

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

FEATURES

- Low Profile Package
- Glass Passivated Chip Junction
- Superfast Reverse Recovery Time
- Lead Free in comply with EU RoHS 2011/65/EU Directives

MECHANICAL DATA

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

MARKING

Part Number	Marking Code	Part Number	Marking Code
SUF201BM-C	E2AB	SUF204BM-C	E2GB
SUF202BM-C	E2BB	SUF205BM-C	E2JB
SUF203BM-C	E2DB		

PACKAGE INFORMATION

Package	MPQ	Leader Size
SMAM	5K	13 inch

ORDER INFORMATION

Part Number	Type
SUF201BM-C~SUF205BM-C	Lead (Pb)-free and Halogen-free

ABSOLUTE MAXIMUM RATINGS

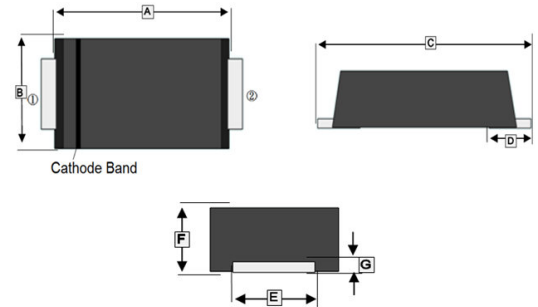
(Rating 25°C ambient temperature unless otherwise specified. Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, de-rate current by 20%.)

Parameter	Symbol	Part Number					Unit
		SUF201 BM-C	SUF202 BM-C	SUF203 BM-C	SUF204 BM-C	SUF205 BM-C	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	
Maximum Average Forward Rectified Current	I_F	2					A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	50					A
Maximum Forward Voltage @ $I_F=2A$	V_F	1		1.25	1.68	V	
Maximum DC Reverse Current @Rated DC Blocking Voltage	$T_A=25^\circ C$	5					μA
	$T_A=125^\circ C$	100					
Maximum Reverse Recovery Time ¹	T_{RR}	35					nS
Typical Junction Capacitance ³	C_J	28					pF
Typical Thermal Resistance ²	$R_{\theta JA}$	60					$^\circ C/W$
	$R_{\theta JC}$	18					
Operating & Storage Temperature	T_J, T_{STG}	-55~150					$^\circ C$

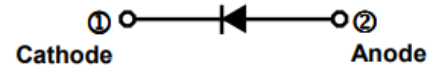
Notes:

1. Measured with $I_F=0.5A$, $I_R=1A$, $I_{RR}=0.25A$.
2. P.C.B. mounted with 2.0 x 2.0" (5 x 5 cm) copper pad areas.
3. $V_R=4V$, $f=1MHz$.

SMBM

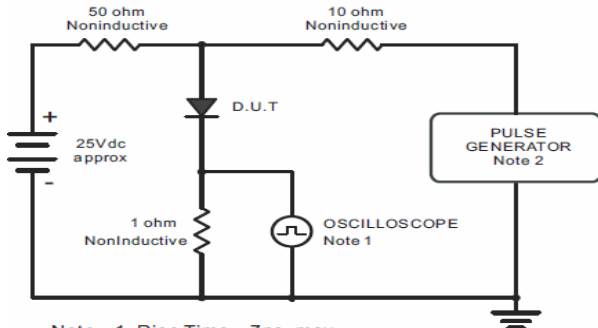


REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	4.20	4.70	E	1.80	2.20
B	3.40	3.80	F	1.10	1.45
C	5.10	5.50	G	0.18	0.26
D	1.00 REF.				



RATINGS AND CHARACTERISTIC CURVES

Fig.1 Reverse Recovery Time Characteristic And Test Circuit Diagram



Note: 1. Rise Time = 7 ns, max.
Input Impedance = 1 megohm, 22pF.
2. Rise Time = 10ns, max.
Source Impedance = 50 ohms.

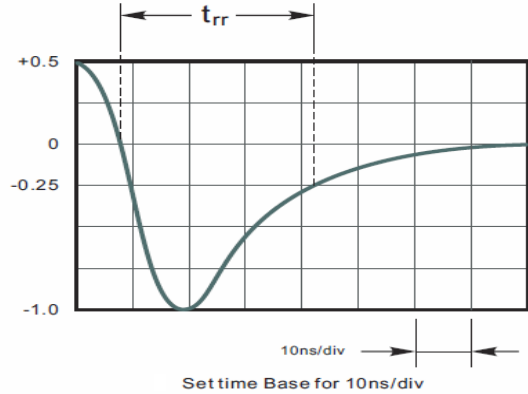


Fig.2 Maximum Average Forward Current Rating

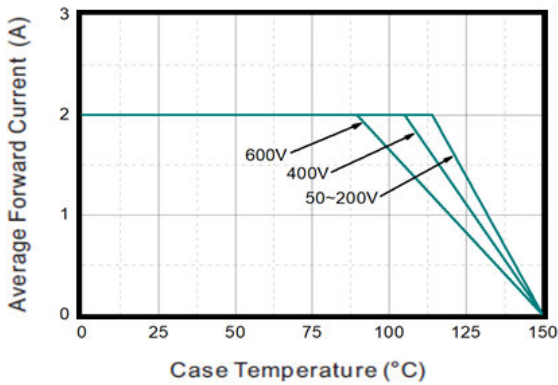


Fig.3 Typical Reverse Characteristics

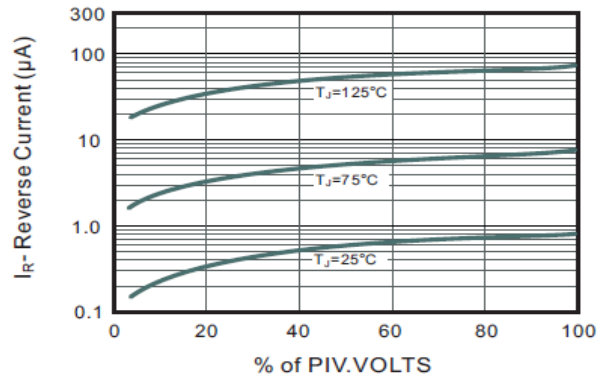


Fig.4 Typical Forward Characteristics

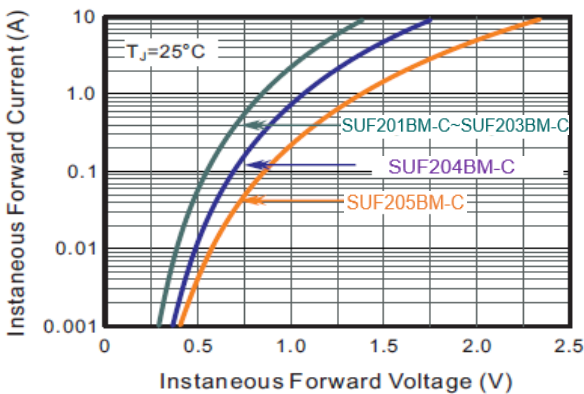


Fig.5 Typical Junction Capacitance

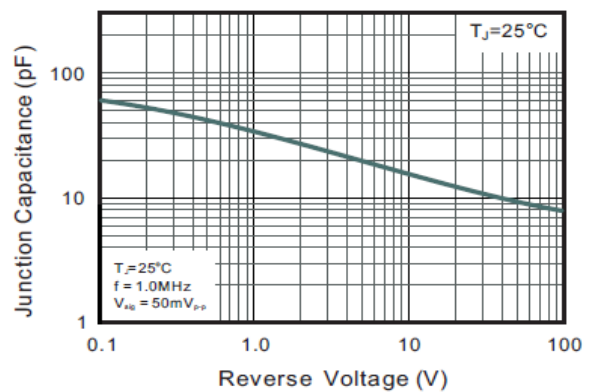


Fig.6 Maximum Non-Repetitive Peak Forward Surge Current

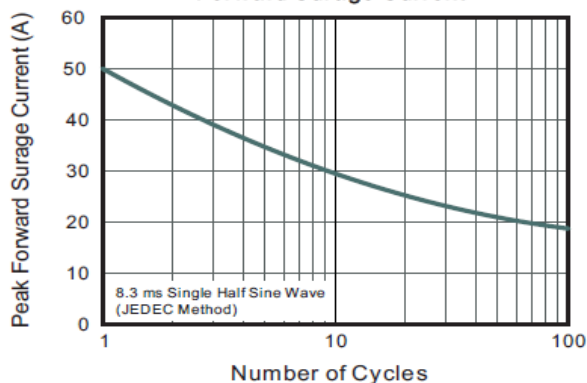
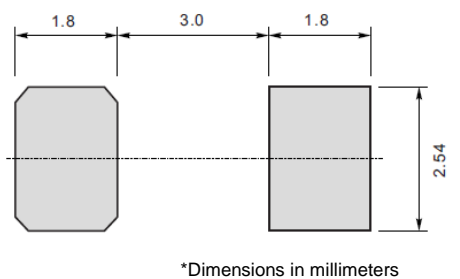


Fig.7 Mounting Pad Layout



*Dimensions in millimeters