

**Surface Mount Superfast Recovery Rectifier**

**Reverse Voltage - 400 V**

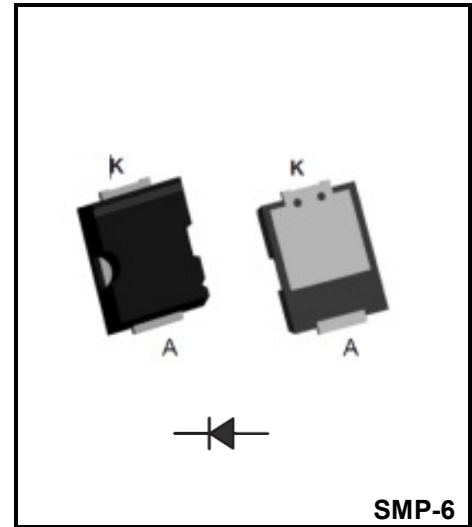
**Forward Current - 10 A**

**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°C seconds
- ◆ Terminals: Solderable per MIL-STD-750, Method 2026



**Maximum Ratings and Electrical Characteristics Ratings (Ta = 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 @ $T_j = 25\text{ }^\circ\text{C}$	$I_{FSM}$	175	A
Maximum Instantaneous Forward Voltage at 5 A	$V_F$	1.3	V
Maximum DC Reverse Current $T_a = 25\text{ }^\circ\text{C}$ at Rated DC Blocking Voltage $T_a = 125\text{ }^\circ\text{C}$	$I_R$	10 250	$\mu\text{A}$
Rating for fusig ( $t < 8.3\text{ms}$ )	$I^2t$	127.5	A <sup>2</sup> sec
Maximum Reverse Recovery Time <sup>(1)</sup>	$T_{rr}$	35	nS
Typical Thermal Resistance <sup>(2)</sup>	$R_{\theta JC}$	7.0	$^\circ\text{C/W}$
Operating and Storage Temperature Range	$T_j, T_{stg}$	-55 ~ +150	$^\circ\text{C}$

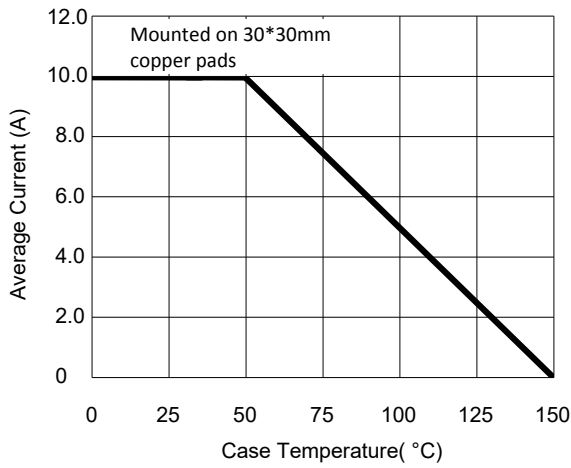
(1) Measured with  $I_F=0.5\text{A}, I_R=1\text{A}, I_n=0.25\text{A}$

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

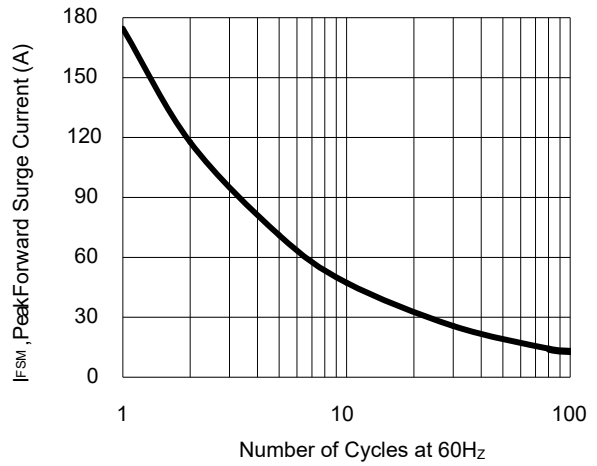
**RATINGS AND CHARACTERISTIC CURVES**

**Ratings and Characteristic Curves** ( $T_A=25^{\circ}\text{C}$  unless otherwise noted)

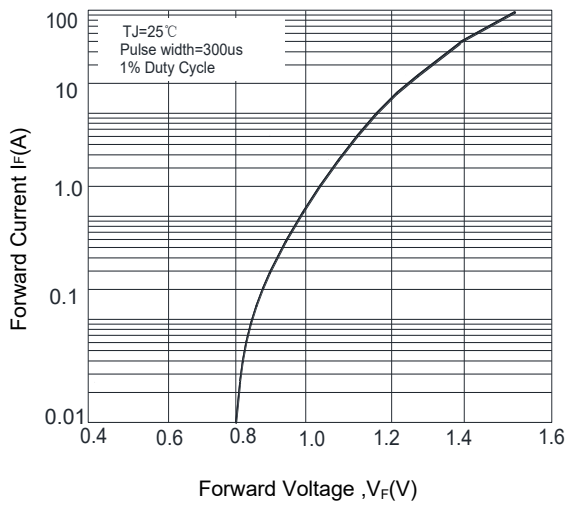
**Fig.1-Forward Current Derating Curve**



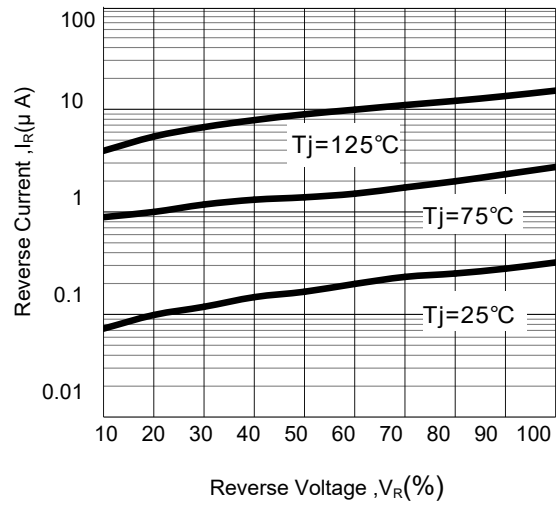
**Fig.2- Surge Current Derating Curve**



**Fig.3- Typical Forward Voltage Characteristic**



**Fig.4- Typical Reverse Characteristic**



**Marking Diagram**

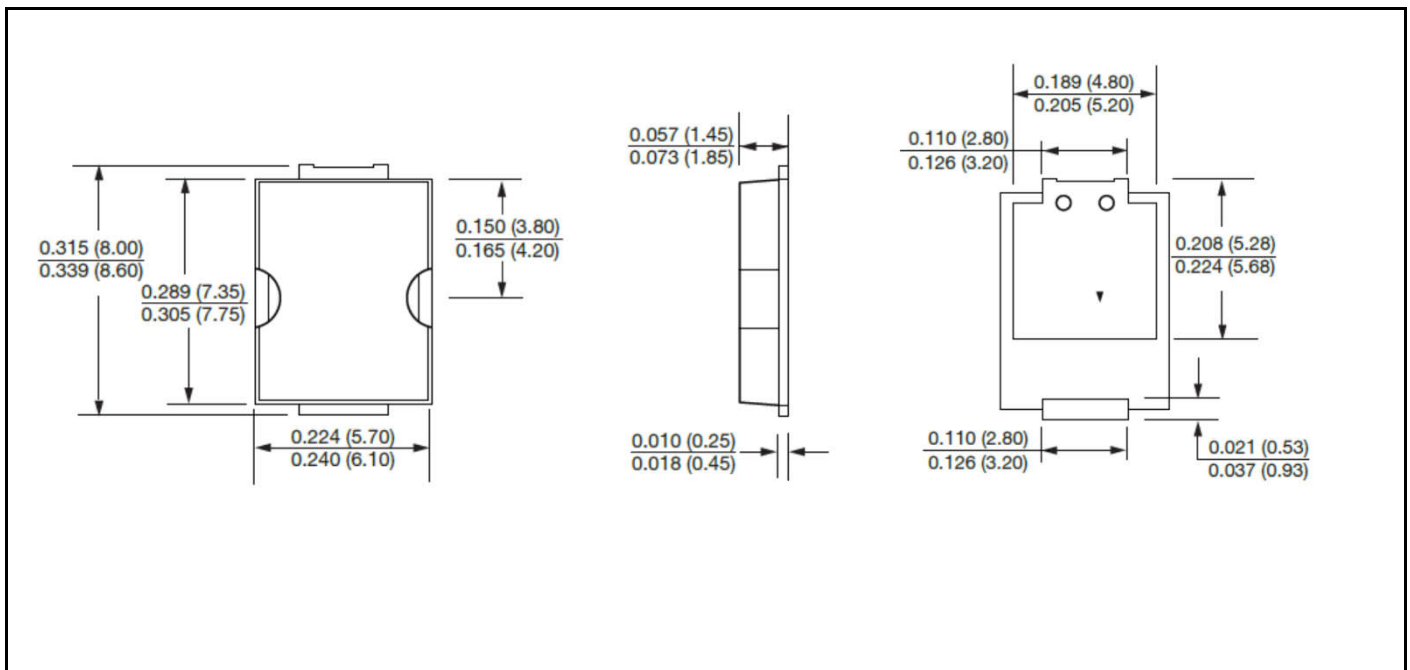


**Ordering information**

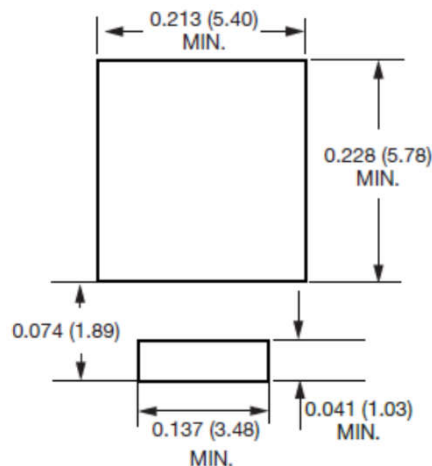
Package	Packing Description	Packing Quantity
SMP-6	Tape/Reel,13"reel	3000PCS/Reel 30000PCS/Carton

**Package Dimensions(Millimeter/ Inches)**

**SMP-6**



**The recommended mounting pad size(Millimeter/ Inches)**



## Disclaimer

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