

**MB2F to MB10F
Surface Mounted Bridge Rectifier**

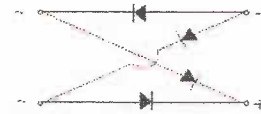
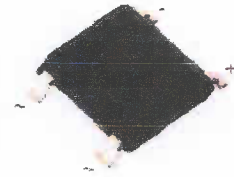
General Description

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					A^2Sec
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					μA
	$T_A=125^\circ\text{C}$		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					$^\circ\text{C}/\text{W}$



MB2F to MB10F

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

FIG.1-FORWARD CURRENT DERATING CURVE

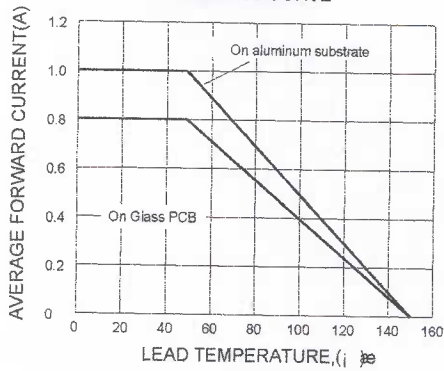


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

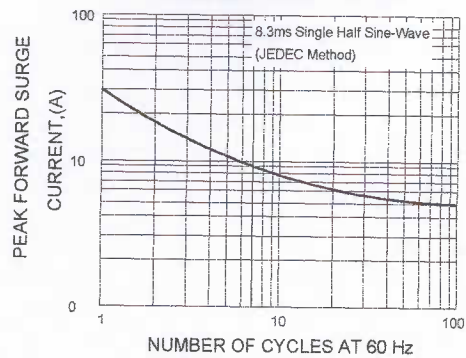


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

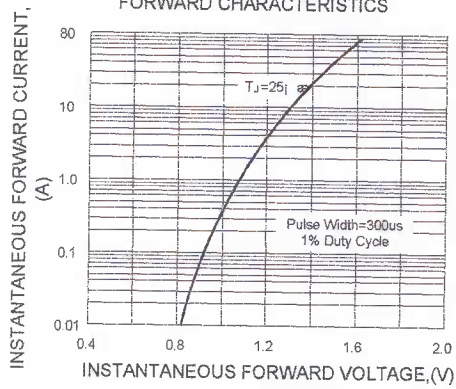
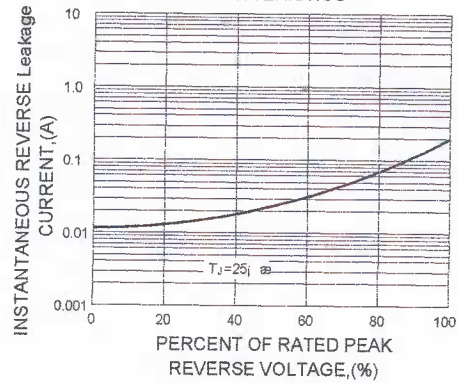


FIG.4-TYPICAL REVERSE CHARACTERISTICS

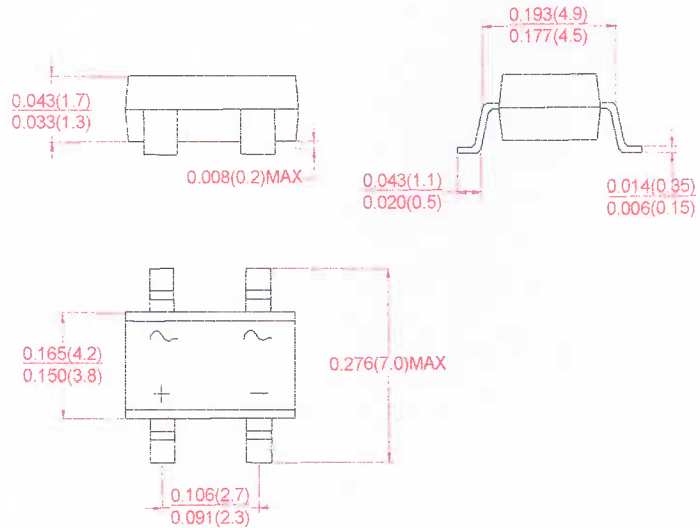




MB2F to MB10F

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.