

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

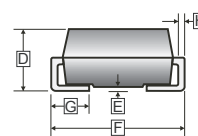
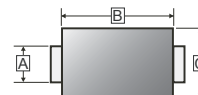
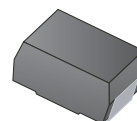
FEATURES

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Epitaxial construction

MECHANICAL DATA

- Case : Molded Plastic
- Epoxy : UL 94V-0 Rate Flame Retardant
- Metallurgically bonded construction
- Polarity : Color Band Denotes Cathode End
- Mounting Position: Any
- Weight : 1.10 grams

SMC



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%.)

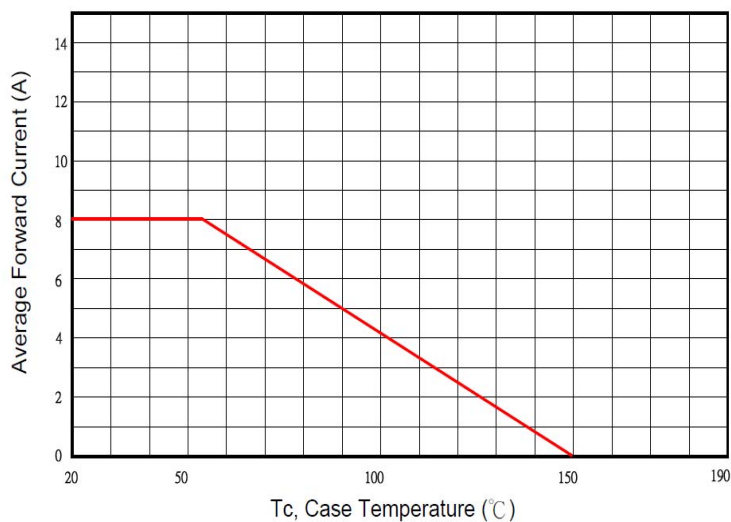
Parameter	Symbol	Rating	Unit
Peak Repetitive Peak reverse voltage	V_{RRM}	200	V
Working Peak Reverse Voltage	V_{RWM}	200	V
Maximum DC Blocking Voltage	V_{DC}	200	V
Maximum Average Forward Current, See Fig. 1	I_F	8	A
Peak Forward Surge Current @ 8.3 ms Half Sine-Wave superimposed on rated load (JEDEC method)	I_{FSM}	125	
Maximum Instantaneous Forward Voltage @ $I_F=8A$	V_F	0.91	V
Maximum DC Reverse Current At Rated DC Blocking Voltage ³	$T_J=25^{\circ}C$	I_R	0.05
	$T_J=125^{\circ}C$		20
Typical Junction Capacitance ¹	C_J	200	pF
Typical Thermal Resistance ²	$R_{\theta JC}$	13	°C / W
Operating Temperature Range	T_J	-50 ~ 150	°C
Storage temperature	T_{STG}	-65 ~ 150	°C

Notes:

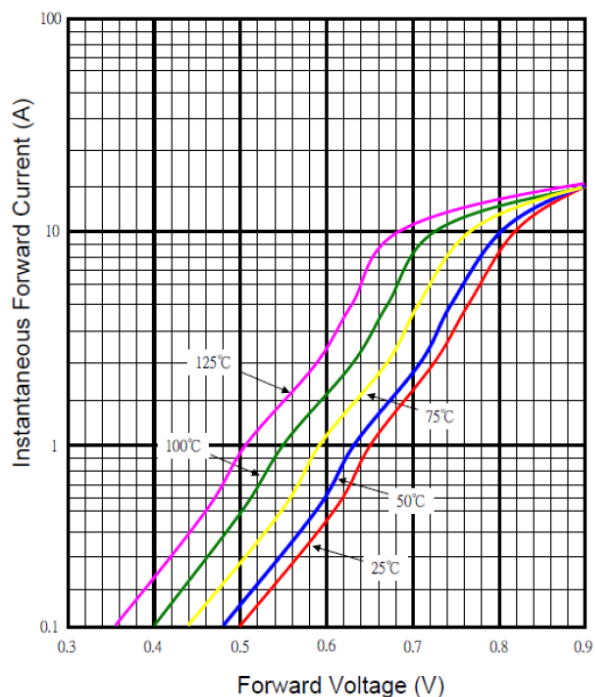
1. Measured at 1MHz and applied reverse voltage of 4.0 V D.C.
2. Thermal Resistance Junction to Case
3. Pulse Test : Pulse Width $\leq 300 \mu s$, Duty Cycle $\leq 2.0\%$.

CHARACTERISTIC CURVES

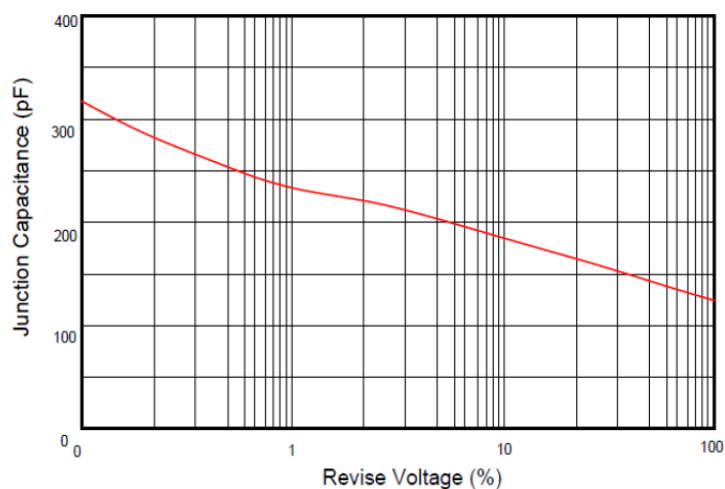
Typical Forward Current Derating Curve



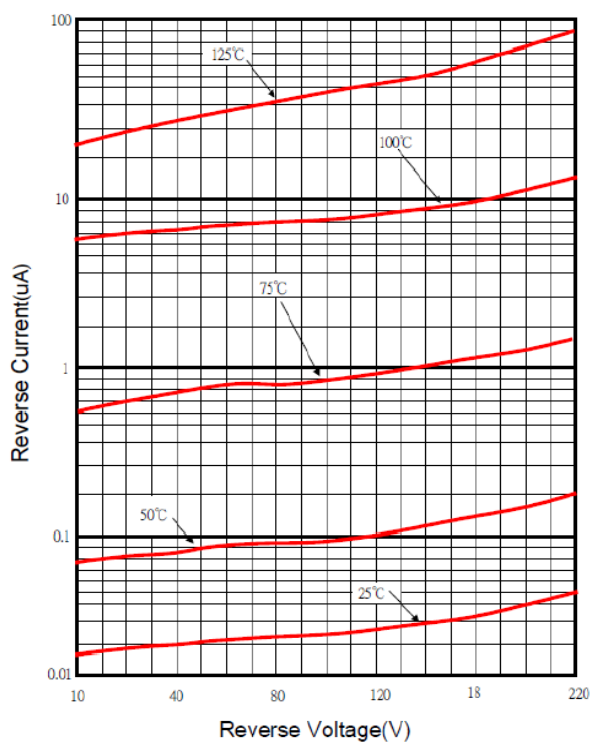
Typical Forward Characteristic



Typical Junction Capacitance



Typical Reverse Characteristic



Maximum Non- Repetitive Forward Surge Current

