

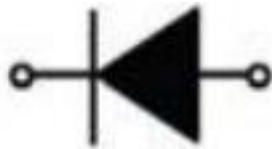
Descriptions

This is 1 Amps 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

Equivalent Circuit



1.Cathode 2. Anode

Pinning



SMAF

Absolute Maximum Ratings(Ta=25°C)

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

Parameter	Symbols	M1	M2	M3	M4	M5	M6	M7	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 $T_c = 125 \text{ } ^\circ\text{C}$	$I_{F(AV)}$	1							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	30							A
Maximum Instantaneous Forward Voltage at 1 A	V_F	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_a = 25 \text{ } ^\circ\text{C}$ $T_a = 125 \text{ } ^\circ\text{C}$	I_R	5 50							μA
Typical Junction Capacitance (1)	C_j	15							pF
Typical Thermal Resistance (2)	$R_{\theta JA}$	80							$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150							$^\circ\text{C}$

- (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 .

Typical Characteristics

Fig.1 Forward Current Derating Curve

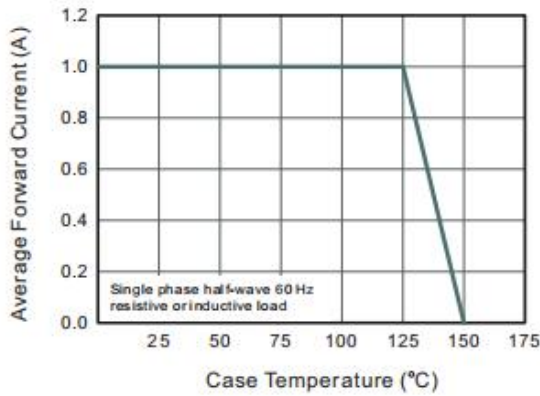


Fig.2 Typical Instaneous Reverse Characteristics

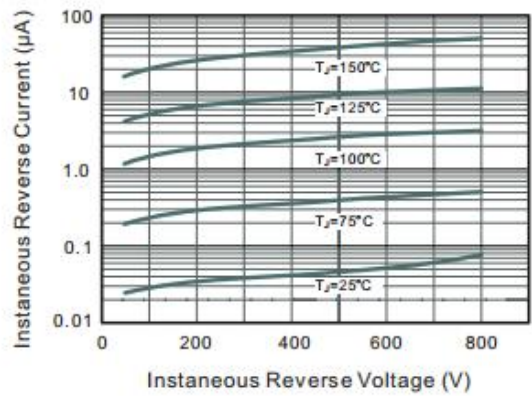


Fig.3 Typical Forward Characteristic

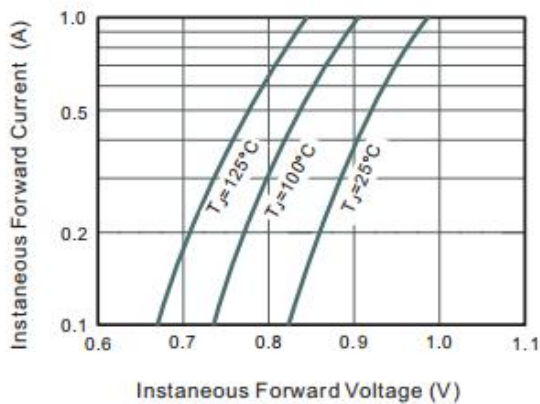


Fig.4 Typical Junction Capacitance

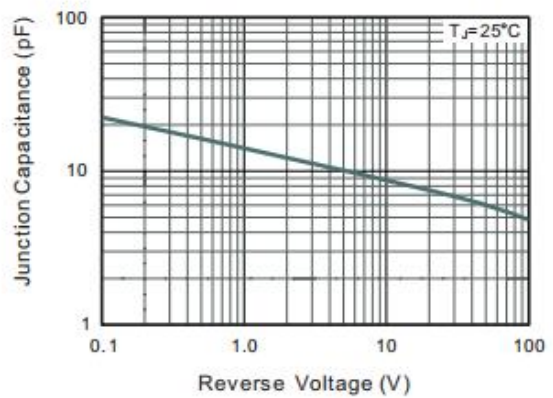
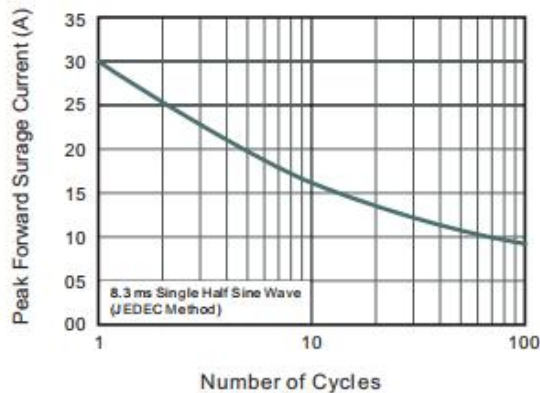


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



Package Outline Dimensions

SMAF

Unit: mm

