

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

### FEATURES

- Low profile package
- Ideal for automated placement
- Guard Ring for over voltage protection
- Low forward voltage drop
- Component in accordance to RoHS 2002/95/EC

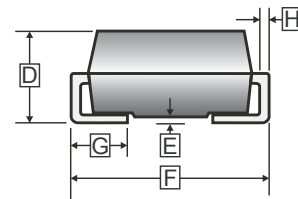
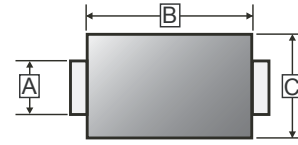
### MECHANICAL DATA

- Case: Molded Plastic
- Epoxy: UL 94V-0 rate flame retardant
- Terminals: Lead Free Plating (Tin Finish).  
Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Mounting position: Any
- Weight: 0.095 grams

### 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%.)

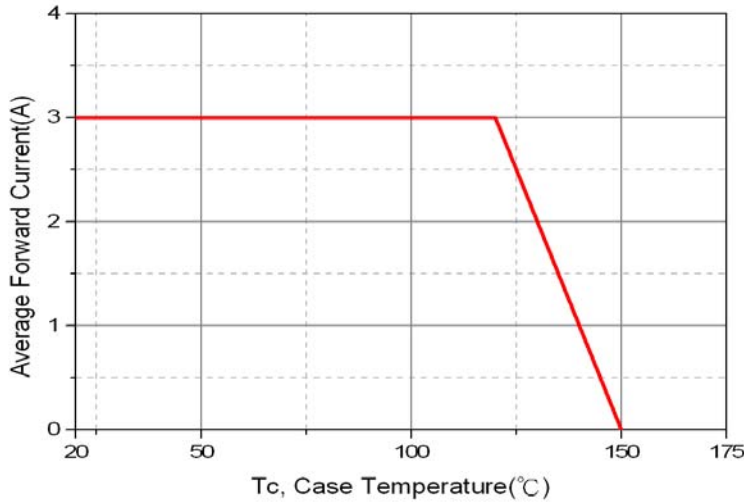
Parameter	Symbol	Rating	Unit
Maximum repetitive peak reverse voltage	$V_{RRM}$	20	V
Maximum RMS voltage	$V_{RMS}$	14	V
Maximum DC Blocking Voltage	$V_{DC}$	20	V
Maximum average forward rectified current	$I_{F(AV)}$	3	A
Peak Forward Current @ 8.3 ms Half Sine	$I_{FSM}$	150	A
Maximum Instantaneous Forward Voltage @ $I_F=3A$	$V_F$	0.42	V
Maximum DC Reverse Current At Rated DC Blocking <sup>2</sup>	$I_R$	$T_A=25^\circ C$	0.1
		$T_A=100^\circ C$	10
Typical Junction Capacitance <sup>1</sup>	$C_J$	200	pF
Typical Thermal Resistance	$R_{\theta JL}$	20	°C/W
Typical Thermal Resistance	$R_{\theta JC}$	25	°C/W
Operating And Storage Temperature Range	$T_J, T_{STG}$	-55~150	°C

Note:

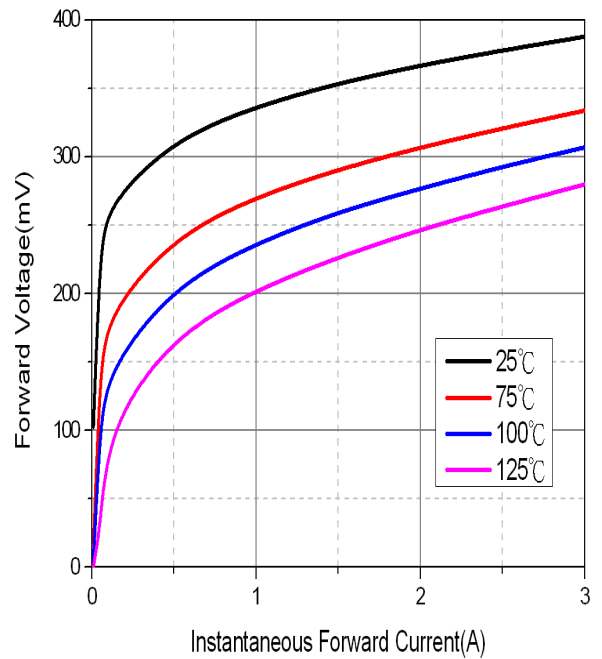
1. Measured at 1.0MHZ and applied reverse voltage of 4.0V DC.
2. Pulse test: 300µs pulse width, 1% duty cycle.

**RATINGS AND CHARACTERISTIC CURVES**

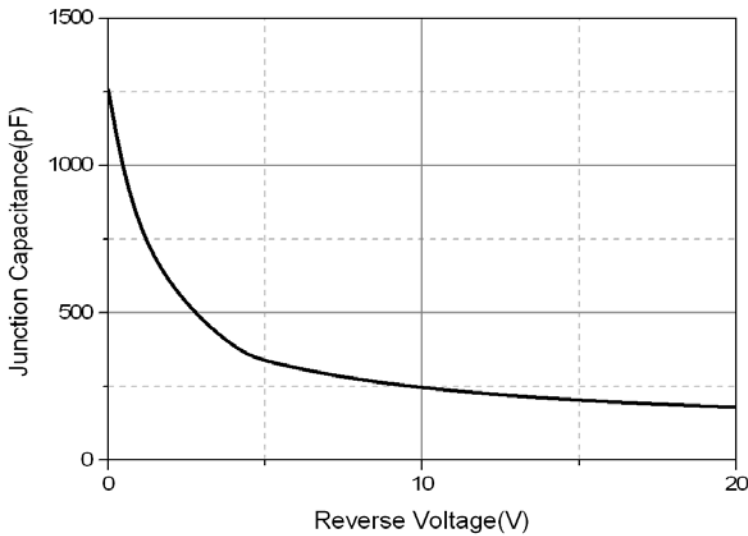
Typical Forward Current Derating Curve



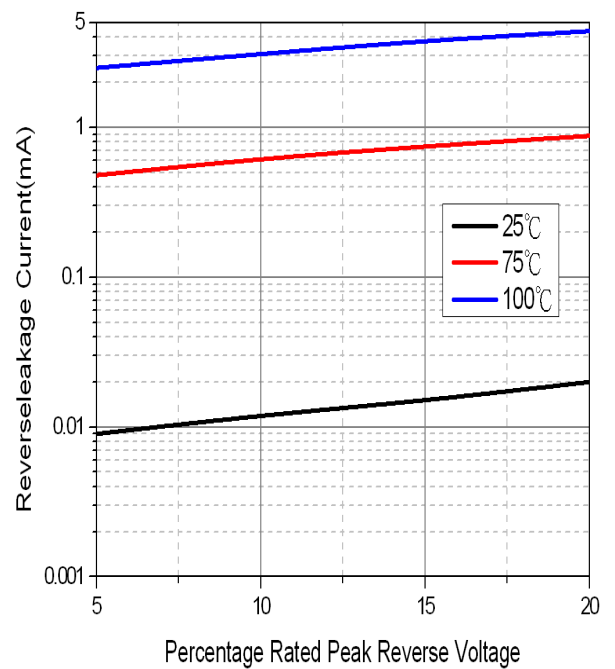
Typical Forward Characteristics



Typical Junction Capacitance



Typical Reverse Characteristics



Maximum Non-Repetitive Forward Surge Current

