

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

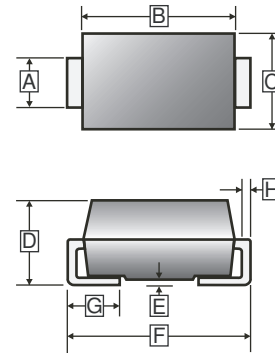
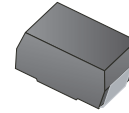
## FEATURES

- Surface mount device
- High surge current capability
- Low reverse current
- Component in accordance to RoHS 2002/95/EC

## MECHANICAL DATA

- Cases: SMC
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Terminals: Lead Free Plating(Tin Finish) Solderable Per MIL-STD-202, Method 208
- Mounting position: Any
- Polarity: Color band denotes cathode

### SMC



## PACKAGE INFORMATION

Package	MPQ	Leader Size
SMC	3K	13' inch

REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.750	3.250	E	-	0.203
B	6.520	7.110	F	7.640	8.130
C	5.50	6.220	G	0.750	1.520
D	1.980	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	$V_{RRM}$	600	V
Maximum Peak Reverse Voltage	$V_{RWM}$	420	V
Maximum DC blocking voltage	$V_{DC}$	600	V
Maximum average forward rectified current@ $T_A=75^\circ\text{C}$	$I_F$	4	A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	150	A
Maximum Instantaneous Forward Voltage	$V_F$	$I_F=4A$	1.28
		$I_F=3A$	1.25
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	$T_J=25^\circ\text{C}$	10
		$T_J=150^\circ\text{C}$	250
Maximum Reverse Recovery Time <sup>1</sup>	$T_{rr}$	50	nS
Storage and Operating Temperature Range	$T_{STG}, T_J$	-65~175	°C

Notes:

1. Measured with  $I_F=0.5A$ ,  $I_R=1A$ ,  $I_{rr}=0.25A$ .

**CHARACTERISTIC CURVES**

FIG.1 FORWARD CURRENT DERATING CURVE

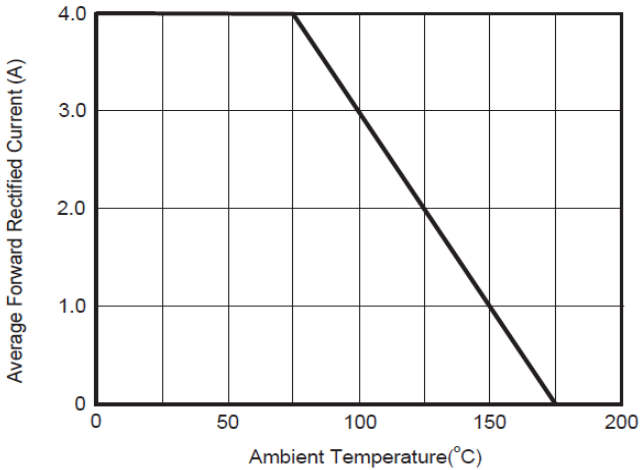


FIG.2 MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

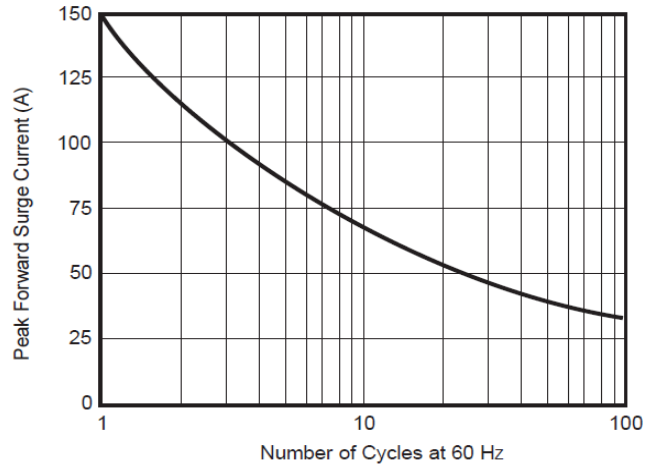


FIG. 3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

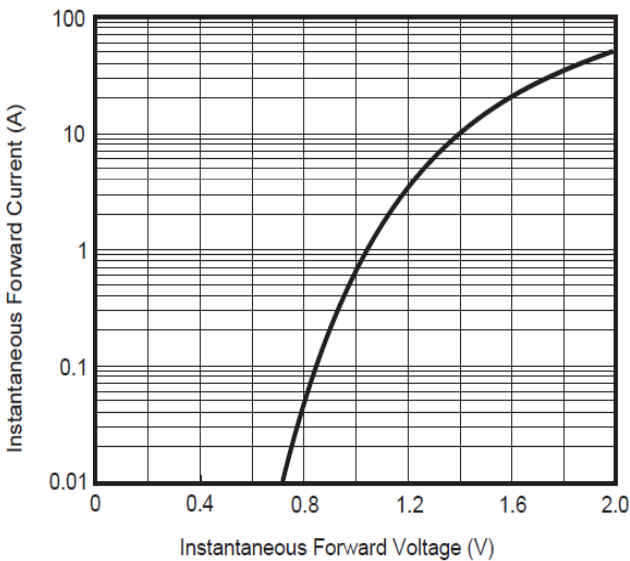


FIG 4. TYPICAL REVERSE CHARACTERISTICS

