

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 Fast switching speed

MECHANICAL DATA

- Epoxy: UL 94V-0 rate flame retardant
- Polarity: Color band denotes cathode
- Mounting position: Any

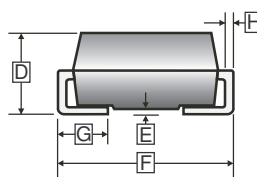
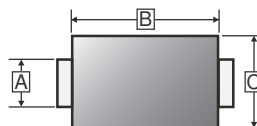
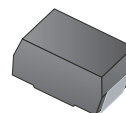
PACKAGE INFORMATION

Package	MPQ	Leader Size
SMC	3K	13 inch

ORDER INFORMATION

Part Number	Type
SUF306C-C	Lead (Pb)-free and Halogen-free

SMC



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.750	3.270	E	-	0.203
B	6.520	7.110	F	7.640	8.170
C	5.50	6.220	G	0.750	1.520
D	1.980	2.620	H	0.23 TYP	

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	Ratings	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	800	V
Maximum Average Forward Rectified Current	I_F	3	A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	100	A
Maximum Instantaneous Forward Voltage @ $I_F=3A$	V_F	1.85	V
Maximum DC Reverse Current @ Rated DC Blocking Voltage	I_R	$T_A=25^\circ C$	5
		$T_A=125^\circ C$	100
Maximum Reverse Recovery Time ¹	T_{RR}	35	nS
Typical Junction Capacitance ²	C_J	34	pF
Typical Thermal Resistance ³	$R_{\theta JL}$	15	$^\circ C/W$
	$R_{\theta JA}$	50	$^\circ C/W$
Operating & Storage Temperature	T_J, T_{STG}	-55~150	$^\circ C$

Notes:

1. Reverse Recovery Time test condition: $I_F=0.5A, I_R=1A, I_{RR}=0.25A$.
2. Measured at 1MHz and applied reverse voltage of 4V D.C.
3. Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.6" x 0.6" (16mm x 16mm) copper pad areas.

CHARACTERISTIC CURVES

FIG1: I_o -TL Curve

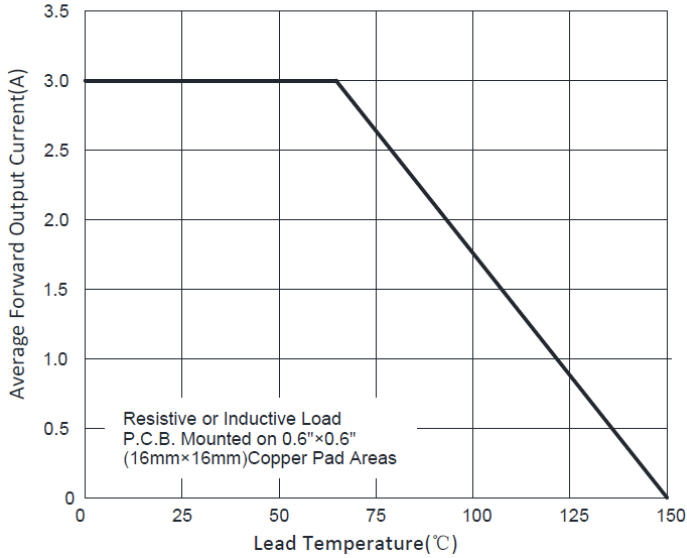


FIG2: Surge Forward Current Capability

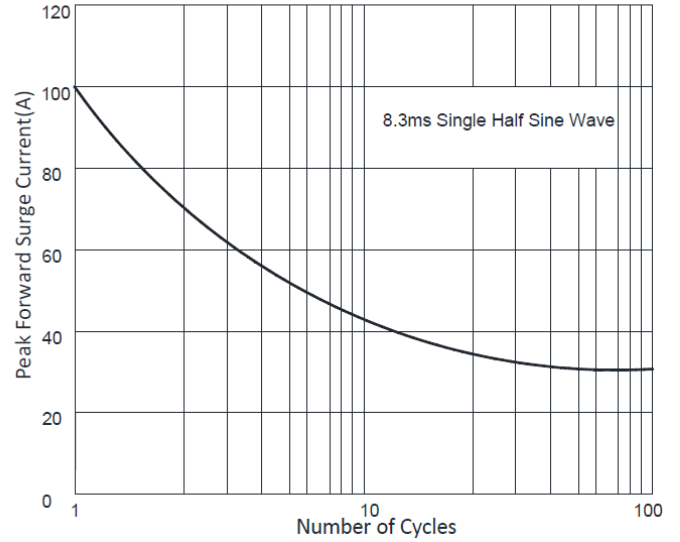


FIG3: Typical Forward Voltage

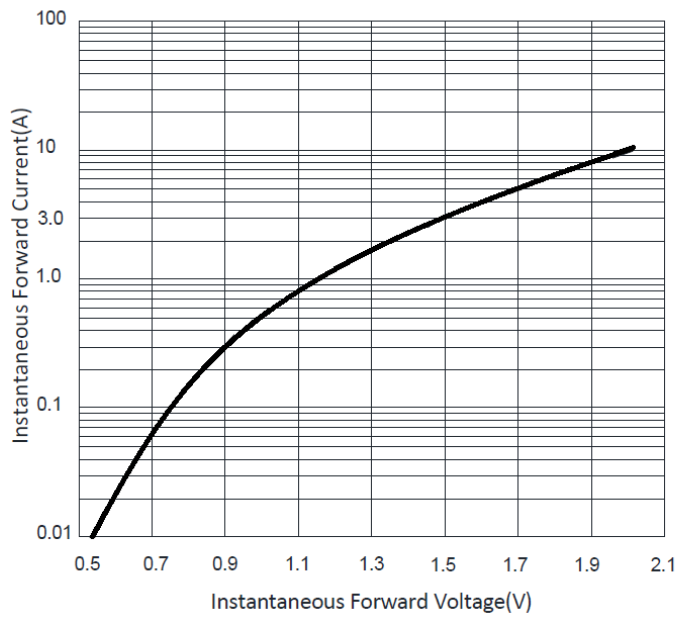


FIG4: Typical Reverse Characteristics

