

### Features

- Lead Free Finish/RoHS Compliant (Note1) ("P" Suffix Designates Compliant. See Ordering Information)
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Fast Recovery and Low Switching Loss

### Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance(Note2): 20°C/W Junction to Lead
- Typical Thermal Resistance(Note3): 70°C/W Junction to Ambient
- Typical Thermal Resistance(Note2): 85°C/W Junction to Ambient

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
RMB2S	RMB2S	200V	140V	200V
RMB4S	RMB4S	400V	280V	400V
RMB6S	RMB6S	600V	420V	600V

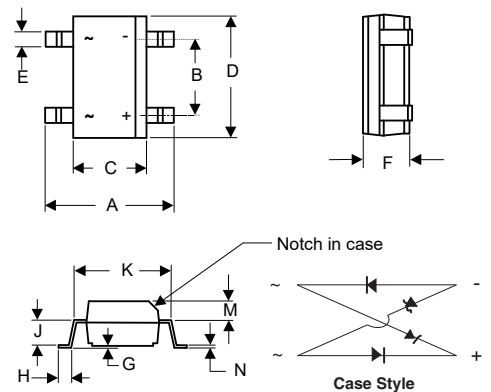
### Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	0.5A <sup>(1)</sup> 0.8A <sup>(2)</sup>	$T_A = 30^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	30A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage	$V_F$	1.25V	$I_{FM} = 0.4\text{A}$ ; $T_J = 25^\circ\text{C}$
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	5μA 100μA	$T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$
Typical Junction Capacitance	$C_J$	13pF	Measured at 1.0MHz, $V_R=4.0\text{V}$
Maximum Reverse Recovery Time RMB2S-RMB4S RMB6S	$t_{rr}$	150ns 250ns	$I_F=0.5\text{A}$ , $I_R=1.0\text{A}$ , $I_{rr}=0.25\text{A}$
$I^2t$ Rating for Fusing	$I^2t$	5.0A <sup>2</sup> S	$t < 8.3\text{ms}$

- Note: 1. High Temperature Solder Exemption Applied, See EU Directive Annex Notes 7a.  
 2. On Glass Epoxy P.C.B. Mounted on 0.05 x 0.05" (1.3 x 1.3mm) Pads  
 3. On Aluminum Substrate P.C.B. with an Area of 0.8" x 0.8" (20 x 20mm) Mounted on 0.05 x 0.05" (1.3 x 1.3mm) Solder Pad

# 0.5 Amp Fast Recovery Glass Passivated Bridge Rectifier 200 to 600 Volts

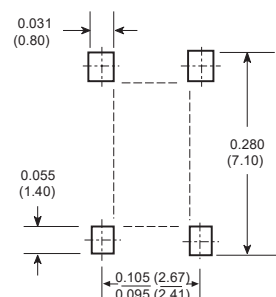
## MBS-1



### DIMENSIONS

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.252	0.276	6.40	7.00	
B	0.095	0.106	2.41	2.70	
C	0.142	0.165	3.60	4.20	
D	0.179	0.195	4.55	4.95	
E	0.019	0.031	0.50	0.80	
F	0.090	0.106	2.30	2.70	
G	0.002	0.008	0.05	0.20	
H	0.027	0.043	0.70	1.10	
J	0.058	0.062	1.47	1.57	
K	0.195	0.205	4.95	5.21	
M	0.039	0.049	0.99	1.24	
N	0.006	0.016	0.15	0.41	

### Suggested Solder Pad Layout



**Curve Characteristics**

Fig. 1 - Forward Current Derating Curve

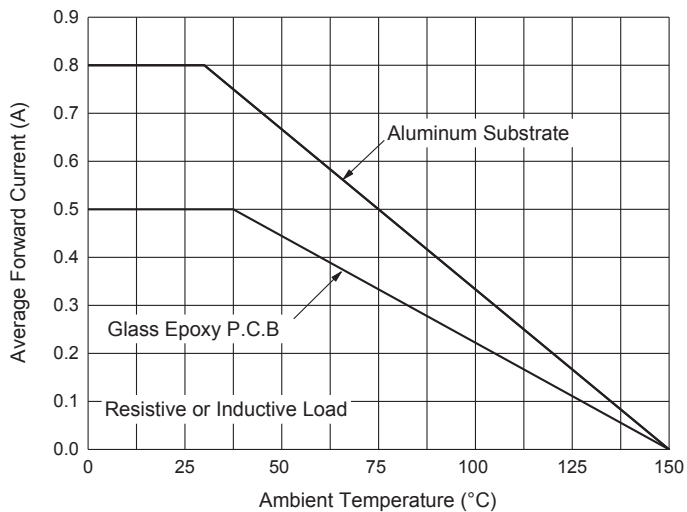


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

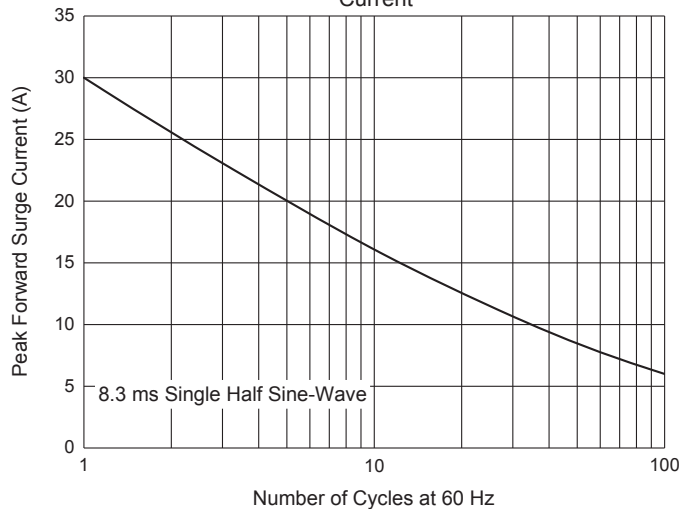


Fig. 3 - Typical Instantaneous Forward Characteristics

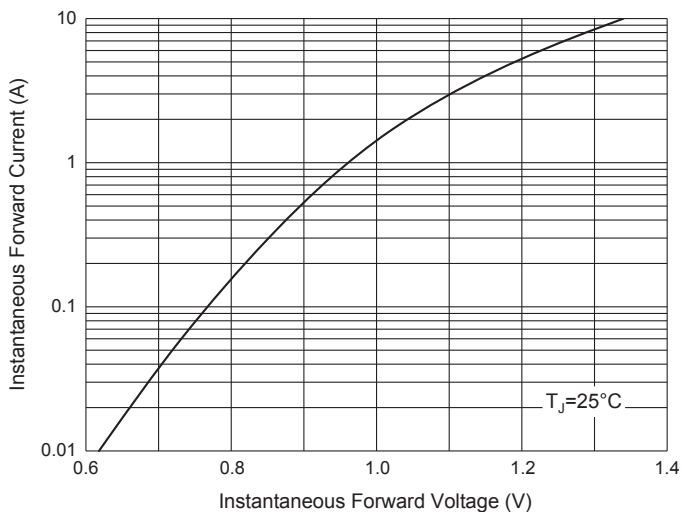
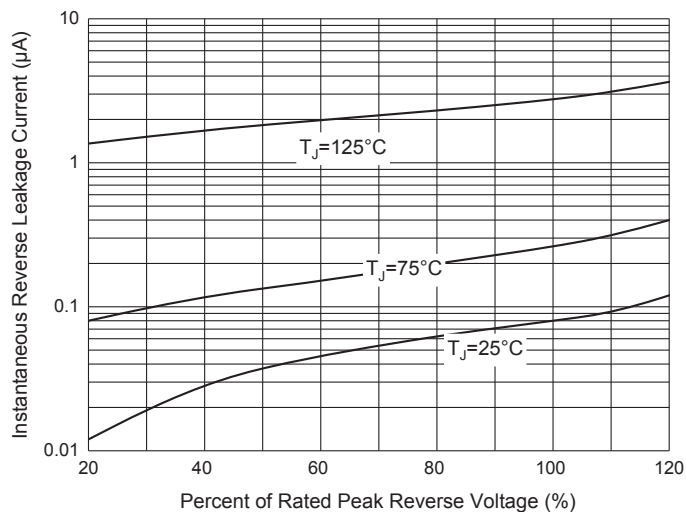


Fig. 4 - Typical Reverse Leakage Characteristics



## Ordering Information

Device	Packing
(Part Number)-TP	Tape&Reel:3Kpcs/Reel

Note : Adding "-HF" Suffix For Halogen Free, eg. Part Number-TP-HF

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