WILLAS

MB4F THRU MB7F

Pb Free Product

0.8 AMP SURFACE MOUNT SI- BRIDGE RECTIFIERS

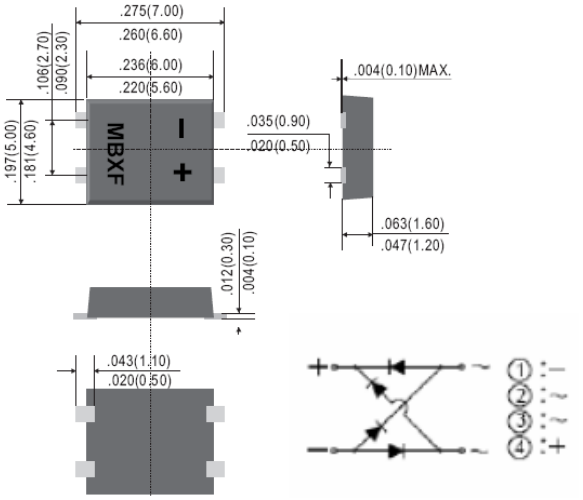
MBF PACKAGE

FEATURES

* Ideal for printed circuit board
* Surge overload rating: 30 Amperes peak
* Mounting position: Any
* Low Profile Package
* RoHS compliant
* Pb free plating 99% Sn above
* RoHS product for packing code suffix "G"
  Halogen free product for packing code suffix "H"

MECHANICAL DATA

* Epoxy: Device has UL flammability classification 94V-O
* Standard Packaging Taped and reeled
* Weight: 0.11 grams



Dimensions in inches and(millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.
Single phase half wave, 60Hz, resistive of inductive load.
For capacitive load, derate current by 20%

RATINGS	SYMBOL	MB4F	MB5F	MB6F	MB7F	UNIT
Marking Code		MB4F	MB5F	MB6F	MB7F	
Pepetitive Peak Reverse Voltage	V_{RRM}	400	600	800	1000	Volts
Maximum Alternating Input Voltage	V_{RMS}	280	420	560	700	Volts
Maximum Average Forward Rectified Current at T_A=50℃	I_O	0.8				Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	30				Amps
Rating for fusing ,t<8.3ms@T_A=25℃	I^2t	3.7				A^2sec
Typical Thermal Resistance (Note 2)	$R_{\Theta JA}$	70				℃/W
Operating Temperature Range	T_J	-55 to +150				
Storage Temperature Range	T_S	-55 to +150				℃

CHARACTERISTICS		SYMBOL	MB4F	MB5F	MB6F	MB7F	UNIT
Maximum Forward Voltage Range at 0.8A DC		V_F	1.05				Volts
Maximum Reverse Current at	@TA=25℃	I_R	5.0				μAmps
Rated DC Blocking Voltage	@TA=125℃		500				

NOTES :1. Measured at 1 MHz and applied reverse voltage of 4.0 volts.
2. Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B with 0.47 x 0.47"(12 x 12mm) copper pads.

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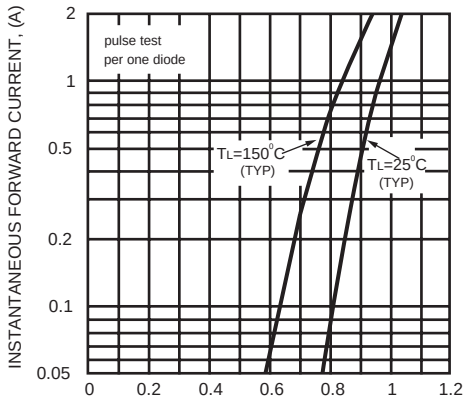
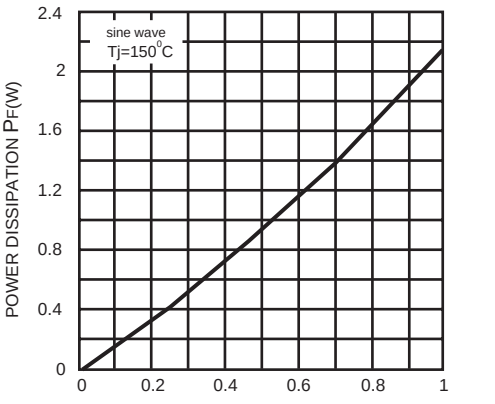
RATING AND CHARACTERISTIC CURVES (MB4F THRU MB7F)

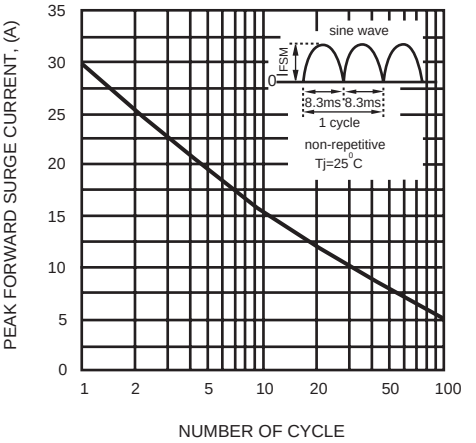
TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



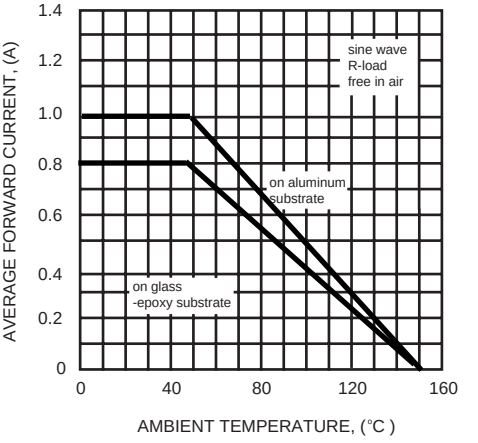
POWER DISSIPATION



SURGE FORWARD CURRENT CAPABILITY



TYPICAL FORWARD CURRENT DERATING CURVE



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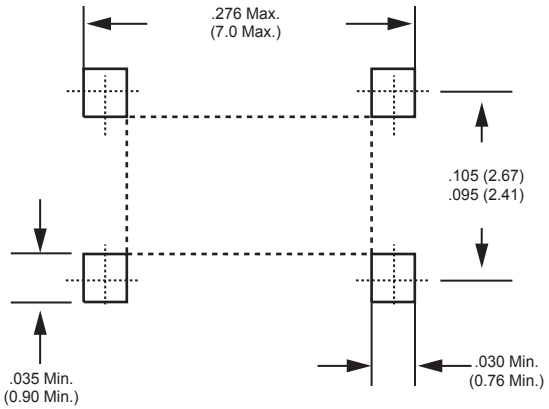
Mounting Pad Layout



Dimensions in inches and (millimeters)