MUR3JBE

3.0AMPS .GLASS PASSIVATED ULTRA FAST RECTIFIERS

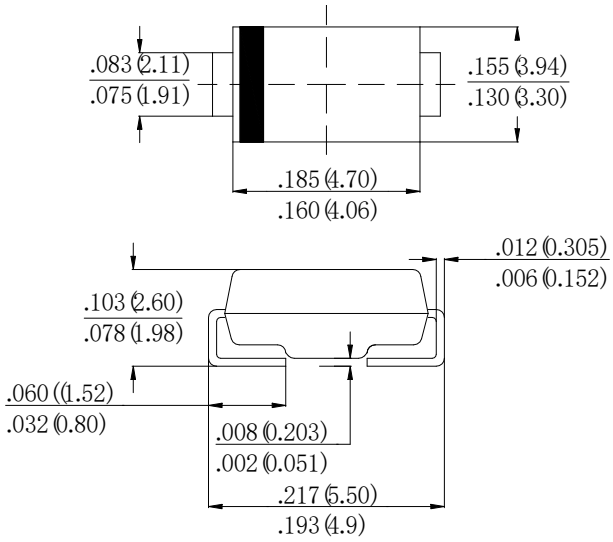
FEATURE

. Glass Passivated clip
. Low power loss, high efficiency
. High surge capability
. Super fast recovery time for high efficiency.
. For surface mounted application.
. Easy pick and place
. High temperature soldering guaranteed:
260°C/10 seconds at terminals.

MECHANICAL DATA

. Terminal: Solder plated
. Case: Molded with UL-94 Class V-0 recognized Flame Retardant Epoxy
. Polarity: color band denotes cathode
. Weight: 0.096 grams

SMB（DO-214AA）



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELETRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz,resistive or inductive load.
For capacitive load, derate current by 20%

Type Number	SYMBOL	MUR3JBE	units
Maximum Recurrent 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 at T_L=90°C	$I_{F(AV)}$	3.0	A
Peak Forward Surge Current 8.3ms single half sine- wave superimposed on rated load (JEDEC method)	I_{FSM}	90.0	A
Maximum Forward Voltage at 3.0A DC	V_F	1.25	V
Maximum DC Reverse Current @T_J =25°C at rated DC blocking voltage @T_J=125°C	I_R	5.0 200.0	μA
Maximum Reverse Recovery Time (Note 1)	t_{rr}	50	nS
Typical Junction Capacitance (Note 2)	C_J	40	pF
Typical Thermal Resistance (Note 3)	$R_{(JA)}$	55	°C /W
	$R_{(JC)}$	20	
Storage Temperature	T_{STG}	-55 to +150	°C
Operation Junction Temperature	T_J	-55 to +150	°C

Note:
1. Test Conditions: I_F=0.5A, I_R=1.0A, I_{RR}=0.25A
2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
3. Measured on P.C.Board with15.0×15.0*2.0mm Copper Pad Areas.

RATING AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

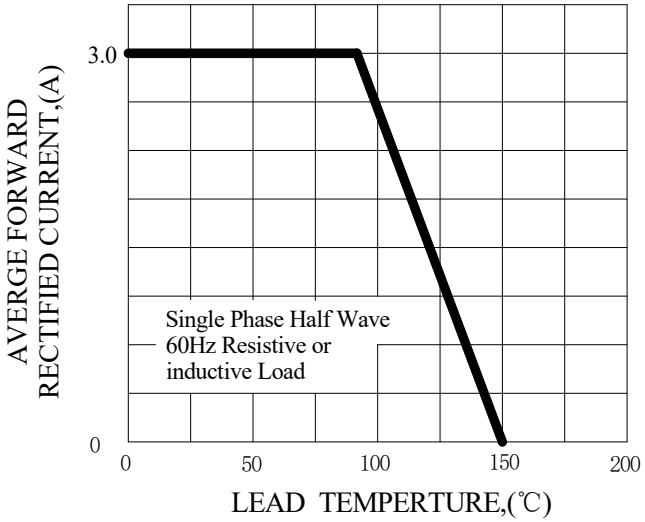


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

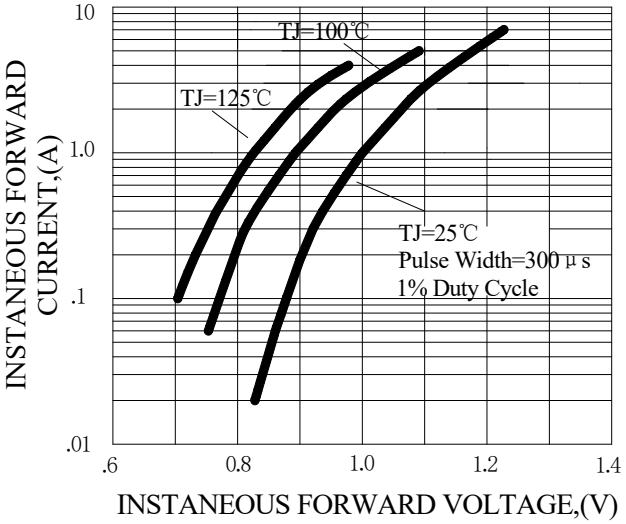


FIG.3-MAXIMUN NON-REPETITIVE FORWARD SURGE CURRENT

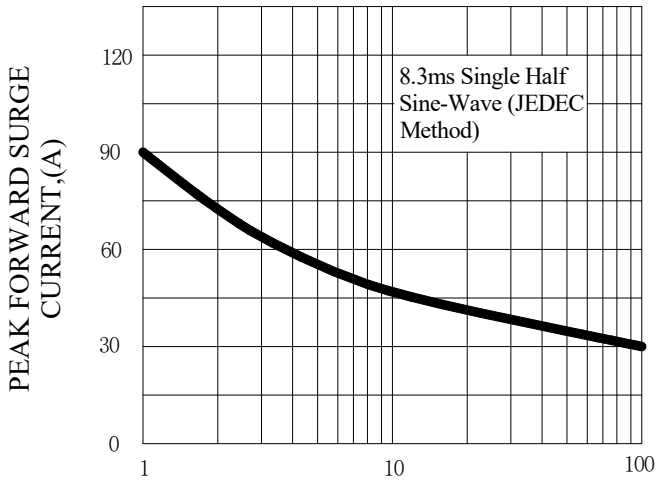


FIG.4-TYPICAL REVERSE CHARACTERISTICS

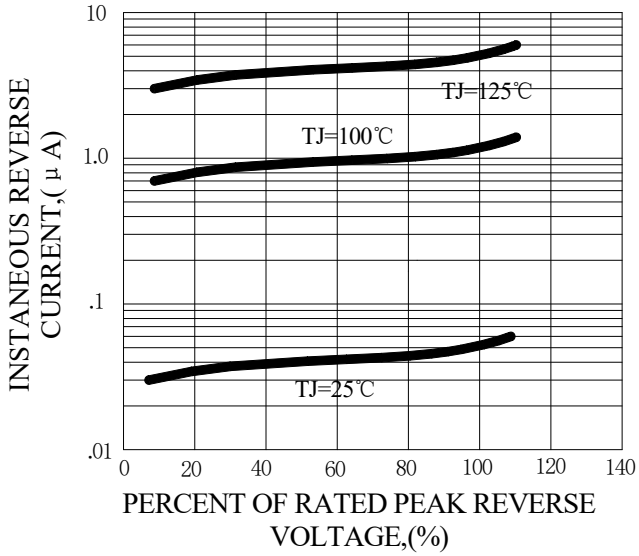
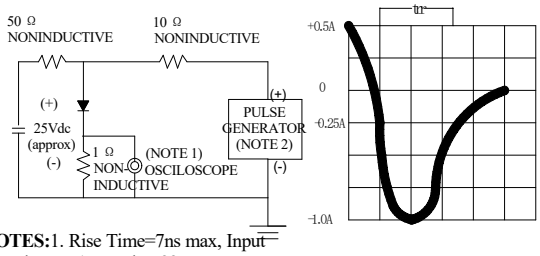


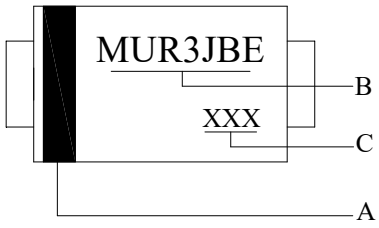
FIG.5-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERSITIC



NOTES:1. Rise Time=7ns max, Input Impedance= 1 megohm.22pF.
2. Rise Time=10ns max,
Souce Impedance= 50 ohms.

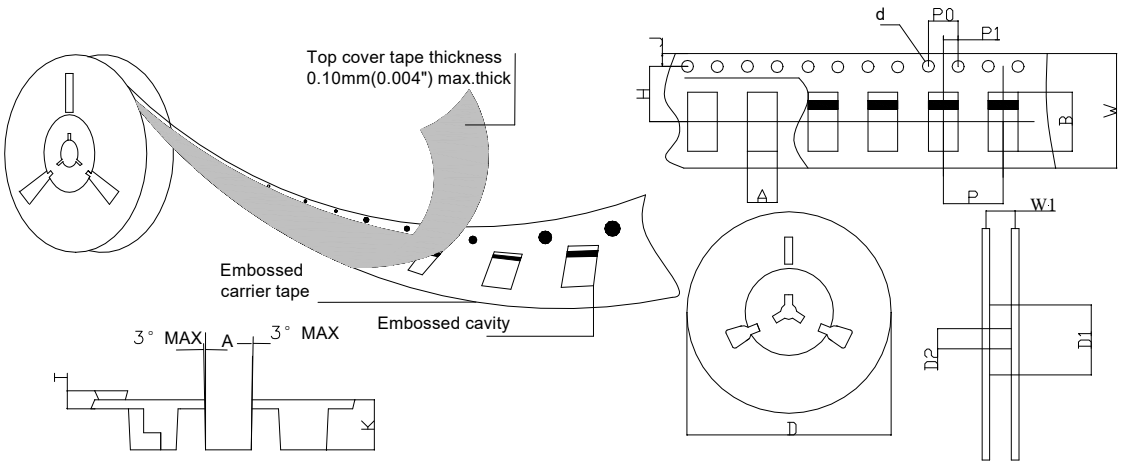
Marking and packaging illustration

1、Marking



SYMBOL	Explanation
A	Color Band Denotes Cathode
B	Product name
C	Date Code

2、Packaging



SPECIFICATIONS mm(inch)		PACKAGE	SPECIFICATIONS mm(inch)		PACKAGE
ITEM	SYMBOL	SMB (DO-214AA)	ITEM	SYMBOL	SMB (DO-214AA)
Carrier width	A	3.81(0.150)Max	Carrier depth	K	2.45(0.965)Typ
Carrier length	B	5.41(0.213)Max	Punch hole pitch	P	8.00(0.315)Typ
Sprocket hole	d	ø1.55(0.061)Typ	Sprocket hole pitch	P0	4.00(0.157)Typ
Reel outer diameter	D	330.0(13.0)Typ	Embossment center	P1	2.00(0.079)Typ
Reel inner diameter	D1	50.0(1.969)Min	Overall tape thickness	T	0.30(0.012)Typ
Feed hole diameter	D2	13.0(0.512)Typ	Tape width	W	12.0(0.472)Typ
Sprocket hole position	J	1.75(0.069)Typ	Reel width	W1	12.4(0.488)Min
Punch hole position	H	5.55(0.219)Typ			