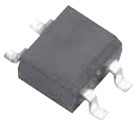
TAIWAN SEMICONDUCTOR

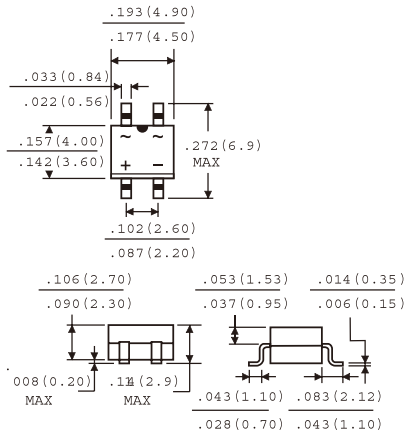
RMB2S - RMB6S

0.8 AMP. Miniature Glass Passivated
Fast Recovery Surface Mount Bridge Rectifiers

MBS

RoHS COMPLIANCE





Dimensions in inches and (millimeters)

Features

- ✧ UL Recognized File # E-326243
- ✧ Ideal for printed circuit board
- ✧ Reliable low cost construction utilizing molded plastic technique
- ✧ High surge current capability
- ✧ High temperature soldering guaranteed: 260 °C / 10 seconds at 5 lbs., (2.3 kg) tension
- ✧ Small size, simple installation
- ✧ Pure tin plated terminal, Lead free. Leads solderable per MIL-STD-202 Method 208
- ✧ Green compound with suffix "G" on packing code & prefix "G" on datecode.
- ✧ Weight: 0.123 grams

Mechanical Data

- ✧ Case: Molded plastic
- ✧ Terminals: Leads solderable per MIL-STD-202 Method 208
- ✧ Weight: 0.123 grams

Marking Diagram

RMBX = Specific Device Code
G = Green Compound
Y = Year
M = Work Month

Maximum Ratings and Electrical Characteristics

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

Type Number	Symbol	RMB2S	RMB4S	RMB6S	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	200	400	600	V
Maximum RMS Voltage	V_{RMS}	140	280	420	V
Maximum DC Blocking Voltage	V_{DC}	200	400	600	V
Maximum Average Forward Rectified Current On glass-epoxy P.C.B. On aluminum substrate	$I_{F(AV)}$	0.5 0.8			A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	30			A
Maximum Instantaneous Forward Voltage @ 0.4A	V_F	1.0			V
Maximum DC Reverse Current @ T_A=25 °C at Rated DC Blocking Voltage (Note 1) @ T_A=125 °C	I_R	5.0 100			uA uA
Maximum Reverse Recovery Time at (Note 2)	Trr	150			nS
Typical Junction Capacitance Per Leg	Cj	13			pF
Typical Thermal Resistance Per Leg	$R_{\theta JA}$	85			°C /W
Operating Temperature Range	T_J	-55 to +150			°C
Storage Temperature Range	T_{STG}	-55 to +150			°C

Note: 1. Pulse Test with PW=300 usec,1% Duty Cycle
2. Reverse Recovery Test Conditions: I_F=0.5A, I_R=1.0A, I_{RR}=0.25A

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RATINGS AND CHARACTERISTIC CURVES (RMB2S THRU RMB6S)

FIG.1- DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

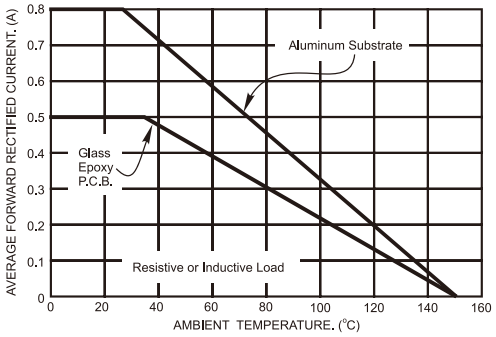


FIG.2- TYPICAL REVERSE LEAKAGE CHARACTERISTICS PER LEG

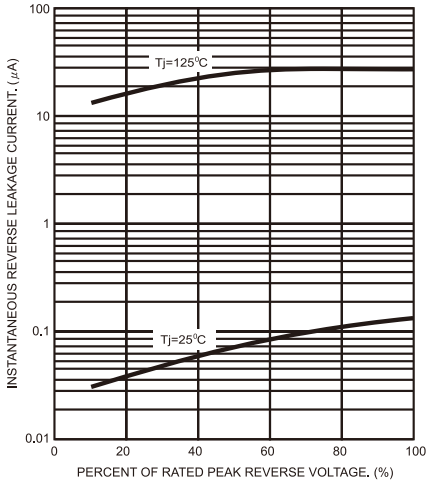


FIG.3- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

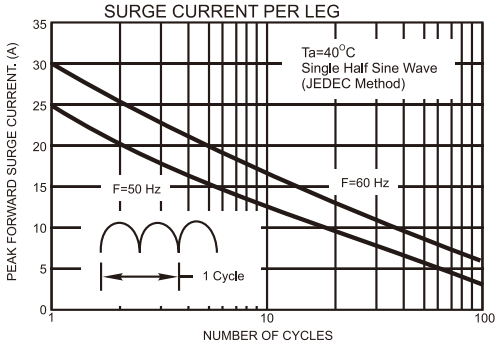


FIG.5- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG

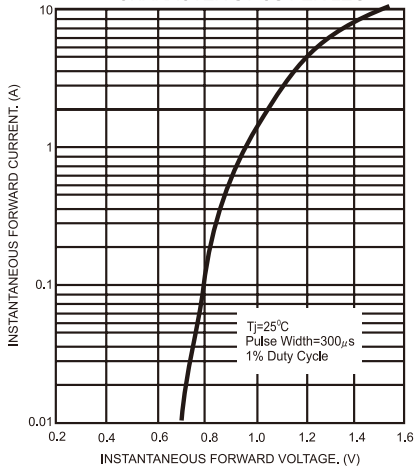


FIG.4- TYPICAL JUNCTION CAPACITANCE PER LEG

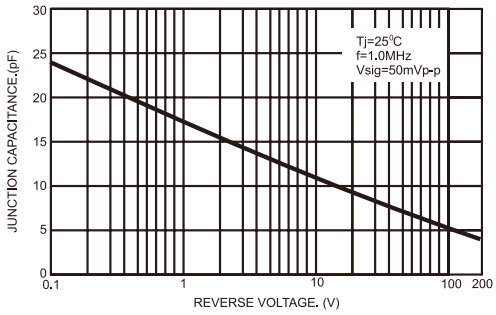
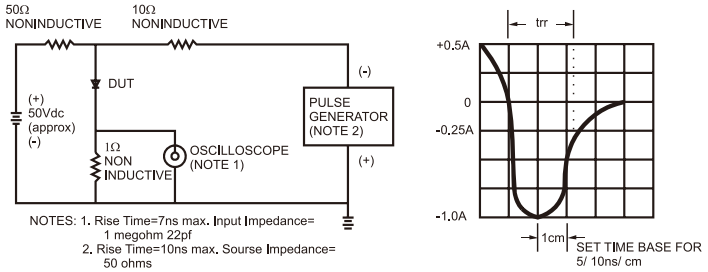


FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



NOTES: 1. Rise Time=7ns max. Input Impedance= 1 megohm 22pf
2. Rise Time=10ns max. Sourse Impedance= 50 ohms

Version: D10