

0.5A SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER
Feature

- Glass Passivated Die Construction
- Low Forward Drop
- High Current Capability
- High Surge Current Capability
- Designed for Surface Mount Application

Maximum Ratings and Electrical characteristics

Single-phase, half-wave, 60 Hz, resistive or inductive load .For capacitive load, derate current by 20%.

Parameter	Symbol	MB 05F	MB 1F	MB 2F	MB 4F	MB 6F	MB 8F	MB 10F	Units
Peak repetitive Reverse Voltage	V_{RRM}								
Working Peak Reverse Voltage	V_{RWM}	50	100	200	400	600	800	1000	V
DC Blocking Voltage	V_R								
RMS Reverse Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Averager Rectified Output Current	I_O	0.8							A
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	5.0							A^2s
Forward Voltage per element @ $I_F=0.5A$	V_{FM}	1.0							V
Peak Reverse Current $T_A=25^\circ C$ at Rated DC Blocking Voltage $T_A=125^\circ C$	I_{RM}	15.0 500							μA
Typical Junction Capacitance per leg (Note 2)	C_j	13							pF
Typical Thermal Resistance per leg (Note 1)	$R_{\theta JA}$ $R_{\theta JI}$	60 16							$^\circ C/W$
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150							$^\circ C$

Note:

1. Mounted on glass epoxy PC board with $1.3mm^2$ solder pad.
2. Measured at 1.0MHz and applied reverse voltage of 4.0V D.C.

Typical Characteristics

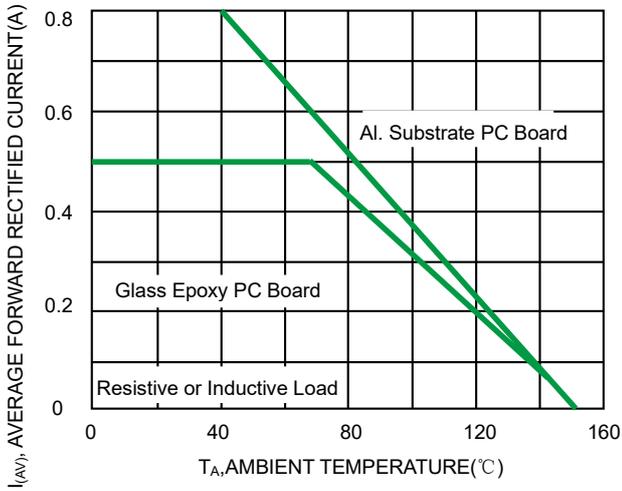


Fig 1 Output Current Derating Curve

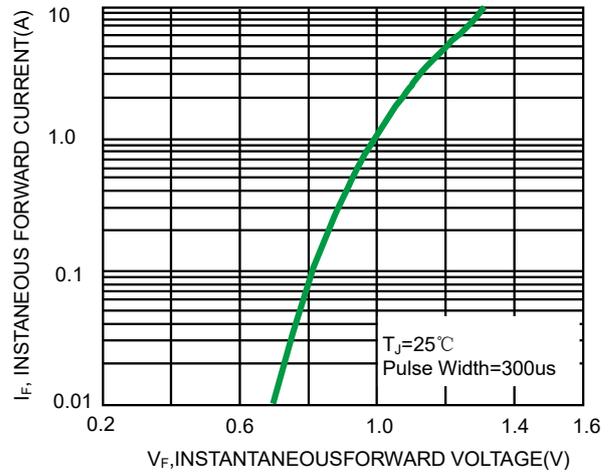


Fig 2. Typical Forward Characteristics (per leg)

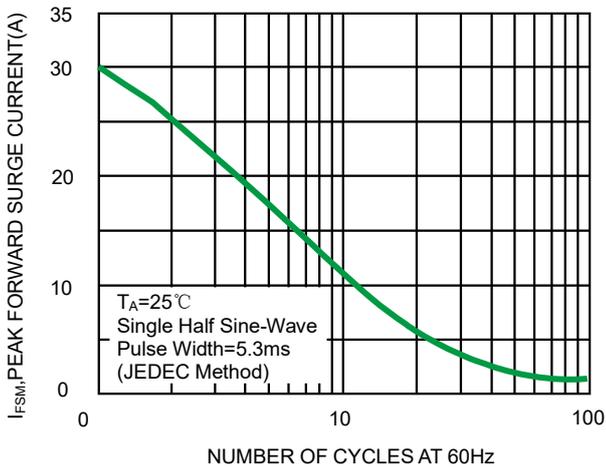


Fig 3. Maximum Peak Forward Surge Current(per leg)

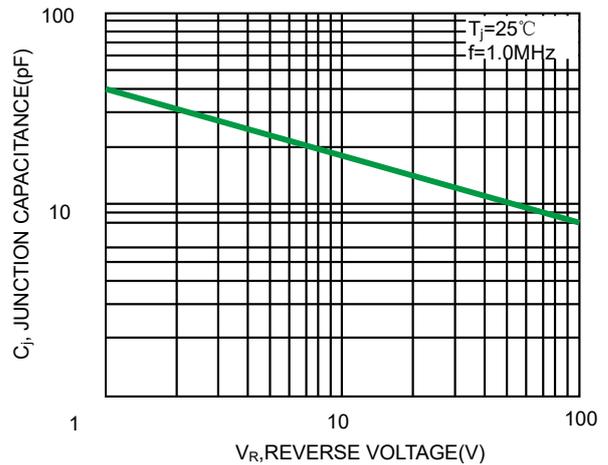
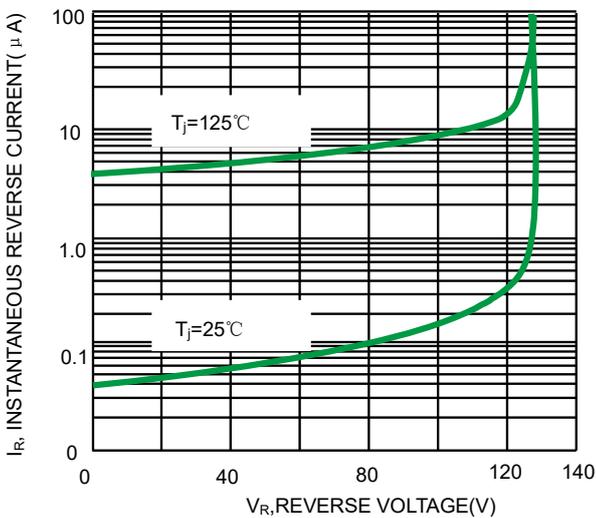
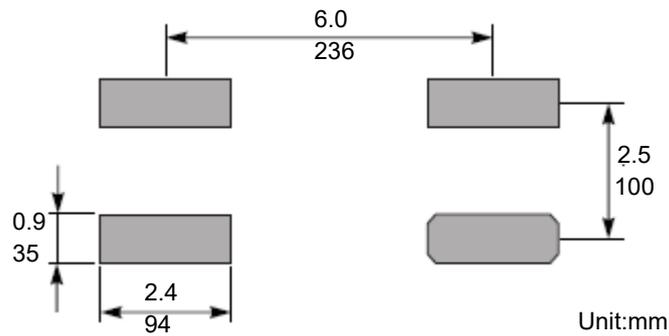
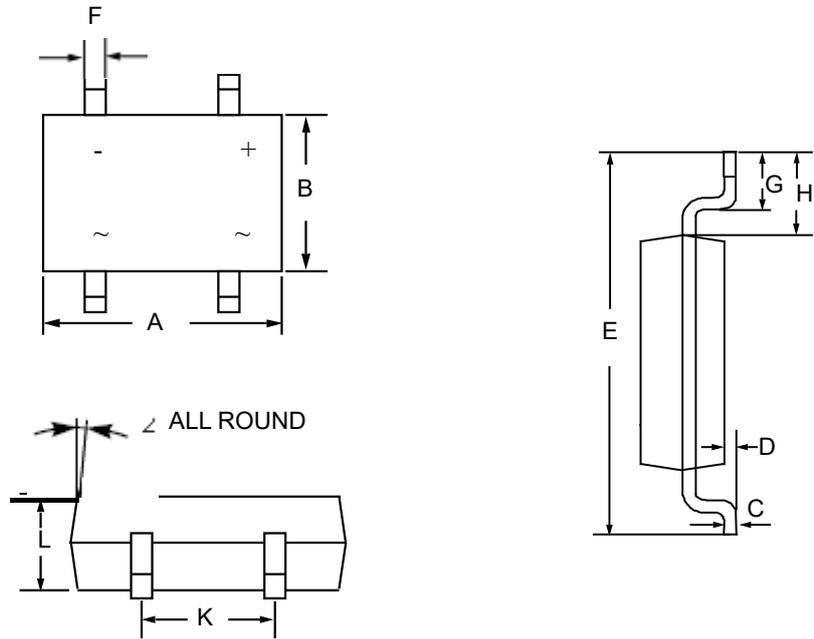


Fig 4. Typical Junction Capacitance



Product dimension (MBF)



Dim	Inches		Millimeters	
	MIN	MAX	MIN	MAX
A	177.00	197.00	4.50	5.00
B	142.00	161.00	3.60	4.10
C	5.90	8.70	0.15	0.22
D	--	8.00	--	0.20
E	252.00	276.00	6.40	7.00
G	20.00	43.00	0.50	1.10
H	51.00	67.00	1.30	1.70
K	91.00	106.00	2.30	2.70
L	47.00	63.00	1.20	1.60
F	20.00	31.00	0.50	0.80

Ordering information

Device	Package	Reel	Shipping
MB05F~MB10F	MBF (Pb-Free)	13"	5000 / Tape & Reel

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