

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 under 35ns

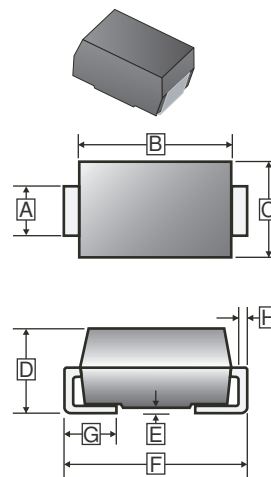
MECHANICAL DATA

- Case: Molded plastic SMC
- 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

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%.)

For capacitive load, dc rate current by 20%.)

Parameter	Symbol	Part Number					Unit
		SUF301C	SUF302C	SUF303C	SUF304C	SUF305C	
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	V
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	V
Maximum Average Forward Rectified Current.375"(9.5mm) Lead Length at T _A =55℃	I _F	3					A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load@ T _L =100℃	I _{FSM}	80					A
Maximum Instantaneous Forward Voltage @ 3A	V _F	0.98			1.3	1.7	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T _A =25℃	I _R	10				μA
	T _A =100℃		500				
Maximum Reverse Recovery Time ¹	T _{RR}	35					nS
Typical Junction Capacitance ²	C _J	50			40		pF
Typical Thermal Resistance ³	R _{θJL}	12					℃/W
	R _{θJA}	47					℃/W
Operating & Storage Temperature	T _J , T _{STG}	-55~150					℃

Notes:

1. Reverse Recovery Time test condition : $I_F=0.5\text{A}$, $I_R=1\text{A}$, $I_{RR}=0.25\text{A}$
2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
3. Units Mounted on P.C.B. with 0.31*0.31"(8*8mm) Copper Pad Areas.

CHARACTERISTIC CURVES

FIG. 1-Typical Forward Current Derating Curve

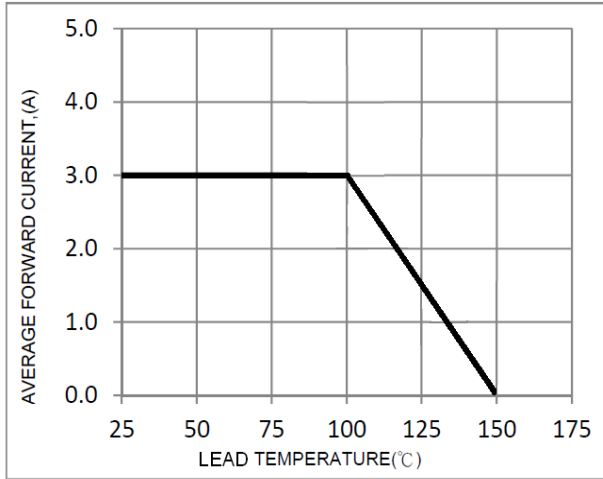


FIG. 2-Typical Forward Characteristics

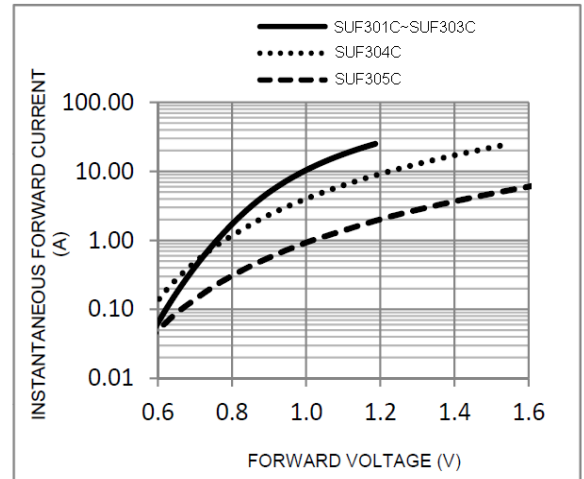


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

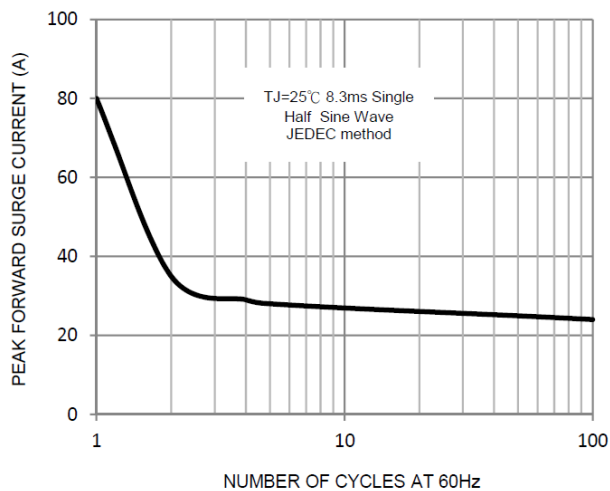


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

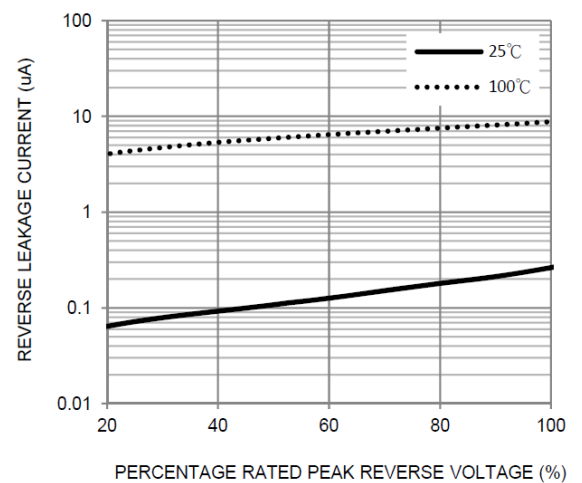


FIG. 5-TYPICAL JUNCTION CAPACITANCE

