

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

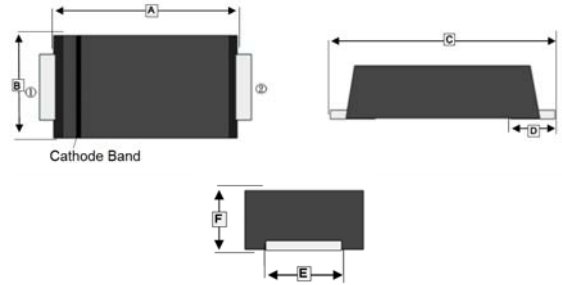
FEATURES

- Low profile package
- Glass Passivated Chip Junction
- 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)

SMAM



MARKING

Part Number	Marking Code	Part Number	Marking Code
SMF101AM	RS1A	SMF105AM	RS1J
SMF102AM	RS1B	SMF106AM	RS1K
SMF103AM	RS1D	SMF107AM	RS1M
SMF104AM	RS1G		

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

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%.)

Parameter	Symbol	Part Number							Unit
		SMF 101AM	SMF 102 AM	SMF 103 AM	SMF 104AM	SMF 105AM	SMF 106AM	SMF 107AM	
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	1.3							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_A=25^\circ C$	5							μA
	$T_A=125^\circ C$	100							
Maximum Reverse Recovery Time ¹	T_{RR}	150			250	500		nS	
Typical Junction Capacitance ³	C_J	15							pF
Typical Thermal Resistance ²	$R_{\theta JL}$	22							°C/W
Typical Thermal Resistance ²	$R_{\theta JC}$	30							°C/W
Operating & Storage Temperature	T_J, T_{STG}	-55~ 150							°C

Notes:

1. Measured with $I_F=0.5A, I_R=1A, I_{RR}=0.25A$
2. P.C.B. mounted with 10 X 10 x 0.2 mm copper pad areas.
3. Measured at 1MHz and applied reverse voltage of 4V D.C

RATINGS AND CHARACTERISTIC CURVES

Fig.1 Forward Current Derating Curve

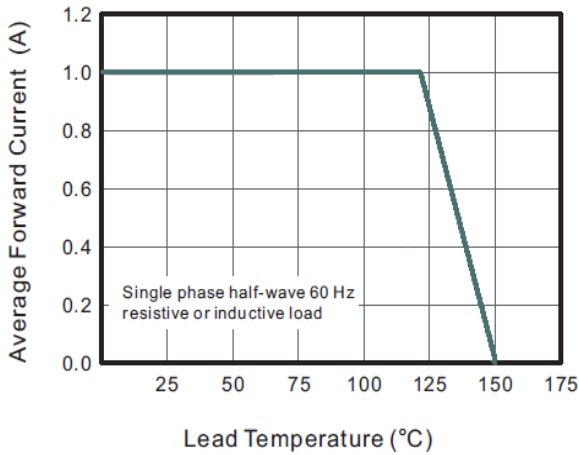


Fig.2 Typical Reverse Characteristics

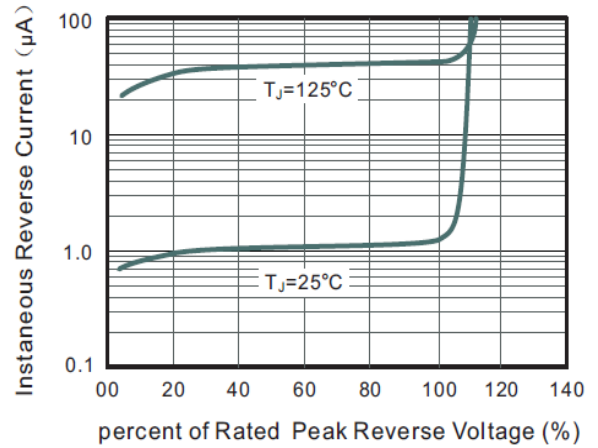


Fig.3 Typical Instantaneous Forward Characteristics

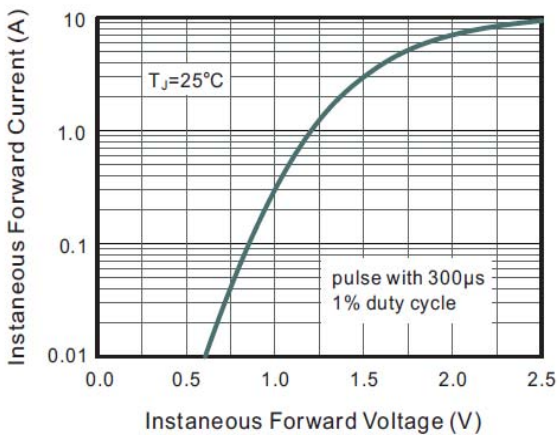


Fig.4 Typical Junction Capacitance

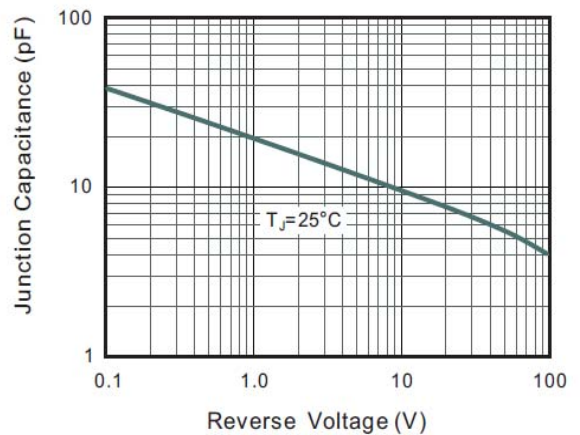


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

