

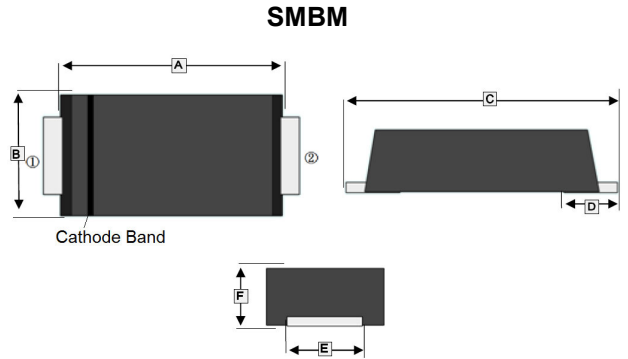
RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- Low forward voltage
- High current capability
- High surge current capability
- Low reverse current
- Component in accordance to RoHS 2002/95/EC

PACKAGE INFORMATION

Package	MPQ	Leader Size
SMBM	5K	13 inch



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

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	Rating	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	60	V
Working Peak Reverse Voltage	V_{RSM}	42	V
Maximum DC Blocking Voltage	V_{DC}	60	V
Maximum Average Forward Rectified Current	I_F	10	A
Peak Forward Surge Current, 8.3 ms single half sine-wave Superimposed on rated load (JEDEC method)	I_{FSM}	100	A
Typical Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	60	°C /W
Typical Thermal Resistance from Junction to Case	$R_{\theta JC}$	20	°C /W
Operating and Storage Temperature Range	T_J, T_{STG}	-55~150	°C

ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Typ.	Max.	Unit	Test Condition
Maximum Instantaneous Forward Voltage	V_F	0.59	0.63	V	$I_F=10A, T_J=25^\circ C$
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	-	0.5	mA	$T_A=25^\circ C$
		-	10		$T_A=100^\circ C$
Typical Junction Capacitance ¹	C_J	-	280	pF	

Notes:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

RATINGS AND CHARACTERISTIC CURVES

FIG. 1-Typical Forward Current Derating Curve

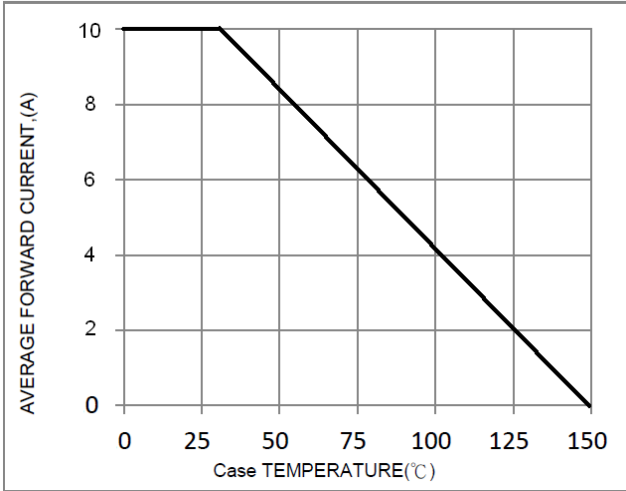


FIG. 2-Typical Forward Characteristics

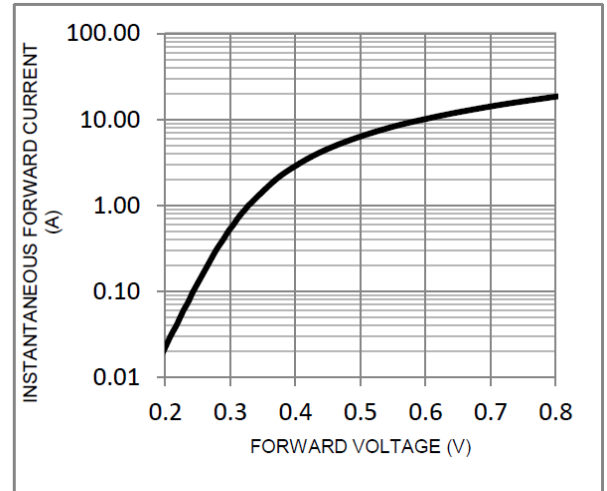


FIG. 3-Maximum Non-Repetitive Forward Surge Current

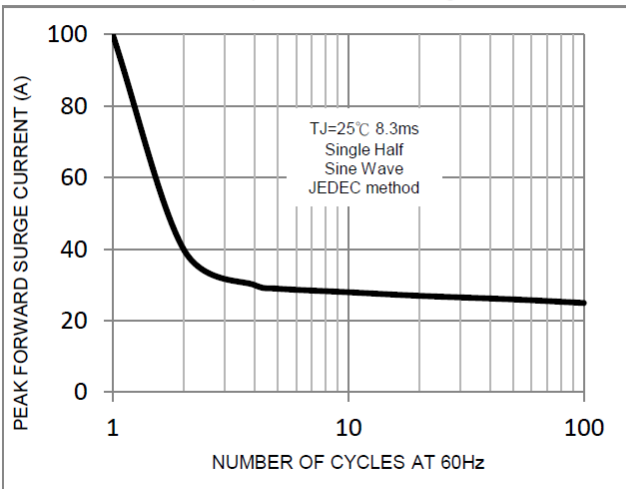


FIG. 4-Typical Reverse Characteristics

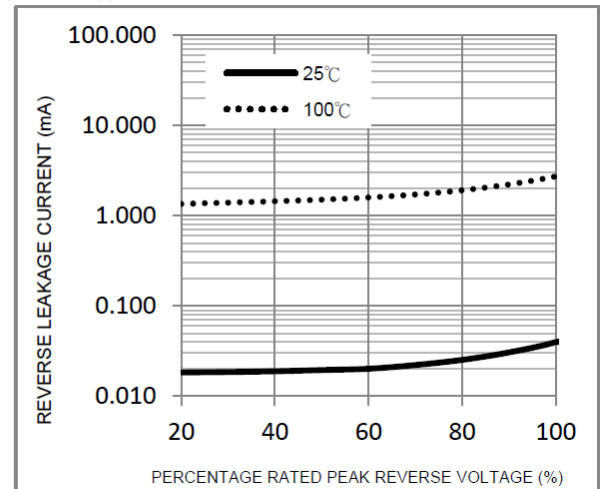


FIG. 5-Typical Junction Capacitance

