

## SURFACE MOUNT GENERAL PURPOSE SILICON RECTIFIERS

### FEATURES

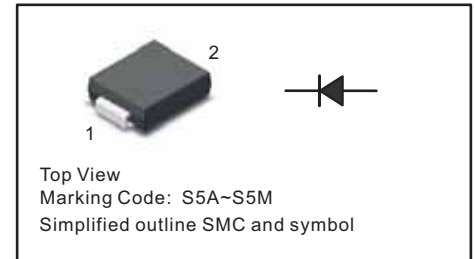
- For surface mounted applications
- Low profile package
- Glass Passivated Chip Junction
- Easy to pick and place
- Lead free in comply with EU RoHS 2011/65/EU directives

### MECHANICAL DATA

- Case: SMC
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.22g / 0.0077oz

### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



### Maximum Ratings and Electrical characteristics

- Ratings at 25 °C ambient temperature unless otherwise specified.
- Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	S5A	S5B	S5D	S5G	S5J	S5K	S5M	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	5							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	$I_{FSM}$	150							A
Maximum Instantaneous Forward Voltage at 5 A	$V_F$	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	5 100							$\mu A$
Typical Junction Capacitance <sup>(1)</sup>	$C_j$	50							pF
Typical Thermal Resistance <sup>(2)</sup>	$R_{\theta JA}$ $R_{\theta JC}$	35 13							°C/W
Operating and Storage Temperature Range	$T_j, T_{stg}$	-55 ~ +150							°C

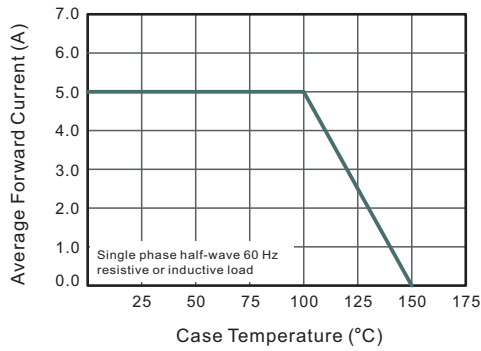
#### Notes:

1. Measured at 1 MHz and applied reverse voltage of 4 V D.C
2. P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.

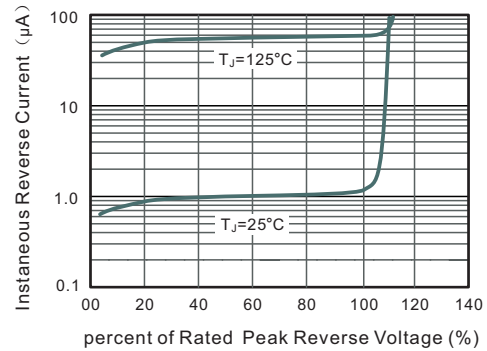
**SURFACE MOUNT GENERAL PURPOSE SILICON RECTIFIERS**

**RATINGS AND CHARACTERISTIC CURVES S5A - S5M**

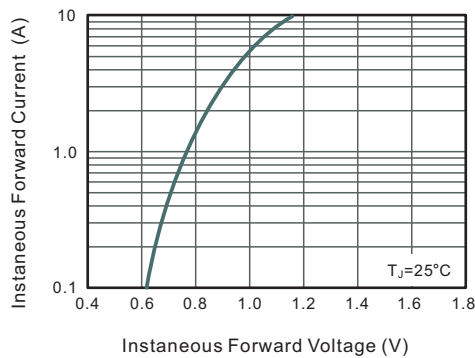
**Fig.1 Forward Current Derating Curve**



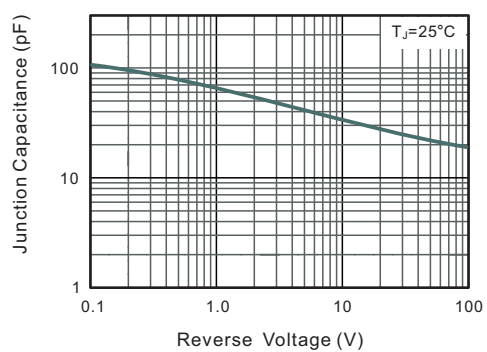
**Fig.2 Typical Reverse Characteristics**



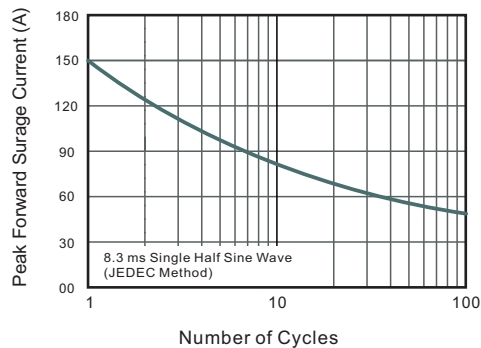
**Fig.3 Typical Forward Characteristic**



**Fig.4 Typical Junction Capacitance**



**Fig.6 Maximum Non-Repetitive Peak Forward Surge Current**

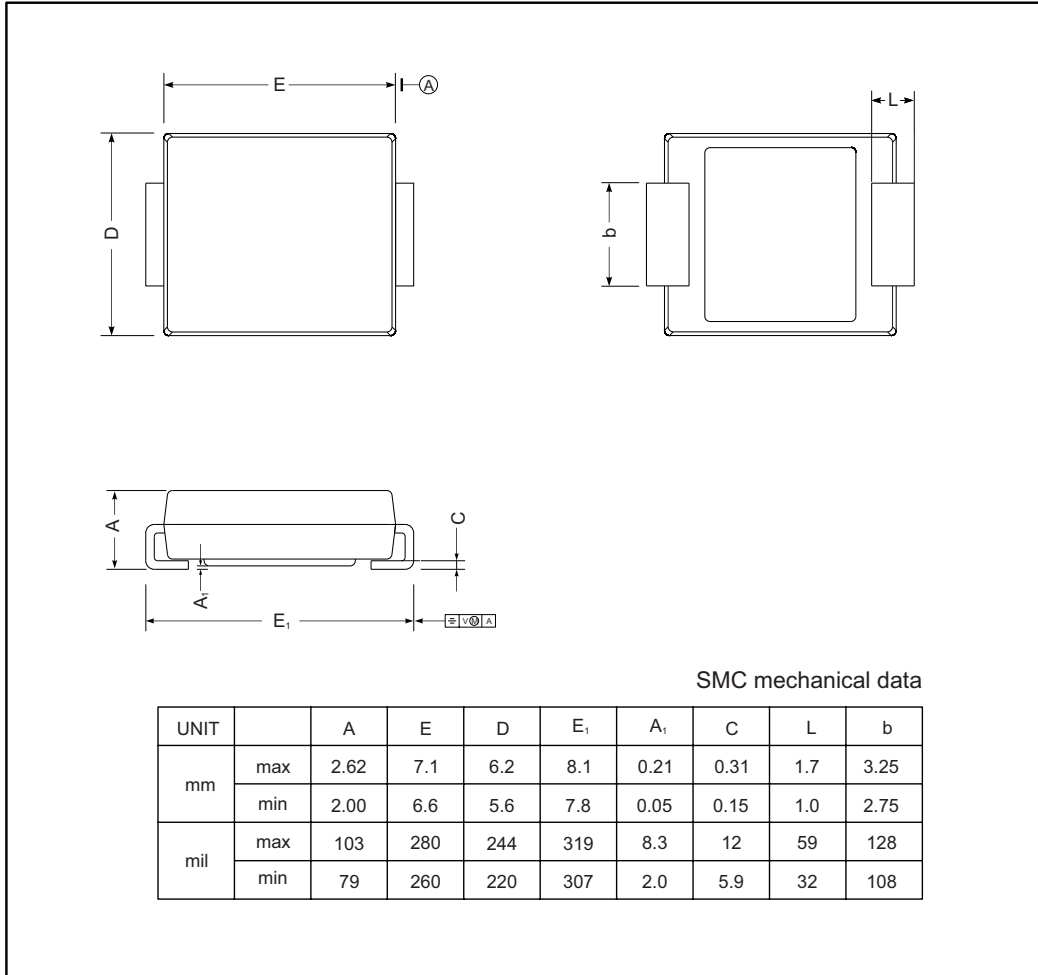


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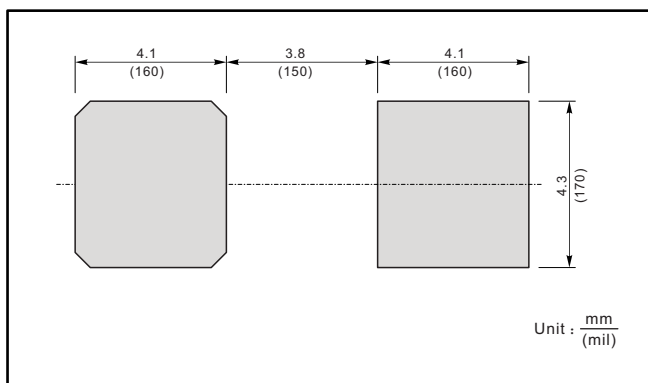
### PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SMC



### The recommended mounting pad size



### Marking

Type number	Marking code
S5A	S5A
S5B	S5B
S5D	S5D
S5G	S5G
S5J	S5J
S5K	S5K
S5M	S5M

### Disclaimer

All product, product specifications and data are subject to change without notice to improve reliability, function or design or otherwise.