

RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

## FEATURES

- Low Profile Package
- Glass Passivated Chip Junction
- Low Reverse Current
- Lead Free in Comply with EU RoHS 2011/65/EU Directives

## MECHANICAL DATA

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

## MARKING

Part Number	Marking Code	Part Number	Marking Code
SM4001AM-C	S1M	SM4005AM-C	S1M
SM4002AM-C	S1M	SM4006AM-C	S1M
SM4003AM-C	S1M	SM4007AM-C	S1M
SM4004AM-C	S1M		

## PACKAGE INFORMATION

Package	MPQ	Leader Size
SMAM	3K	7 inch

## ORDER INFORMATION

Part Number	Type
SM4001AM-C~SM4007AM-C	Lead (Pb)-free and Halogen-free

## ABSOLUTE MAXIMUM RATINGS

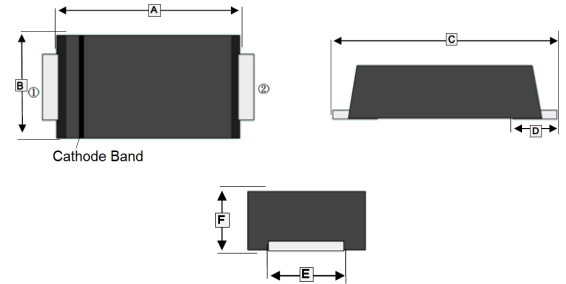
(Rating 25°C ambient temperature unless otherwise specified. Single phase half wave, 60Hz, resistive or inductive load.  
For capacitive load, de-rate current by 20%.)

Parameter	Symbol	Part Number							Unit
		SM4001 AM-C	SM4002 AM-C	SM4003 AM-C	SM4004 AM-C	SM4005 AM-C	SM4006 AM-C	SM4007 AM-C	
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	$I_F$	1							A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	30							A
Maximum Instantaneous Forward Voltage $I_F=1A @25^\circ C$	$V_F$	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_A=25^\circ C$	5							$\mu A$
	$T_A=125^\circ C$	50							
Typical Junction Capacitance <sup>1</sup>	$C_J$	9							pF
Typical Thermal Resistance <sup>2</sup>	$R_{\theta JL}$	22							°C/W
Typical Thermal Resistance <sup>2</sup>	$R_{\theta JC}$	30							°C/W
Operating & Storage Temperature	$T_J, T_{STG}$	-55~ 150							°C

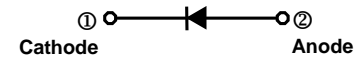
Notes:

1. Measured at 1 MHz and applied reverse voltage of 4V D.C.
2. P.C.B. mounted with 10 x 10 x 0.2 mm copper pad areas.

SMAM



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	3.20	3.70	D	1 TYP.	
B	2.40	2.80	E	1.30	1.60
C	4.40	4.90	F	0.90	1.20



**RATINGS AND CHARACTERISTIC CURVES**

Fig.1 Forward Current Derating Curve

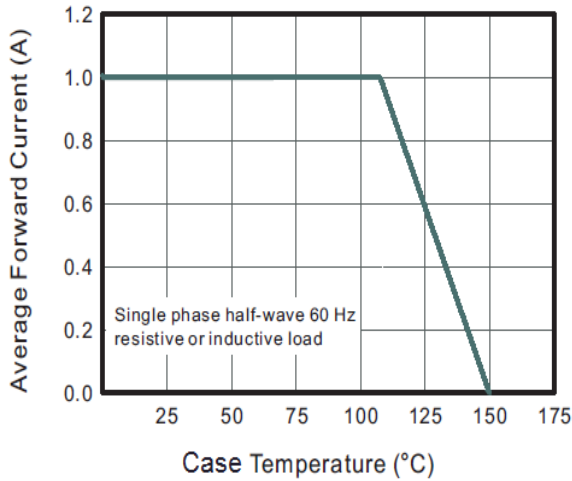


Fig.2 Typical Instaneous Reverse Characteristics

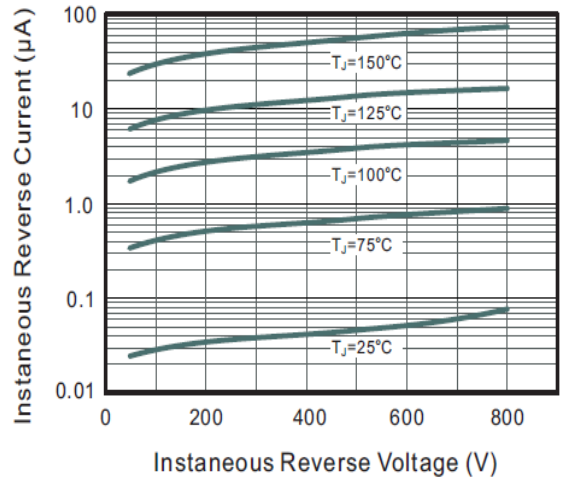


Fig.3 Typical Forward Characteristic

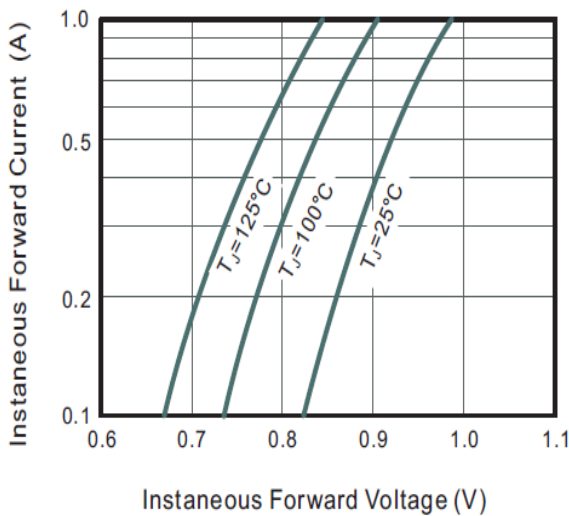


Fig.4 Typical Junction Capacitance

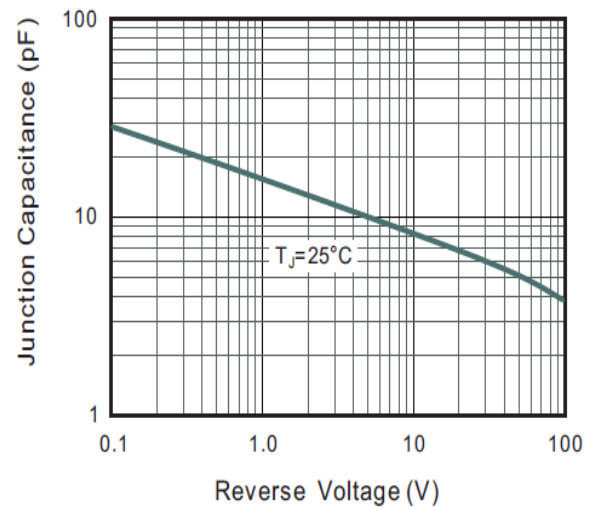
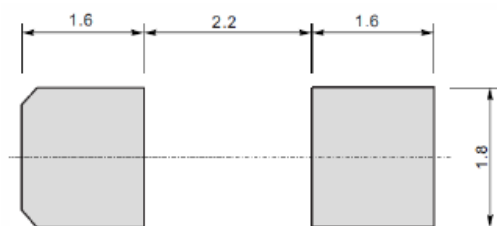


Fig.5 Mounting Pad Layout



\*Dimensions in millimeters