

STANDARD RECOVERY DIODE (Stud Version) | 普通整流二极管(螺旋式)

Features

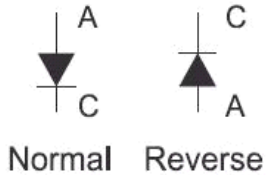
- High surge current capability
- Stud cathode and stud anode version
- Wide current range
- Metric device version available



Typical Applications

- Battery charges
- Converters
- Power supplies
- Machine tool controls
- Welder ■ Motor controls

Polarity



Ordering Information Table

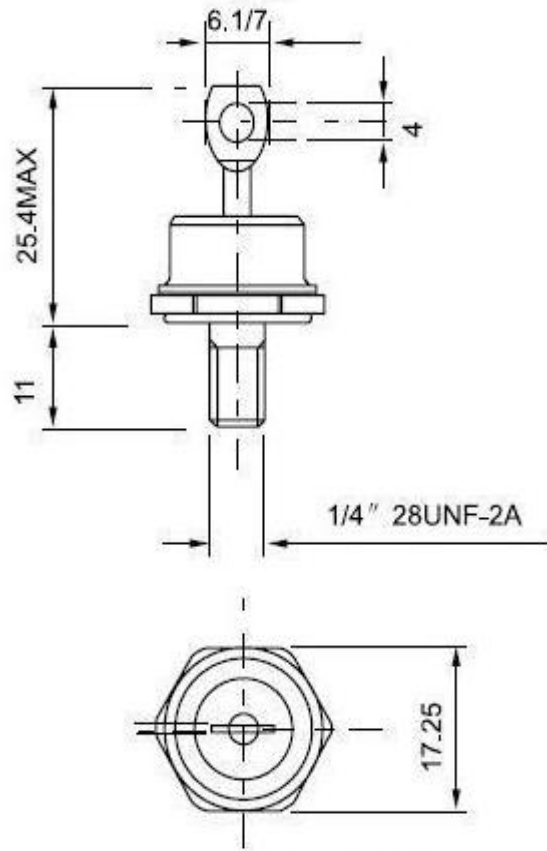
Device Code	FR	70	HF	R	120	M
	①	②	③	④	⑤	⑥
1	-None=Standard recovery diodes; FR=Fast recovery diodes					
2	-Current code= $I_{F(AV)}$					
3	-Outline code: F=DO-4 case 6A~25A; HF=DO-5 case 30A~85A U=DO-8,DO-9 case 100A~300A					
4	-None=Stud Normal Polarity (cathode to stud) R=Stud Reverse Polarity (anode to stud)					
5	-Voltage code=code x 10= V_{RRM}					
6	-None=Standard inch Device; M=Metric Device					

ELECTRICAL CHARACTERISTICS

Symbol	Parameter	Conditions	40HF(R)	50HF(R)	70HF(R)	85HF(R)	Unit
$I_{F(AV)}$	Average on-state current	THS=55°C	40	50	70	85	A
$I_{F(RMS)}$	RMS on-state current	THS=55°C	64	80	112	160	A
V_{RRM}	Repetitive peak reverse voltage	THS=140°C	400-1200		400-1600		V
V_{DRM}	Repetitive peak reverse voltage	THS=140°C	400-1200		400-1600		V
I_{RRM}	Repetitive peak reverse current	THS=140°C	10	10	12	12	mA
V_{FM}	On-state voltage	THS=140°C	1.3	1.4	1.45	1.45	V
I_{FM}	On-state Current	THS=140°C	120	150	210	240	A
R j-c	Peak gate forward voltage		≤0.8	≤0.8	≤0.6	≤0.5	°C/W
T_j	Junction temperature		-40~+150				°C
T_{stg}	Storage temperature		-40~+125				°C
MT	Mounting torque		≤2.0				N·m
Wt	Weight	Typical value	19	19	20	20	g

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Outline table



For metric devices: M6 × 1

DO-5

Dimension in mm

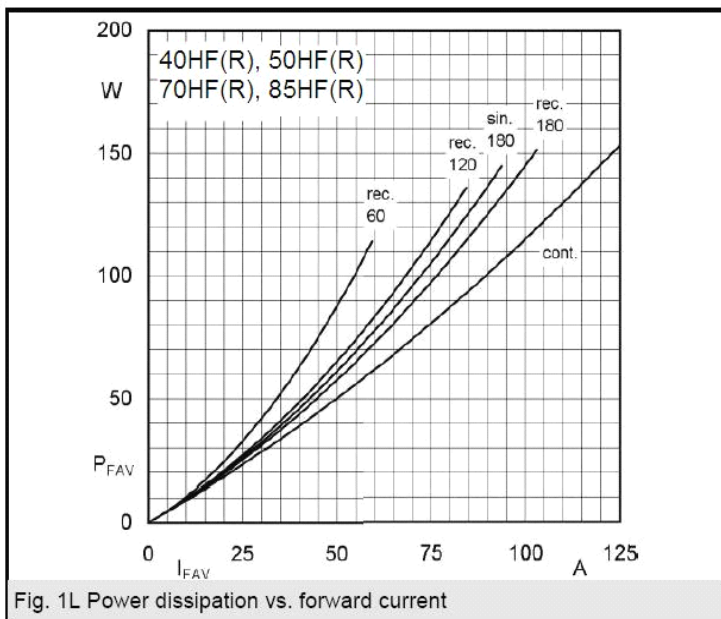


Fig. 1L Power dissipation vs. forward current

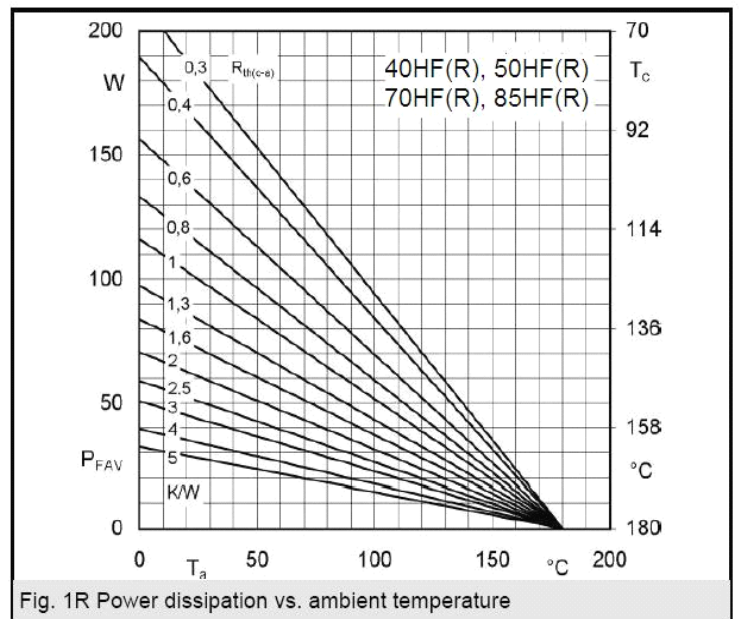


Fig. 1R Power dissipation vs. ambient temperature

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