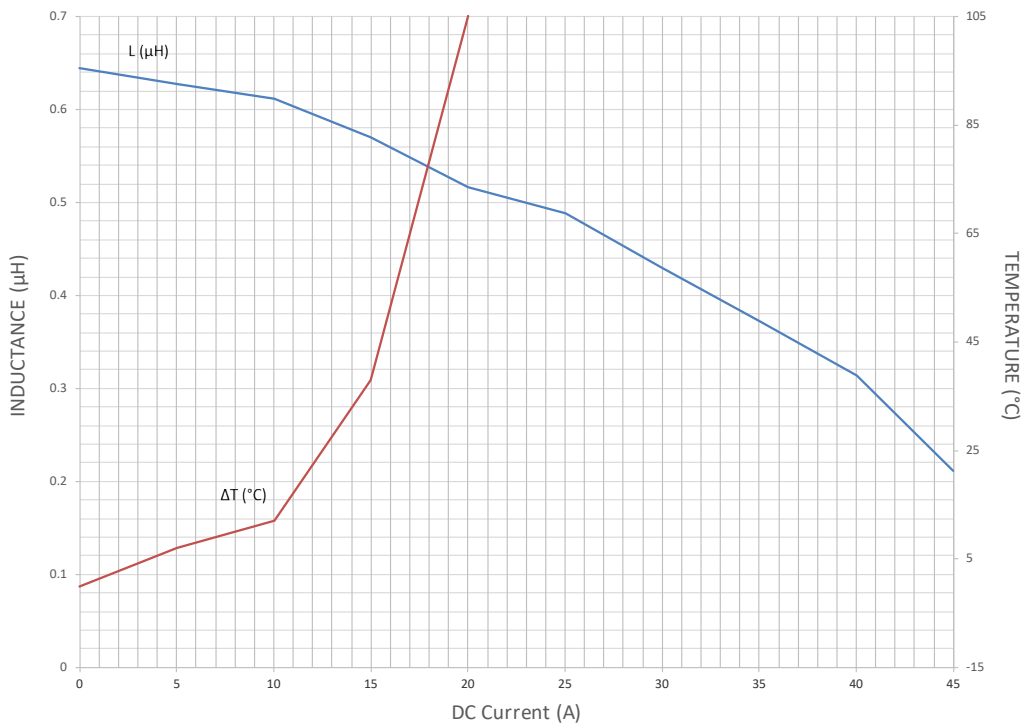
R47



LMLP07A7M-R68

L&I Curve

R68



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LMax Low Profile/High Current Power Inductor

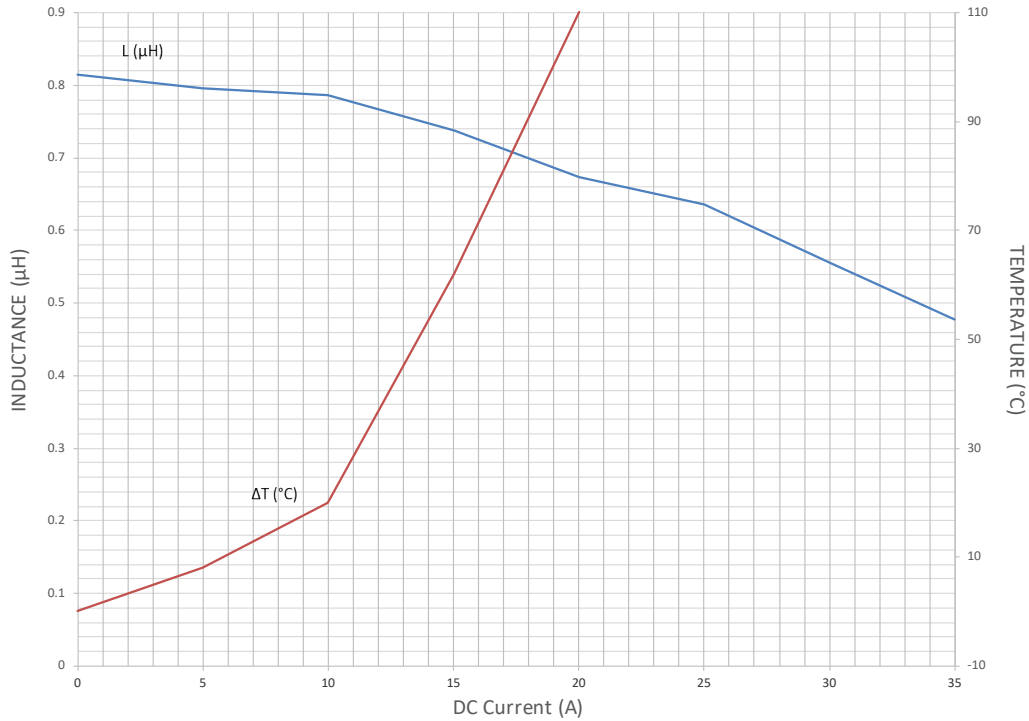
LMLP Series – Style D



LMLP07A7M-R82

L&I Curve

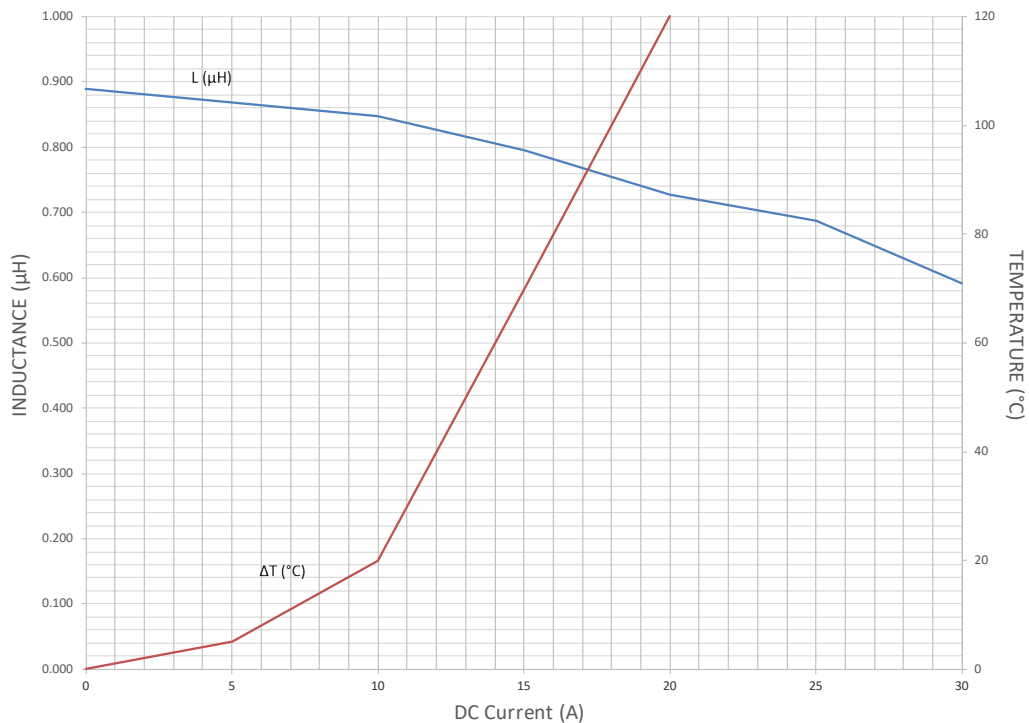
R82



LMLP07A7M-1R0

L&I Curve

1R0



LMax Low Profile/High Current Power Inductor

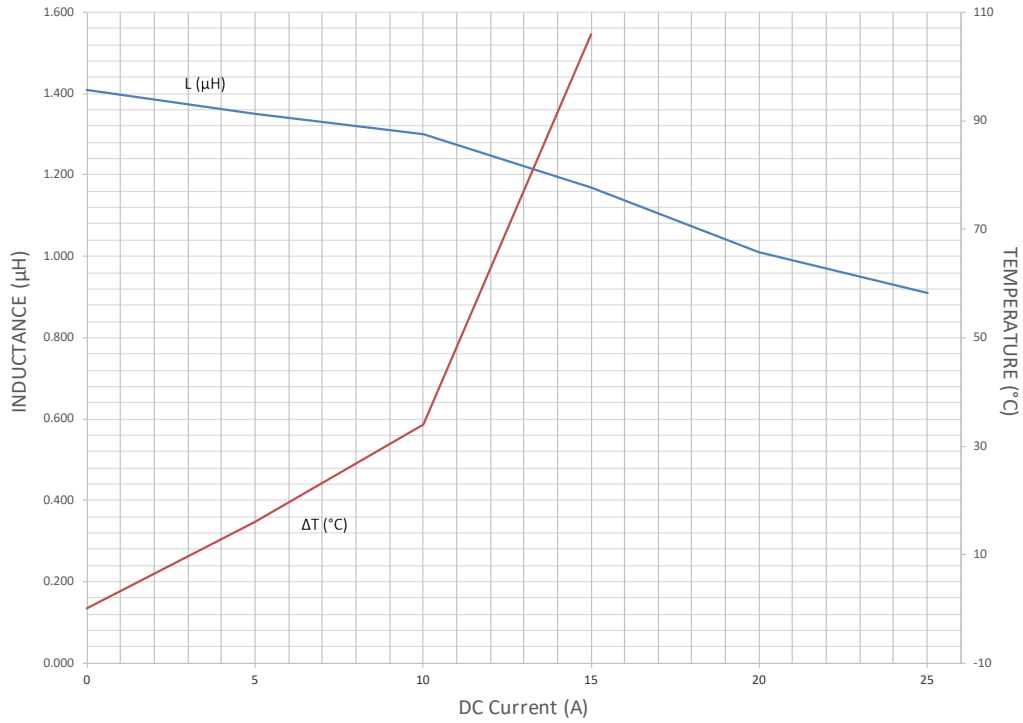
LMLP Series – Style D



LMLP07A7M-1R5

L&I Curve

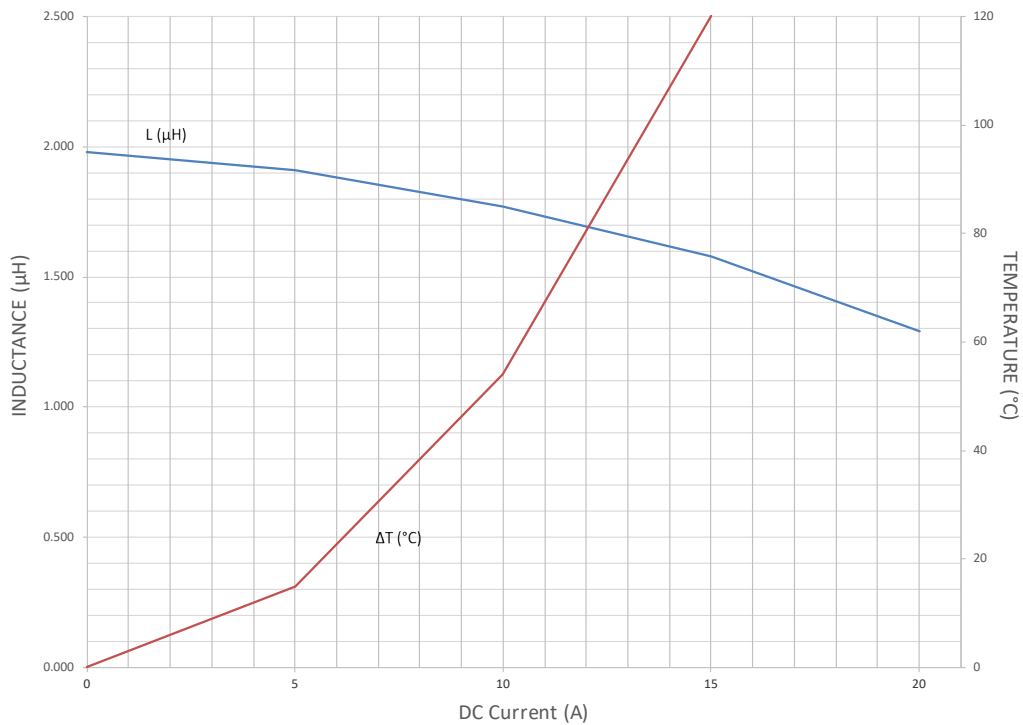
1R5



LMLP07A7M-2R2

L&I Curve

2R2



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LMax Low Profile/High Current Power Inductor

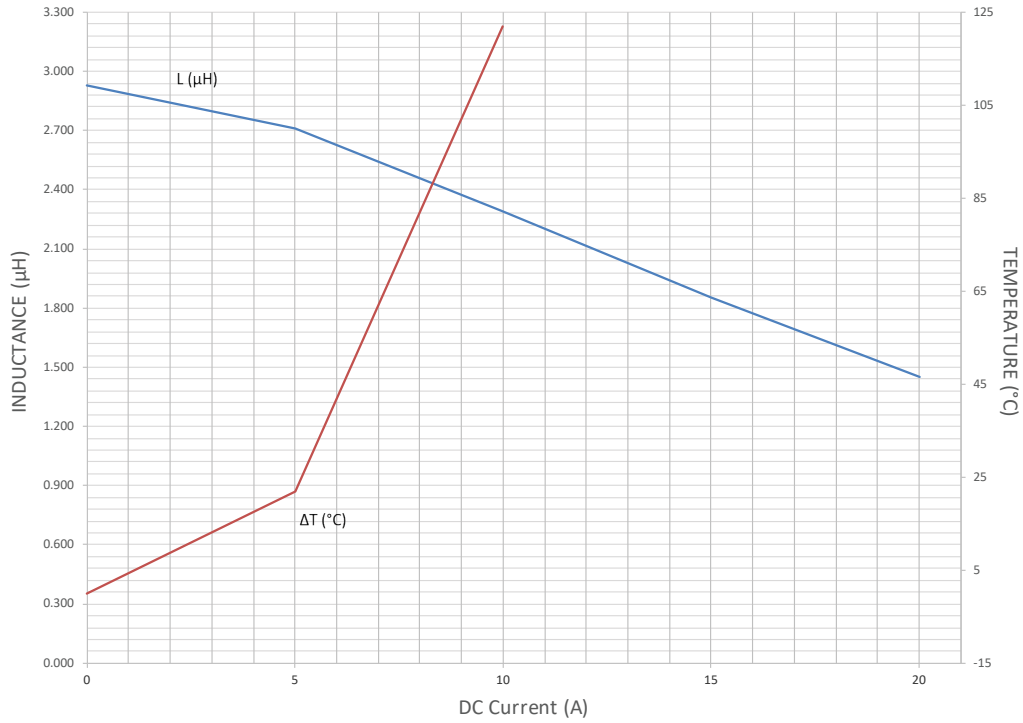
LMLP Series – Style D



LMLP07A7M-3R3

L&I Curve

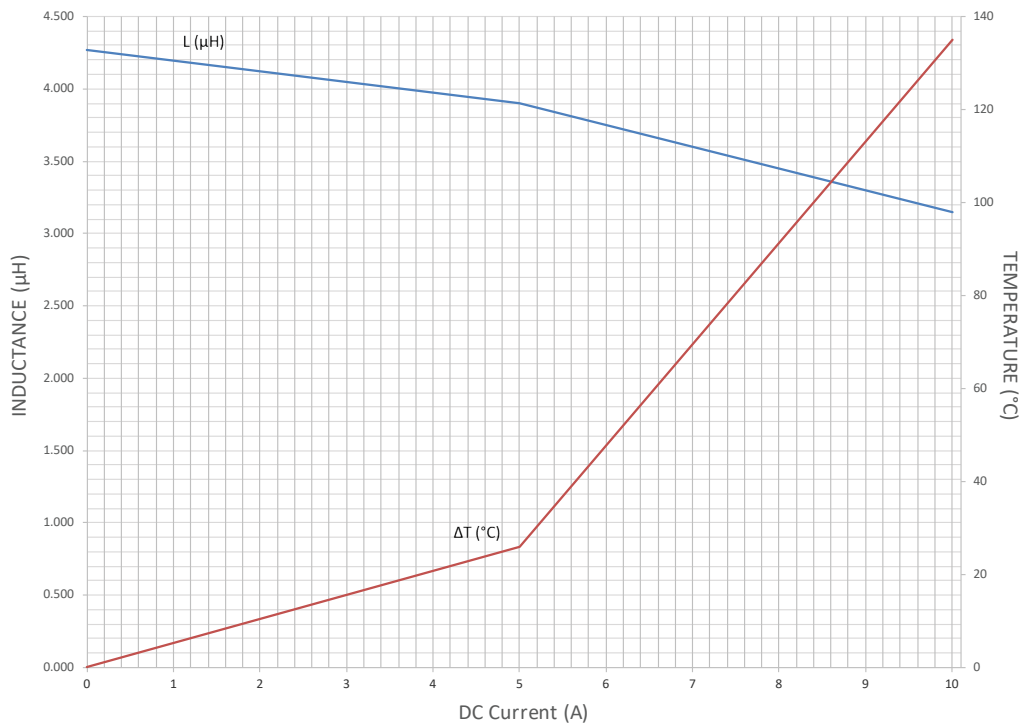
3R3



LMLP07A7M-4R7

L&I Curve

4R7



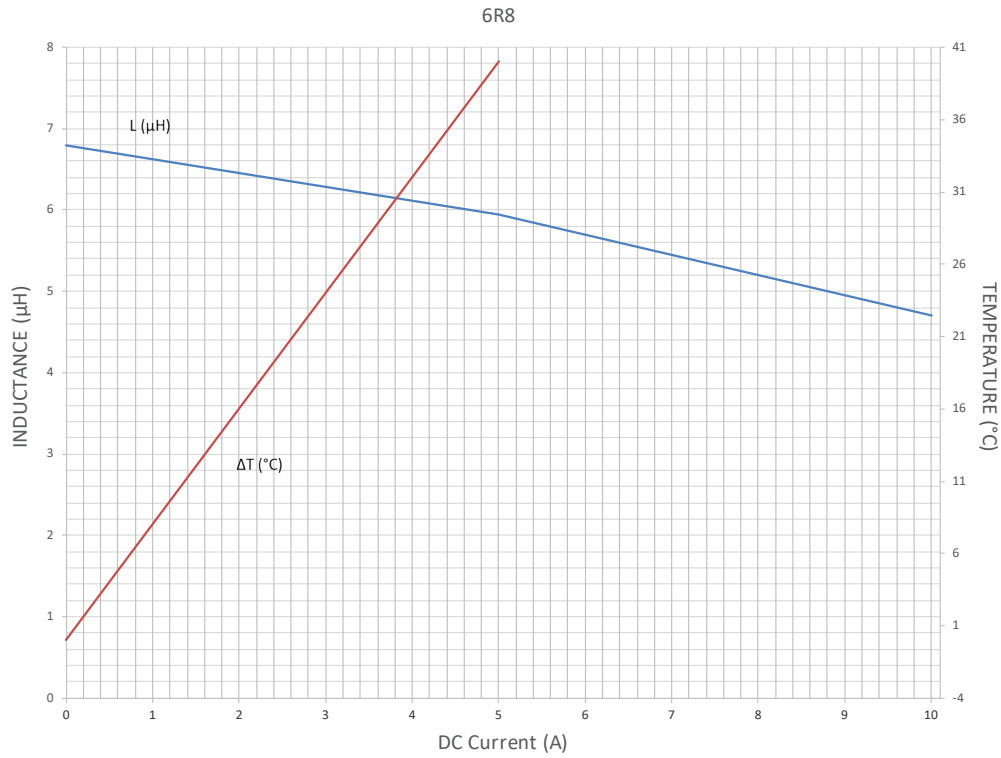
LMax Low Profile/High Current Power Inductor

LMLP Series – Style D



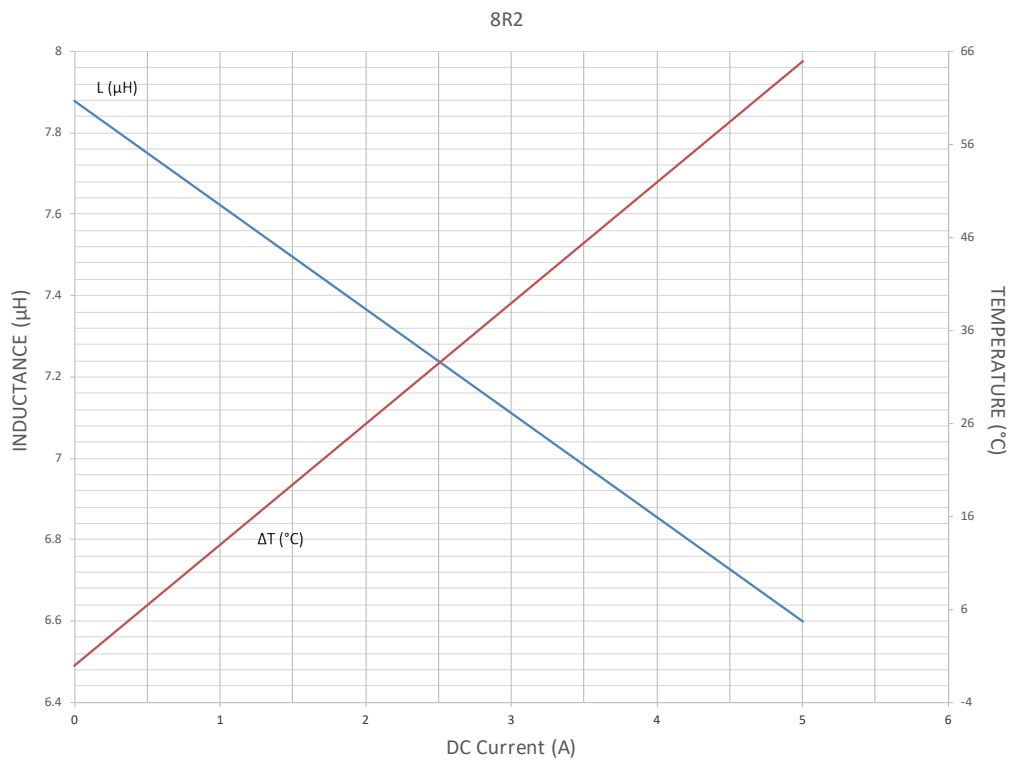
LMLP07A7M-6R8

L&I Curve



LMLP07A7M-8R2

L&I Curve



LMax Low Profile/High Current Power Inductor

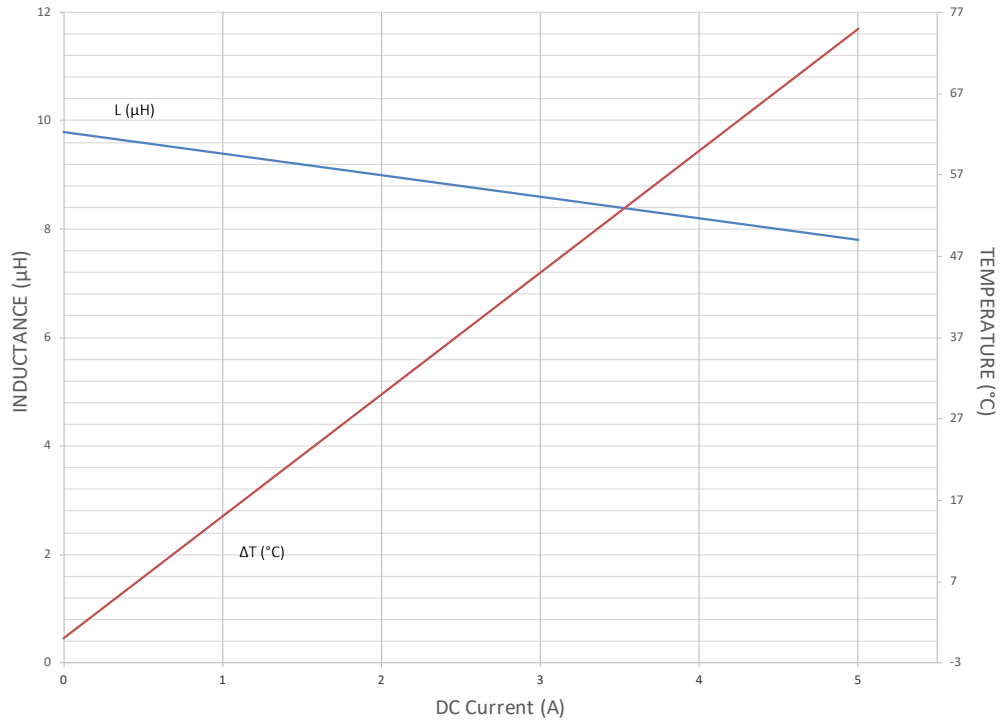
LMLP Series – Style D



LMLP07A7M-100

L&I Curve

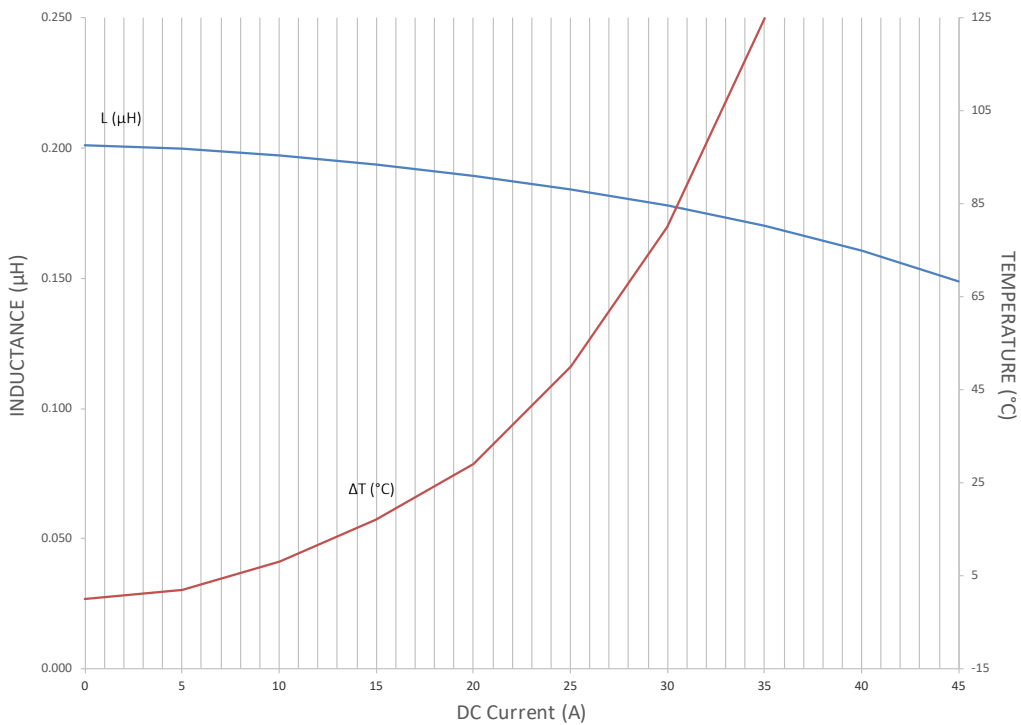
100



LMLP07A7M-R22

I&T Curve

R22



LMax Low Profile/High Current Power Inductor

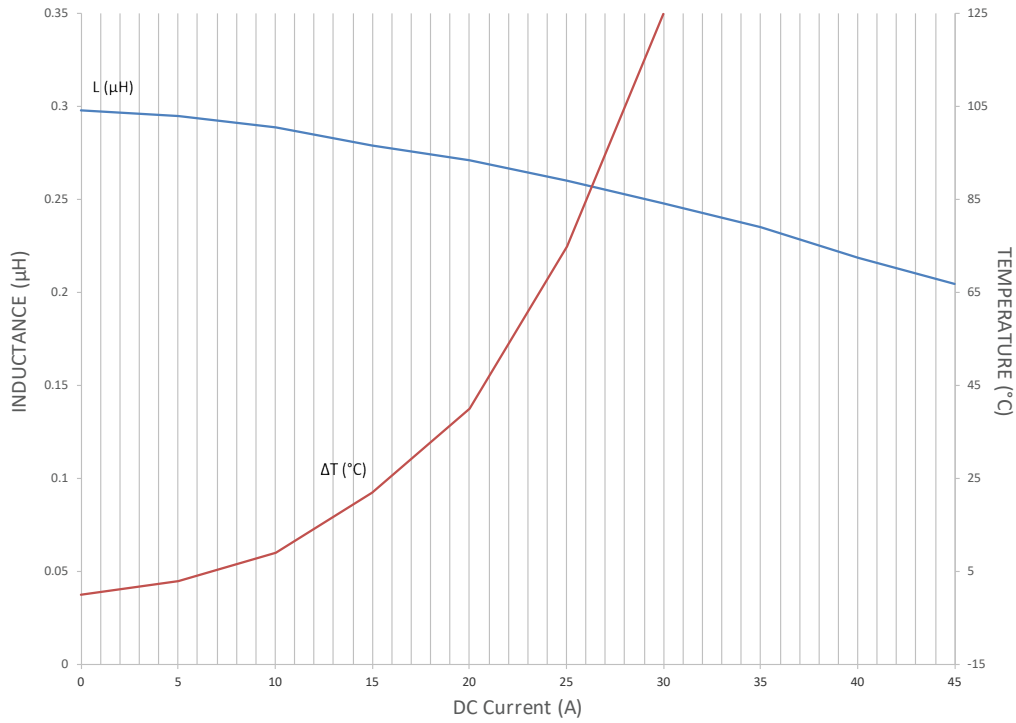
LMLP Series – Style D



LMLP07A7M-R33

I&T Curve

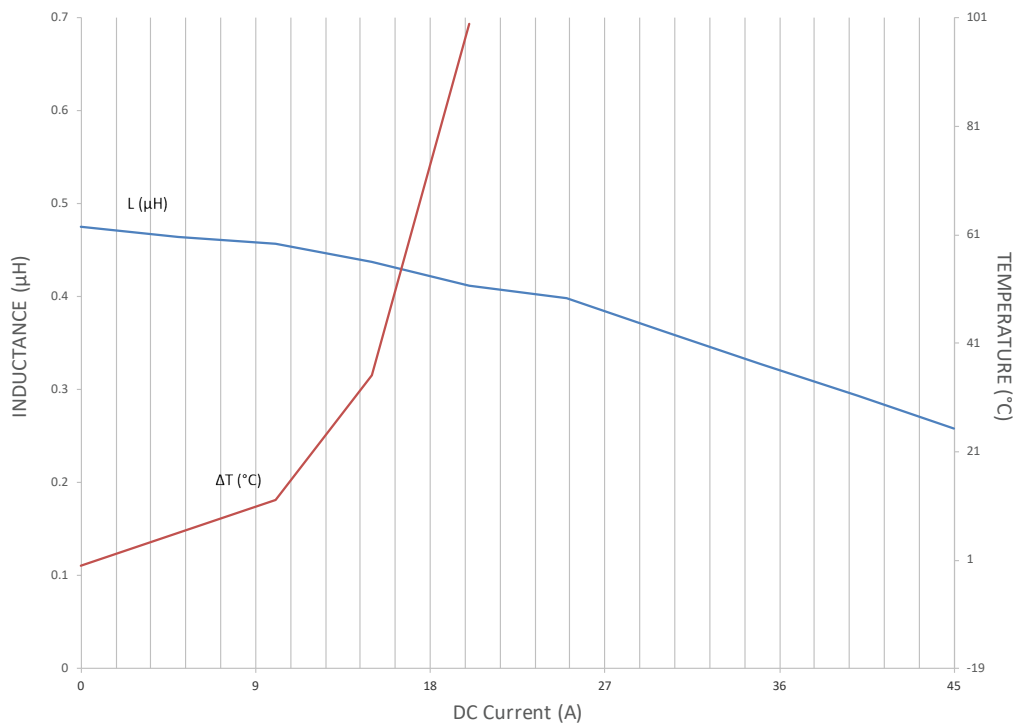
R33



LMLP07A7M-R47

I&T Curve

R47



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LMax Low Profile/High Current Power Inductor

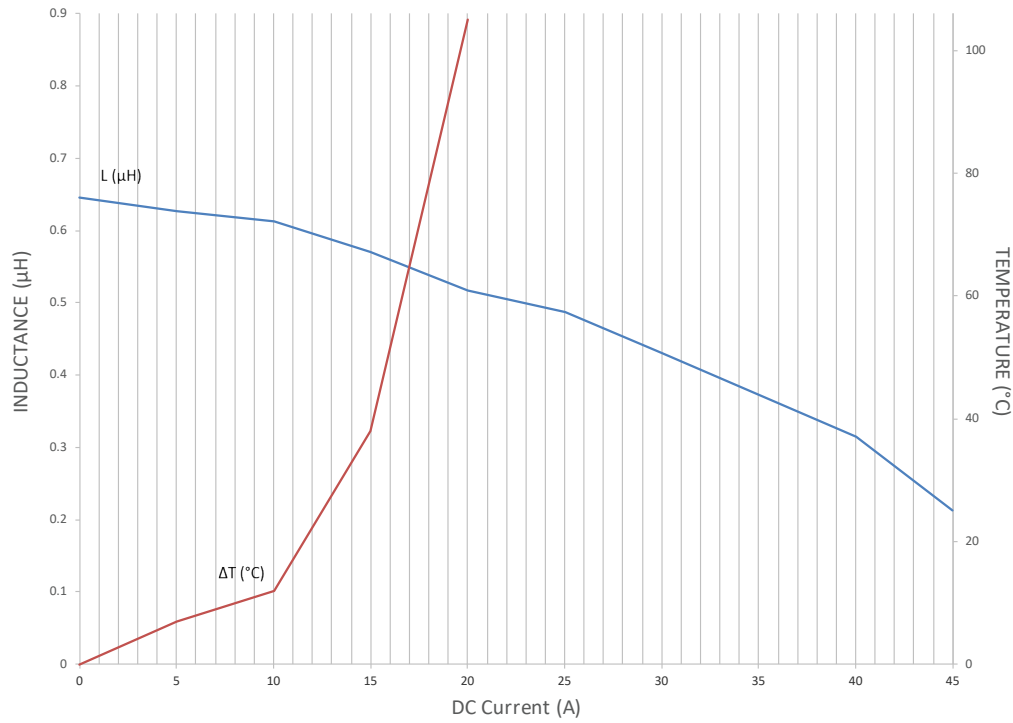
LMLP Series – Style D



LMLP07A7M-R68

I&T Curve

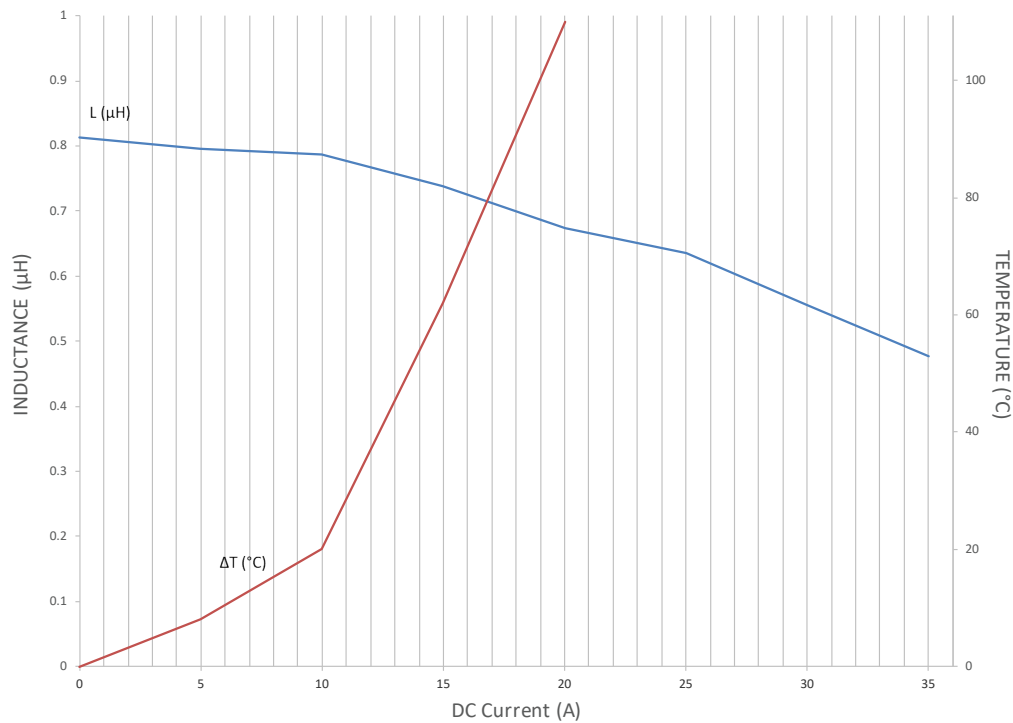
R68



LMLP07A7M-R82

I&T Curve

R82



LMax Low Profile/High Current Power Inductor

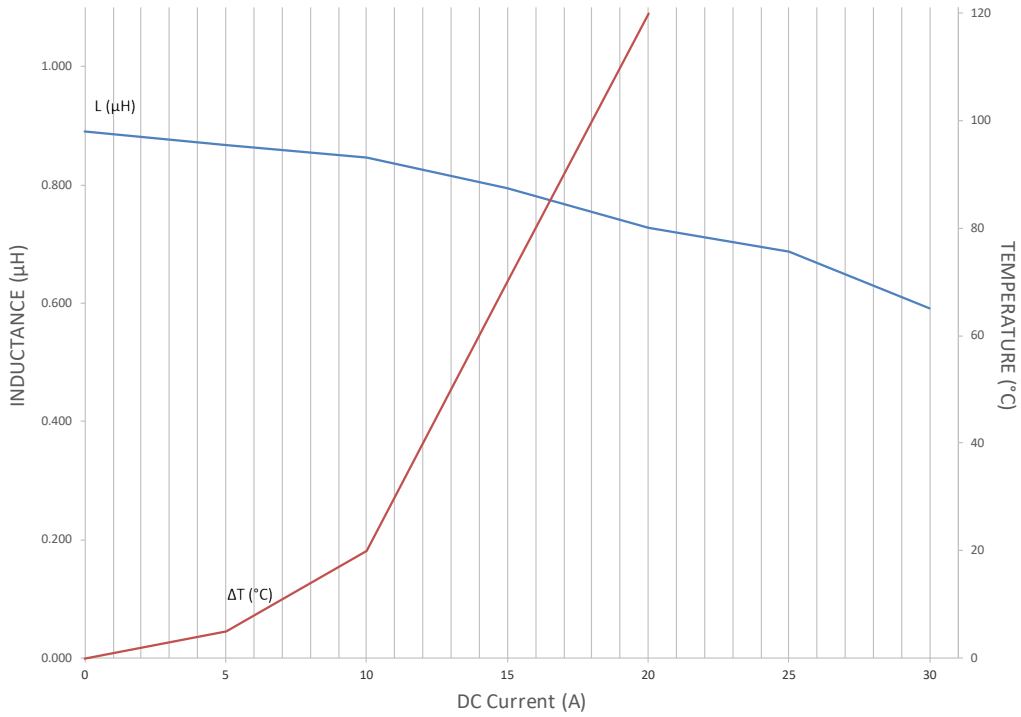
LMLP Series – Style D



LMLP07A7M-1R0

I&T Curve

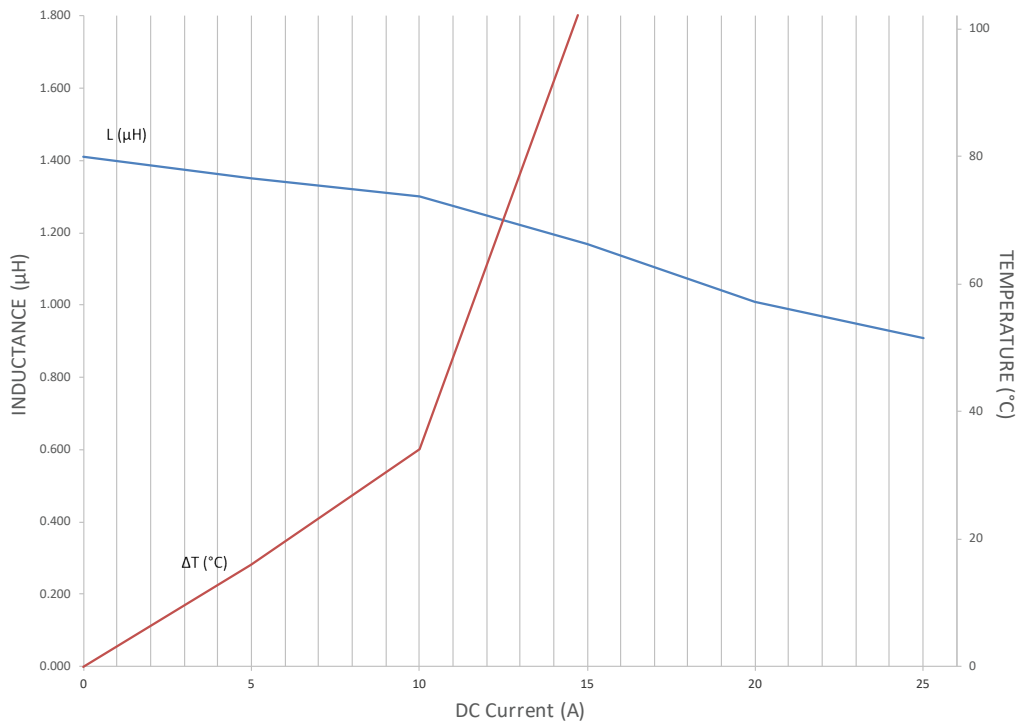
1R0



LMLP07A7M-1R5

I&T Curve

1R5



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LMax Low Profile/High Current Power Inductor

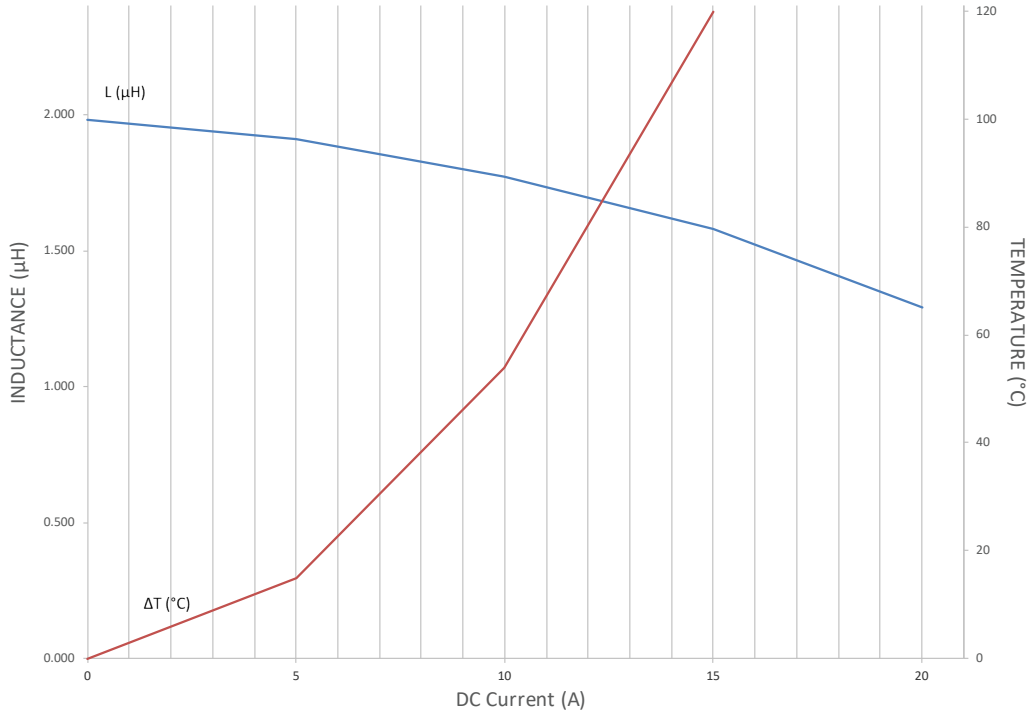
LMLP Series – Style D



LMLP07A7M-2R2

I&T Curve

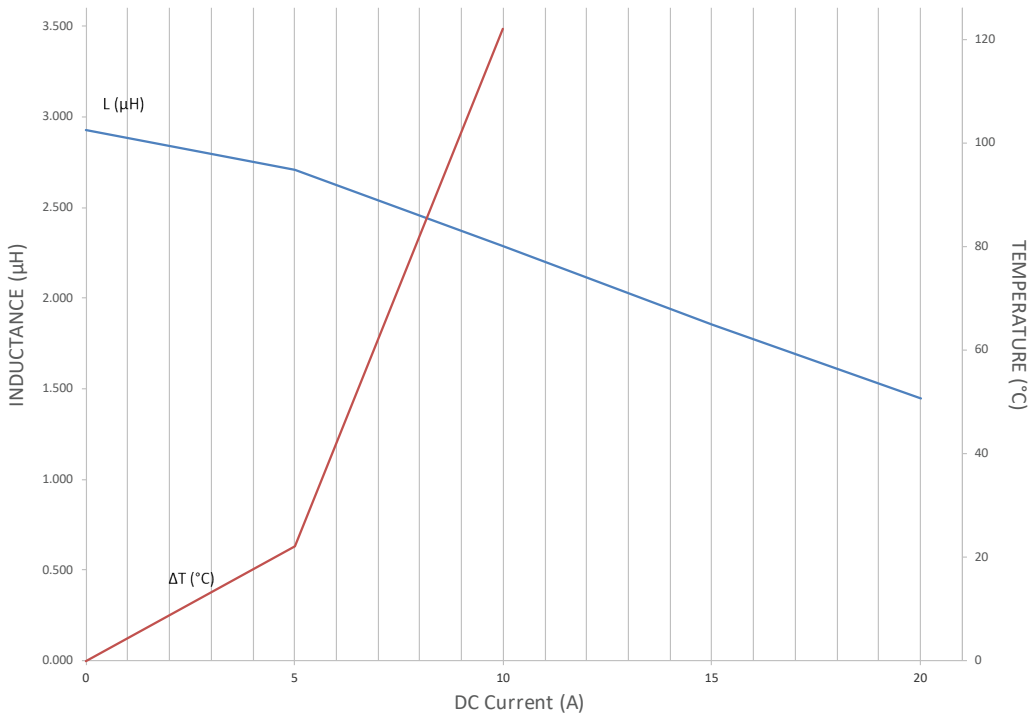
2R2



LMLP07A7M-3R3

I&T Curve

3R3



LMax Low Profile/High Current Power Inductor

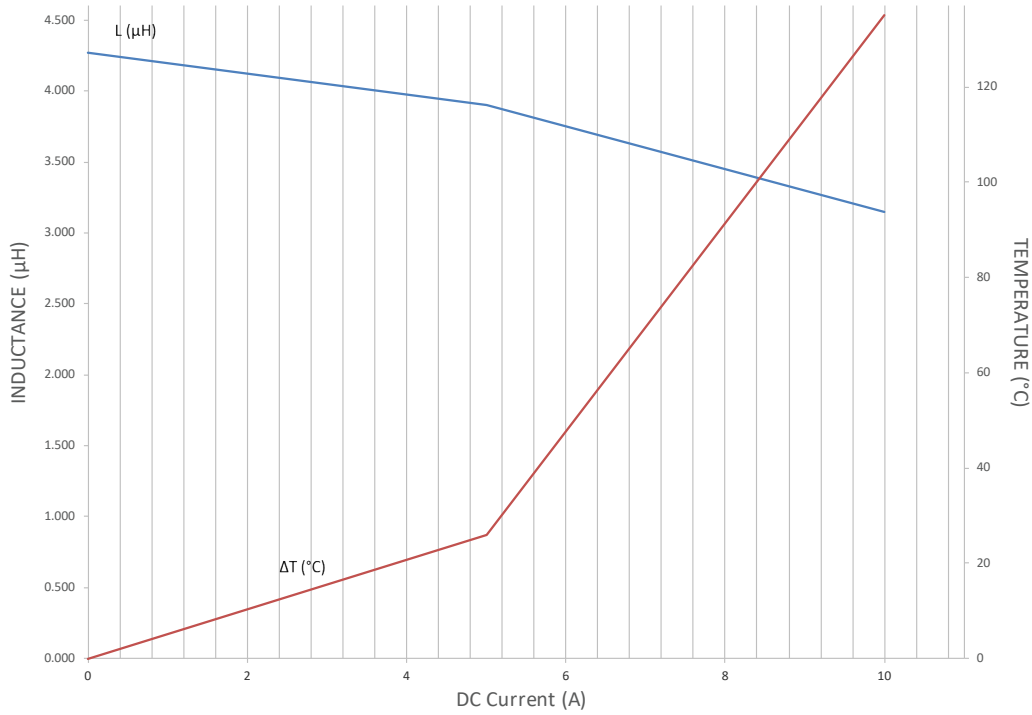
LMLP Series – Style D



LMLP07A7M-4R7

I&T Curve

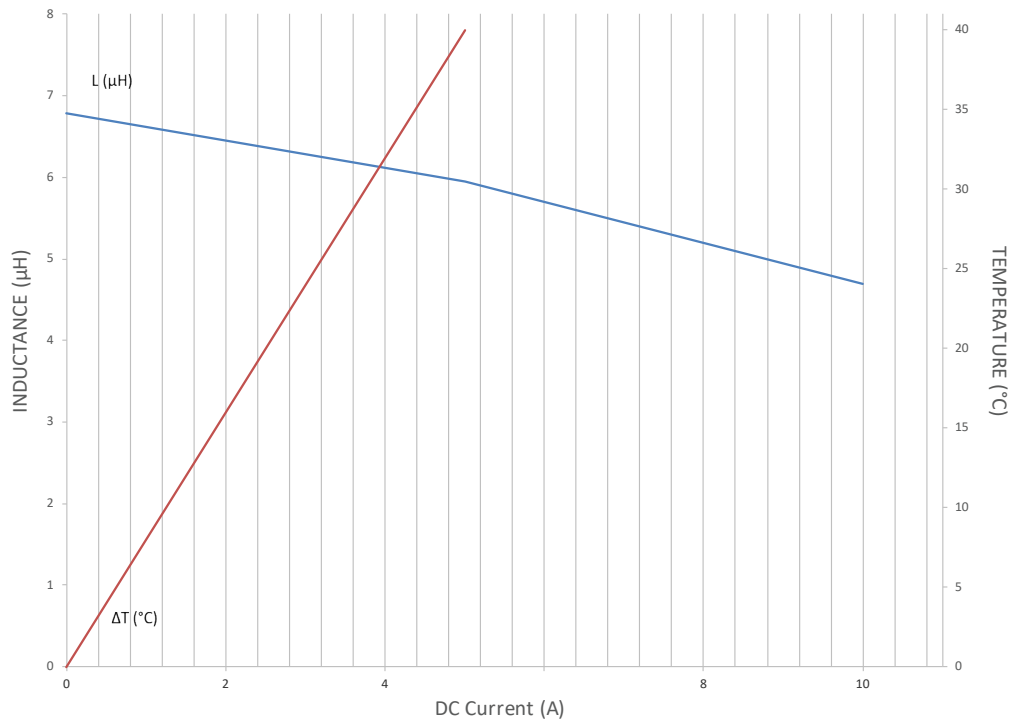
4R7



LMLP07A7M-6R8

I&T Curve

6R8



LMax Low Profile/High Current Power Inductor

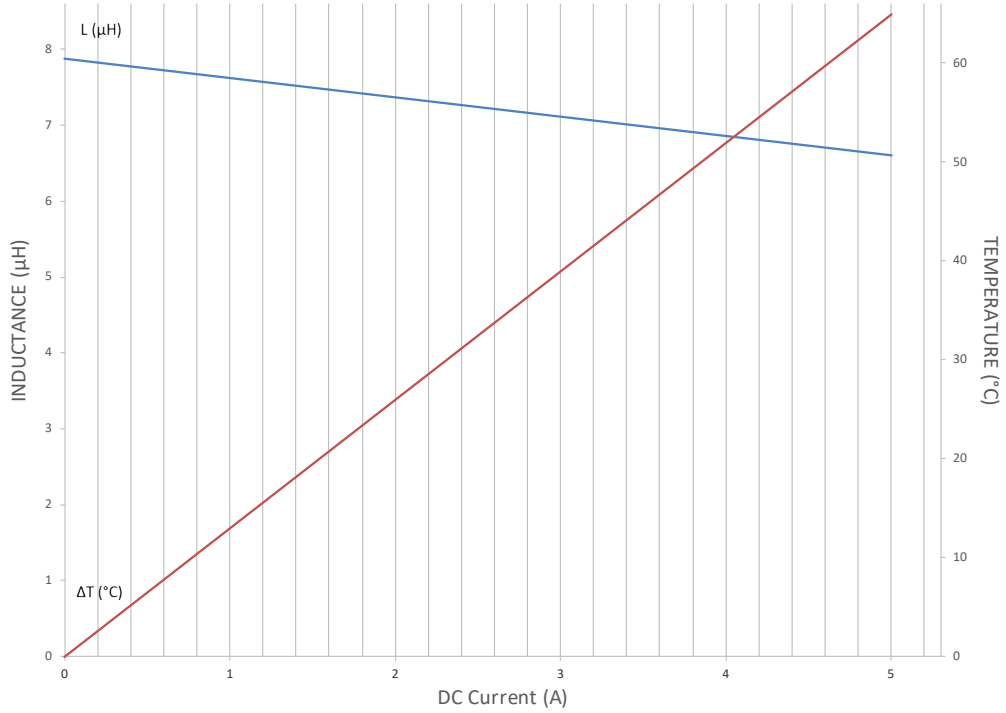
LMLP Series – Style D



LMLP07A7M-8R2

I&T Curve

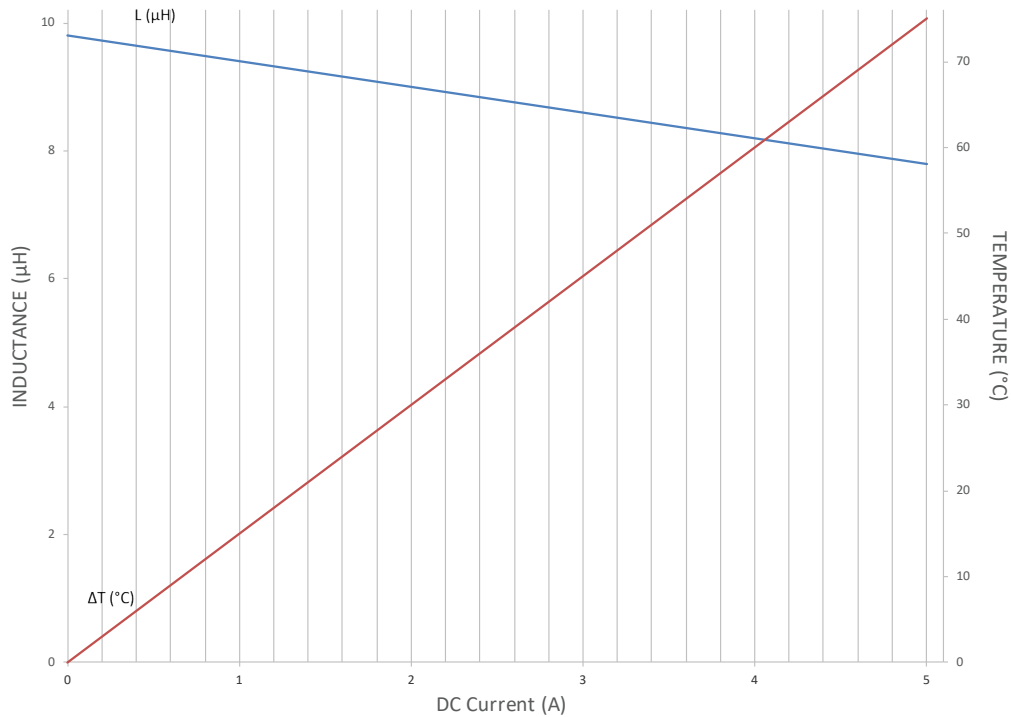
8R2



LMLP07A7M-100

I&T Curve

100



LMax Low Profile/High Current Power Inductor

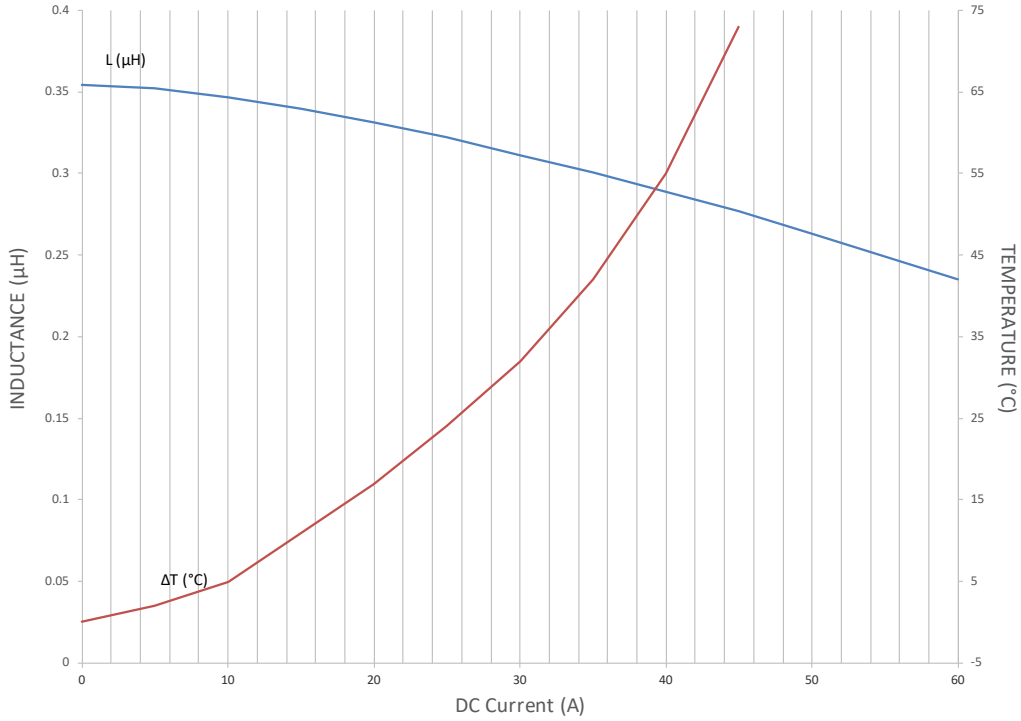
LMLP Series – Style D



LMLP1011M-R36

L&I Curve

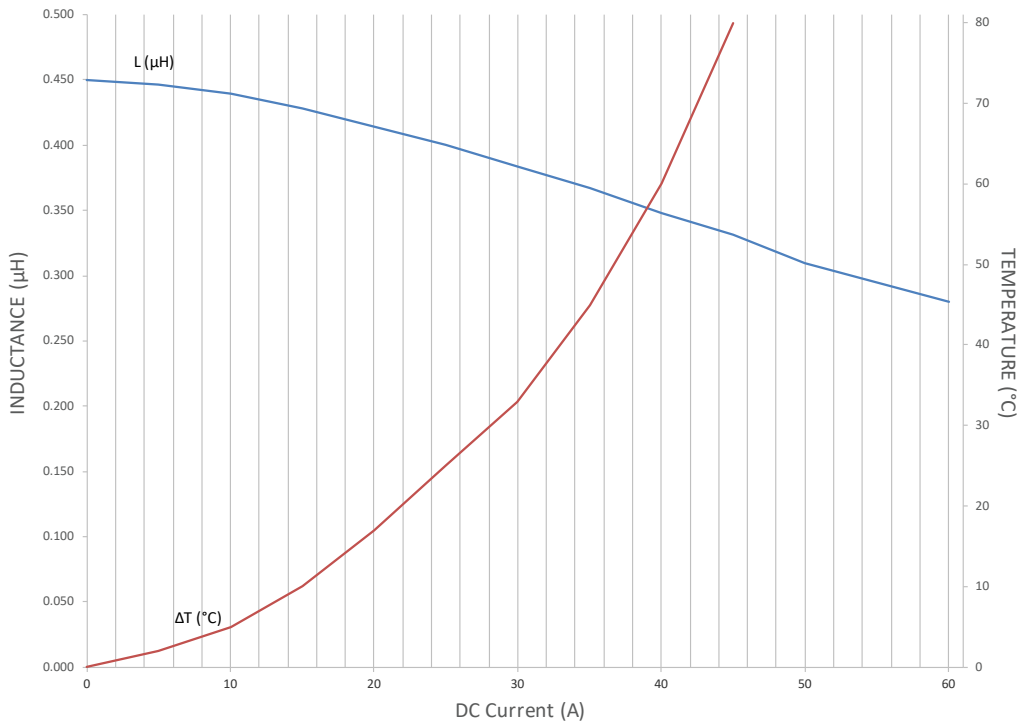
R36



LMLP1011M-R47

L&I Curve

R47



LMax Low Profile/High Current Power Inductor

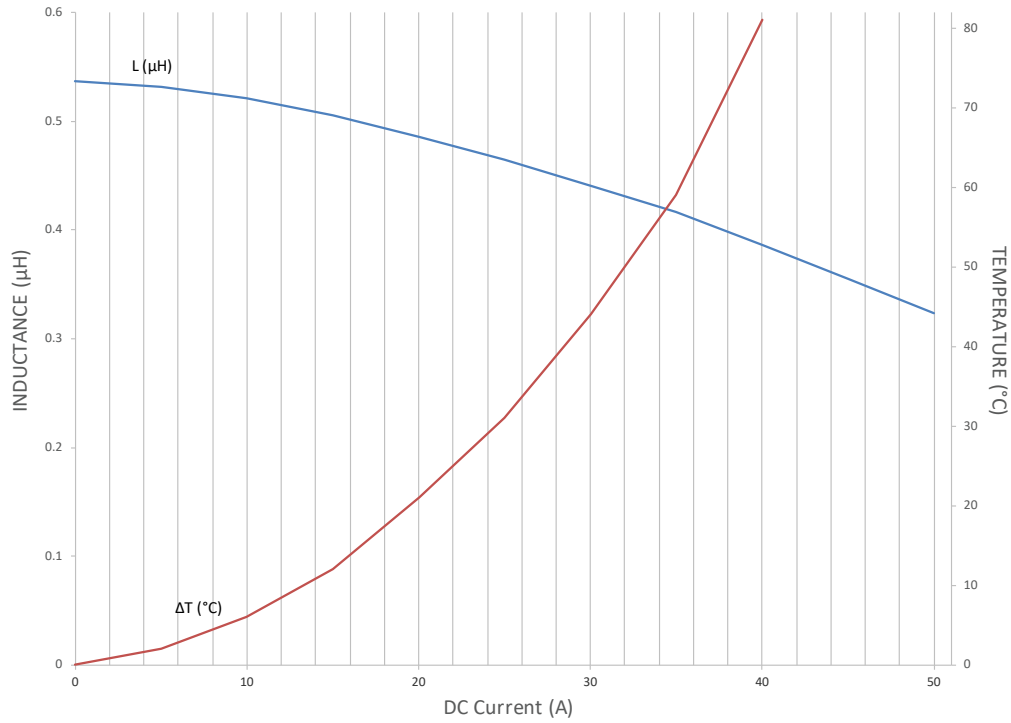
LMLP Series – Style D



LMLP1011M-R56

L&I Curve

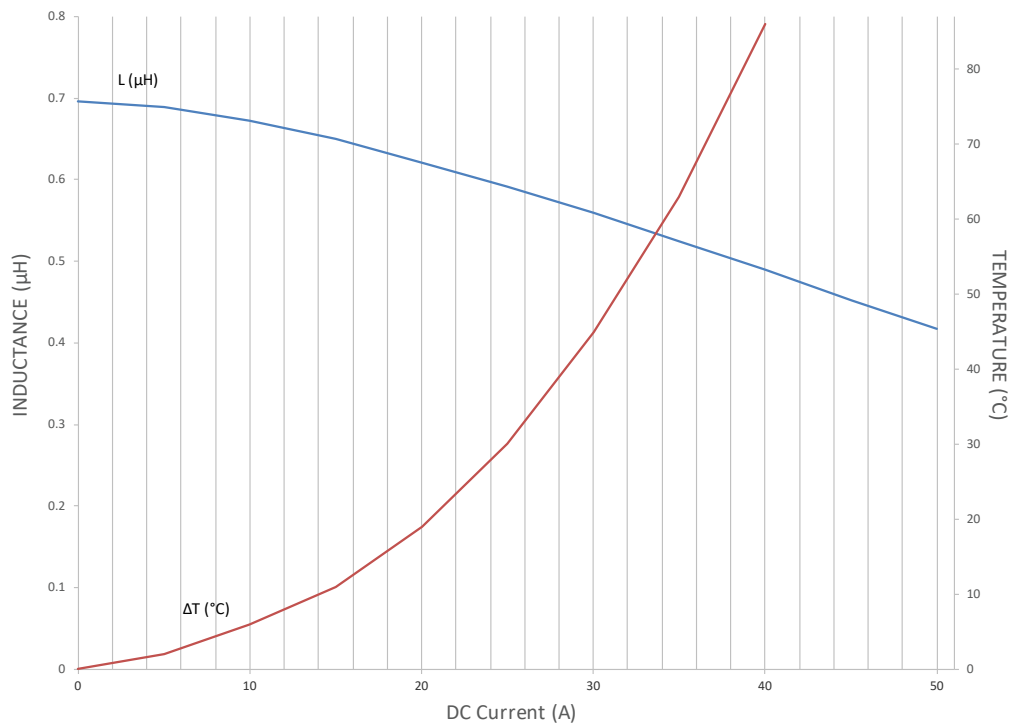
R56



LMLP1011M-R68

L&I Curve

R68



LMax Low Profile/High Current Power Inductor

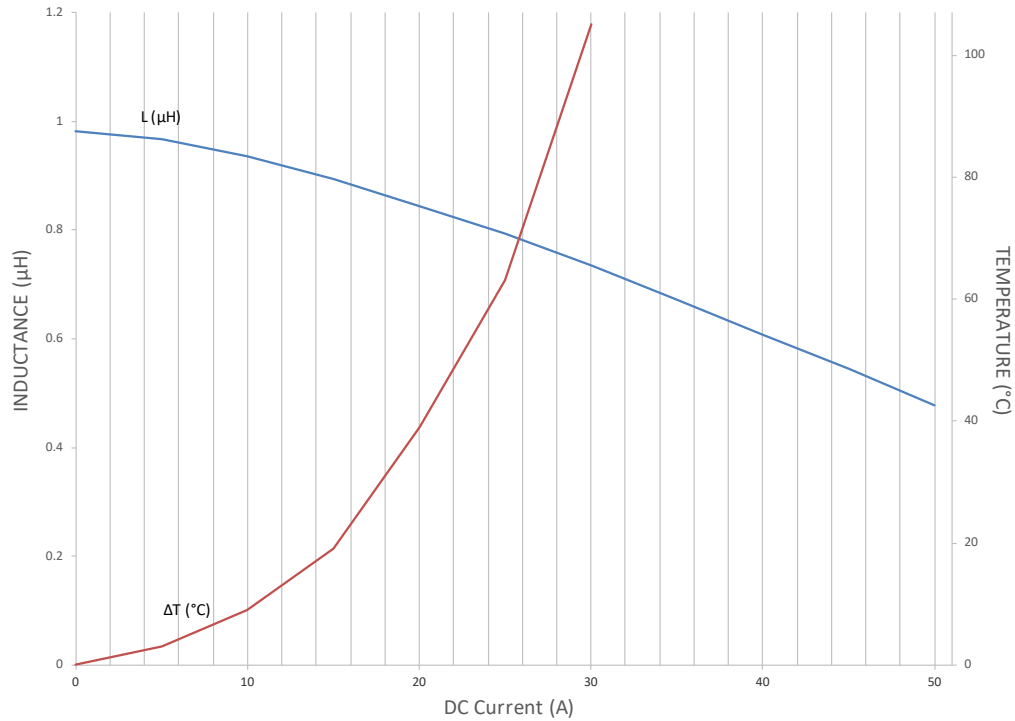
LMLP Series – Style D



LMLP1011M-1R0

L&I Curve

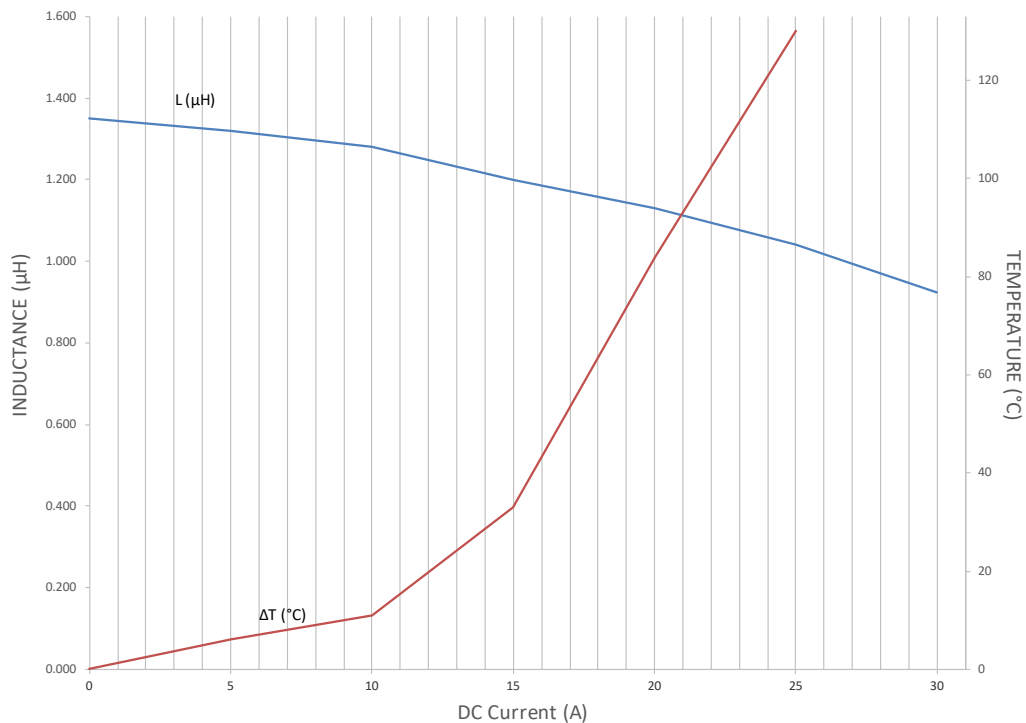
1R0



LMLP1011M-1R5

L&I Curve

1R5



LMax Low Profile/High Current Power Inductor

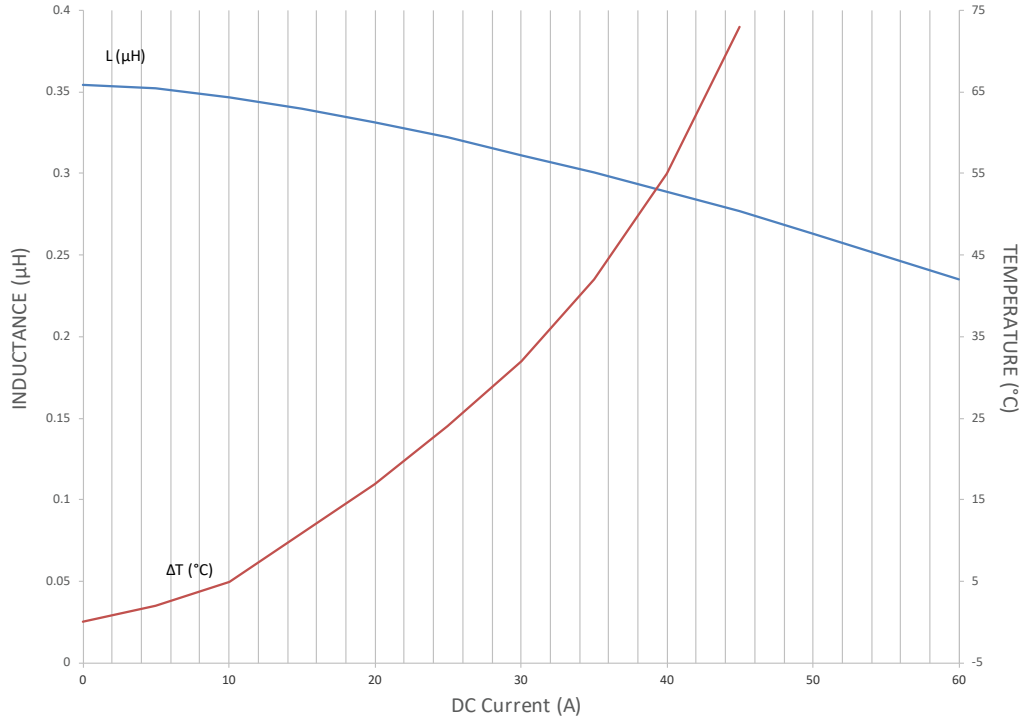
LMLP Series – Style D



LMLP1011M-R36

I&T Curve

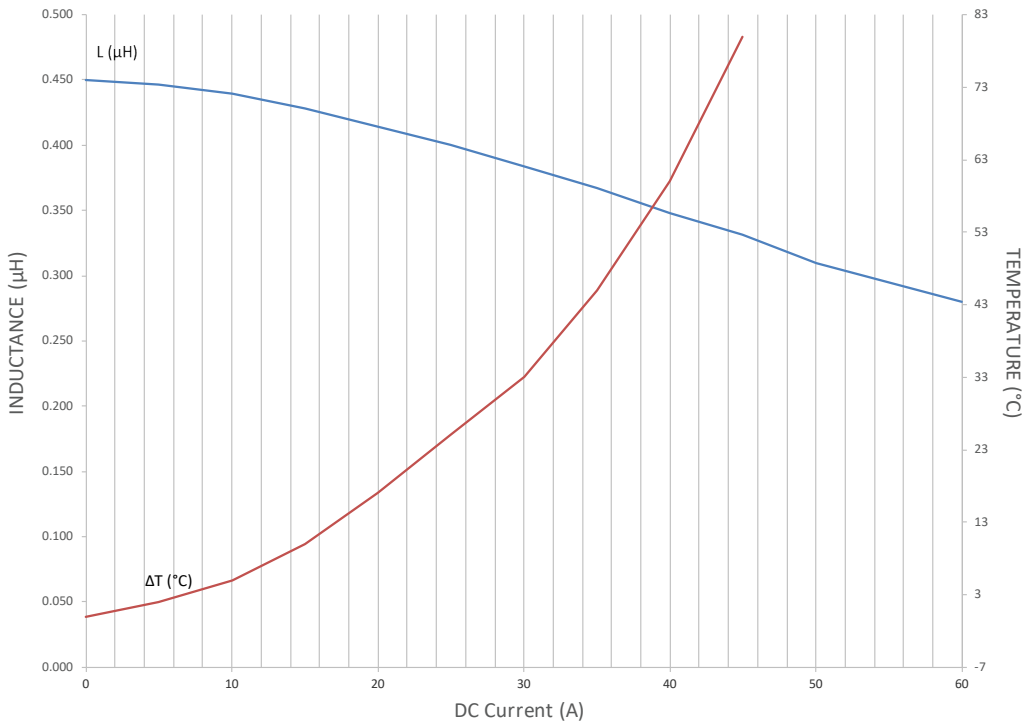
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LMLP1011M-R47

I&T Curve

R47



LMax Low Profile/High Current Power Inductor

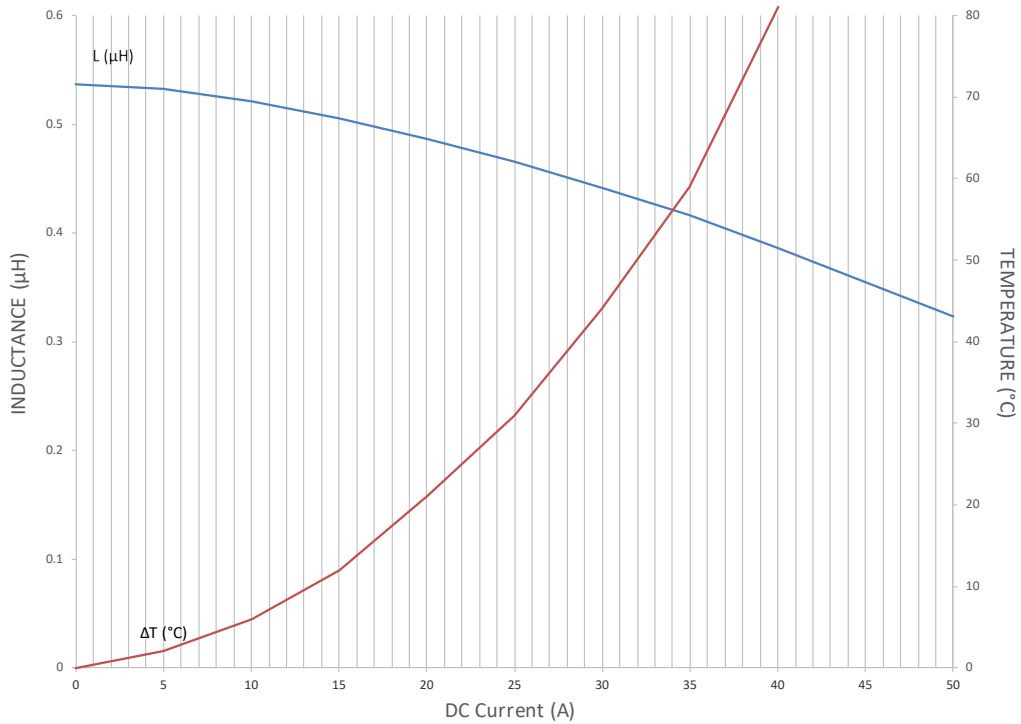
LMLP Series – Style D



LMLP1011M-R56

I&T Curve

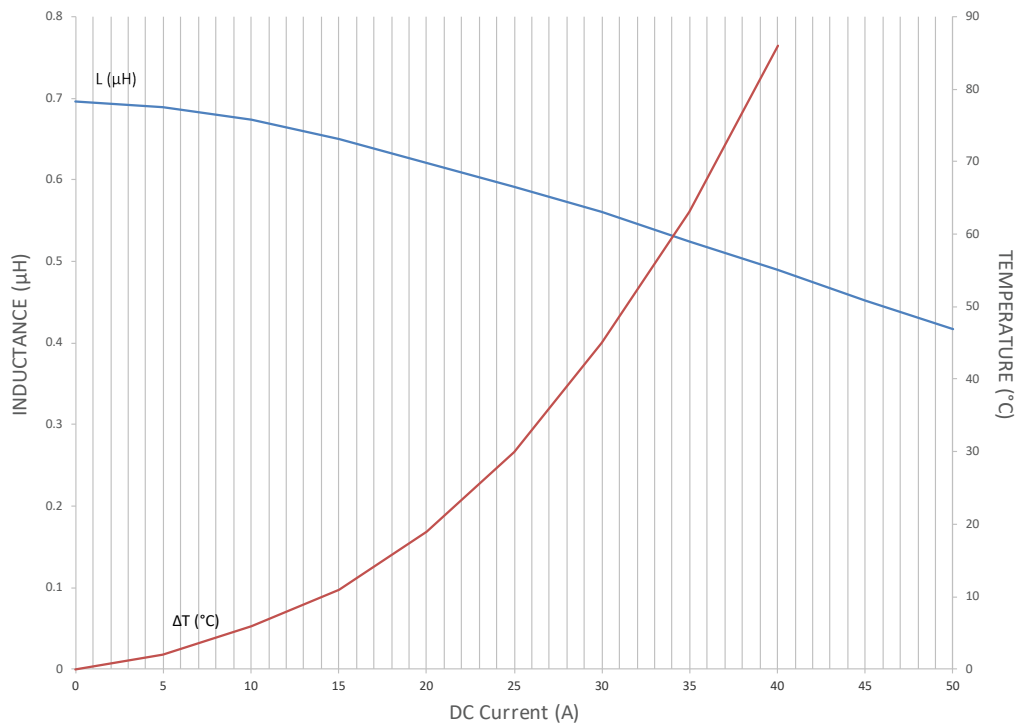
R56



LMLP1011M-R68

I&T Curve

R68



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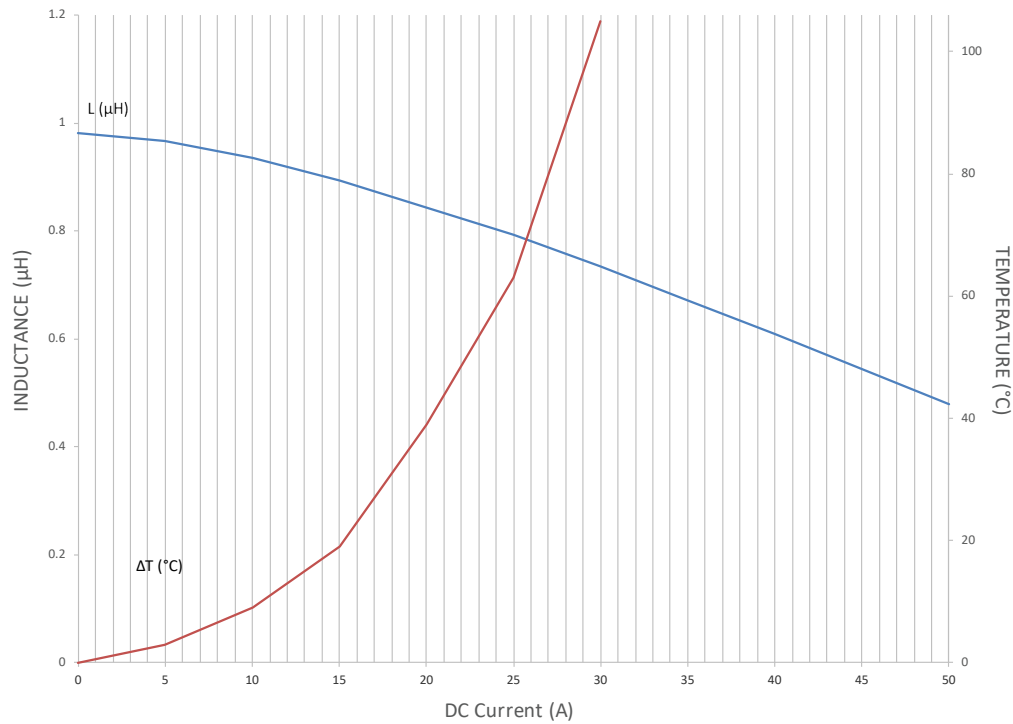
LMLP Series – Style D



LMLP1011M-1R0

I&T Curve

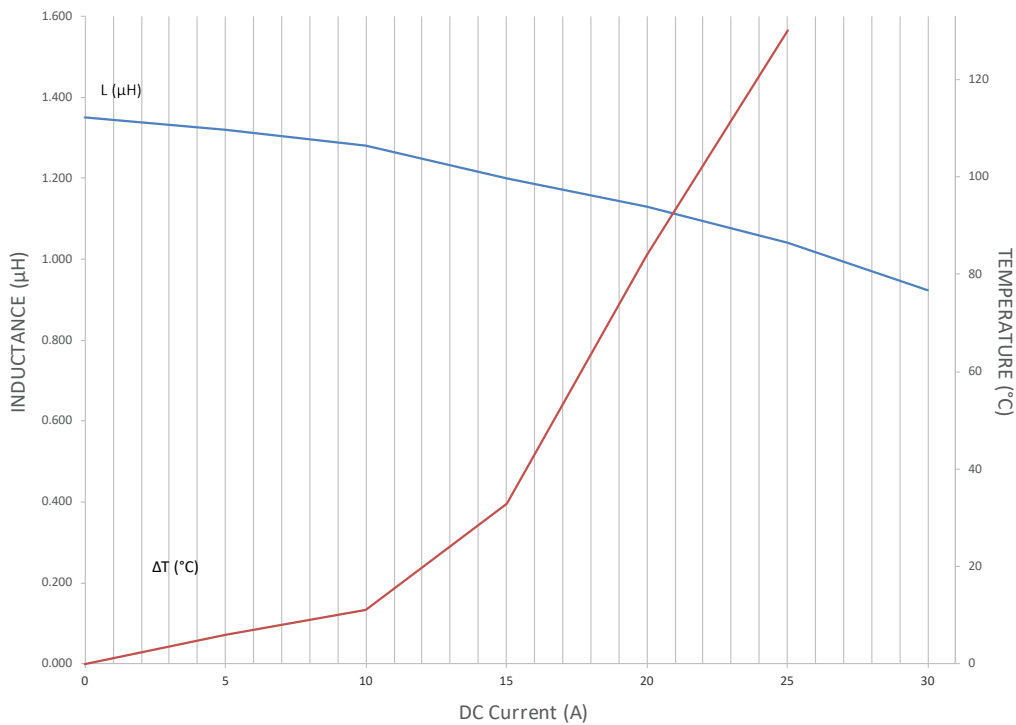
1R0



LMLP1011M-1R5

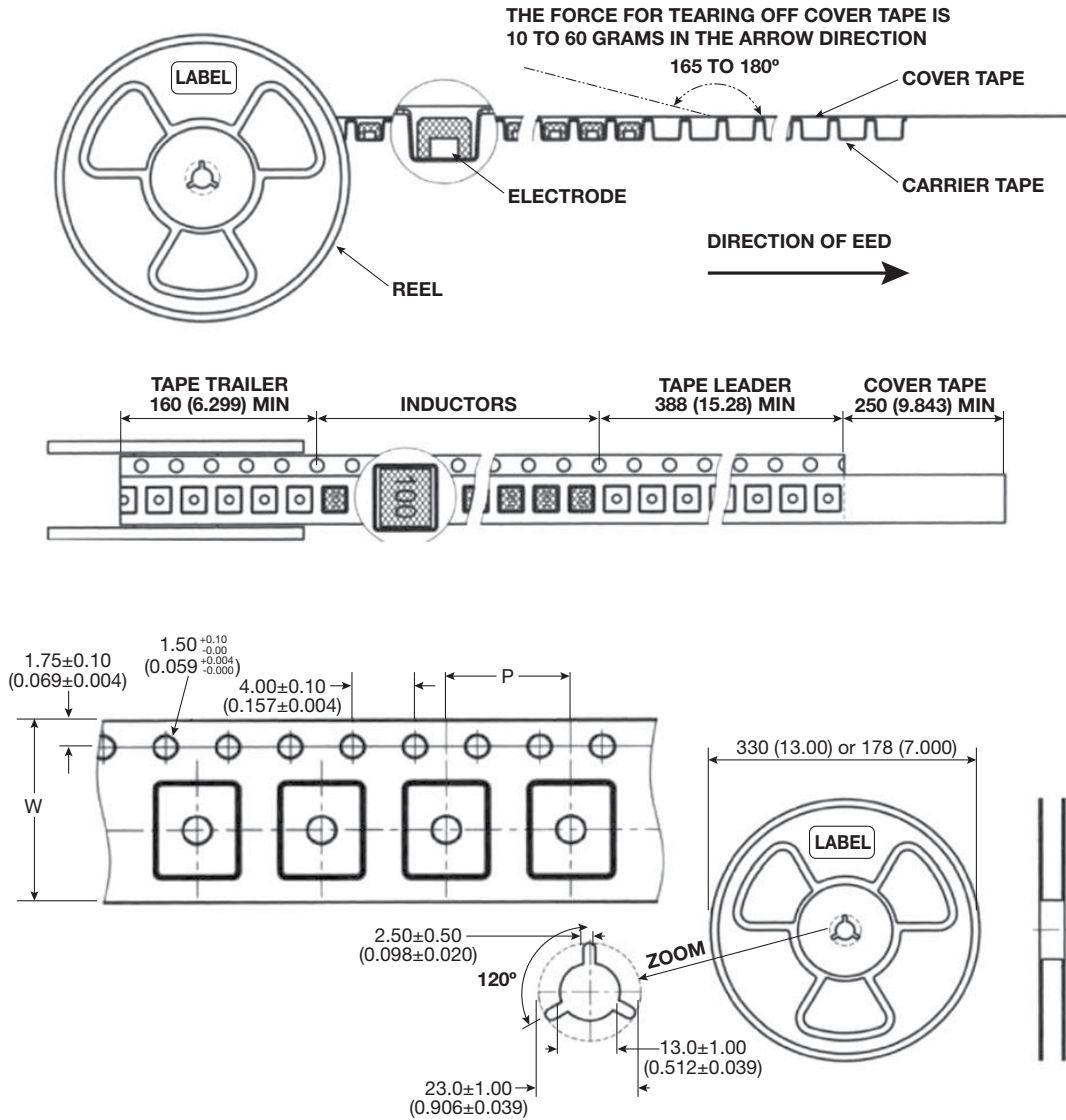
I&T Curve

1R5



LMax Low Profile/High Current Power Inductor

LMLP Series – Style D



| Size Code | Tape Size (mm) | | Reel Size | SPQ |
|-----------|----------------|----|-----------|------|
| | W | P | | |
| 0405 | 12 | 8 | 13" Reel | 2000 |
| 05A6 | 12 | 8 | 13" Reel | 3000 |
| 0506 | 12 | 8 | 13" Reel | 2000 |
| 0707 | 16 | 12 | 13" Reel | 1500 |
| 07B7 | 16 | 12 | 13" Reel | 1500 |
| 07A7 | 16 | 12 | 13" Reel | 1000 |
| 07C7 | 16 | 12 | 13" Reel | 800 |
| 1011 | 24 | 16 | 13" Reel | 500 |
| 1313 | 24 | 16 | 13" Reel | 500 |
| 13B3 | 24 | 20 | 13" Reel | 400 |

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