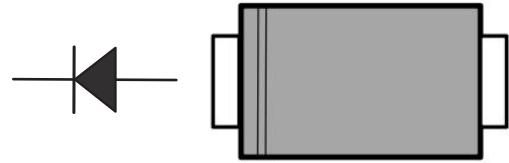


### Surface Mount General Purpose Silicon Rectifiers

Parameter	Value	Unit
$V_{RRM}$	50~1000	V
$I_{F(AV)}$	1.0	A



SMAF

#### Features

- For surface mounted applications
- Low profile package
- Glass Passivated Chip Junction
- Easy to pick and place

#### Applications

- For use in general purpose rectification in power supplies, inverters, converters, and as freewheeling diodes for consumer and telecommunications applications.

### Absolute Maximum Ratings And Characteristics (at $T_J = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	M1F	M2F	M3F	M4F	M5F	M6F	M7F	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 $T_C=125^\circ\text{C}$	$I_{F(AV)}$	1.0							A
Peak Forward Surge Current 8.3ms Single Half Sine Wave Superimposed on Rated Load	$I_{FSM}$	30							A
Maximum Instantaneous Forward Voltage at 1A	$V_F$	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	5 50							$\mu\text{A}$
Typical Junction Capacitance (1)	$C_j$	15							pF
Typical Thermal Resistance (2)	$R_{\theta JA}$	80							$^\circ\text{C}/\text{W}$
Operating and Storage Temperature Range	$T_j, T_{stg}$	-55 ~ +150							$^\circ\text{C}$

#### 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.

## Typical Characteristics

Fig.1 Forward Current Derating Curve

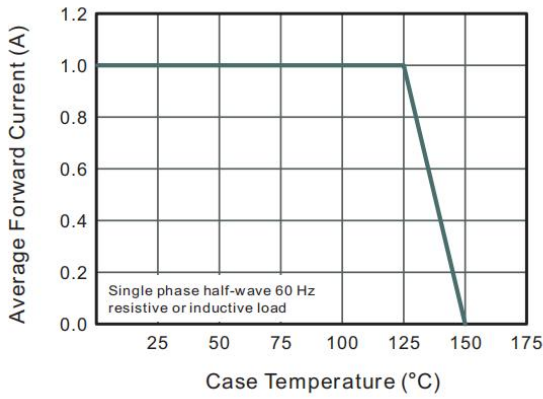


Fig.2 Typical Instantaneous Reverse Characteristics

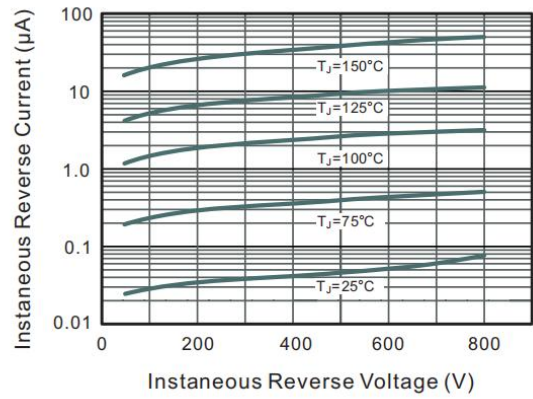


Fig.3 Typical Forward Characteristic

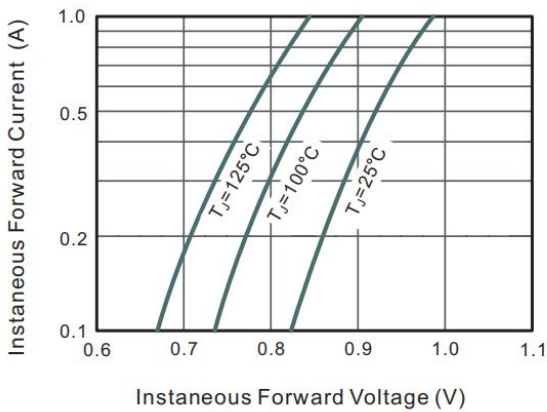


Fig.4 Typical Junction Capacitance

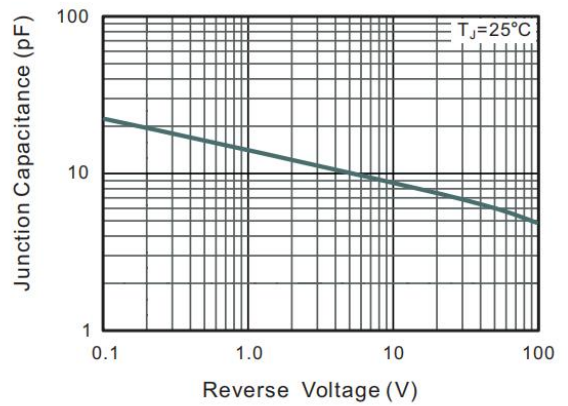
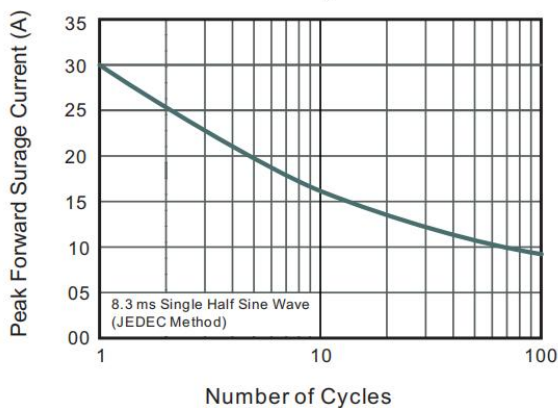
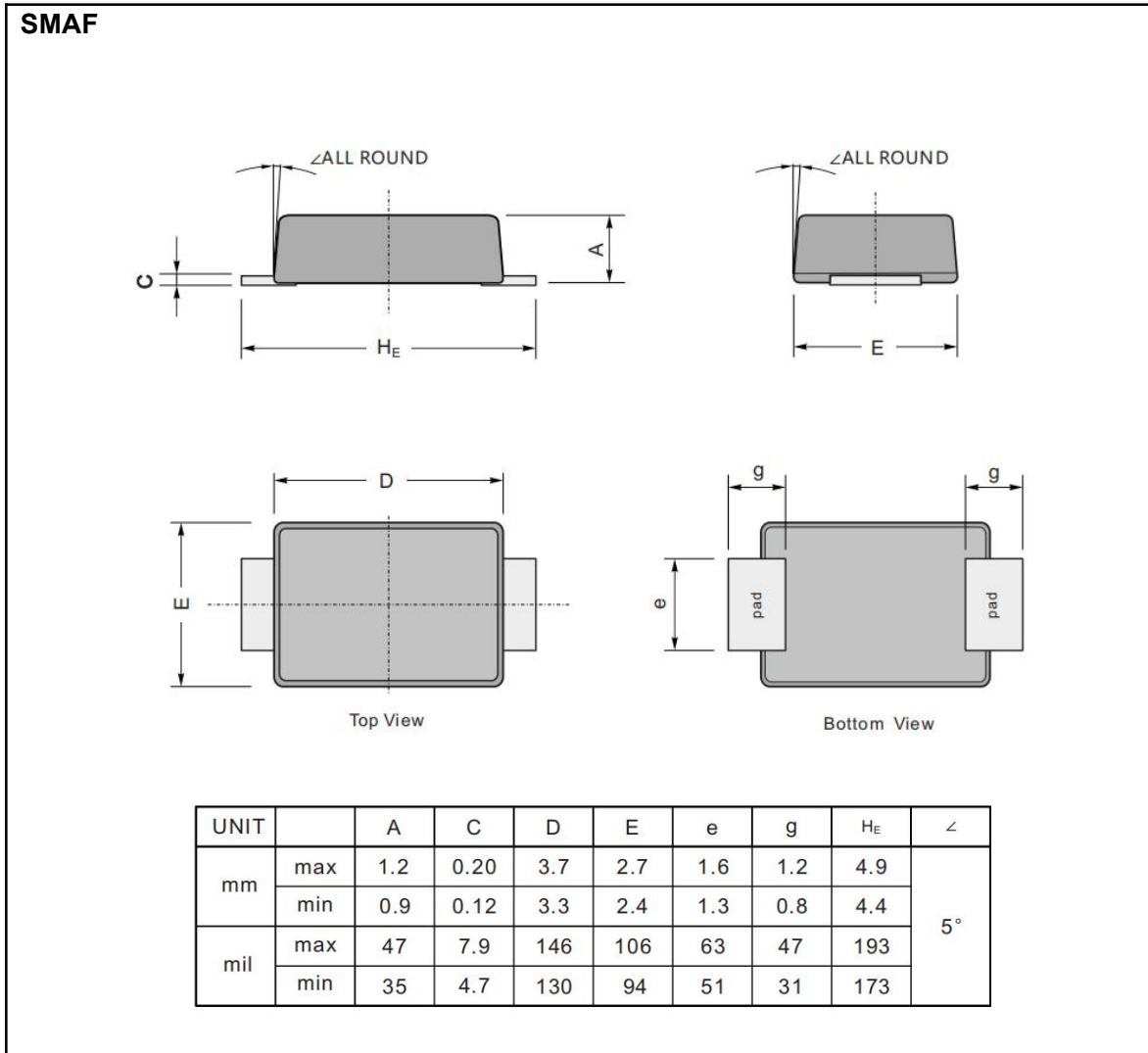


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

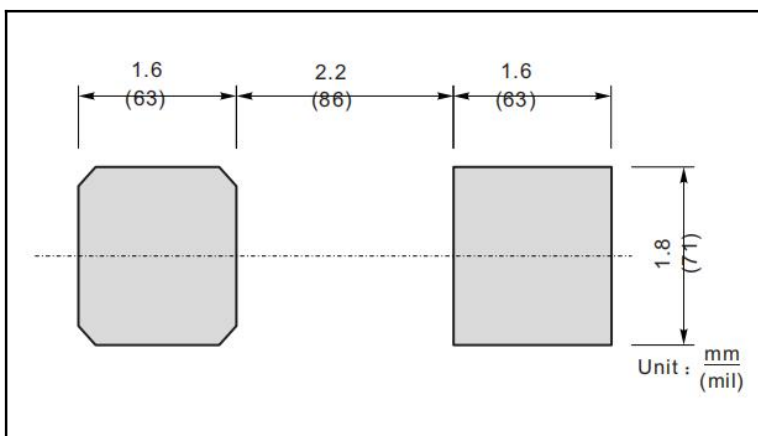


### Package Outlines

Plastic surface mounted package; 2 leads



### The recommended mounting pad size



### Marking

Type number	Marking code
M1F	M1F
M2F	M2F
M3F	M3F
M4F	M4F
M5F	M5F
M6F	M6F
M7F	M7F

**\*Important Usage Information and Disclaimer**

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