

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

## FEATURES

- Ideal for surface mount applications
- Easy pick and place
- Built-in strain relief
- Super Low  $V_F$  & Low  $I_R$

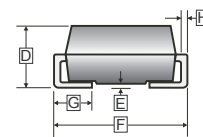
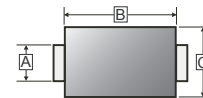
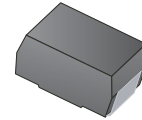
## MECHANICAL DATA

- Case : Molded Plastic
- Epoxy : UL 94V-0 Rate Flame Retardant
- Metallurgically bonded construction
- Polarity : Color Band Denotes Cathode End
- Mounting Position: Any

## PACKAGE INFORMATION

Package	MPQ	Leader Size
SMC	3K	13 inch

## SMC



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%.)

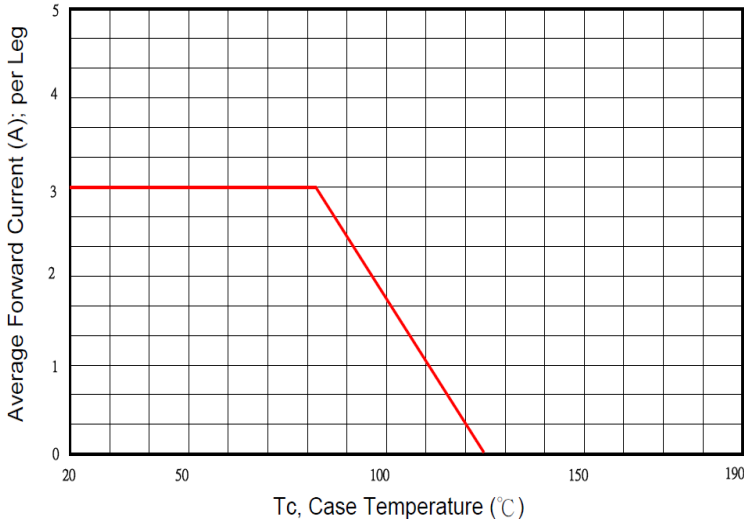
Parameter	Symbol	Rating	Unit
Peak Repetitive Peak reverse voltage	$V_{RRM}$	40	V
Working Peak Reverse Voltage	$V_{RWM}$	40	V
Maximum DC Blocking Voltage	$V_{DC}$	40	V
Maximum Average Forward Current, See Fig. 1	$I_F$	3	A
Peak Forward Surge Current @ 8.3 ms Half Sine-Wave superimposed on rated load (JEDEC method)	$I_{FSM}$	90	
Maximum Instantaneous Forward Voltage @ $I_F = 3A$	$V_F$	0.42	V
Maximum DC Reverse Current At Rated DC Blocking Voltage <sup>3</sup>	$T_A = 25^\circ C$	0.5	mA
	$T_A = 80^\circ C$	5	
Voltage Rate of Change (Rated VR)	dv/dt	10000	V / $\mu S$
Typical Thermal Resistance <sup>1</sup>	$R_{\theta JL}$	20	$^\circ C / W$
Typical Thermal Resistance <sup>2</sup>	$R_{\theta JC}$	25	$^\circ C / W$
Operating Temperature Range	$T_J$	-25~125	$^\circ C$
Storage temperature	$T_{STG}$	-55~150	$^\circ C$

Notes:

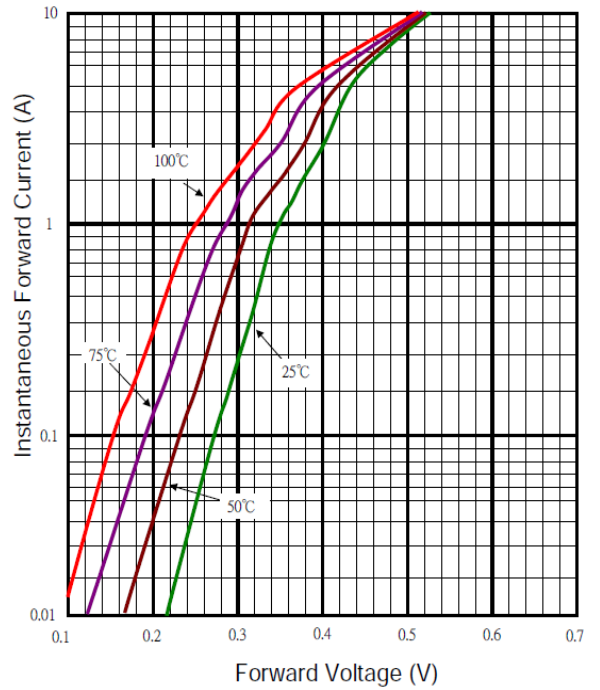
1. Thermal Resistance Junction to Lead.
2. Thermal Resistance Junction to Case
3. Pulse test: 300 $\mu s$  pulse width, 1% duty cycle.

**CHARACTERISTIC CURVES**

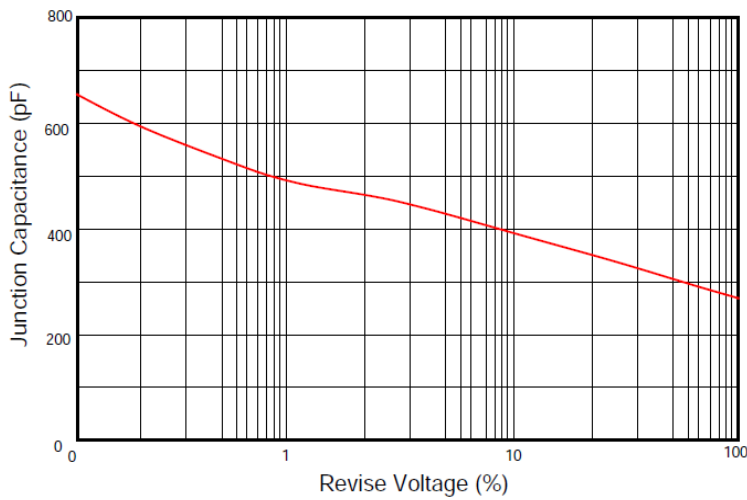
Typical Forward Current Derating Curve



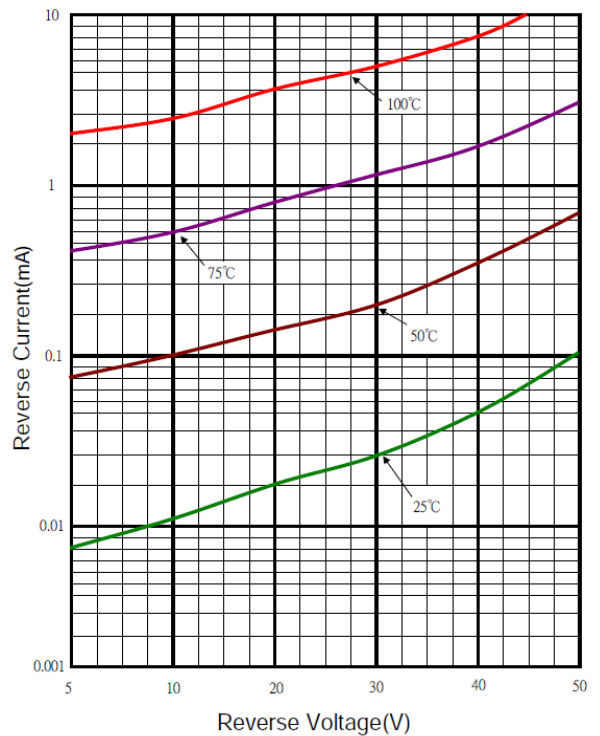
Typical Forward Characteristic



Typical Junction Capacitance



Typical Reverse Characteristic



Maximum Non- Repetitive Forward Surge Current

