

**MB2F to MB10F  
Surface Mounted Bridge Rectifier**

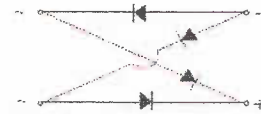
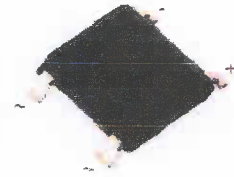
**General Description**

This SMD bridge rectifier is for use in general purpose rectification of power supplies, inverters, converters and freewheeling diodes application

- High Forward Surge Capability
- Low Forward Voltage Drop
- Small size package for installation

**Features**

- Case: MBF, molded epoxy body
- Terminal: Matte tin plated leads
- Polarity: Color band denotes cathode end



**Maximum Ratings** ( $T_A=25^\circ\text{C}$  unless otherwise noted)

Parameter	Symbol	MB2F	MB4F	MB6F	MB8F	MB10F	Units
Maximum repetitive peak reverse voltage	$V_{RRM}$	200	400	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	140	280	420	560	700	V
Maximum DC blocking voltage	$V_{DC}$	200	400	600	800	1000	V
Maximum average forward output rectifier current	$I_{F(AV)}$	0.8					A
Peak forward surge current single half sine-wave superimposed on rated load	$I_{FSM}$	30					A
Rating for Fusing ( $t < 8.3\text{ms}$ )	$I^2t$	3.74					$\text{A}^2\text{Sec}$
Operating Junction Temperature Range	$T_J, T_{STG}$	-55 to 150					$^\circ\text{C}$

**Electrical Characteristics** ( $T_A=25^\circ\text{C}$  unless otherwise noted)

Parameter	Condition	Symbol	MB2F	MB4F	MB6F	MB8F	MB10F	Units
Maximum instantaneous forward voltage	$I_F=0.4\text{A}$	$V_F$	1.0					V
Maximum DC reverse current at blocking voltage	$T_A=25^\circ\text{C}$	$I_R$	10					$\mu\text{A}$
	$T_A=125^\circ\text{C}$		200					
Typical junction capacitance	4.0V, 1 MHz	$C_J$	13					pF

**Thermal Characteristic** ( $T_A=25^\circ\text{C}$  unless otherwise noted)

Parameter	Symbo	MB2F	MB4F	MB6F	MB8F	MB10F	Units
Typical Thermal resistance	$R_{\theta JA}$	85					$^\circ\text{C}/\text{W}$



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Ratings and Characteristics Curves ( $T_A=25^\circ\text{C}$  unless otherwise noted)

FIG.1-FORWARD CURRENT DERATING CURVE

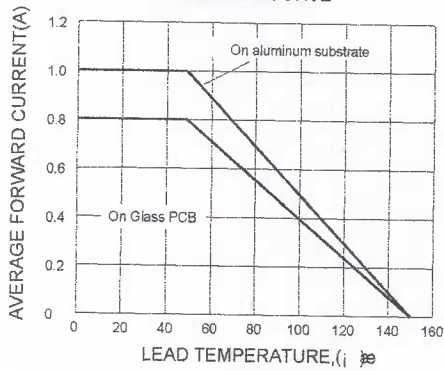


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

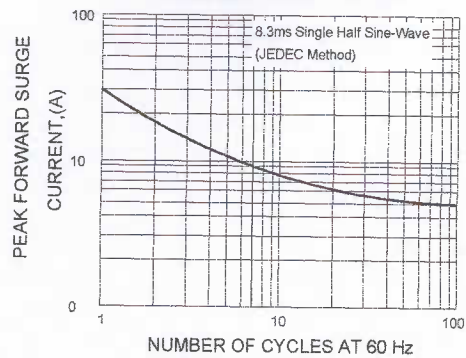


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

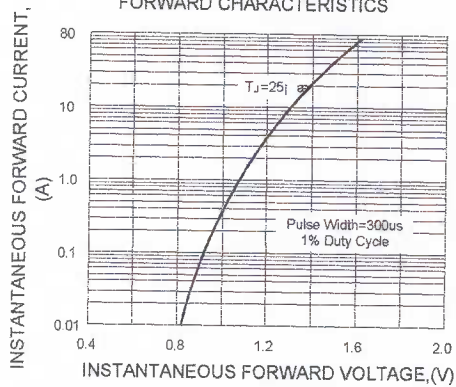
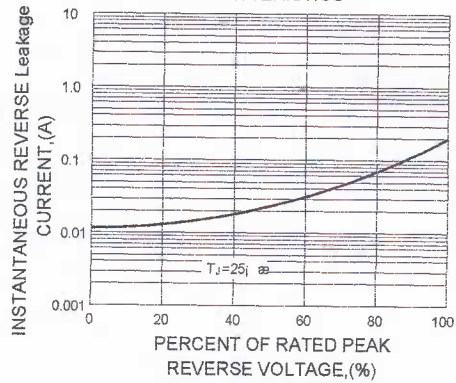


FIG.4-TYPICAL REVERSE CHARACTERISTICS

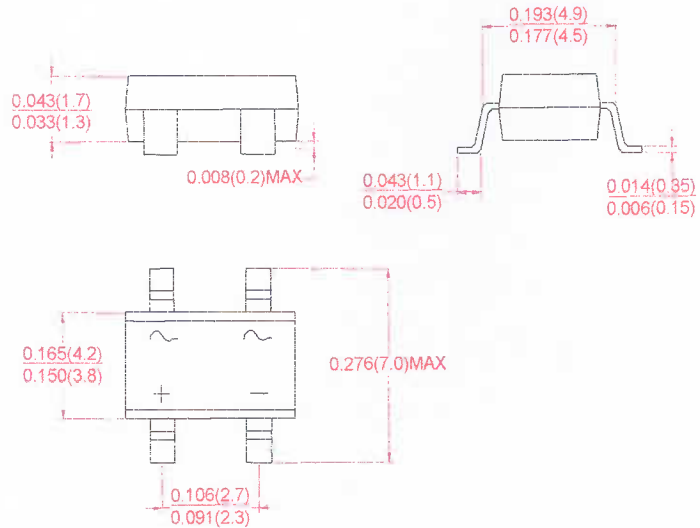




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**Package Information**

**MBF**



All dimension in inches and (millimeters) unless notice

**Product Chip Information**

Product Number	MB10F
Chip Technology	GPP process

**Ordering Information**

Part No.	UNIT WEIGHT (g)	Quantity	PACKING
MBF02-MBF10	0.136	3000	13" diameter plastic reel

**NOTE:**

- 1) According to the existing **RoHS** requirement, Lead found in GPP Dice and Lead in high melting Temperature type solders are specifically exempted.
- 2) After authority chop & sign, there should not be any additional changes, cancellation or correction.
- 3) Please sign & return the attached copy for us as acknowledgement of the above information.