Elektronische Bauelemente

SM120AM~SM1200AM

Voltage 20 ~ 200 V

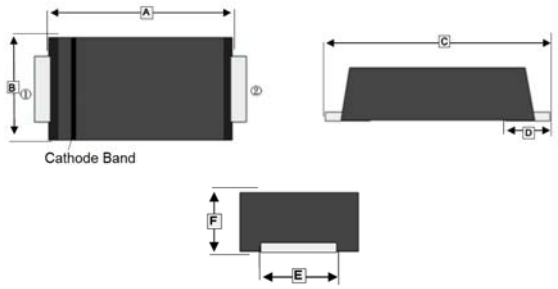
1.0 AMP Surface Mount Schottky Barrier Rectifiers

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

FEATURES

- Low profile package
- Glass Passivated Chip Juntion
- Low reverse current

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

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
SM120AM	SS14	SM1100AM	SS110
SM140AM	SS14	SM1150AM	SS115
SM160AM	SS16	SM1200AM	SS120

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
			SM 120AM	SM 140AM	SM 160AM	SM 1100AM	SM 1150AM	SM 1200AM	
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	V
Maximum DC Blocking Voltage		V_{DC}	20	40	60	100	150	200	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		V_F	0.55		0.7	0.85	0.9		V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T_A=25°C	I_R	0.3			0.2	0.1		mA
	T_A=100°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						°C/W
Operating & Storage Temperature		T_J,T_{STG}	-55~125, -55~ 150						°C

Notes:
1. Measured at 1MHz 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.

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RATINGS AND CHARACTERISTIC CURVES

Fig.1 Forward Current Derating Curve

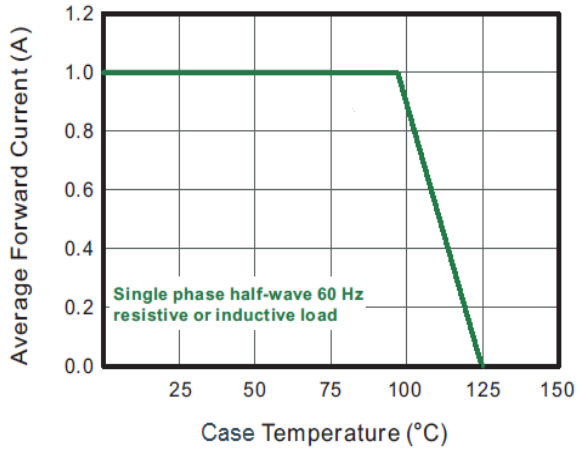

Fig.2 Typical Reverse Characteristics

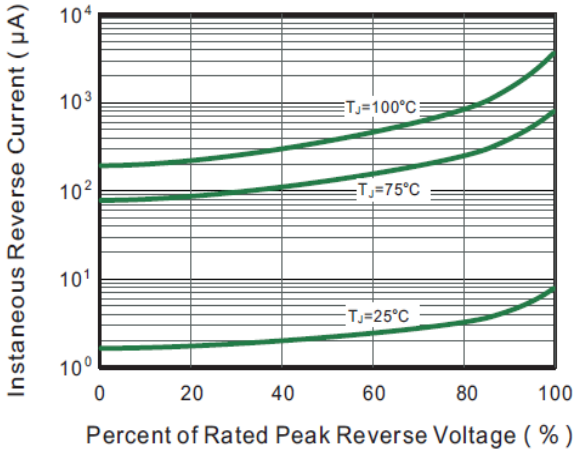

Fig.3 Typical Forward Characteristic

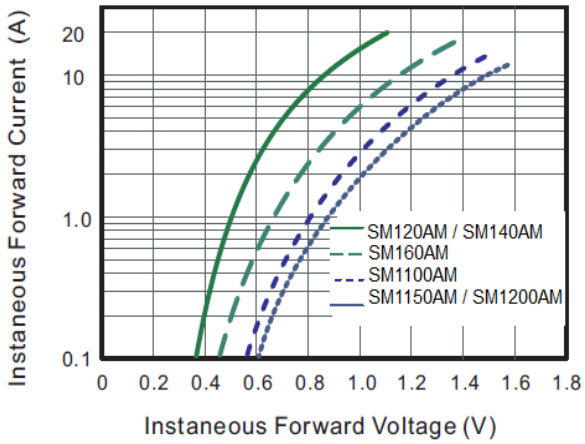

Fig.4 Typical Junction Capacitance

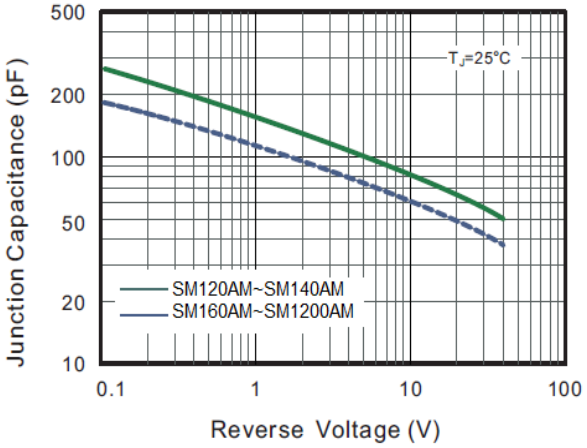

Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

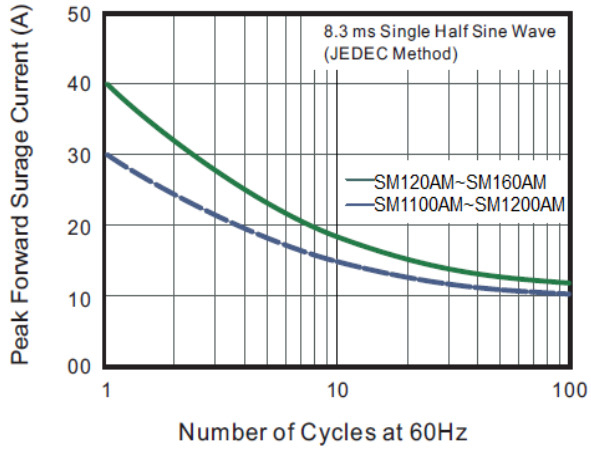

Fig.6- Typical Transient Thermal Impedance