

MB4F-10 SERIES

MINI SURFACE MOUNT GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

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

MBF Unit : inch(mm)



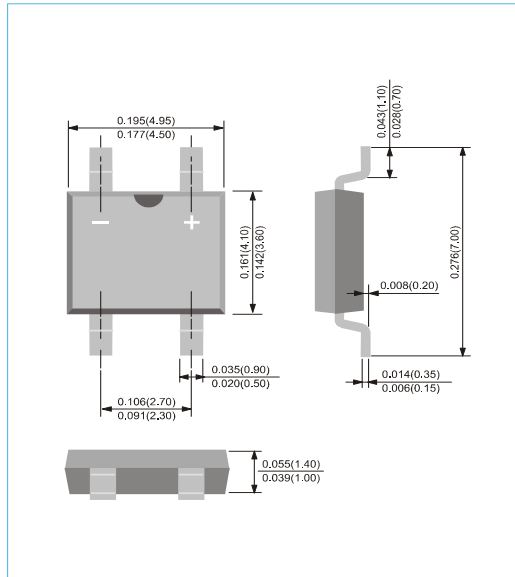
Recongnized File #E111753

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

MB4F-10 SERIES

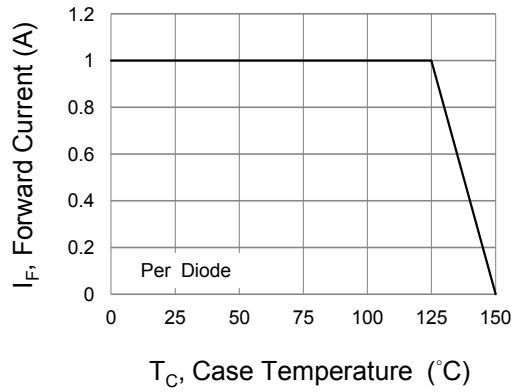


Fig.1 Forward Current Derating Curve

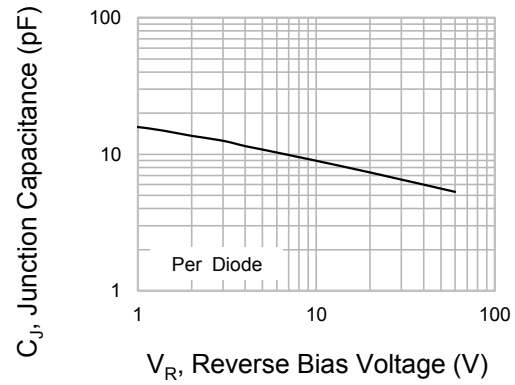


Fig.2 Typical Junction Capacitance

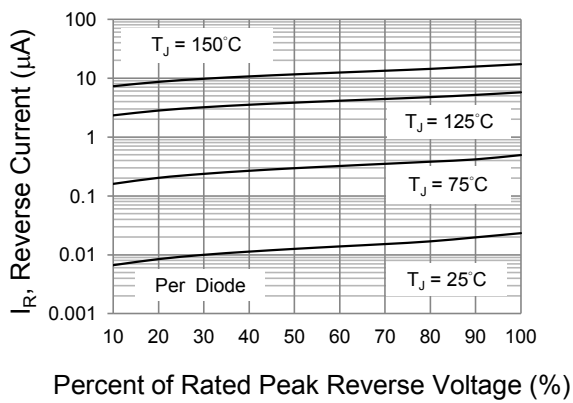


Fig.3 Typical Reverse Characteristics

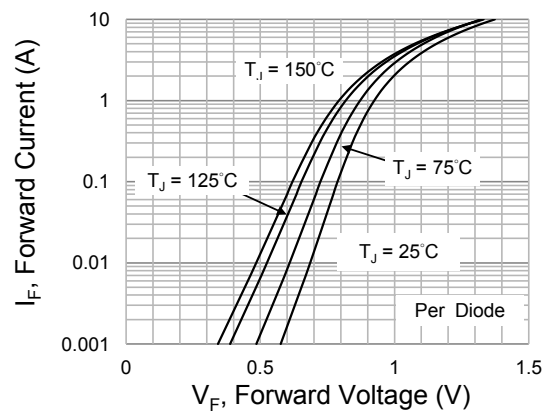
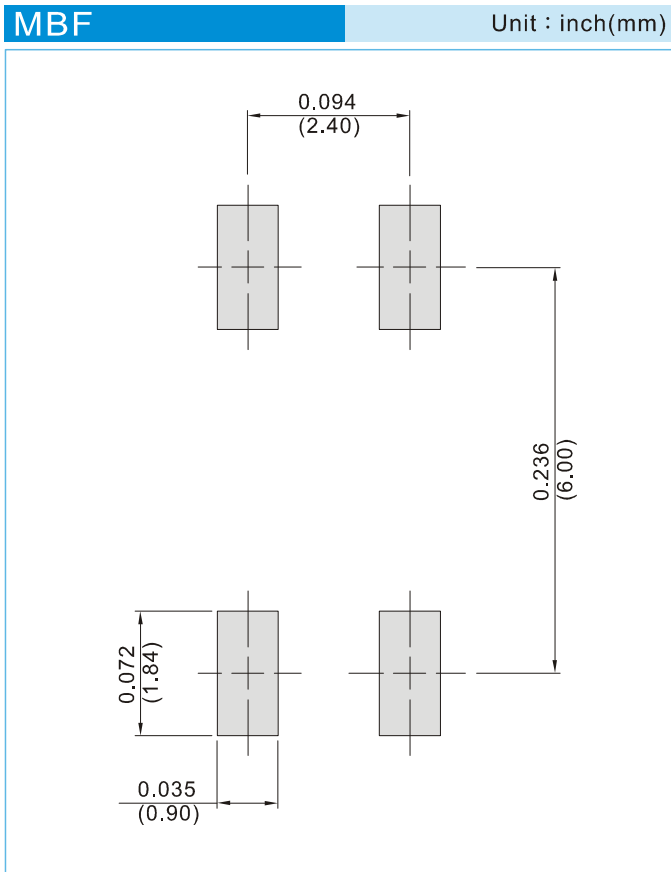


Fig.4 Typical Forward Characteristics

MB4F-10 SERIES

MOUNTING PAD LAYOUT



ORDER INFORMATION

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

MB4F-10 SERIES

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			



MB4F-10 SERIES

Disclaimer

- Reproducing and modifying information of the document is prohibited without permission from Panjit International Inc..
- Panjit International Inc. reserves the rights to make changes of the content herein the document anytime without notification. Please refer to our website for the latest document.
- Panjit International Inc. disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- Panjit International Inc. does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the herein document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications. Panjit International Inc. makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown herein are not designed and authorized for equipments requiring high level of reliability or relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, transportation equipment, aerospace machinery et cetera. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Panjit International Inc. for any damages resulting from such improper use or sale.
- Since Panjit uses lot number as the tracking base, please provide the lot number for tracking when complaining.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Panjit:

[MB10F-10_R2_00001](#) [MB10F-10_R2_10001](#)