



#### MINI SURFACE MOUNT GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

1 Amper

VOLTAGE 400~1000 Volt CURRENT

Recongnized File #E111753

#### **FEATURES**

- Ultra Thin Profile Package for Space Constrained Utilization
- Glass Passivated Chip Junciton
- 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

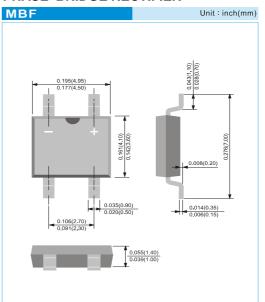
#### **MECHANICAL DATA**

· 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

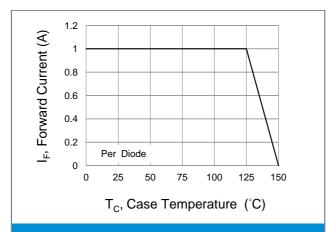
PARAMETER	SYMBOL	MB4F-10	MB6F-10	MB8F-10	MB10F-10	UNIT
Marking		MB4F1	MB6F1	MB8F1	MB10F1	
Maximum Recurrent Peak Reverse Voltage	Vrrm	400	600	800	1000	V
Maximum RMS Voltage	VRMS	280	420	560	700	V
Maximum DC Blocking Voltage	VDC	400	600	800	1000	V
Maximum Average Rectified Forward Current	I F(AV)		Α			
Peak Forward Surge Current : 0.5ms single square wave superimposed on rated load per diode	I FSM		Α			
Peak Forward Surge Current : 1ms single square wave superimposed on rated load per diode	I FSM		Α			
Peak Forward Surge Current : 8.3ms single half-sine-wave superimposed on rated load per diode	I FSM		Α			
Maximum Forward Voltage at 1A	VF	1.1				V
Maximum DC Reverse Current at T <sub>J</sub> =25°C	IR 5				μА	
Typical Thermal Resistance per diode (Note 1)	Rejc	30			°C/W	
Operating Junction Temperature Range	TJ	-55 to +150				°C
Storage Temperature Range	Тѕтс	-55 to +150			°C	

Note:1.Mounted on a FR4 PCB, single-sided copper, with 100cm<sup>2</sup> copper pad area

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**Fig.1 Forward Current Derating Curve** 

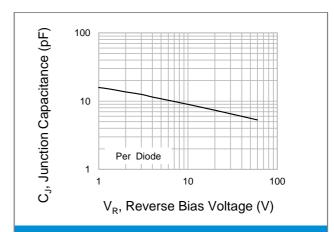


Fig.2 Typical Junction Capacitance

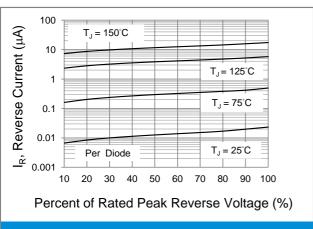


Fig.3 Typical Reverse Characteristics

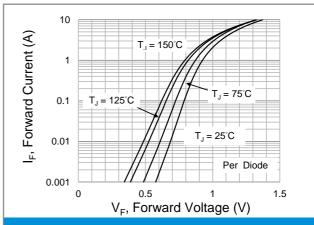
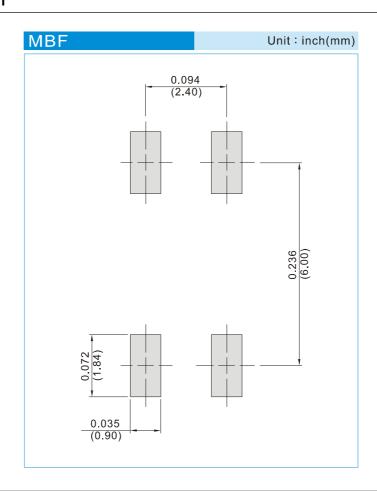


Fig.4 Typical Forward Characteristics





#### **MOUNTING PAD LAYOUT**



#### **ORDER INFORMATION**

• Packing information

T/R - 5K per 13" plastic Reel

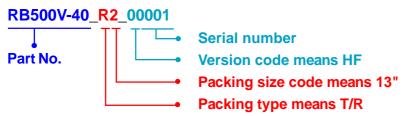




### Part No\_packing code\_Version

MB4F-10\_R2\_10001

## For example:



Packing Code XX				Version Code XXXXX				
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> ~5 <sup>th</sup> 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)	В	13"	2					
Tube Packing (T/P)	Т	26mm	Х					
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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