

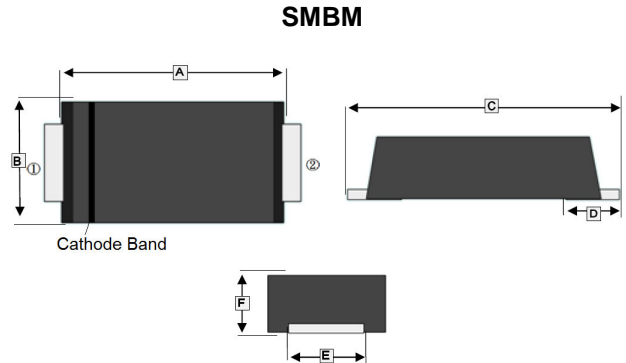
RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

## 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

## MECHANICAL DATA

- Case Material: SMBM
- Terminals: Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band



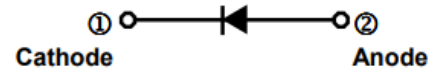
## MARKING

SL810B

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

## PACKAGE INFORMATION

Package	MPQ	Leader Size
SMBM	5K	13 inch



## ORDER INFORMATION

Part Number	Type
SK8100BM-C	Lead (Pb)-free and Halogen-free

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(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	Ratings	Unit
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	100	V
Maximum RMS Voltage	$V_{RMS}$	70	V
Maximum DC Blocking Voltage	$V_{DC}$	100	V
Maximum Average Forward Rectified Current	$I_F$	8	A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	180	A
Maximum Instantaneous Forward Voltage @ $I_F=8A$	$V_F$	0.65	V
Maximum DC Reverse Current @ Rated DC Blocking Voltage	$I_R$	0.1	mA
$T_A=25^\circ C$			
Typical Junction Capacitance <sup>1</sup>	$C_J$	450	pF
Typical Thermal Resistance Junction-Ambient <sup>2</sup>	$R_{\theta JA}$	60	°C/W
Operating Junction & Storage Temperature Range	$T_J, T_{STG}$	150, -55~150	°C

Notes:

1. Measured at 1MHz and applied reverse voltage of 4V D.C.
2. P.C.B. mounted with 2.0" X 2.0" (5 X 5cm) copper pad areas.

**RATINGS AND CHARACTERISTIC CURVES**

Fig.1 Forward Current Derating Curve

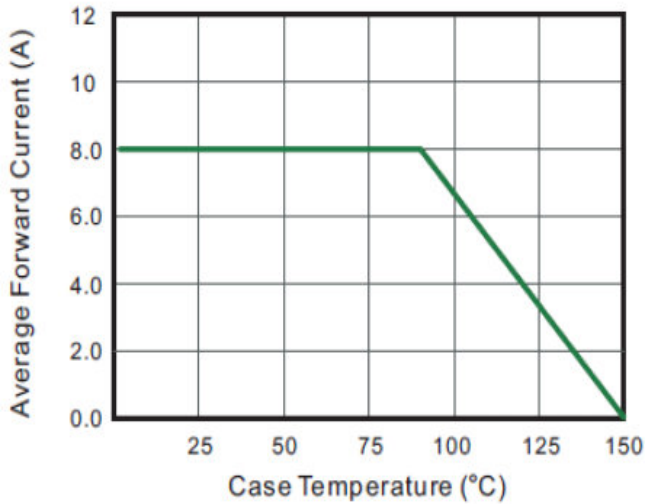


Fig.2 Typical Reverse Characteristics

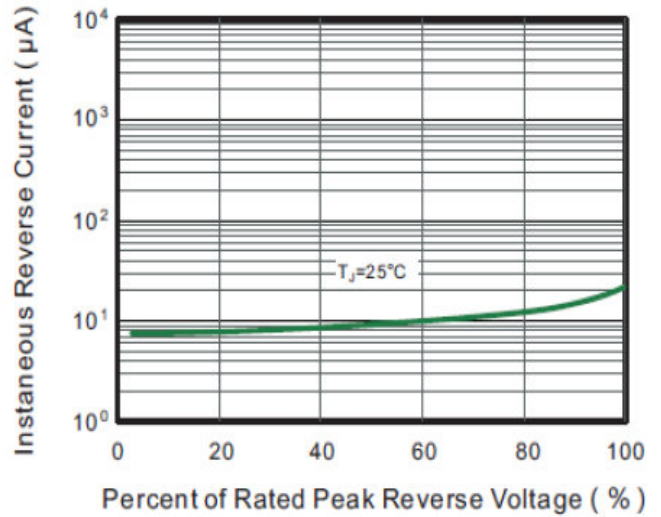


Fig.3 Typical Forward Characteristic

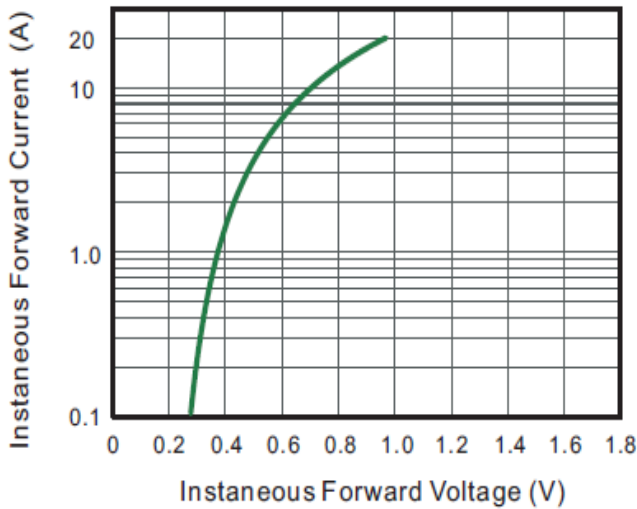


Fig.4 Typical Junction Capacitance

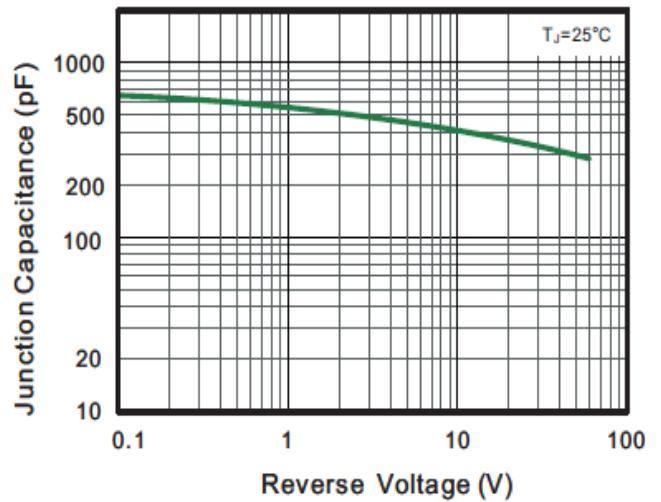


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

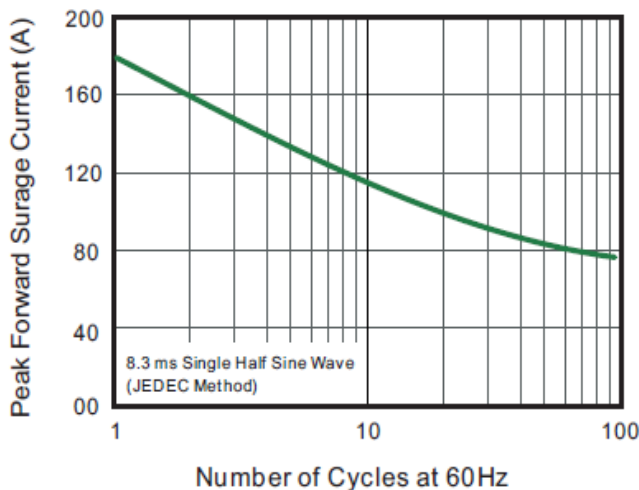


Fig.5- Typical Transient Thermal Impedance

