

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

FEATURES

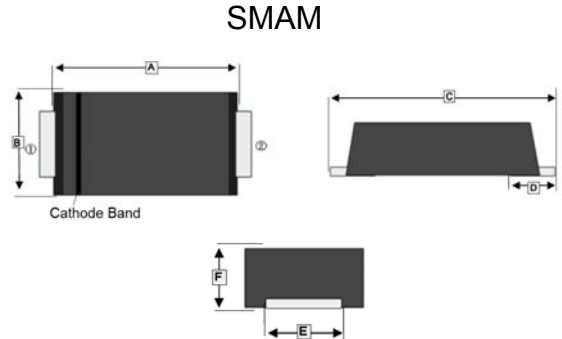
- Low profile package
- Glass Passivated Chip Junction
- Lead free in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA

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

MARKING

Part Number	Marking Code	Part Number	Marking Code
SMF301AM	RS3A	SMF305AM	RS3J
SMF302AM	RS3B	SMF306AM	RS3K
SMF303AM	RS3D	SMF307AM	RS3M
SMF304AM	RS3G		



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 301AM	SMF 302 AM	SMF 303 AM	SMF 304AM	SMF 305AM	SMF 306AM	SMF 307AM	
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	3							A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	100							A
Maximum Instantaneous Forward Voltage $I_F=3A @ 25^\circ C$	V_F	1.3							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_A=25^\circ C$	5							μA
	$T_A=125^\circ C$	200							
Maximum Reverse Recovery Time ¹	T_{RR}	150				250			nS
Typical Junction Capacitance ³	C_J	60							pF
Typical Thermal Resistance ²	$R_{\theta JL}$	22							$^\circ C/W$
Typical Thermal Resistance ²	$R_{\theta JC}$	30							$^\circ C/W$
Operating & Storage Temperature	T_J, T_{STG}	-55~ 150							$^\circ C$

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 0.2mm 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

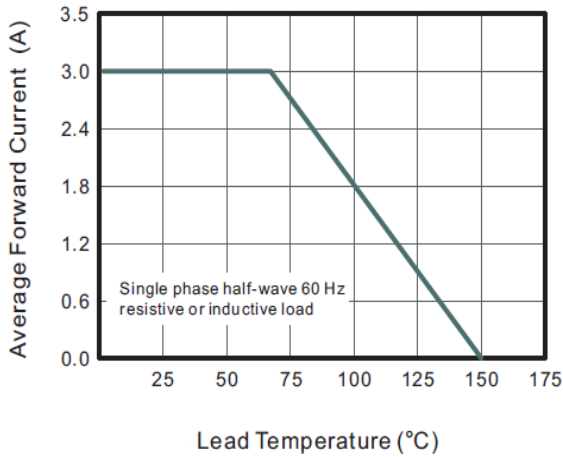


Fig.2 Typical Reverse Characteristics

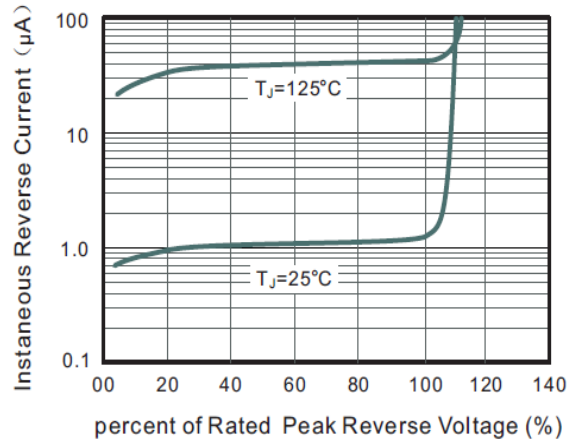


Fig.3 Typical Instantaneous Forward Characteristics

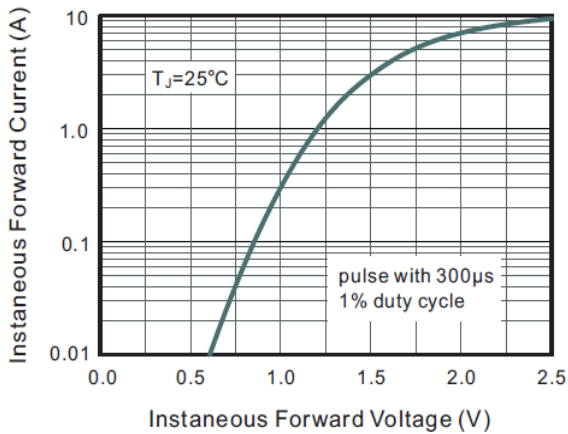


Fig.4 Typical Junction Capacitance

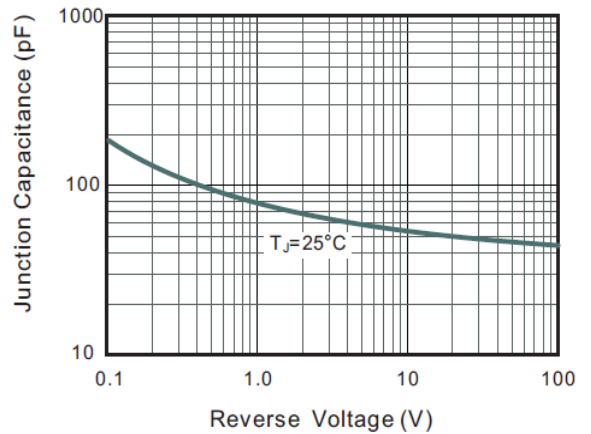


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

