

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

FEATURES

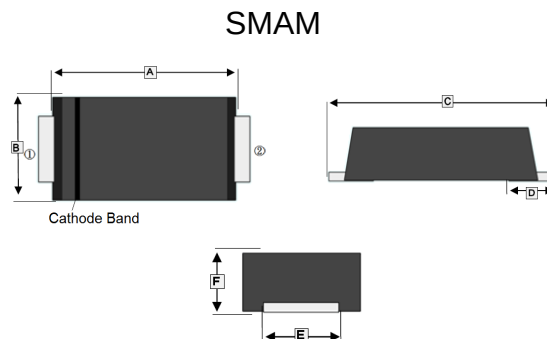
- Low profile package
- Glass Passivated Chip Junction
- Low reverse current
- Lead free in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA

- Case : SMAM
- Terminals: Solderable per MIL-STD-750, Method 2026
- Weight: 27 mg (Approximate)

MARKING

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



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	3.30	3.70	D	0.80	1.20
B	2.40	2.70	E	1.30	1.60
C	4.40	4.90	F	0.90	1.10

PACKAGE INFORMATION

Package	MPQ	Leader Size
SMAM	3K	7 inch

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%.)

or capacitive load, dc rate current by 20%.)

Parameter	Symbol	Part Number							Unit
		SM 4001AM	SM 4002AM	SM 4003AM	SM 4004AM	SM 4005AM	SM 4006AM	SM 4007AM	
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℃	V _F	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T _A =25℃	I _R	5					μA	
	T _A =125℃		50						
Typical Junction Capacitance ¹	C _J	9							pF
Typical Thermal Resistance ²	R _{θJL}	22							℃/W
Typical Thermal Resistance ²	R _{θJC}	30							℃/W
Operating & Storage Temperature	T _J ,T _{STG}	-55~ 150							℃

Notes:

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

RATINGS AND CHARACTERISTIC CURVES

Fig.1 Forward Current Derating Curve

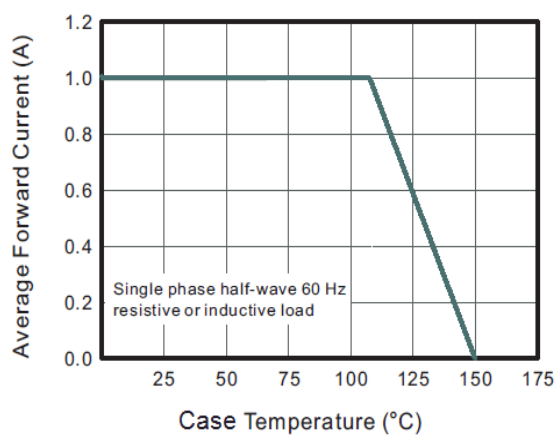


Fig.2 Typical Instaneous Reverse Characteristics

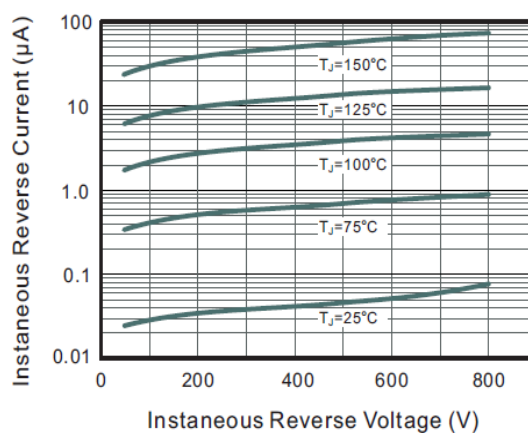


Fig.3 Typical Forward Characteristic

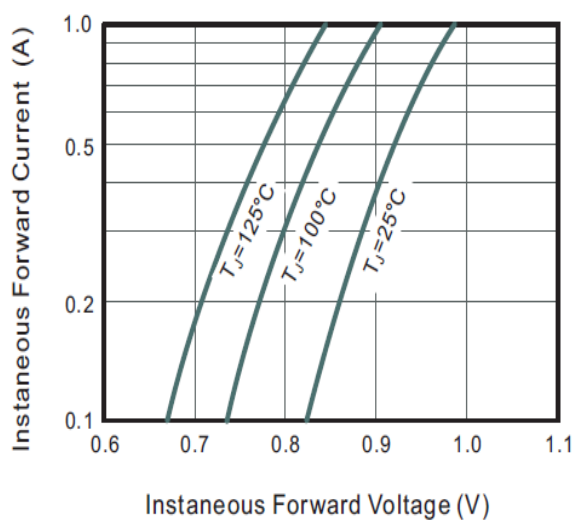


Fig.4 Typical Junction Capacitance

