

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

FEATURES

- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability
- Epitaxial Construction
- High Operating Temperature

MECHANICAL DATA

- Case: Molded Plastic
- Epoxy: UL 94V-0 Rate Flame Retardant
- Lead: Axial leads, Solderable Per MIL-STD-202, Method 208 Guaranteed
- Polarity: Color Band Denotes Cathode End
- Mounting Position: Any

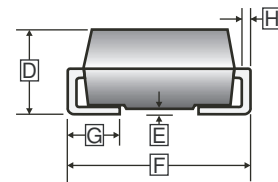
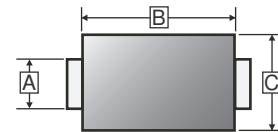
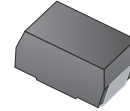
PACKAGE INFORMATION

Package	MPQ	Leader Size
SMB	3K	13 inch

ORDER INFORMATION

Part Number	Type
SMH3150B	Lead (Pb)-free
SMH3150B-C	Lead (Pb)-free and Halogen-free

SMB



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.85	2.20	E	-	0.203
B	4.00	4.75	F	5.08	5.59
C	3.25	3.94	G	0.75	1.52
D	1.99	2.61	H	0.15	0.31

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 Recurrent Peak Reverse Voltage	V _{RRM}	150	V
Working Peak Reverse Voltage	V _{RSM}	150	V
Maximum DC Blocking Voltage	V _{DC}	150	V
Maximum Average Forward Rectified Current	I _F	3	A
Peak Forward Surge Current @8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I _{FSM}	90	A
Voltage Rate of Change (Rated V _R)	dv/dt	10000	V/μs
Typical Thermal Resistance	R _{θJC}	25	°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	175, -50~175	°C

ELECTRICAL CHARACTERISTICS

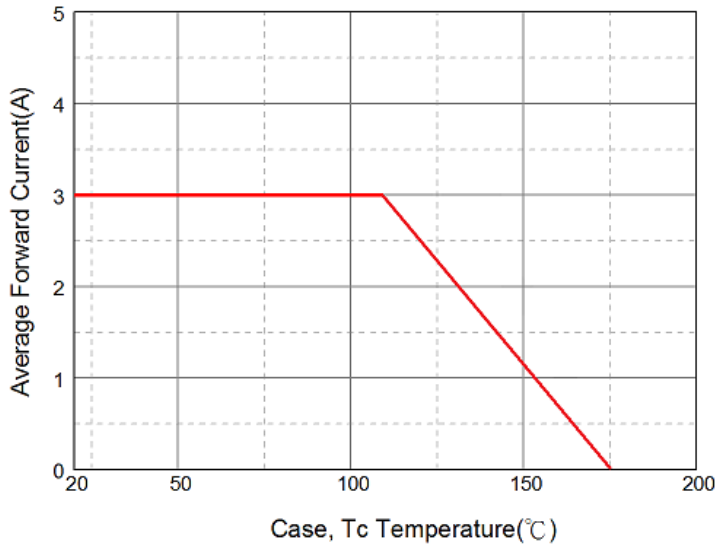
Parameter	Symbol	Typ.	Max.	Unit	Test Conditions
Instantaneous Forward Voltage	V _F	0.79	0.85	V	I _F =3A, T _J =25°C
		0.65	-		I _F =3A, T _J =125°C
Maximum DC Reverse Current @Rated DC Blocking Voltage ²	I _R	0.006	50	uA	T _J =25°C
		65	800		T _J =125°C
Typical Junction Capacitance ¹	C _J	70	-	pF	

Notes:

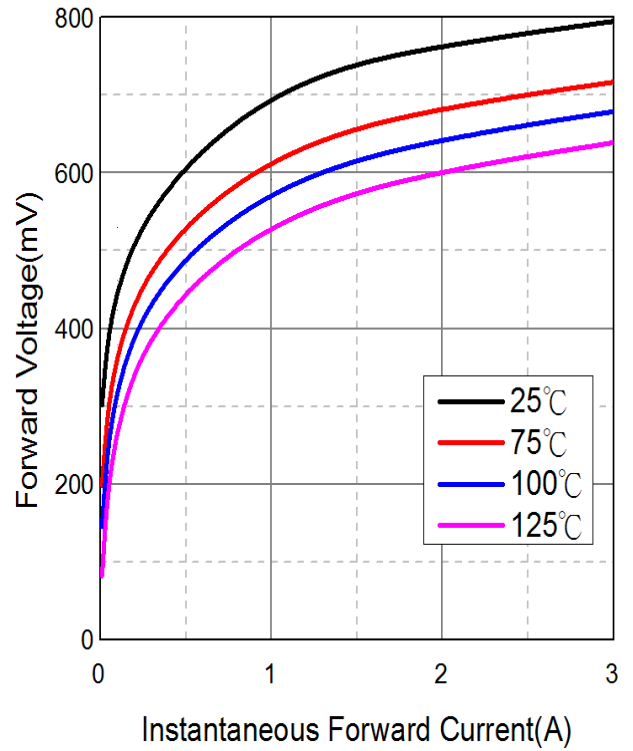
1. Measured at 1MHz and applied reverse voltage of 5V D.C.
2. Pulse Test: Pulse Width=300μs, Duty Cycle ≤2%.

RATINGS AND CHARACTERISTIC CURVES

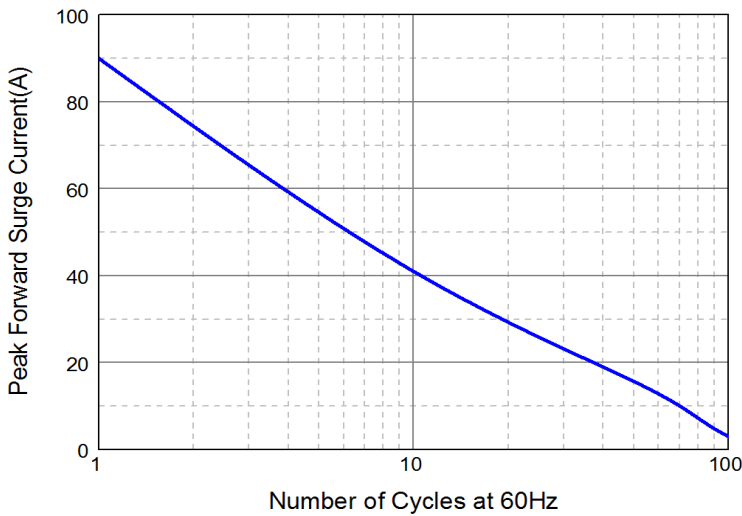
Typical Forward Current Derating Curve



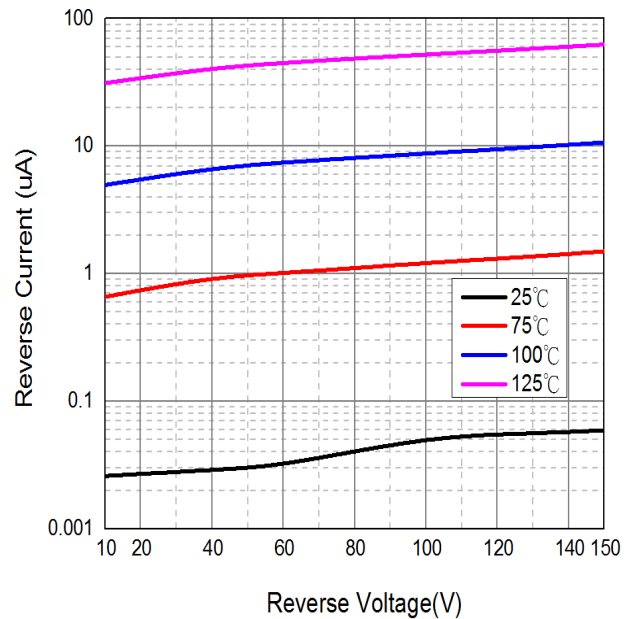
Typical Forward Characteristic



Maximum Non-Repetitive Forward Surge Current



Typical Reverse Characteristic



Typical Junction Capacitance

