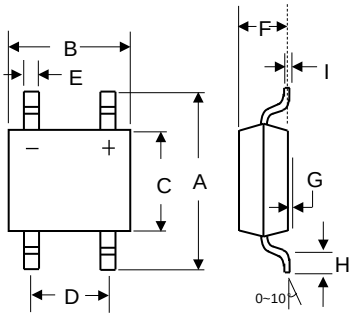
MB005F THRU MB10F

Glass Passivated Bridge Rectifiers

Features

* Ideal for surface mount application
* The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
* Surge overload ratings to 30 amperes
* High temperature soldering guaranteed 260℃/10 seconds at 5 lbs (2.3kg) tension

RoHS COMPLIANT



MBF				
DIM.	INCHES		MM	
	MIN	MAX	MIN	MAX
A	0.258	0.276	6.55	7.05
B	0.177	0.193	4.50	4.90
C	0.142	0.157	3.60	4.00
D	0.095	0.105	2.34	2.74
E	0.019	0.031	0.40	0.80
F	0.047	0.063	1.20	1.60
G	---	0.008	---	0.20
H	0.024	0.043	0.61	1.01
I	0.006	0.014	0.15	0.25

Mechanical Data

* Case: Molded plastic
* Terminals: Plated leads solderable per MIL-STD-202, Method 208
* Polarity: Polarity as marked on the body
* Mounting Position: Any

Maximum Ratings and Electrical Characteristics (TA=25℃ unless otherwise noted)

Type Number	Symbol	MB005F	MB1F	MB2F	MB4F	MB6F	MB8F	MB10F	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current On glass-epoxy P.C.B. On aluminum substrate	I_F	0.5 0.8							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	30							A
Maximum Instantaneous Forward Voltage (Note 1) I_F= 0.4 A	V_F	1.0							V
Maximum DC Reverse Current T_J=25°C at rated DC blocking voltage T_J=125°C	I_R	5 100							μA
Typical thermal resistance (Note 3)	$R_{\theta JL}$ $R_{\theta JA}$	20 85							°C/W
Typical junction capacitance per element(Note2)	C_J	13							pF
Rating for fusing (t<8.3ms)	I^2t	5.08							A^2sec
Operating junction and storage temperature range	T_J / T_{STG}	-55 to +150							°C

Note: 1、Pulse Test with PW=300μs,1% Duty Cycle

2、Measure at 1.0MHz and Applied Reverse Voltage of 4.0 Volts D.C.

3、On glass epoxy P.C.B. mounted on 0.05" x 0.05" (1.3mm x 1.3mm) pads

Ratings and Characteristic Curves

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

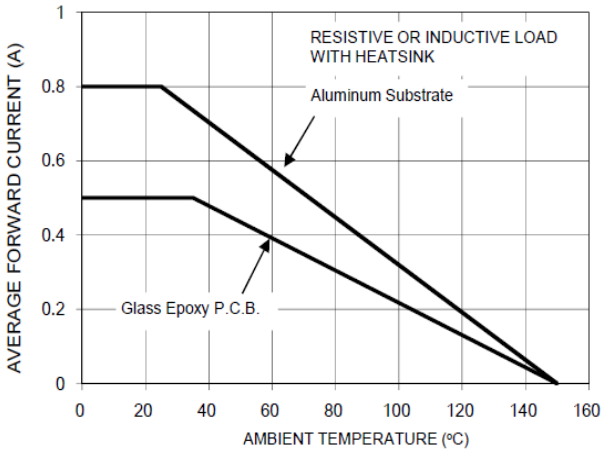


FIG. 2 TYPICAL REVERSE CHARACTERISTICS PER LEG

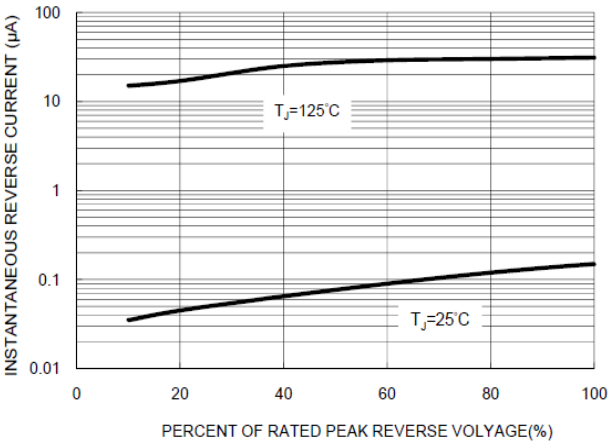


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

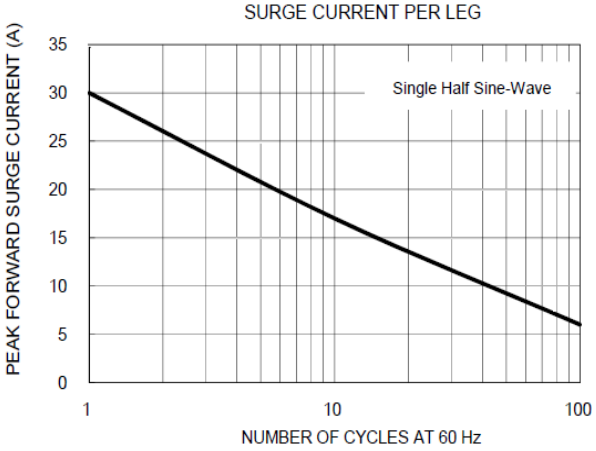


FIG. 4 TYPICAL FORWARD CHARACTERISTICS PER LEG

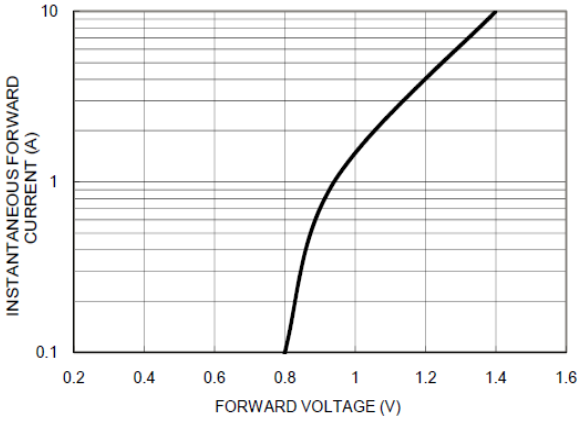
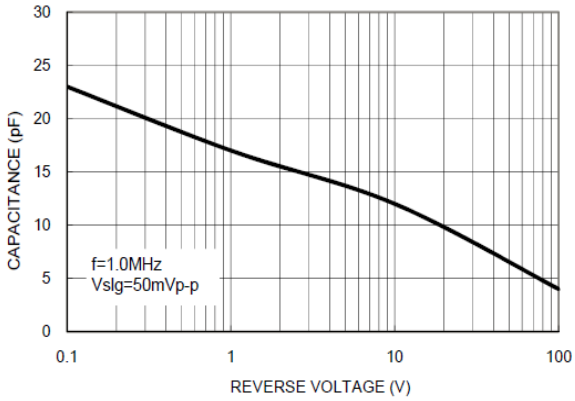


FIG. 5 TYPICAL JUNCTION CAPACITANCE PER LEG



Ordering Information

Part No.	Package	Packing Code	Packing
MB005F THRU MB10F	MBF	R50	5000pcs/Reel

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