

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

FEATURES

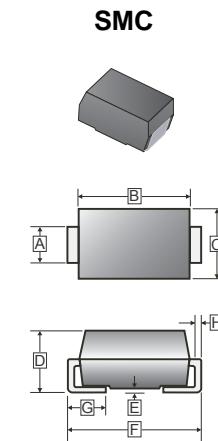
- High Current Capability
- Extremely Low Thermal Resistance
- For Surface Mount Application
- Higher Temp Soldering : 250°C for 10 Seconds at Terminals
- Low Reverse Current

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
SMC	3K	13' inch



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.75	3.15	E	-	0.203
B	6.60	7.11	F	7.75	8.13
C	5.59	6.22	G	0.76	1.27
D	2.00	2.62	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%).

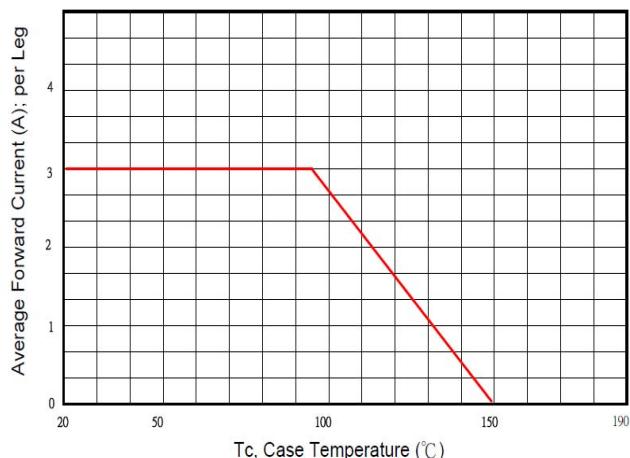
Parameter	Symbol	Rating	Unit
Peak Repetitive Peak reverse voltage	V_{RRM}	200	V
Working Peak Reverse Voltage	V_{RWM}	200	V
Maximum DC Blocking Voltage	V_R	200	V
Average Forward Current @ $T_J=25^\circ\text{C}$	$I_{F(AV)}$	3	A
Peak Forward Current @ 8.3 ms Half Sine	I_{FSM}	90	A
Maximum Instantaneous Forward Voltage	$I_{FM} = 3.0 \text{ A}, T_A = 25^\circ\text{C}$	0.85	V
		0.75	
		0.68	
Maximum DC Reverse Current At Rated DC Blocking Voltage ⁴	I_R	5	μA
		80	
Typical Junction Capacitance ¹	C_J	60	pF
Typical Thermal Resistance ²	$R_{\theta JA}$	60	$^\circ\text{C} / \text{W}$
Typical Thermal Resistance ³	$R_{\theta JC}$	20	$^\circ\text{C} / \text{W}$
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:

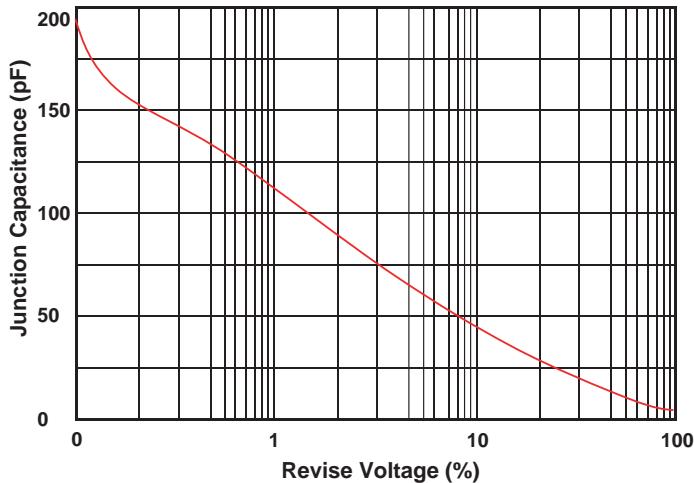
1. Measured at 1MHz and applied reverse voltage of 5.0 V D.C.
2. Thermal Resistance Junction to Ambient.
3. Thermal Resistance Junction to Case.
4. Pulse test: 300 μs pulse width, 1% duty cycle.

RATINGS AND CHARACTERISTIC CURVES

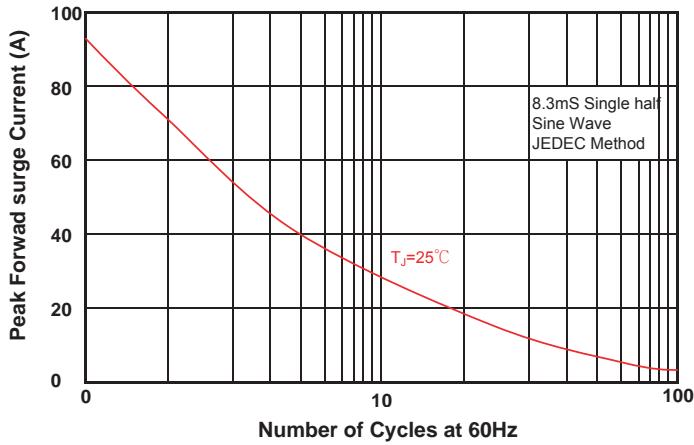
Typical Forward Current Derating Curve



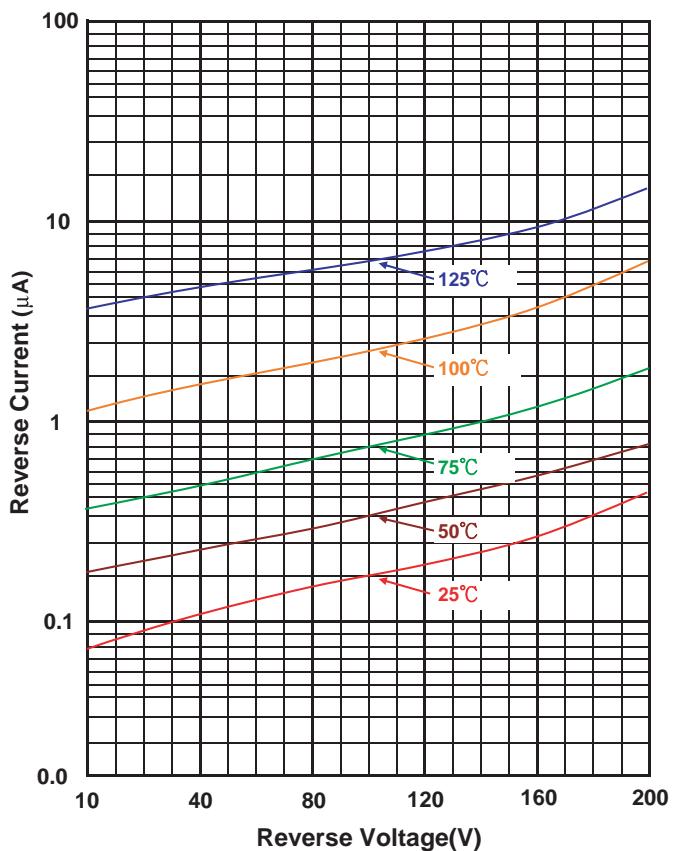
Typical Junction Capacitance



Maximum Non-Repetitive Forward Surge Current



Typical Reverse Characteristic



Typical Forward Characteristic

