

RoHS Compliant Product

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

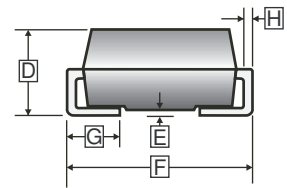
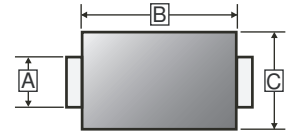
## FEATURES

- Surface mount device
- High surge current capability
- Low reverse current

## MECHANICAL DATA

- Cases : DO-214AA(SMB)
- Case Material : Molded Plastic. UL Flammability Classification Rating 94V-0
- Terminals : Lead Free Plating(Tin Finish)  
Solderable Per MIL-STD-202, Method 208
- Polarity : Cathode Band

### SMB



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.91	2.20	E	-	0.203
B	4.06	4.75	F	5.08	5.59
C	3.30	3.94	G	0.76	1.52
D	1.95	2.65	H	0.15	0.31

## PACKAGE INFORMATION

Package	MPQ	Leader Size
SMB	3K	13 inch

## 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	Part Number	Unit
Maximum repetitive peak reverse voltage	$V_{RRM}$	600	V
Maximum average forward rectified current see Fig 2. @ 60Hz Half-sine wave, Resistance load, $T_L=110^\circ\text{C}$	$I_F$	3	A
Peak Forward Surge Current @ 60Hz Half-sine wave, 1 cycle, $T_A=25^\circ\text{C}$	$I_{FSM}$	100	A
Maximum Instantaneous Forward Voltage @ $I_F=3\text{A}$	$V_F$	1.7	V
Peak Reverse Current	$I_{RRM}$	$T_A=25^\circ\text{C}$	10
		$T_A=100^\circ\text{C}$	200
Maximum Reverse Recovery Time @ $I_F=0.5\text{A}$ , $I_R=1\text{A}$ , $I_{RR}=0.25\text{A}$	$T_{RR}$	75	ns
Thermal Resistance, Junction to Ambient (Typ.) <sup>1</sup>	$R_{\theta JA}$	47	$^\circ\text{C/W}$
Thermal Resistance, Junction to Lead (Typ.) <sup>1</sup>	$R_{\theta JL}$	13	$^\circ\text{C/W}$
Storage and Operating Temperature Range	$T_J, T_{STG}$	-55 ~ 150	$^\circ\text{C}$

NOTES:

1. Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.2"x0.2" (5.0mm x 5.0mm) copper pad areas.

**CHARACTERISTIC CURVES**

FIG.1: FORWARD CURRENT DERATING CURVE

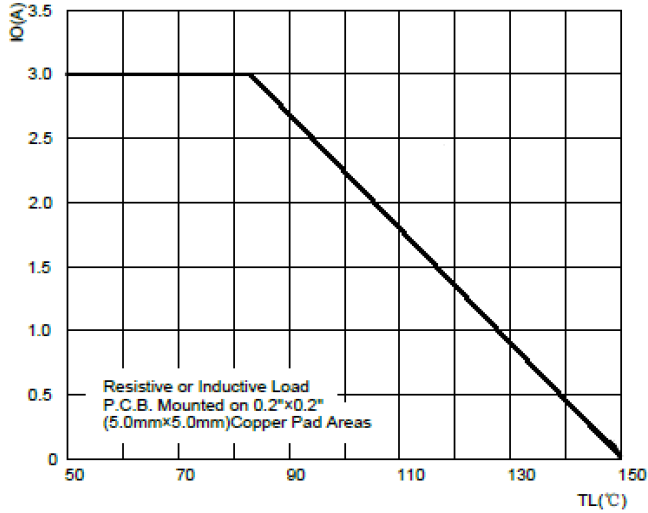


FIG.2: MAXIMUM NON-REPETITIVE FORWARD URGE CURRENT

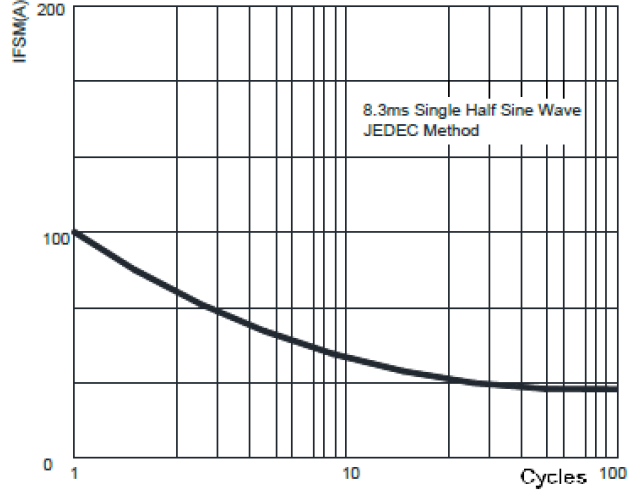


FIG.3: TYPICAL FORWARD CHARACTERISTICS

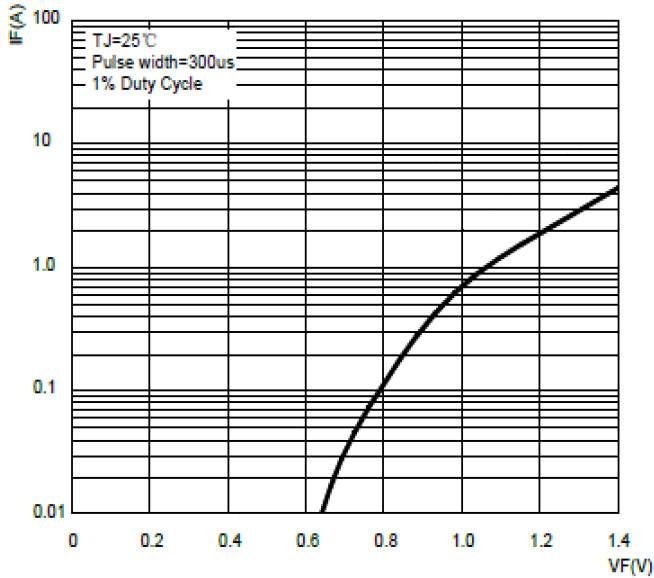


FIG.4: TYPICAL REVERSE CHARACTERISTICS

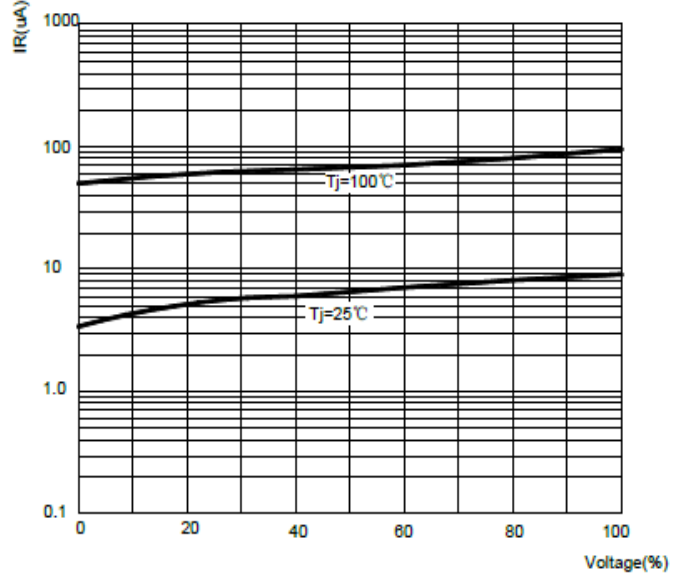


FIG.5: Diagram of circuit and Testing wave form of reverse recovery time

