

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

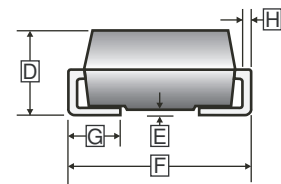
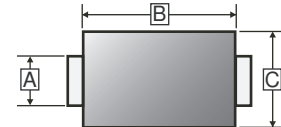
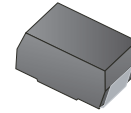
APPLICATIONS

- Rectifier

PACKAGE INFORMATION

Package	MPQ	Leader Size
SMC	3K	13 inch

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	8.130
C	5.50	6.220	G	0.750	1.520
D	1.980	2.620	H	0.23 TYP	

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Part Number					Unit
		SUF501C	SUF502C	SUF503C	SUF504C	SUF505C	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	V
Maximum Average Forward Current@60Hz half sine wave, resistance load, $T_A=50^\circ\text{C}$	I_F	5					A
Maximum Non-Repetitive Peak Forward Surge Current@ 60Hz half sine-wave, 1 cycle, $T_A=25^\circ\text{C}$	I_{FSM}	150					A
Peak Forward Voltage@ $I_{FM}=5\text{A}$, $T_A=25^\circ\text{C}$ ²	V_{FM}	0.95		1.3	1.7	V	
Peak Reverse Current@ $V_{RM}=V_{RRM}$ ²	$T_A=25^\circ\text{C}$	10					μA
	$T_A=125^\circ\text{C}$	500					
Reverse Recovery Time ^{1,2}	T_{RR}	35					nS
Typical Thermal Resistance from Junction to Lead ²	$R_{\theta JL}$	15					$^\circ\text{C/W}$
Typical Thermal Resistance from Junction to Ambient ²	$R_{\theta JA}$	50					$^\circ\text{C/W}$
Operating Junction and Storage Temperature	T_J, T_{STG}	150, -55~150					$^\circ\text{C}$

Notes:

1. Reverse Recovery Time test condition : $I_F=0.5\text{A}$, $I_R=1\text{A}$, $I_{RR}=0.25\text{A}$, $T_A=25^\circ\text{C}$
2. $R_{\theta JL}$ and $R_{\theta JA}$ is measured when the device is mounted on a P.C.B. with a 0.3" x 0.3" (8mm x 8mm) copper pad areas.

CHARACTERISTIC CURVES

FIG.1 FORWARD CURRENT DERATING CURVE

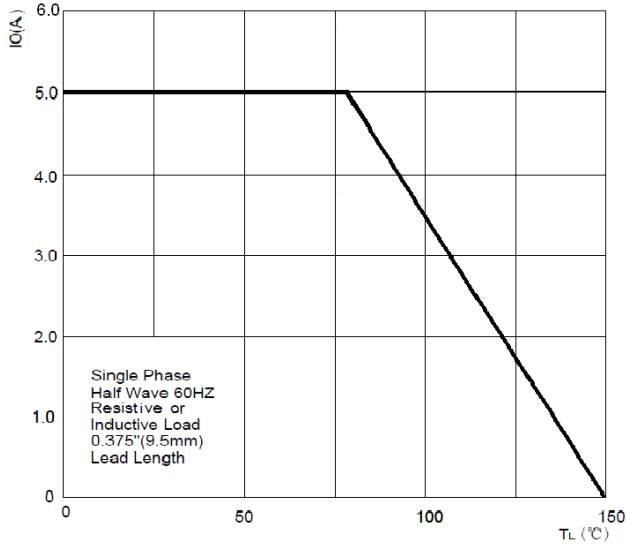


FIG.2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

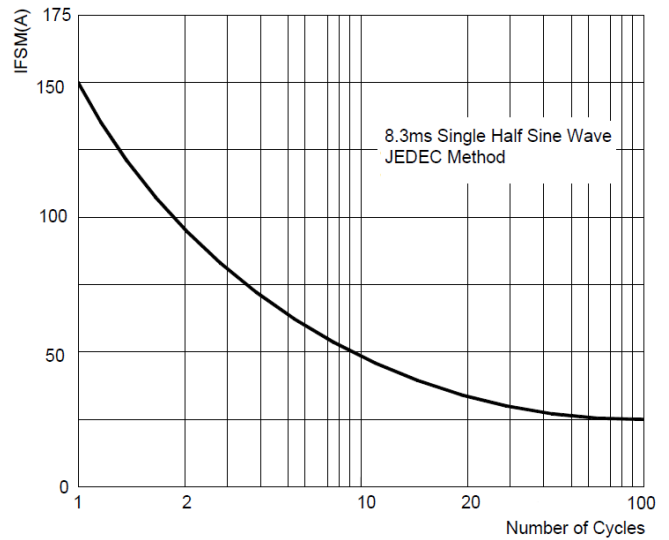


FIG.3: TYPICAL FORWARD CHARACTERISTICS

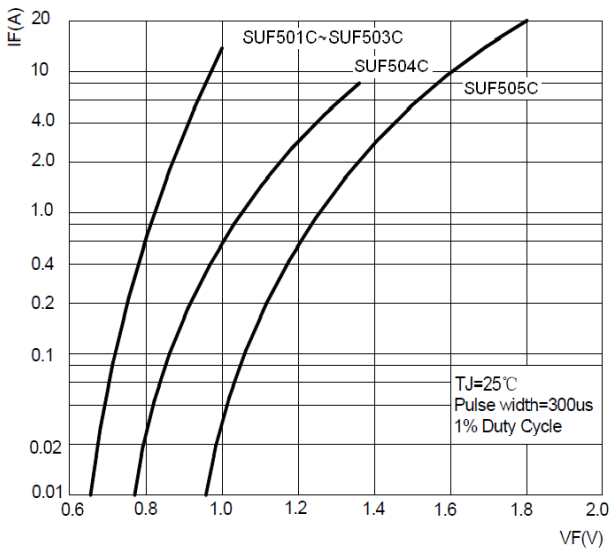


FIG.4: TYPICAL REVERSE CHARACTERISTICS

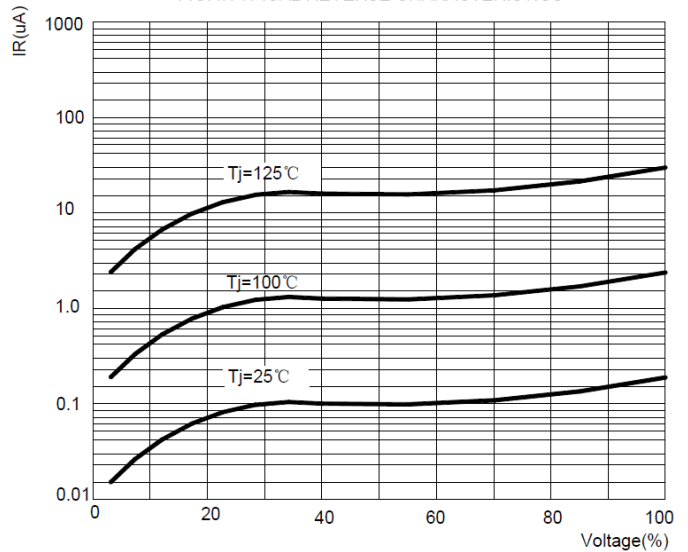


FIG.5: Diagram of circuit and Testing wave form of reverse recovery time

