

RoHS Compliant Product

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

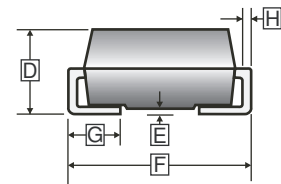
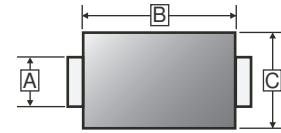
FEATURES

- 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
- Weight : 0.093 grams(approximate)

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 RMS voltage	V_{RMS}	420	V
Maximum DC blocking voltage	V_{DC}	600	V
Maximum average forward rectified current see Fig 2.	I_F	1	A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	50	A
Maximum Instantaneous Forward Voltage @ 1A	V_F	1.7	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	$T_A=25^\circ\text{C}$	5
		$T_A=100^\circ\text{C}$	100
Typical Junction Capacitance ¹	C_J	30	pF
Maximum Reverse Recovery Time ²	T_{rr}	75	ns
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	50	°C/W
Storage and Operating Temperature Range	T_{STG}, T_J	-55 ~ 150	°C

NOTES:

1. Measured at 1.0MHz and applied reverse voltage of 4.0V D.C.
2. Measured with $I_F=0.5A$, $I_R=1A$, $I_{RR}=0.25A$

CHARACTERISTIC CURVES

FIG.1- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

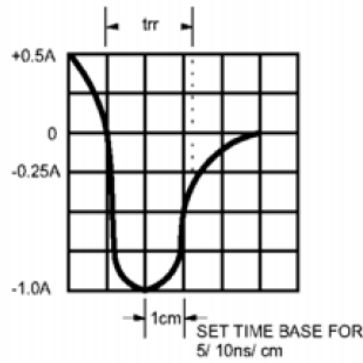
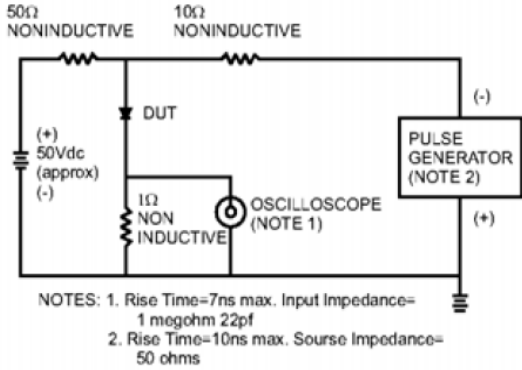


FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE

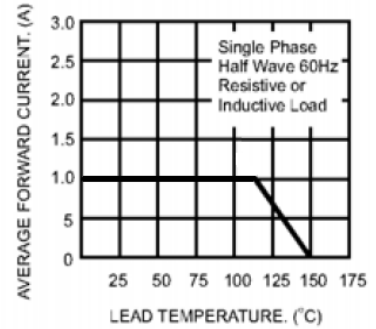


FIG.3- TYPICAL REVERSE CHARACTERISTICS

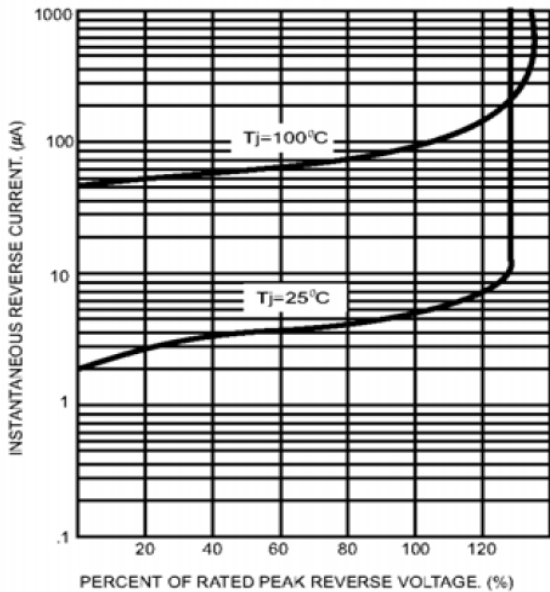


FIG.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

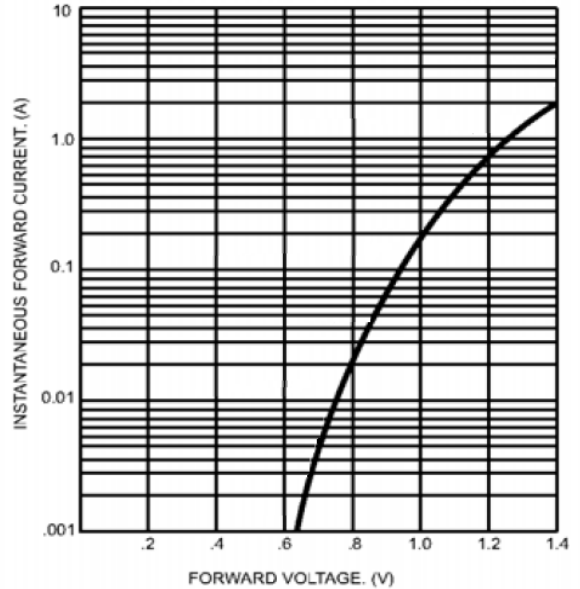


FIG.5- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

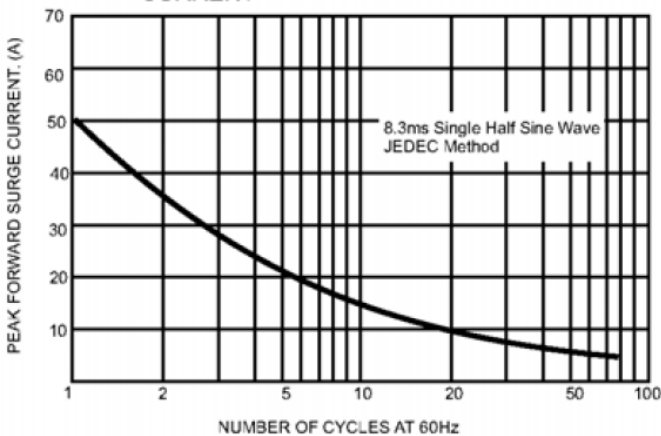


FIG.6- TYPICAL JUNCTION CAPACITANCE

