

RoHS Compliant Product

A suffix of "-C" specifies halogen-free and RoHS Compliant

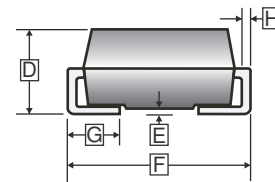
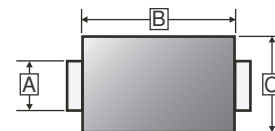
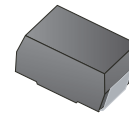
FEATURES

- Surface mount device
- High surge current capability
- Low reverse current
- Component in accordance to RoHS 2002/95/EC

MECHANICAL DATA

- Cases: SMB
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Terminals: Lead Free Plating(Tin Finish) Solderable Per MIL-STD-202, Method 208
- Mounting position: Any
- Polarity: Color band denotes cathode
- Weight: 0.093 grams(approximate)

SMB



PACKAGE INFORMATION

Package	MPQ	Leader Size
SMB	3K	13' inch

REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.91	2.20	E	-	0.203
B	4.06	4.70	F	5.08	5.59
C	3.30	3.94	G	0.76	1.52
D	2.13	2.44	H	0.15	0.305

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 repetitive peak reverse voltage	V_{RRM}	600	V
Maximum Peak Reverse Voltage	V_{RWM}	420	V
Maximum DC blocking voltage	V_{DC}	600	V
Maximum average forward rectified current@ $T_A=75^\circ\text{C}$	I_F	4	A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	150	A
Maximum Instantaneous Forward Voltage	V_F	$I_F=4A$	1.28
		$I_F=3A$	1.25
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	$T_J=25^\circ\text{C}$	10
		$T_J=150^\circ\text{C}$	250
Maximum Reverse Recovery Time ¹	T_{rr}	50	nS
Storage and Operating Temperature Range	T_{STG}, T_J	-65~175	°C

Notes:

1. Measured with $I_F=0.5A$, $I_R=1A$, $I_{rr}=0.25A$.

CHARACTERISTIC CURVES

FIG.1 FORWARD CURRENT DERATING CURVE

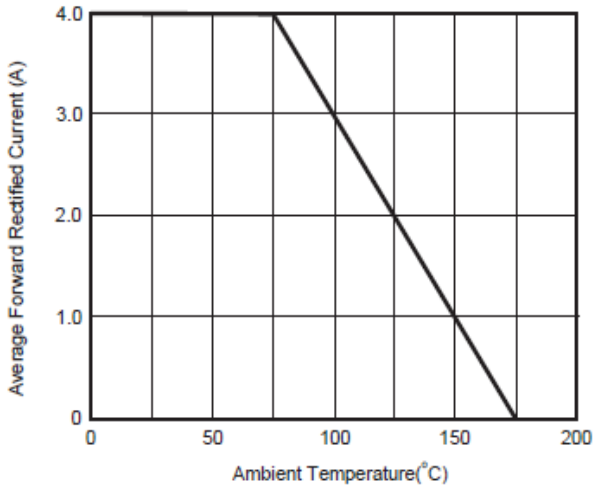


FIG.2 MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

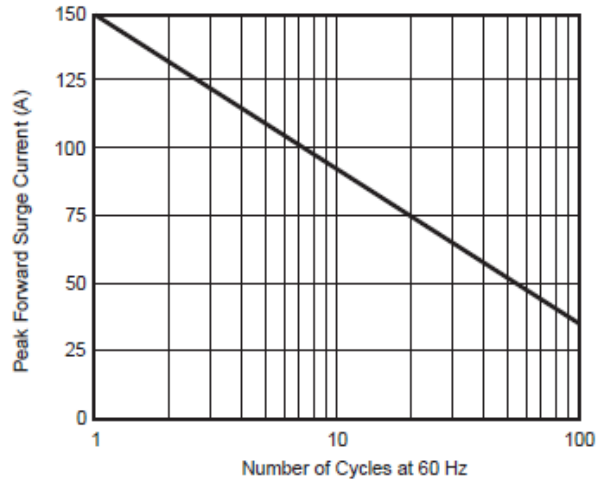


FIG. 3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

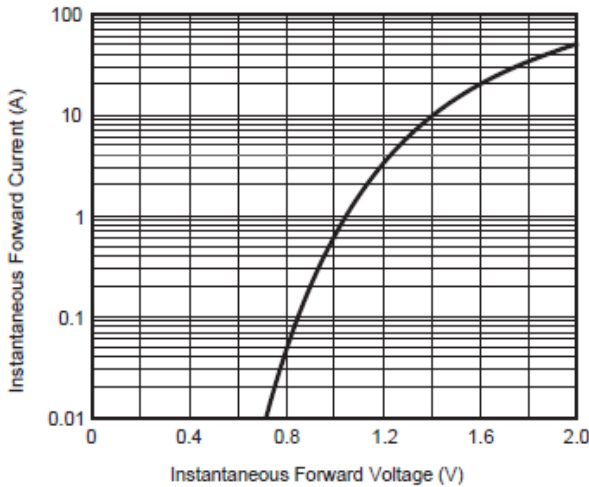


FIG. 4. TYPICAL REVERSE CHARACTERISTICS

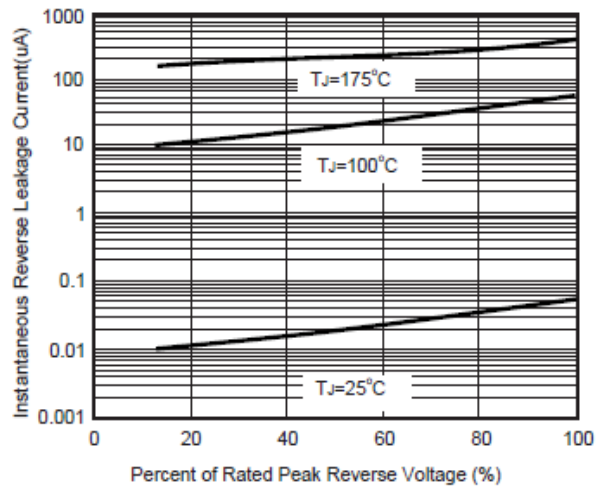


FIG.5 TYPICAL JUNCTION CAPACITANCE PER LEG

