

## Surface Mount General Purpose Silicon Rectifiers

**Reverse Voltage - 1000 V**

**Forward Current - 3 A**

### FEATURES

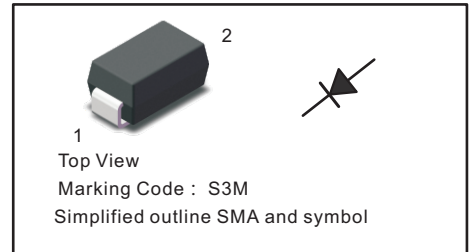
- For surface mounted applications
- Low profile package
- Glass Passivated Chip Junction
- Easy to pick and place
- Lead free in comply with EU RoHS 2011/65/EU directives

### MECHANICAL DATA

- Case: SMA
- Terminals: Solderable per MIL-STD-750, Method 2026

### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



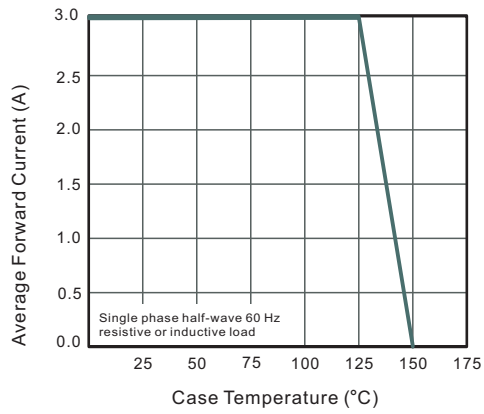
### Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

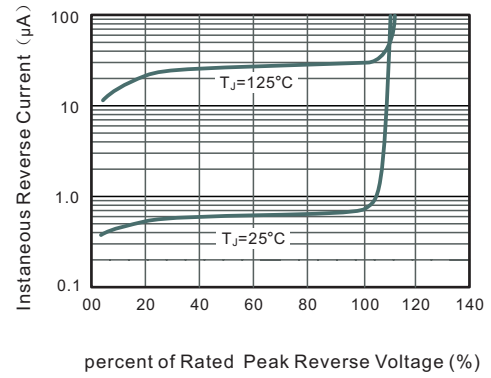
Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	S3M	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	1000	V
Maximum RMS voltage	$V_{RMS}$	700	V
Maximum DC Blocking Voltage	$V_{DC}$	1000	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	3	A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	$I_{FSM}$	60	A
Maximum Instantaneous Forward Voltage at 2 A	$V_F$	1.1	V
Maximum DC Reverse Current $T_a = 25\text{ °C}$ at Rated DC Blocking Voltage $T_a = 125\text{ °C}$	$I_R$	5 100	$\mu A$
Operating and Storage Temperature Range	$T_j, T_{stg}$	-55 ~ +150	°C

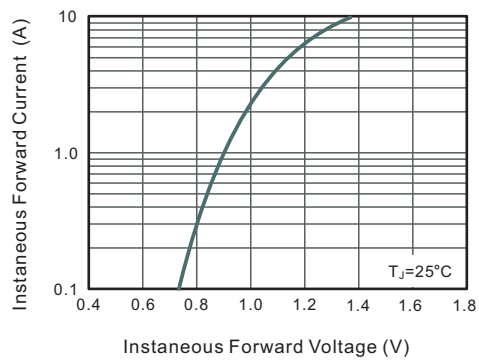
**Fig.1 Forward Current Derating Curve**



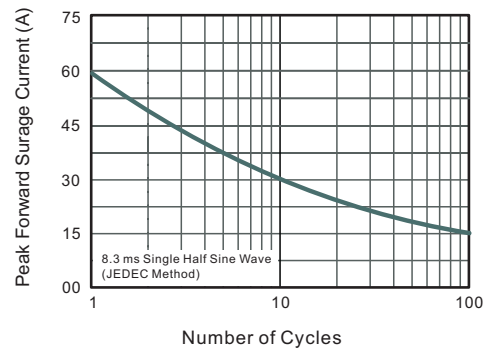
**Fig.2 Typical Reverse Characteristics**



**Fig.3 Typical Forward Characteristic**



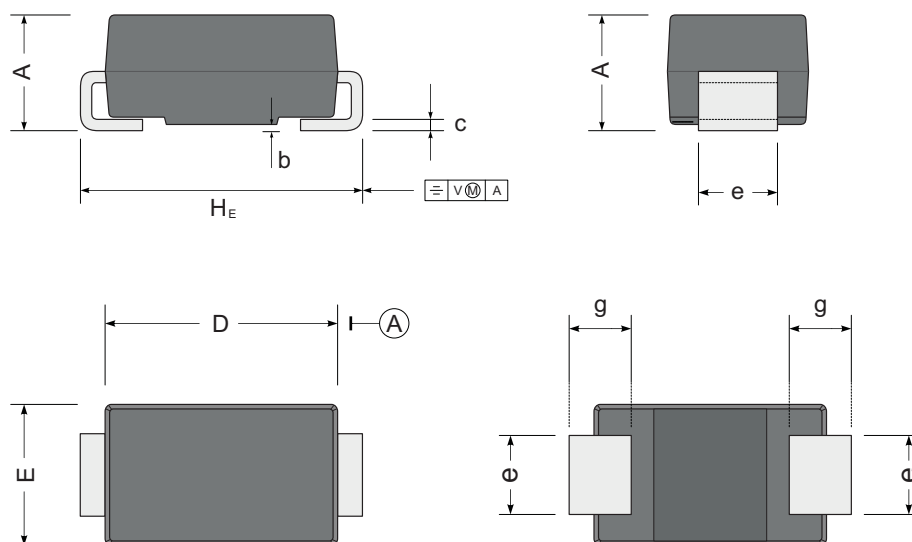
**Fig.4 Maximum Non-Repetitive Peak Forward Surge Current**



## PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SMA



UNIT		A	D	E	H <sub>E</sub>	c	e	g	b
mm	max	2.4	4.5	2.7	5.2	0.31	1.6	1.5	0.2
	min	2.0	4.0	2.3	4.7	0.15	1.3	0.9	0.05
mil	max	94	181	106	205	12	63	59	7.9
	min	78	157	91	185	6	51	35	2

### The recommended mounting pad size

