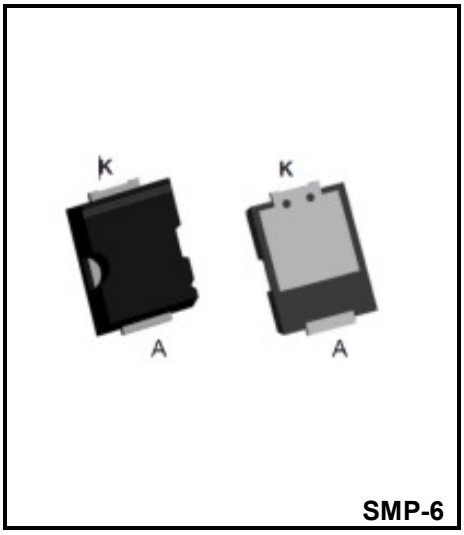
Surface Mount Superfast Recovery Rectifier

Reverse Voltage - 400 V

Forward Current - 10 A



FEATURES

- Low profile package
- Ideal for automated placement
- Glass passivated chip junction
- High forward surge capability
- Super fast reverse recovery time
- Lead free in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA

- Case: SMP-6
- High temperature soldering guaranteed:260℃ seconds
- Terminals: Solderable per MIL-STD-750, Method 2026

Absolute Maximum Ratings and characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Parameter	Symbols	SRA4ES	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	400	V
Maximum RMS voltage	V_{RMS}	280	V
Maximum DC Blocking Voltage	V_{DC}	400	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	10	A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave @ T_j = 25 °C	I_{FSM}	175	A
Maximum Instantaneous Forward Voltage at 5 A	V_F	1.3	V
Maximum DC Reverse Current T_a = 25 °C at Rated DC Blocking Voltage T_a=125 °C	I_R	10 250	μA
Rating for fusig (t<8.3ms)	I^2t	127.5	A2sec
Maximum Reverse Recovery Time (1)	Trr	35	nS
Typical Thermal Resistance (2)	$R_{\theta JC}$	7.0	°C/W
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150	°C

(1) Measured with I_F=0.5A,I_R=1A,I_n=0.25A

(2) P.C.B. mounted with 30cmX30cmX1mm copper pad areas.

RATINGS AND CHARACTERISTIC CURVES

Ratings and Characteristic Curves (T_A=25°C unless otherwise noted)

Fig.1-Forward Current Derating Curve

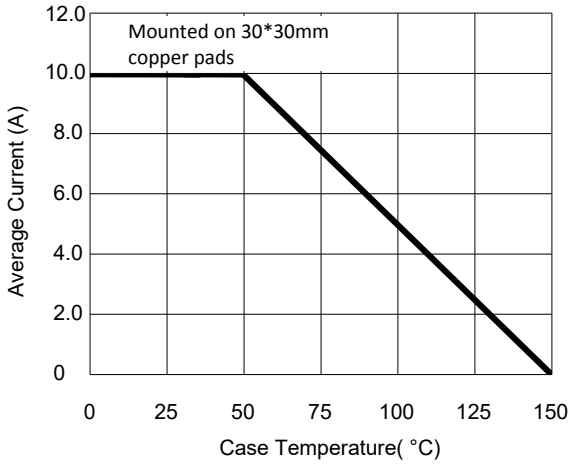


Fig.2- Surge Current Derating Curve

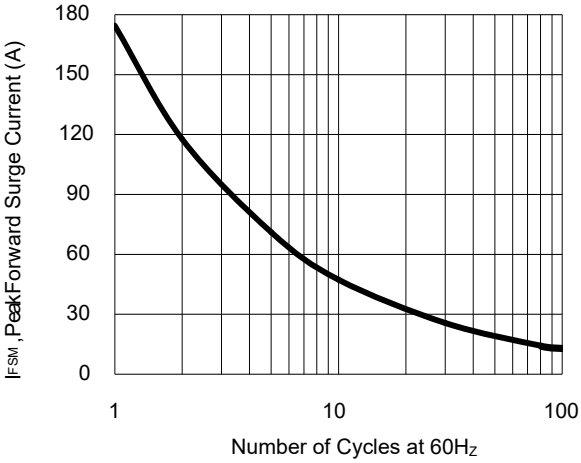


Fig.3- Typical Forward Voltage Characteristic

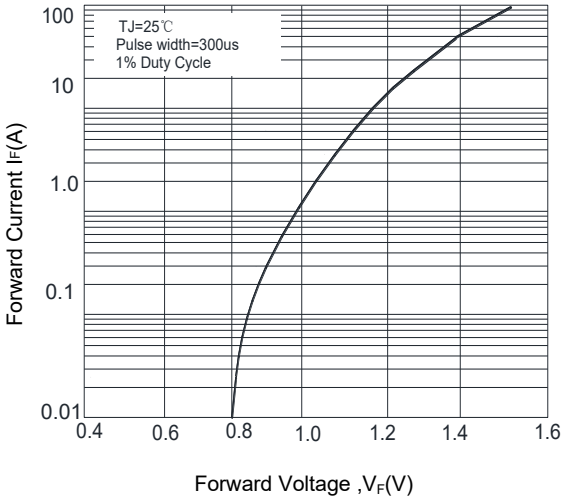
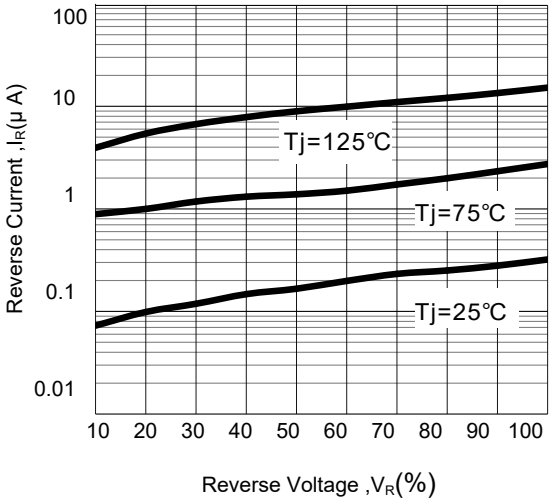


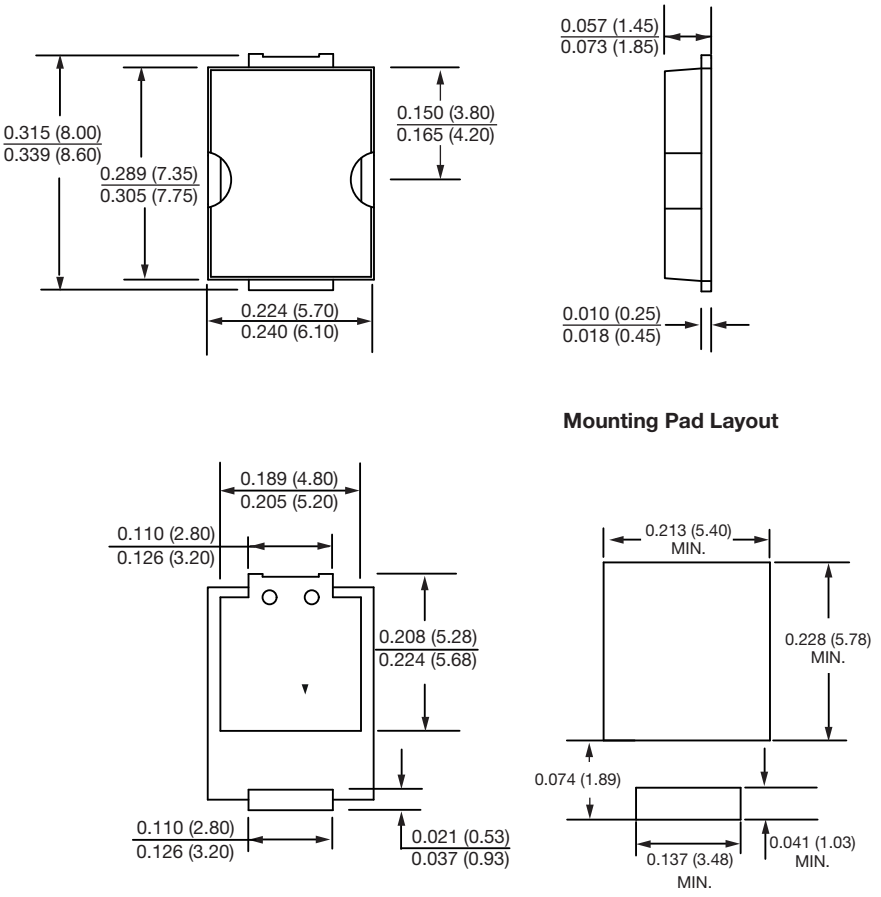
Fig.4- Typical Reverse Characteristic



Package Outline SMP6

Plastic surface mounted package; 2 leads

SMP6



Dimensions in inches and (millimeters)