

RoHS Compliant Product

FEATURES

- Glass Passivated Die Construction
- Low Leakage
- Ideal for Printed Circuit Board
- Surge Overload Rating to 30A Peak
- Plastic Material-UL Flammability 94V-0

MECHANICAL DATA

- Case: MBS, molded plastic
- Terminals: Plated leads solderable per MIL-STD-202, Method 208
- Polarity: As marked on case
- Mounting Position: Any
- Marking: Type number

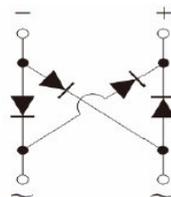
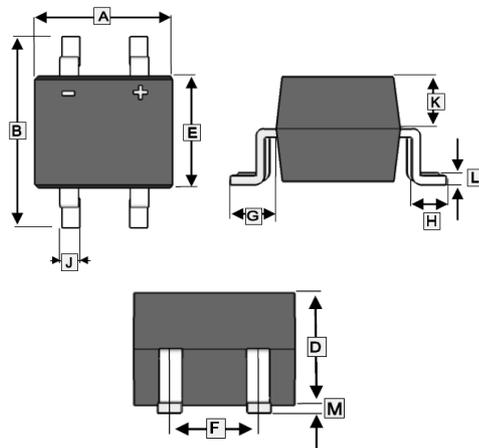
PACKAGE INFORMATION

Package	MPQ	Leader Size
MBS	3K	13 inch

ORDER INFORMATION

Part Number	Type
RMB1S~RMB10S	Lead (Pb)-free
RMB1SH~RMB10SH	Lead (Pb)-free and Halogen-free

MBS



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	4.50	4.95	H	0.60	1.10
B	-	7.00	J	0.50	0.84
D	2.30	2.70	K	0.90	1.53
E	3.60	4.20	L	0.15	0.35
F	2.20	2.70	M	0.20	REF.
G	1.10	2.12			

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
		RMB1S	RMB2S	RMB4S	RMB6S	RMB8S	RMB10S	
Peak Repetitive Reverse Voltage	V_{RRM}							
Working Peak Reverse Voltage	V_{RWM}	100	200	400	600	800	1000	V
DC Blocking Voltage	V_{DC}							
RMS Reverse Voltage	V_{RMS}	70	140	280	420	560	700	V
Average Rectified Output Current ¹	I_F	0.5						A
Average Rectified Output Current ²		0.8						
Non-Repetitive Peak Forward Surge Current @8.3ms Single half sine-wave superimposed on rated load(JEDEC Method)	I_{FSM}	30						A
I^2t Rating for Fusing ($t < 8.3ms$)	I^2t	3.735						A ² s
Forward Voltage per element @ $I_F=0.8A$	V_F	1.3						V
Peak Reverse Current @Rated DC Blocking Voltage	I_R	5						uA
		200						
Maximum Reverse Recovery Time ³	t_{rr}	150		250	500		nS	
Typical Junction Capacitance per leg ⁴	C_J	13						pF
Typical Thermal Resistance per leg	$R_{\theta JA}$	60						°C/W
	$R_{\theta JL}$	16						
Operating and Storage Temperature Range	T_J, T_{STG}	-55~150						°C

Notes:

1. Mounted on glass epoxy PC board with 1.3mm² solder pad.
2. Mounted on aluminum substrate PC board with 1.3mm² solder pad.
3. Reverse Recovery Test Conditions: $I_F=0.5A$, $I_R=1A$, $I_{rr}=0.25A$.
4. Measured at 1MHz and applied reverse voltage of 4V D.C.

RATINGS AND CHARACTERISTIC CURVES

Fig. 1 Output Current Derating Curve

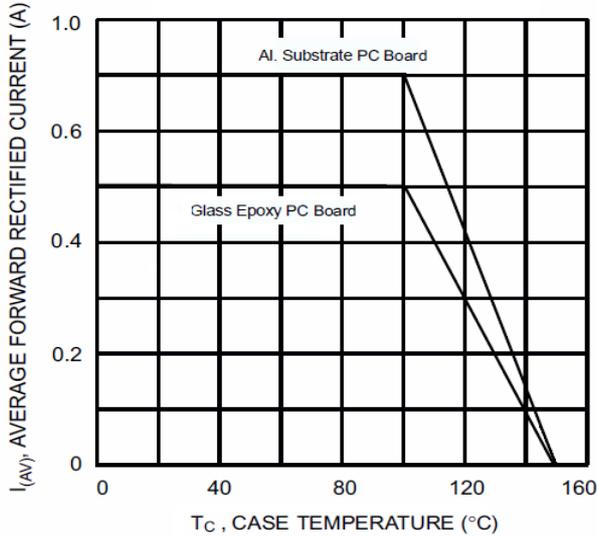


Fig. 2 Typical Forward Characteristics (per leg)

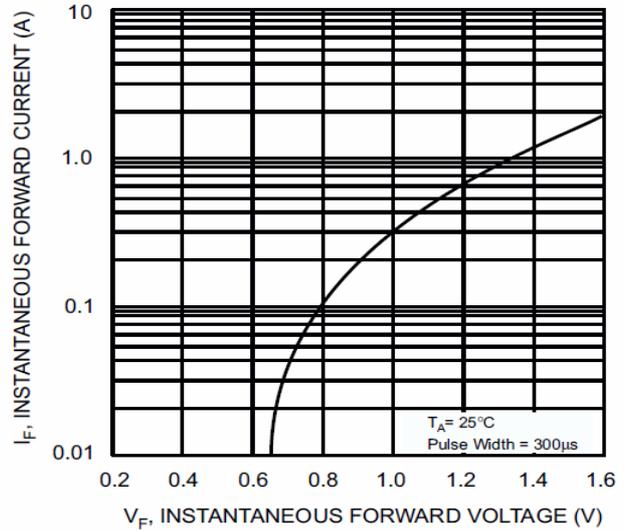


Fig. 3 Maximum Peak Forward Surge Current (per leg)

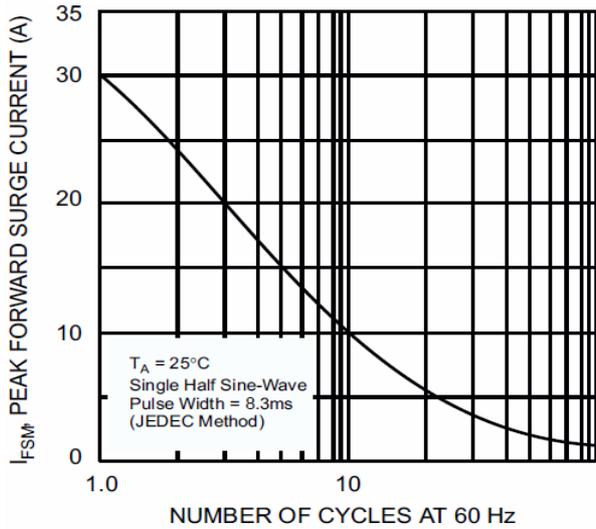


Fig. 4 Typical Junction Capacitance

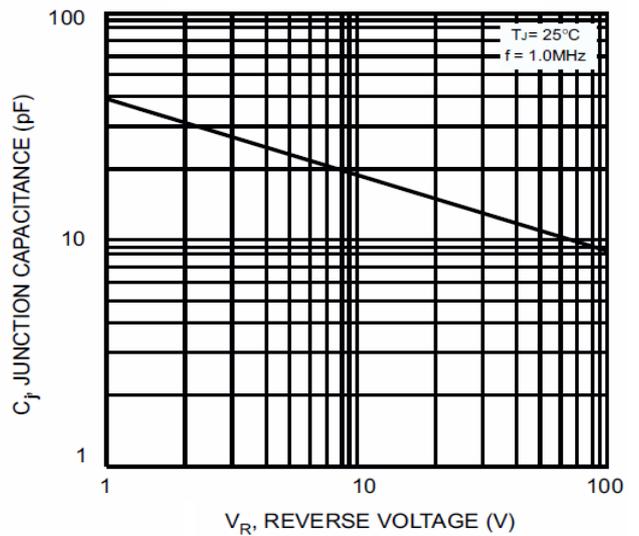


FIG.5 TYPICAL REVERSE CHARACTERISTICS

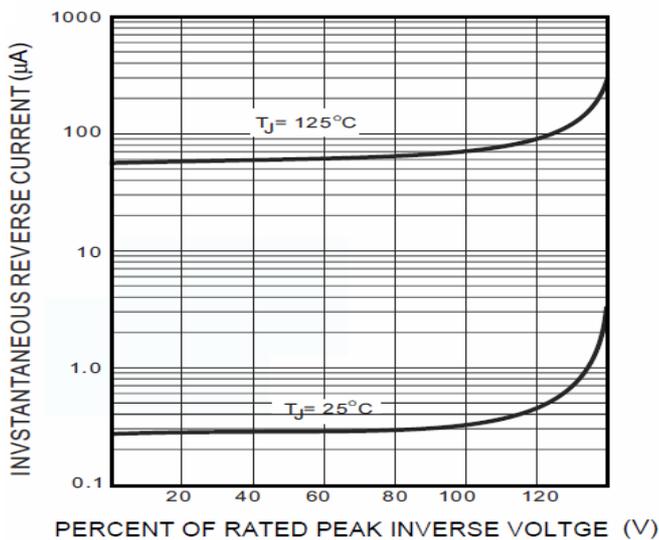


FIG.6 MOUNTING PAD LAYOUT

