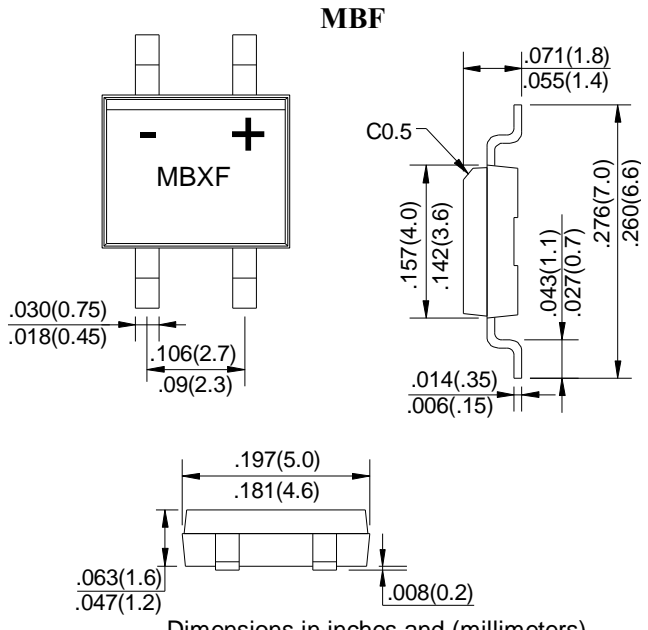


MB05F THRU MB10F

SINGLE-PHASE 1.0A AMP. GLASS PASSIVATED BRIDGE RECTIFIER
REVERSE VOLTAGE: 50 to 1000 VOLTS

 <p>MBF</p> <p>MBXF</p> <p>Dimensions in inches and (millimeters)</p>	<p>FEATURES</p> <ul style="list-style-type: none"> · Surge overload rating: 30 amperes peak · Ideal for printed circuit board · Plastic material has Underwriters Laboratory Flammability Classification 94V-0 · Low leakage · Reliable low cost construction utilizing molded <p>MECHANICAL DATA</p> <p>Case: Molded plastic Epoxy: UL 94V-0 rate flame retardant Terminals: Leads solderable per MIL-STD-202E, method 208 guaranteed Mounting position: Any</p>
<p>Maximum Ratings and Electrical Characteristics</p>	

Ratings at 25°C ambient temperature unless otherwise specified.
 Single phase, half wave, 60Hz, resistive or inductive load.

		MB05F	MB1F	MB2F	MB4F	MB6F	MB8F	MB10F	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current (see Fig. 1) on glass-epoxy P.C.B (Note 2) on aluminum substrate (Note 3)	$I_{(AV)}$	0.8						1.0	Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	30							Amp
Maximum Forward Voltage at 0.4A DC and 25 °C	V_F	1.0							Volts
Maximum Reverse Current at $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage $T_A=125^\circ\text{C}$	I_R	10.0						200	uAmp
Typical Junction Capacitance (Note 1)	C_J	13							pF
Typical Thermal Resistance (Note 3)	$R_{\theta JA}$	60							°C/W
Typical Thermal Resistance (Note 2)	$R_{\theta JL}$	16							°C/W
Operating and Storage Temperature Range	T_J, T_{stg}	-55 to +150							°C

NOTES:

- 1- Measured at 1 MHz and applied reverse voltage of 4.0 VDC.
- 2- On glass epoxy P.C.B. mounted on 0.05 x 0.05" (1.3 x 1.3mm) pads
- 3- On aluminum substrate P.C.B. with an area of 0.8" x 0.8" (20 x 20mm) mounted on 0.05 x 0.05" (1.3 x 1.3mm) solder pad

RATING AND CHARACTERISTIC CURVES (MB05F THRU MB10F)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

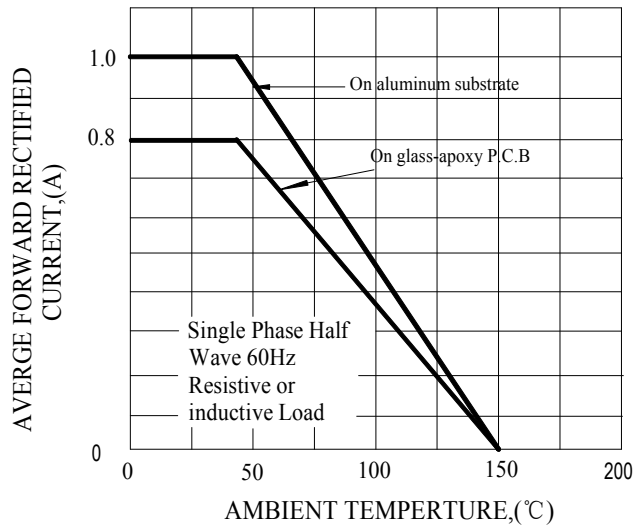


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

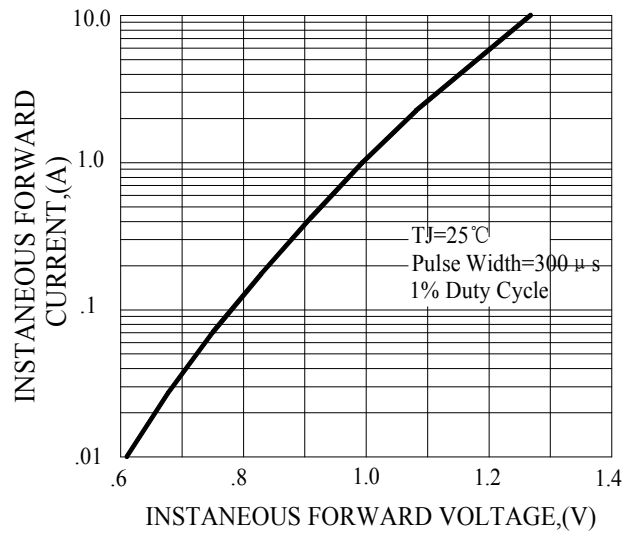


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

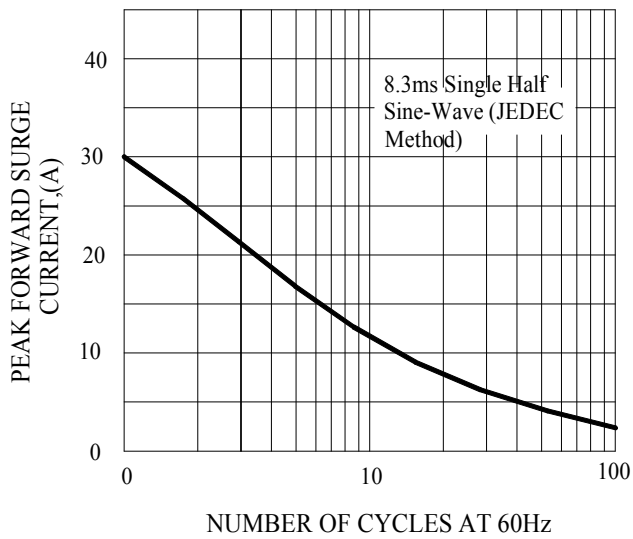


FIG.4-TYPICAL REVERSE CHARACTERISTICS

