

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

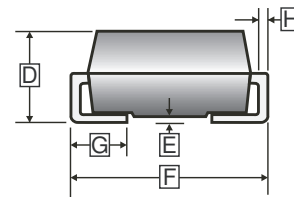
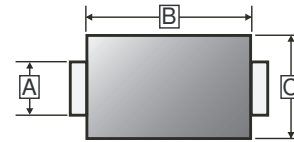
MECHANICAL DATA

- Case: Molded plastic
- Epoxy: UL94V-1 rate flame retardant
- Lead: Lead solderable per MIL-STD-202 method 208 guaranteed
- Polarity: As Marked
- Mounting position: Any
- Weight: 1.10 grams (Approximately)

PACKAGE INFORMATION

Package	MPQ	Leader Size
SMC	3K	13 inch

SMC



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.750	3.250	E	-	0.203
B	6.520	7.110	F	7.750	8.130
C	5.590	6.220	G	0.760	1.520
D	2.000	2.620	H	0.150	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%.)

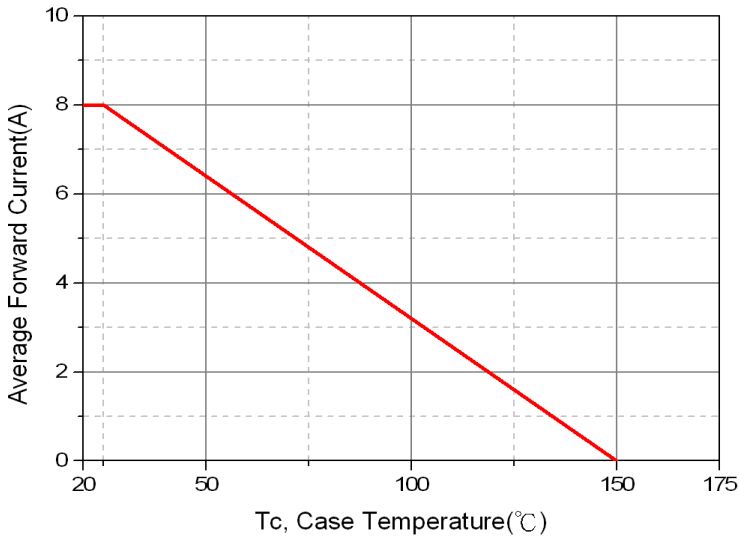
Parameter	Symbol	Rating	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	150	V
Working Peak Reverse Voltage	V_{RWM}	150	V
Maximum DC Blocking Voltage	V_R	150	V
Maximum Average Forward Rectified Current See Fig. 1	$I_{F(AV)}$	8	A
Peak Forward Surge Current, 8.3 ms single half sine-wave Superimposed on rated load (JEDEC method)	I_{FSM}	150	A
Maximum Instantaneous Forward Voltage	V_F	$T_A=25^\circ\text{C}$	0.87
		$T_A=125^\circ\text{C}$	0.73
Maximum DC Reverse Current at Rated DC Blocking Voltage ⁴	I_R	$T_A=25^\circ\text{C}$	0.1
		$T_A=125^\circ\text{C}$	8
Typical Junction Capacitance ¹	C_J	200	pF
Voltage Rate of Change (Rated VR)	dv/dt	10000	V / μS
Typical Thermal Resistance ³	$R_{\theta JC}$	25	$^\circ\text{C} / \text{W}$
Typical Thermal Resistance ²	$R_{\theta JL}$	20	$^\circ\text{C} / \text{W}$
Operating & Storage Temperature	T_J, T_{STG}	-50 ~ 150, -65 ~ 175	$^\circ\text{C}$

Note:

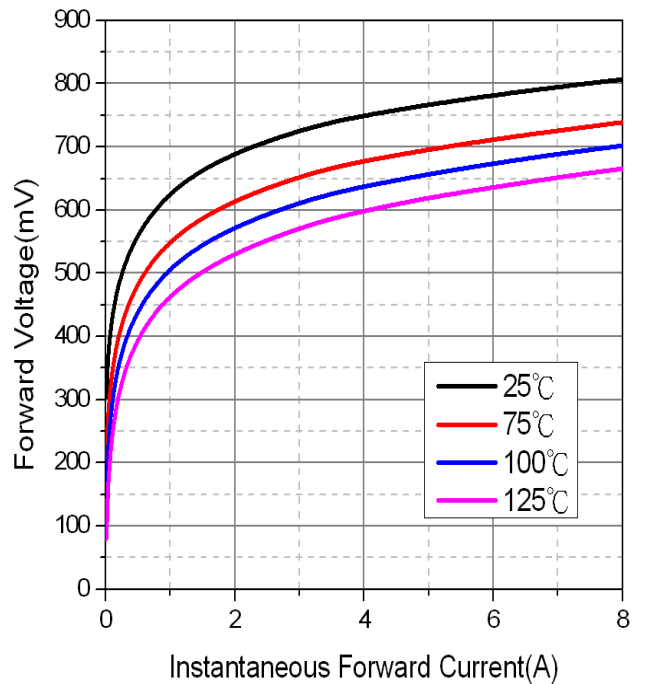
1. Measured at 1MHz and applied reverse voltage of 5.0 V D.C.
2. Thermal Resistance Junction to Lead.
3. Thermal Resistance Junction to Case.
4. Pulse test: 300 μs pulse width, 1% duty cycle.

RATINGS AND CHARACTERISTIC CURVES

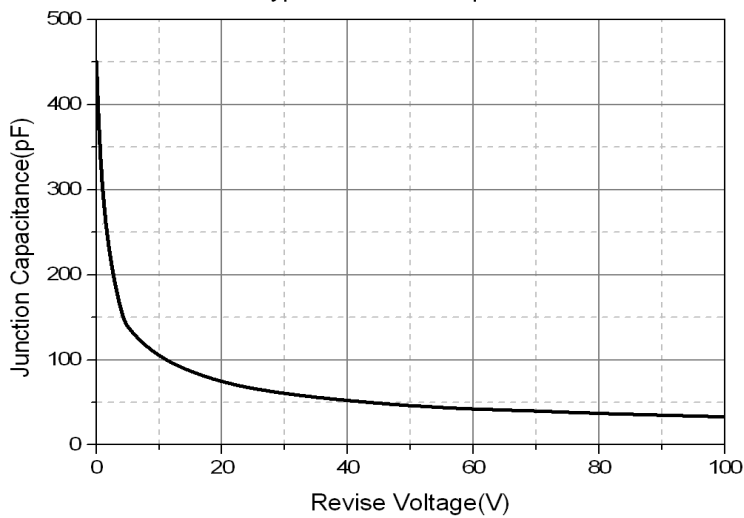
Typical Forward Current Derating Curve



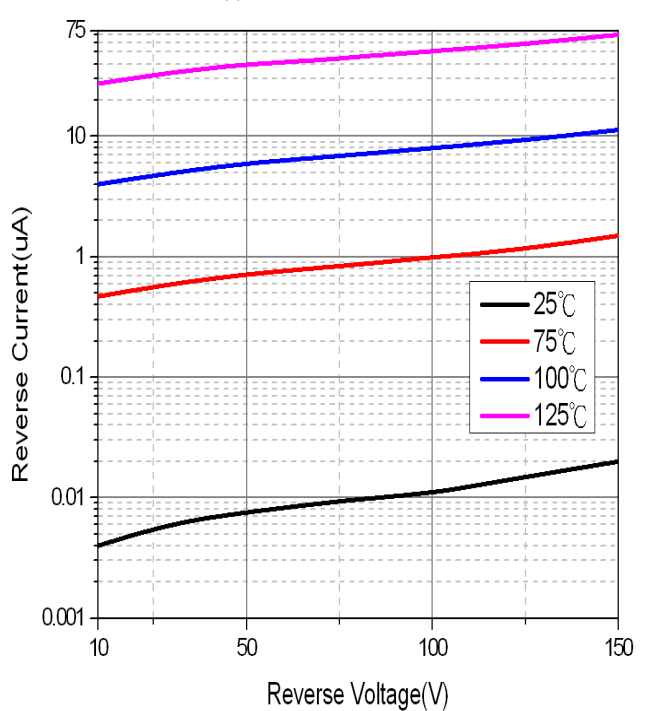
Typical Forward Characteristic



Typical Junction Capacitance



Typical Reverse Characteristic



Maximum Non-Repetitive Forward Surge Current

