

MB4F-10 SERIES

MINI SURFACE MOUNT GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

VOLTAGE 400~1000 Volt **CURRENT** 1 Amper

MBF Unit : inch(mm)



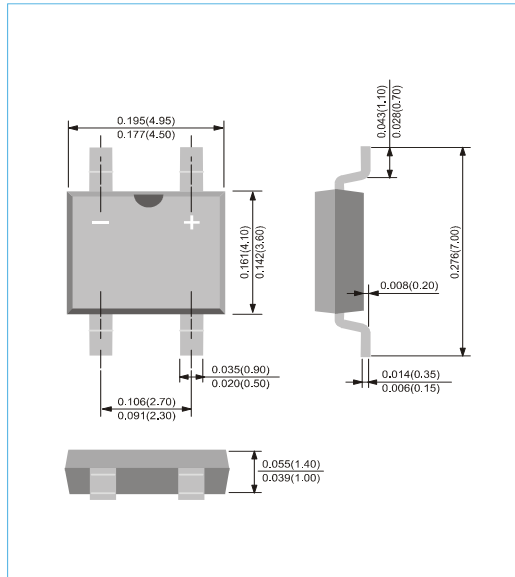
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FEATURES

- Ultra Thin Profile Package for Space Constrained Utilization
- Glass Passivated Chip Junction
- Ideally Suited for Automatic Assembly
- Save Space On Printed Circuit Boards
- Low Forward Voltage Drop
- Lead free in compliance with EU RoHS 2011/65/EU directive

MECHANICAL DATA

- Case : MBF, Plastic
- Terminals : Solderable per MIL-STD-750, Method 2026
- Polarity : As Marked on case
- Approx weight : 0.00289 ounces, 0.0818 grams



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

PARAMETER	SYMBOL	MB4F-10	MB6F-10	MB8F-10	MB10F-10	UNIT
Marking		MB4F1	MB6F1	MB8F1	MB10F1	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	400	600	800	1000	V
Maximum Average Rectified Forward Current	$I_{F(AV)}$	1				A
Peak Forward Surge Current : 0.5ms single square wave superimposed on rated load per diode	I_{FSM}	96				A
Peak Forward Surge Current : 1ms single square wave superimposed on rated load per diode	I_{FSM}	65				A
Peak Forward Surge Current : 8.3ms single half-sine-wave superimposed on rated load per diode	I_{FSM}	30				A
Rating of fusing (t<8.3ms) (Note 1)	I^2t	3.735				A ² s
Maximum Forward Voltage at 1A	V_F	1.1				V
Maximum DC Reverse Current at $T_J=25^{\circ}C$	I_R	5				μA
Typical Thermal Resistance per diode (Note 2)	$R_{\theta JC}$	30				$^{\circ}C/W$
Operating Junction Temperature Range	T_J	-55 to +150				$^{\circ}C$
Storage Temperature Range	T_{STG}	-55 to +150				$^{\circ}C$

Note:1.Non-repetitive, for t > 1ms and < 8.3ms

2.Mounted on a FR4 PCB, single-sided copper, with 100cm² copper pad area

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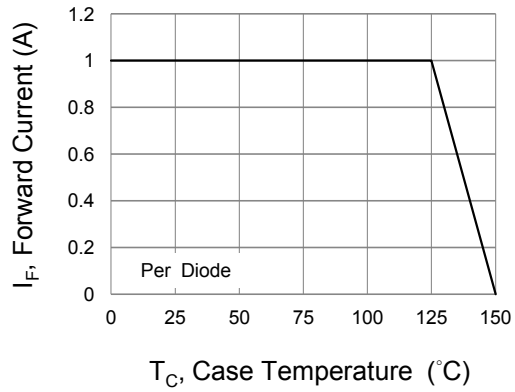


Fig.1 Forward Current Derating Curve

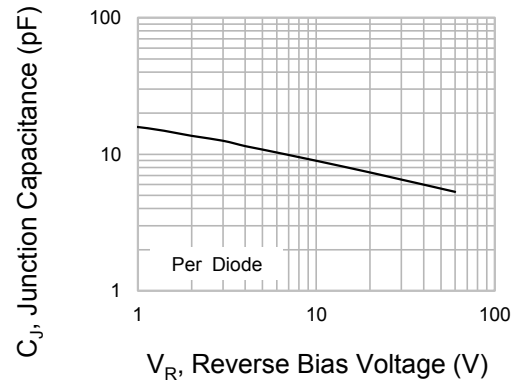


Fig.2 Typical Junction Capacitance

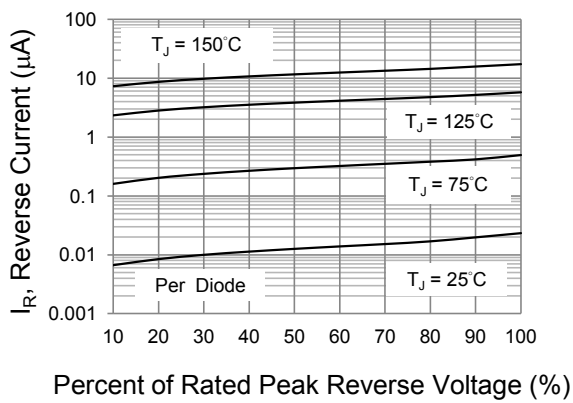


Fig.3 Typical Reverse Characteristics

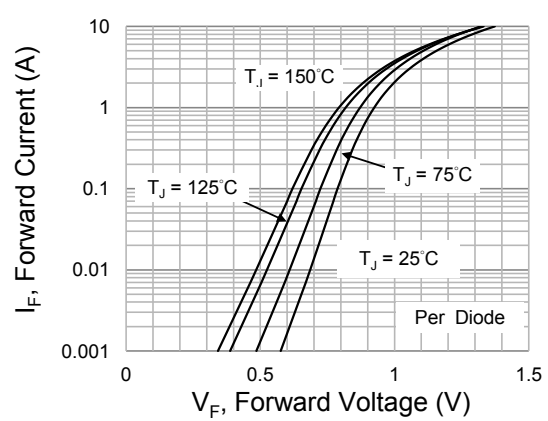
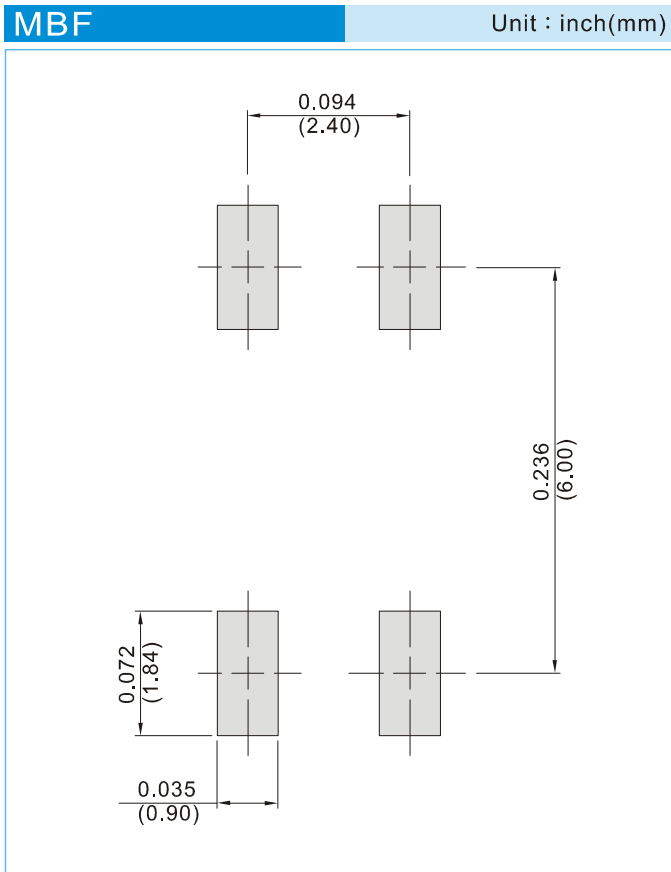


Fig.4 Typical Forward Characteristics

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MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information
T/R - 5K per 13" plastic Reel

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Part No_packing code_Version

MB4F-10_R2_10001

For example :

RB500V-40_R2_00001

Part No.

Serial number

Version code means HF

Packing size code means 13"

Packing type means T/R

Packing Code XX				Version Code XXXXX		
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			



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