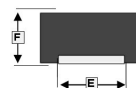
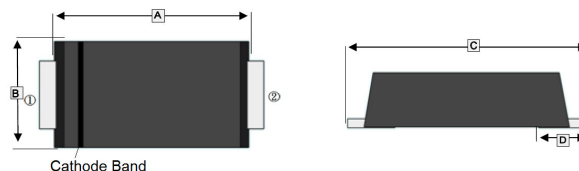


RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- Metal silicon junction, majority carrier conduction
- For surface mounted applications
- Low power loss, high efficiency
- High forward surge current capability
- For use in low voltage, high frequency inverters free wheeling, and polarity protection applications

SMBM



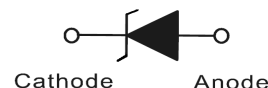
REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	4.2	4.7	D	1.0 REF	
B	3.4	3.8	E	1.8	2.2
C	5.1	5.5	F	1.1	1.45

MECHANICAL DATA

- Case : SMBM
- Terminals: Solderable per MIL-STD-750, Method 2026
- Weight: 57 mg (Approximate)

MARKING

Part Number	Marking Code	Part Number	Marking Code
SM320BM	S34B	SM3100BM	S310B
SM340BM	S34B	SM3150BM	S315B
SM360BM	S36B	SM3200BM	S320B



PACKAGE INFORMATION

Package	MPQ	Leader Size
SMBM	5K	13 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 320BM	SM 340BM	SM 360BM	SM 3100BM	SM 3150BM	SM 3200BM	
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	3						A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	80			70			A
Maximum Instantaneous Forward Voltage $I_F=3A @ 25^\circ C$	V_F	0.55	0.7	0.85	0.95		V	
Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_A=25^\circ C$	0.5			0.3			mA
	$T_A=100^\circ C$	5			3			
Typical Junction Capacitance ¹	C_J	450			400			pF
Typical Thermal Resistance from Junction to Ambient ²	$R_{\theta JA}$	50						°C/W
Operating & Storage Temperature	T_J, T_{STG}	-55~150						°C

Notes:

1. Measured at 1MHz and applied reverse voltage of 4 V D.C.
2. P.C.B. mounted with 0.5" x 0.5" (12.7 x 12.7 mm) copper pad areas.

RATINGS AND CHARACTERISTIC CURVES

Fig.1 Forward Current Derating Curve

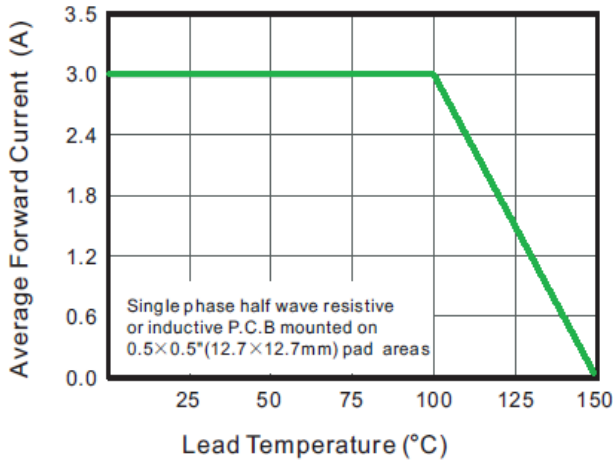


Fig.2 Typical Reverse Characteristics

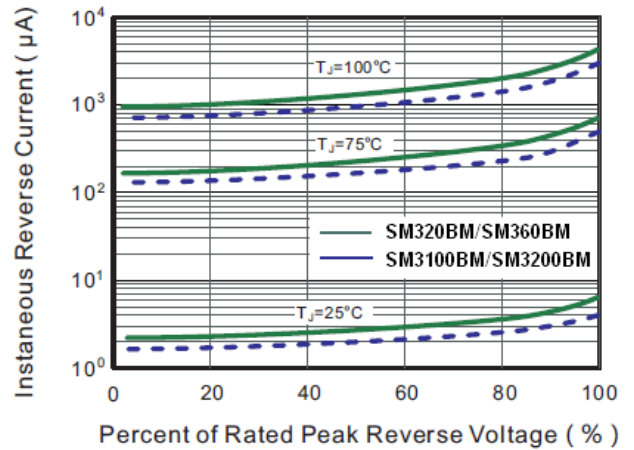


Fig.3 Typical Forward Characteristic

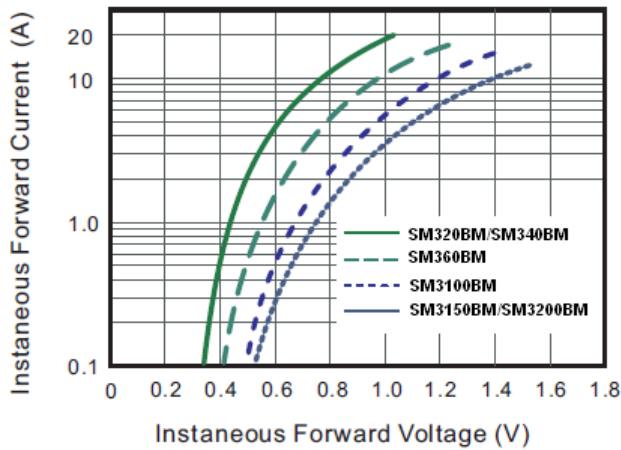


Fig.4 Typical Junction Capacitance

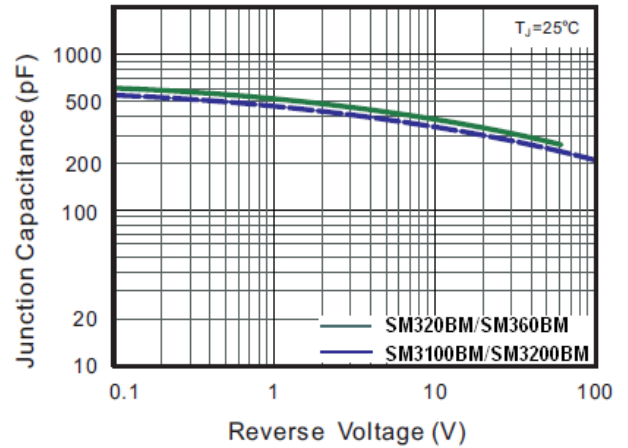


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

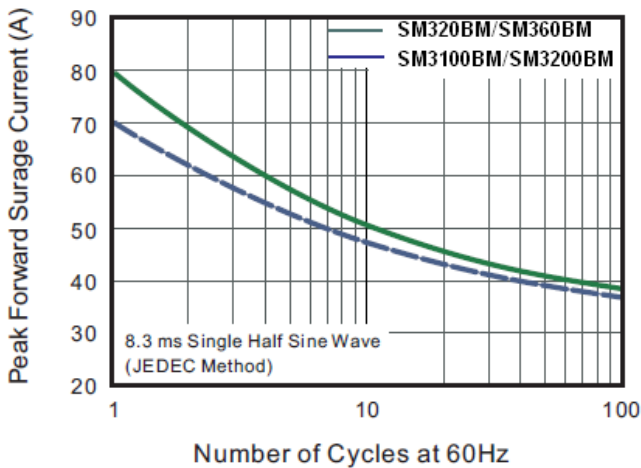


Fig.6- Typical Transient Thermal Impedance

