

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

FEATURES

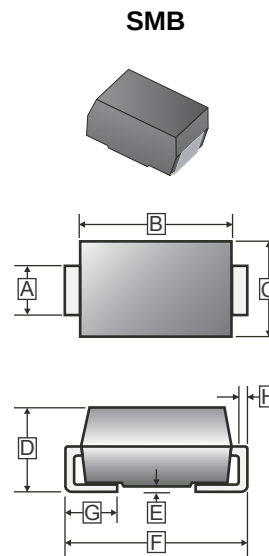
- High Current Capability
- Extremely Low Thermal Resistance
- For Surface Mount Application
- Higher Temp Soldering : 250°C for 10 Seconds at Terminals
- Low Reverse Current

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



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%.)

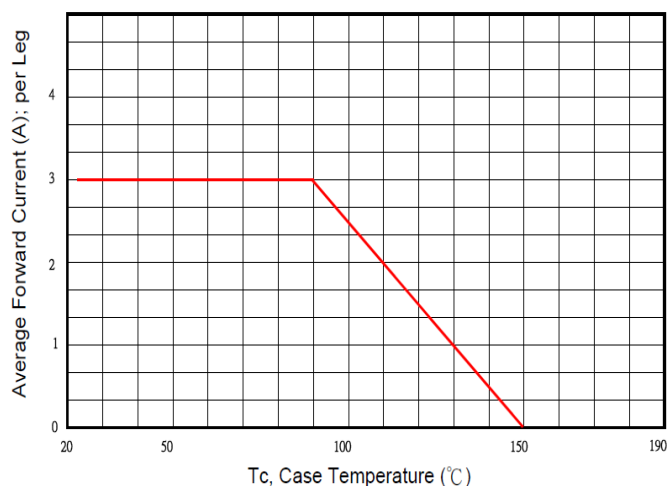
Parameter		Symbol	Rating	Unit
Peak Repetitive Peak reverse voltage		V_{RRM}	200	V
Working Peak Reverse Voltage		V_{RWM}	200	V
Maximum DC Blocking Voltage		V_R	200	V
Average Forward Current @ $T_J=25^\circ\text{C}$		$I_{F(AV)}$	3	A
Peak Forward Current @ 8.3 ms Half Sine		I_{FSM}	90	A
Maximum Instantaneous Forward Voltage	$I_{FM} = 3.0 \text{ A}, T_A = 25^\circ\text{C}$	V_F	0.85	V
	$I_{FM} = 3.0 \text{ A}, T_A = 75^\circ\text{C}$		0.75	
	$I_{FM} = 3.0 \text{ A}, T_A = 125^\circ\text{C}$		0.68	
Maximum DC Reverse Current At Rated DC Blocking Voltage ²	$T_J = 25^\circ\text{C}$	I_R	5	μA
	$T_J = 100^\circ\text{C}$		80	
Typical Junction Capacitance ¹		C_J	60	pF
Typical Thermal Resistance ³		$R_{\theta JA}$	50	$^\circ\text{C} / \text{W}$
Typical Thermal Resistance ⁴		$R_{\theta JC}$	23	$^\circ\text{C} / \text{W}$
Voltage Rate of Change (Rated V_R)		dv / dt	1000	$\text{V} / \mu\text{s}$
Operating Temperature Range		T_J	-50~150	$^\circ\text{C}$
Storage temperature		T_{STG}	-65~150	$^\circ\text{C}$

Notes:

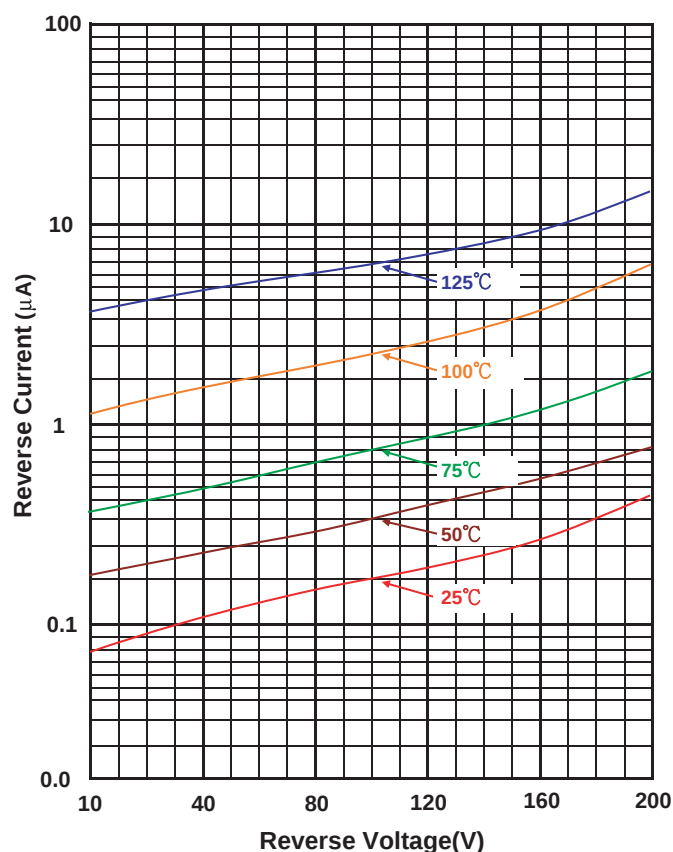
1. Measured at 1MHz and applied reverse voltage of 5.0 V D.C.
2. Pulse test: 300 μs pulse width, 1% duty cycle.
3. Thermal Resistance Junction to Ambient.
4. Thermal Resistance Junction to Case.

RATINGS AND CHARACTERISTIC CURVES

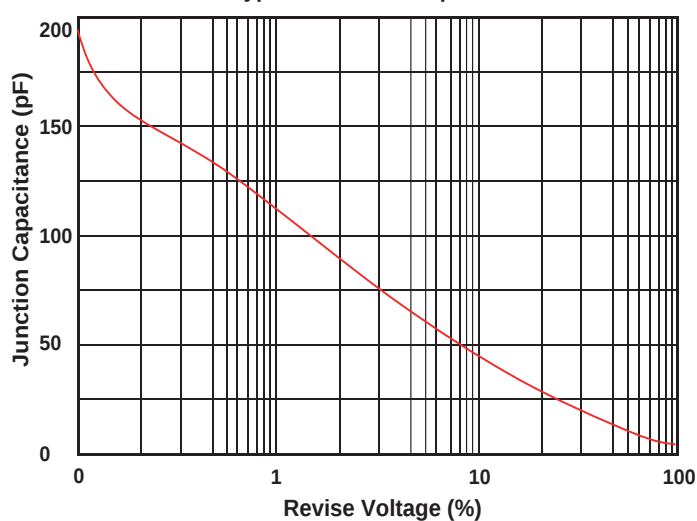
Typical Forward Current Derating Curve



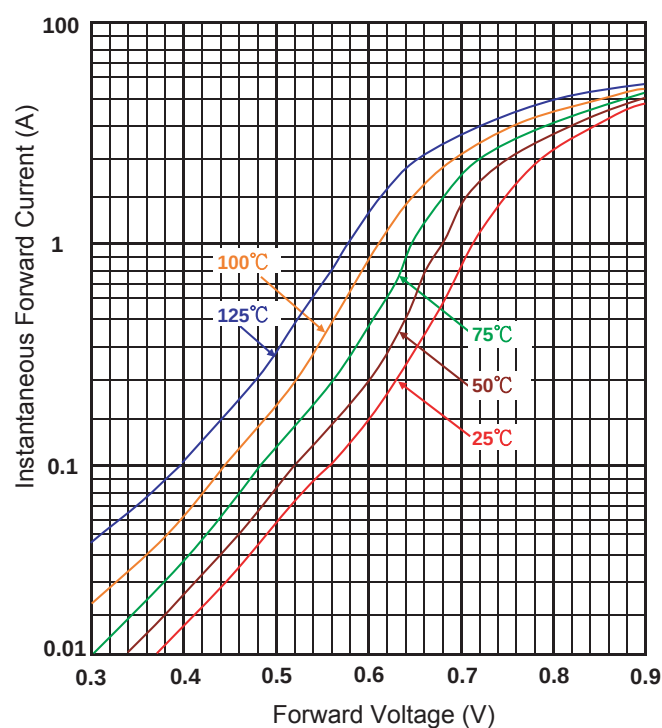
Typical Reverse Characteristic



Typical Junction Capacitance



Typical Forward Characteristic



Maximum Non- Repetitive Forward Surge Current

