

## Surface Mount General Purpose Silicon Rectifiers

Reverse Voltage - 50 to 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

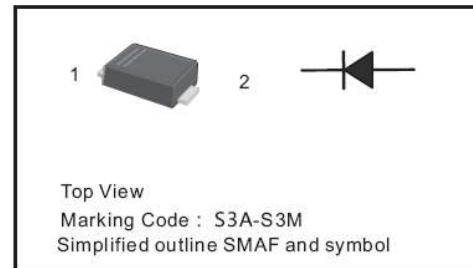
- Case: SMAF
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 27mg 0.00086oz

### 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 %.

### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Parameter	Symbols	S3AF	S3BF	S3DF	S3GF	S3JF	S3KF	S3MF	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 at $T_a = 65^\circ\text{C}$	$I_{F(AV)}$	3							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	100							A
Maximum Instantaneous Forward Voltage at 3A	$V_F$	1.2							V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_a = 25^\circ\text{C}$ $T_a = 125^\circ\text{C}$	$I_R$	5 250							$\mu\text{A}$
Typical Junction Capacitance <sup>1)</sup>	$C_j$	53							pF
Typical Thermal Resistance <sup>2)</sup>	$R_{\theta JA}$	13 47							$^\circ\text{C/W}$
Operating and Storage Temperature Range	$T_j, T_{stg}$	-55 ~ +150							$^\circ\text{C}$

<sup>1)</sup> Measured at 1 MHz and applied reverse voltage of 4 V D.C    <sup>2)</sup> Thermal resistance from junction to ambient at 0.375" (9.5 mm) lead length, P.C.B. mounted

SHIKE MAKE CONSCIOUS PRODUCT

CONSCIOUS PRODUCTS BEGIN WITH CONSCIOUS PEOPLE

REV.07



www.shike.tw

Fig.1 Forward Current Derating Curve

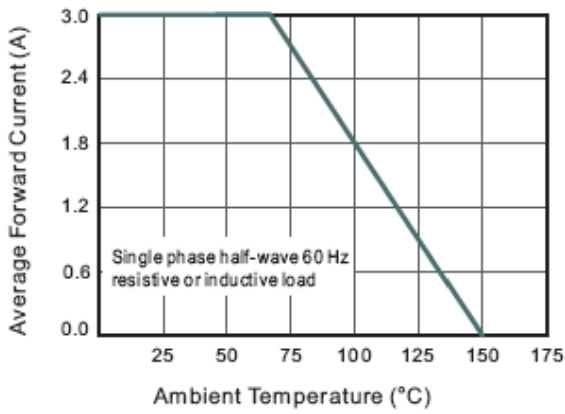


Fig.2 Typical Instaneous Reverse Characteristics

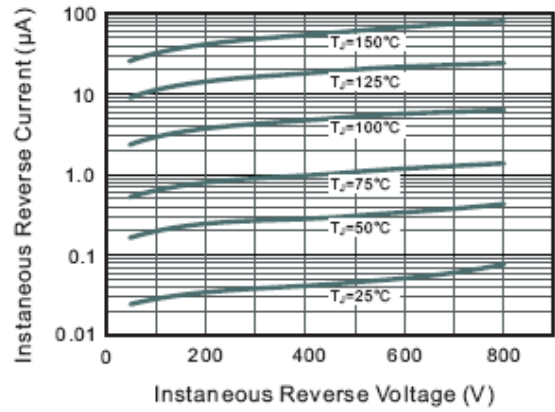


Fig.3 Typical Forward Characteristic

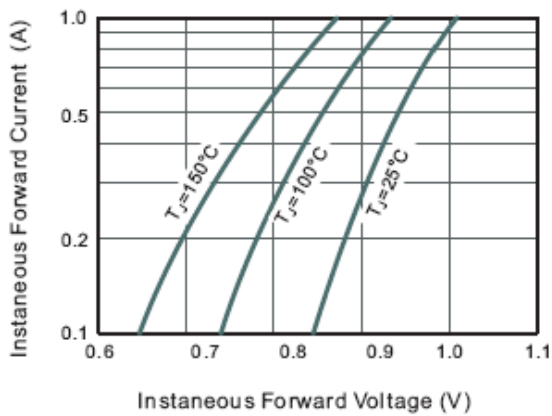
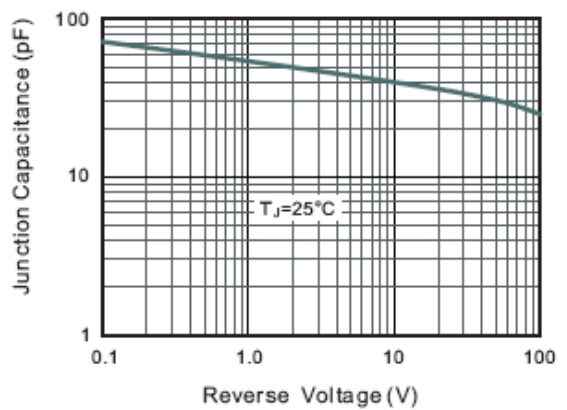
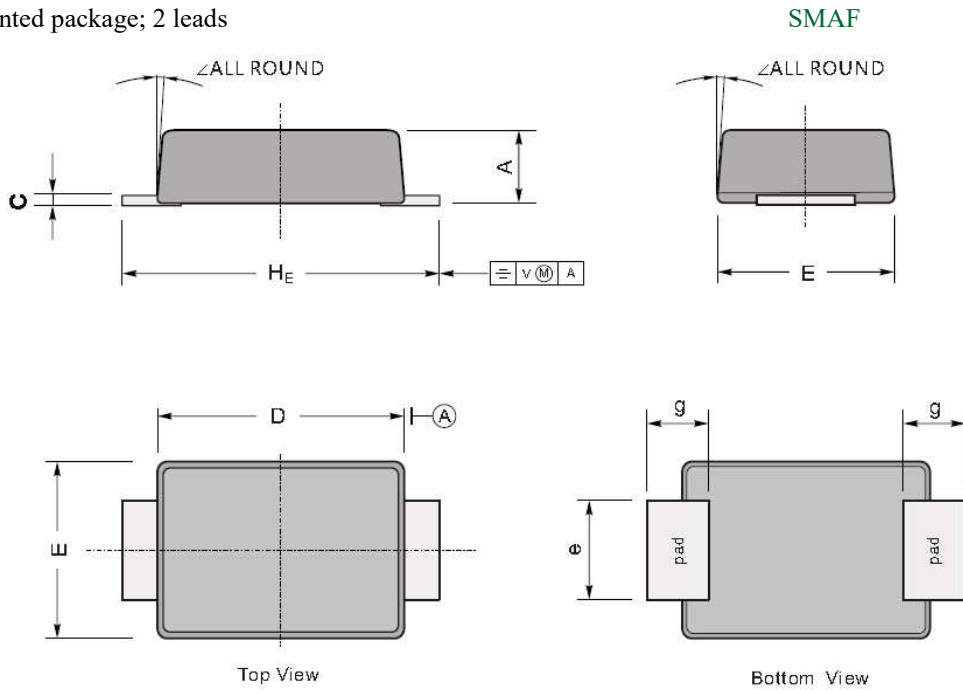


Fig.4 Typical Junction Capacitance



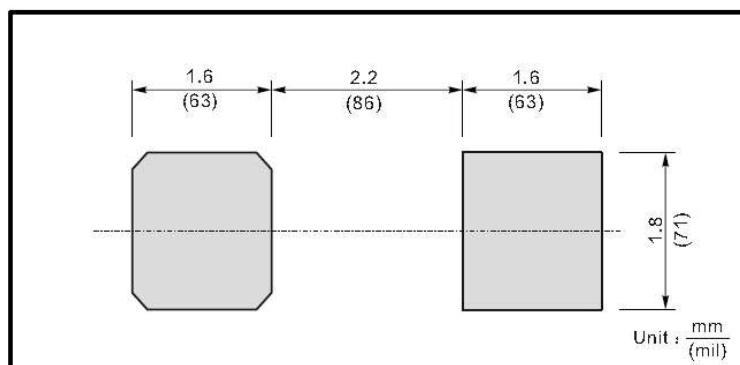
## PACKAGE OUTLINE

Plastic surface mounted package; 2 leads



UNIT		A	C	D	E	e	g	H <sub>E</sub>	∠
mm	max	1.1	0.20	3.7	2.7	1.6	1.2	4.9	7°
	min	0.9	0.12	3.3	2.4	1.3	0.8	4.4	
mil	max	43	7.9	146	106	63	47	193	
	min	35	4.7	130	94	51	31	173	

### The recommended mounting pad size



SHIKE MAKE CONSCIOUS PRODUCT

CONSCIOUS PRODUCTS BEGIN WITH CONSCIOUS PEOPLE

REV.07



www.shike.tw