

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

FEATURES

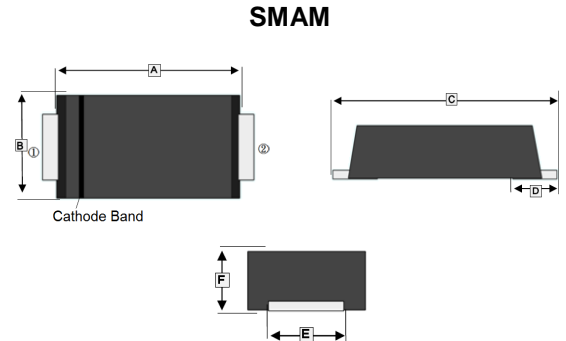
- Low Profile Package
- Glass Passivated Chip Junction
- Low Reverse Current

MECHANICAL DATA

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

MARKING

Part Number	Marking Code	Part Number	Marking Code
SM120AM-C	SS14	SM1100AM-C	SS110
SM140AM-C	SS14	SM1150AM-C	SS115
SM160AM-C	SS16	SM1200AM-C	SS120



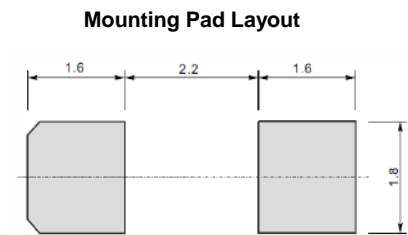
REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	3.20	3.70	D	1 TYP.	
B	2.40	2.80	E	1.30	1.60
C	4.40	4.90	F	0.90	1.20

PACKAGE INFORMATION

Package	MPQ	Leader Size
SMAM	3K	7 inch

ORDER INFORMATION

Part Number	Type
SM120AM-C~SM1200AM-C	Lead (Pb)-free and Halogen-free



*Dimensions in millimeters

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
		SM120 AM-C	SM140 AM-C	SM160 AM-C	SM1100 AM-C	SM1150 AM-C	SM1200 AM-C	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	40	60	100	150	200	V
Maximum RMS Voltage	V_{RMS}	14	28	42	70	105	140	
Maximum DC Blocking Voltage	V_{DC}	20	40	60	100	150	200	
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 @ $I_F=1A$	V_F	0.55		0.7	0.85	0.9		V
Maximum DC Reverse Current @ Rated DC Blocking Voltage	$T_A=25^\circ C$	0.3			0.2	0.1		mA
	$T_A=100^\circ C$	10			5	2		
Typical Junction Capacitance ¹	C_J	110			80			pF
Typical Thermal Resistance ²	$R_{\theta JL}$	22						°C/W
Typical Thermal Resistance ²	$R_{\theta JC}$	30						
Operating & Storage Temperature	T_J, T_{STG}	-55~125, -55~150						°C

Notes:

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

RATINGS AND CHARACTERISTIC CURVES

SM1100AM-C~SM1200AM-C

Fig.1 Forward Current Derating Curve

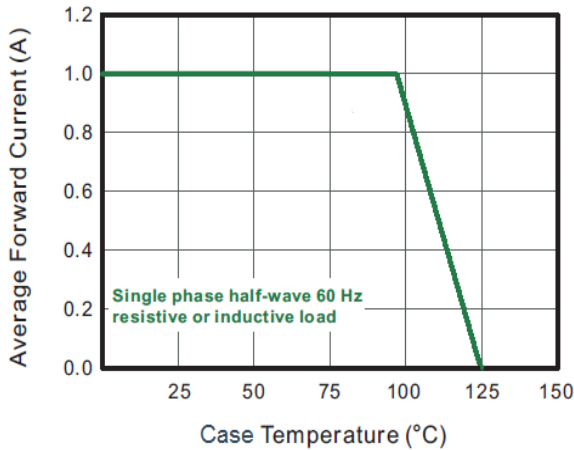


Fig.2 Typical Reverse Characteristics

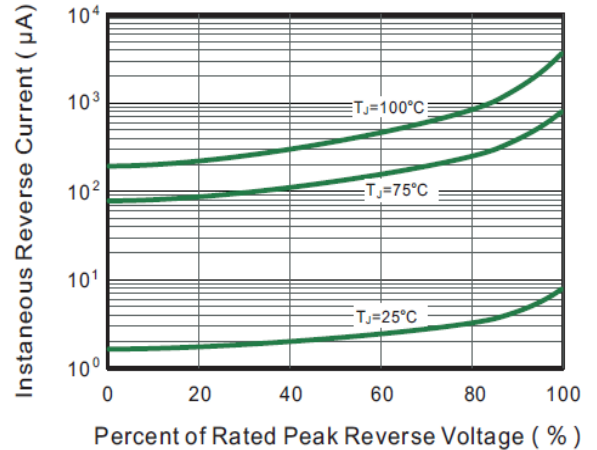


Fig.3 Typical Forward Characteristic

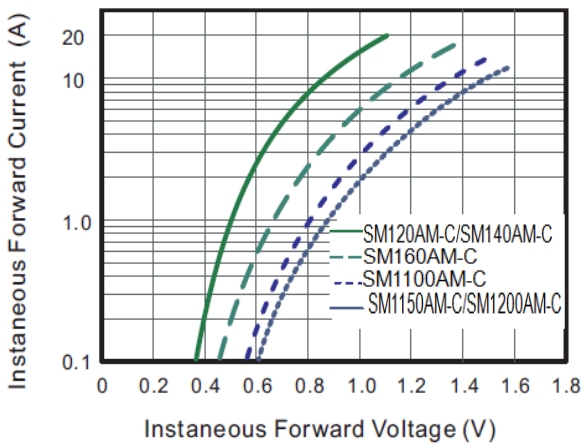


Fig.4 Typical Junction Capacitance

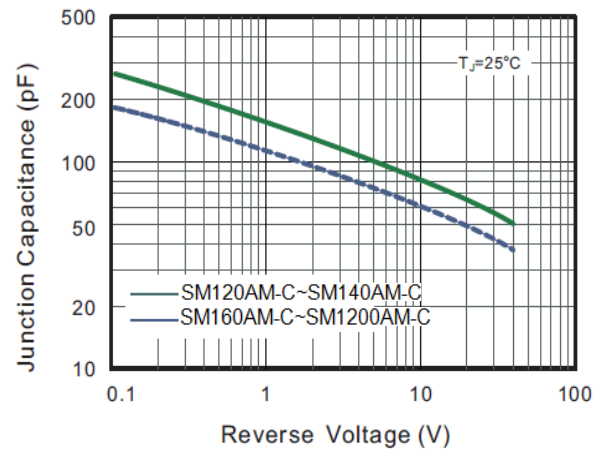


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

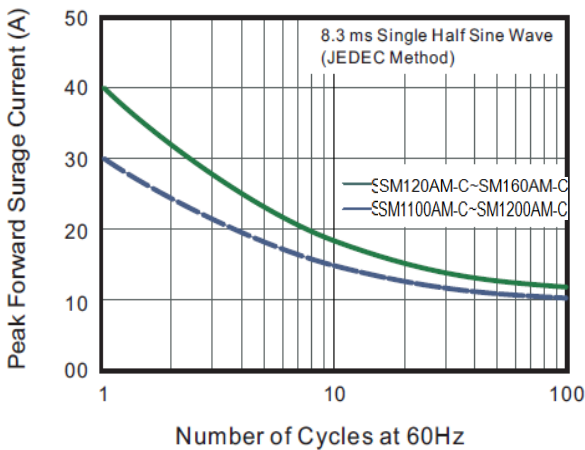


Fig.6 Typical Transient Thermal Impedance

