



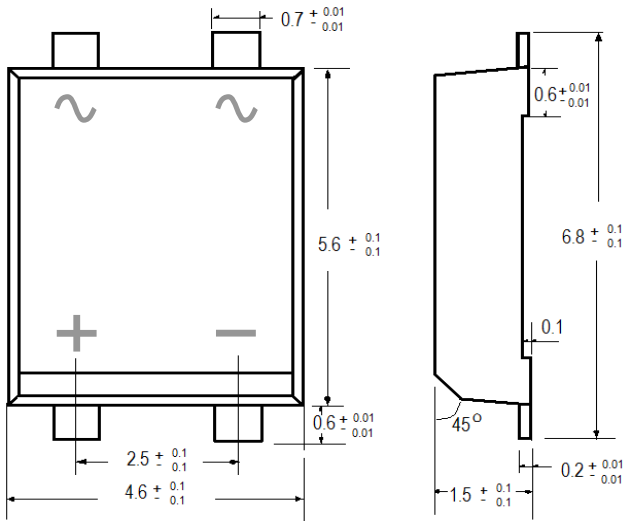
MB05F THRU MB10F

Miniature Single-Phase Surface Mount Glass Passivated Bridge Rectifiers

Reverse Voltage - 50 to 1000 Volts Forward Current - 0.5 / 0.8 Amperes

MBS-F

FEATURES



Dimensions in millimeters

- ◆ Surface mount package ideally suited for automatic insertion
- ◆ Surge overload rating-35Amperes peak
- ◆ Plastic material has underwriters laboratory flammability classification 94V-0
- ◆ High temperature soldering guaranteed: 250°C/10 seconds at terminals
- ◆ Pb free product : 99% Sn above can meet RoHS environment substance directive request

MECHANICAL DATA

Case: MBS-F is Miniature Flat Surface Mount, Molded plastic
Terminals: Solderable per MIL-STD-750 · Method 2026
Lead: solder plated
Polarity: As marked
Weight: 0.08 grams
Mounting Position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

PARAMETER	SYMBOLS	MB 05F	MB 1F	MB 2F	MB 4F	MB 6F	MB 8F	MB 10F	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Minimum DC Breakdown Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current (see Fig :1) on glass-epoxy P.C.B. (1) on aluminum substrate (2)	$I_{F(AV)}$	0.5 0.8							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	35							A
Maximum Instantaneous Forward Voltage @ 0.4A	V_F	1.0							V
Maximum DC Reverse Current @ $T_A=25^\circ\text{C}$ rated DC blocking voltage per leg @ $T_A=125^\circ\text{C}$	I_R	5.0 100							μA
I^2t Rating for fusing($t<8.3\text{ms}$)	I^2t	5							A^2S
Typical junction capacitance per leg at 4.0V, 1MHz	C_J	13							pF
Typical Thermal Resistance pre leg	$R_{\theta JL}$ $R_{\theta JA}$ $R_{\theta JA}$	20.0 85.0 ⁽¹⁾ 70.0 ⁽²⁾							$^\circ\text{C/W}$
Operating Temperature and Storage Temperature Range	T_J, T_{STG}	-55 to +150							$^\circ\text{C}$

Note: 1. On glass epoxy P.C.B. mounted on 0.05*0.05"(1.3*1.3mm) pads
 2. On aluminum substrate P.C.B. with an area of 0.8"(20*20mm) mounted



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RATINGS AND CHARACTERISTIC CURVES

