

MUR2JGR

2.0AMPS .GLASS PASSIVATED ULTRA FAST RECTIFIERS

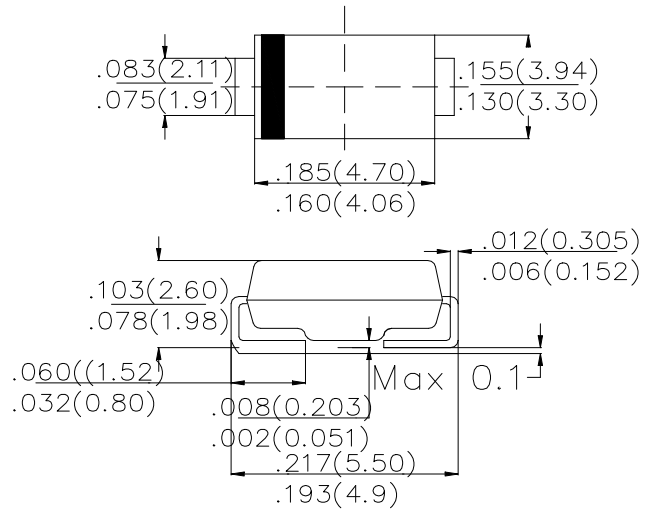
FEATURE

- . Glass passivated chip
- . High current capability
- . Low forward voltage drop
- . High surge capability
- . Superfast recovery time for high efficiency
- . High temperature soldering guaranteed
260°C/10 seconds at terminals.
- . For surface mounted application.
- . Easy pick and place.

MECHANICAL DATA

- . Case: Molded plastic
- . Epoxy: UL94V-0 rate flame retardant
- . Lead: MIL-STD- 202E, Method 208 guaranteed
- . Polarity:Color band denotes cathode end
- . Mounting position: Any

SMB (DO-214AA)



Dimensions in inches and (millimeters)

Single phase, half wave, 60Hz,resistive or inductive load.

For capacitive load, derate current by 20%

MAXIMUM RATINGS ($T_C=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	MUR2JGR			Units
		Min	Typ	Max	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	600			V
Maximum RMS Voltage	V_{RMS}	420			V
Maximum DC blocking Voltage	V_{DC}	600			V
Average Forward Rectified Current	$I_{F(AV)}$	1.0			A
Non-repetitive forward surge current,8.3mS half sine-wave	I_{FSM}	35			A
Maximum Reverse Recovery Time (Note 1)	t_{rr}			50	nS
Typical Junction Capacitance (Note 2)	C_J		15		pF
Instantaneous Forward voltage at 1.0A @ $T_J=25^{\circ}\text{C}$	V_F			1.25	V
reverse current @ $T_J=25^{\circ}\text{C}$	I_R			5.0	uA
at rated DC blocking voltage @ $T_J=125^{\circ}\text{C}$				125.0	
Typical Thermal Resistance (Note 3)	R_{thJA}			13	$^{\circ}\text{C}/\text{W}$
Operation Junction Temperature and Storage Temperature	T_J, T_{STG}	-55 to + 150			$^{\circ}\text{C}$

Note:

1.Conditions: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{RR}=0.25\text{A}$

2. $T_J=25^{\circ}\text{C}$, $V_R = 4\text{V}_{DC}@1\text{Mhz}$

3.Measured on P.C.Board with5.0mm*5.0mm*1.6mm Copper Pad Areas

RATING AND CHARACTERISTIC CURVES (MUR2JGR)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

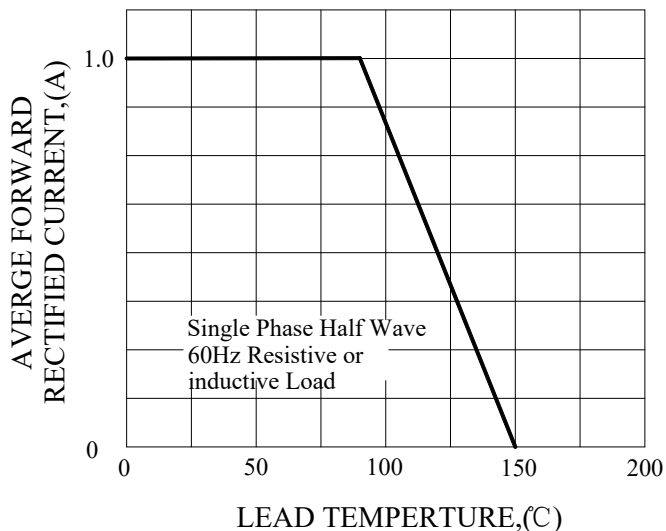


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

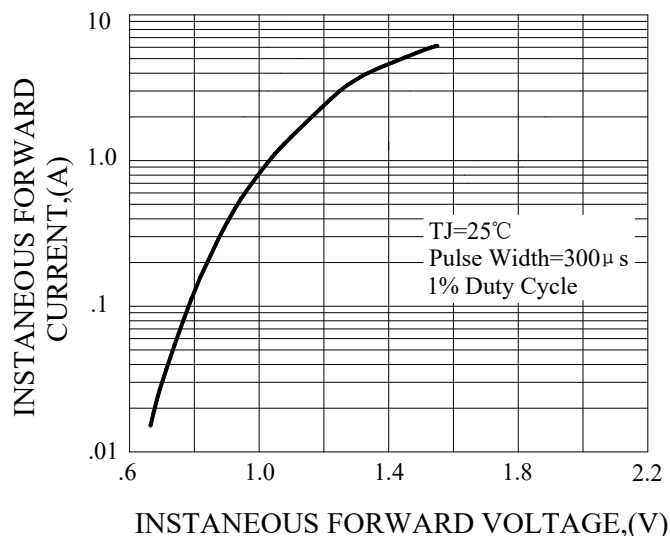


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

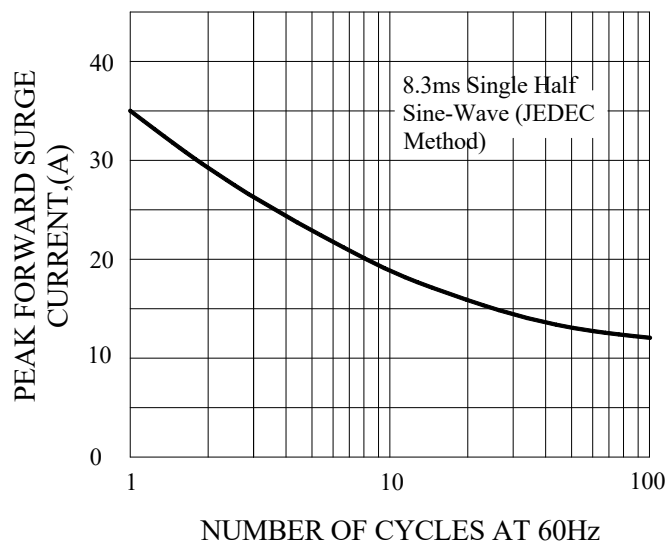


FIG.4-TYPICAL REVERSE CHARACTERISTICS

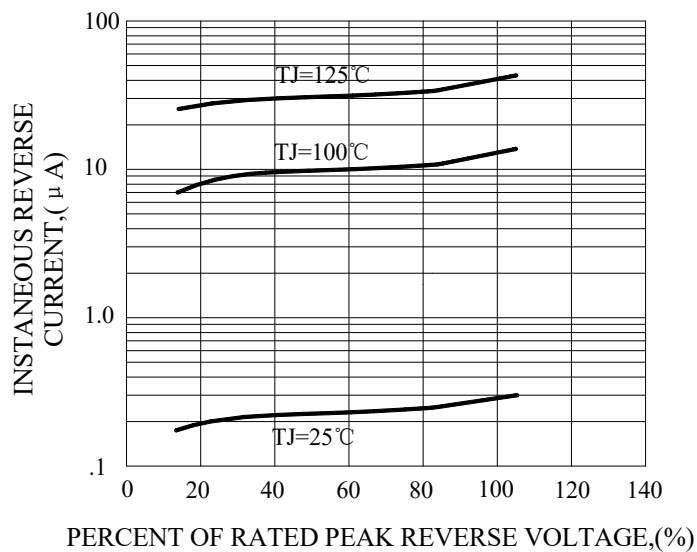
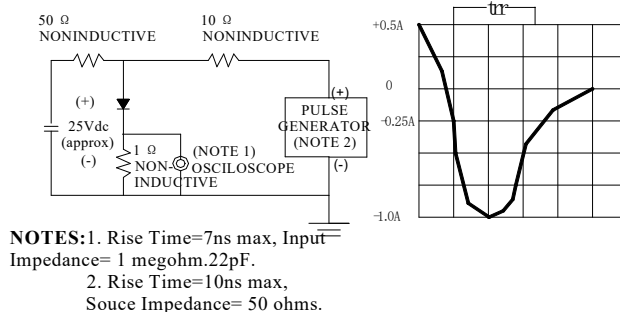
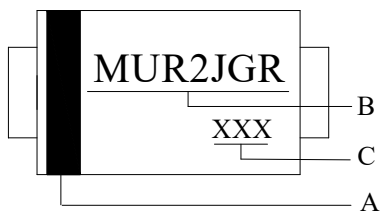


FIG.5-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



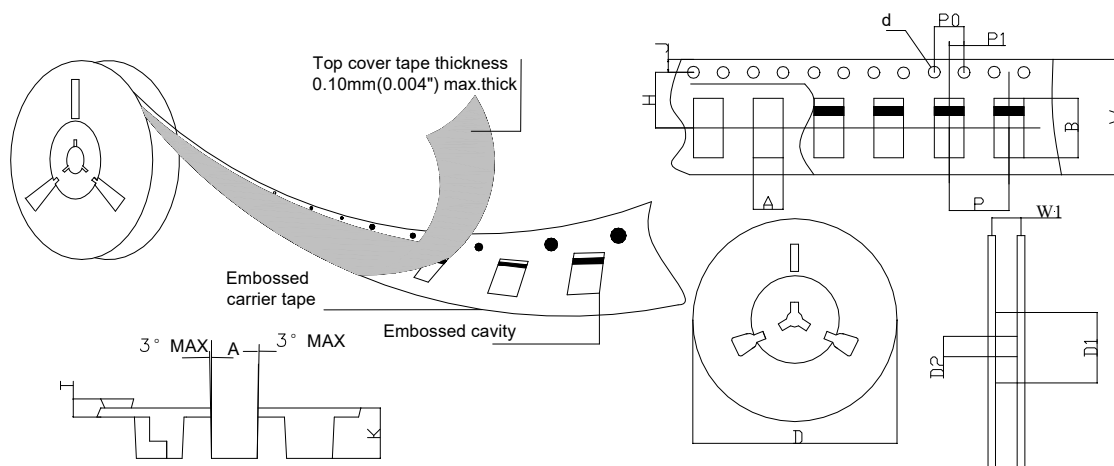
Marking and packaging illustration

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	SYM BOL	SMB (DO-214AA)	ITEM	SYM BOL	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			