

**SINGLE-PHASE GLASS PASSIVATED
SILICON BRIDGE RECTIFIER**
VOLTAGE RANGE 50 to 1000 Volts CURRENT 35 Amperes

FEATURES

- * Superior thermal desing
- * 400 amperes surge rating
- * 1/4" universal faston terminal
- * Hole thru for #8 screw

MECHANICAL DATA

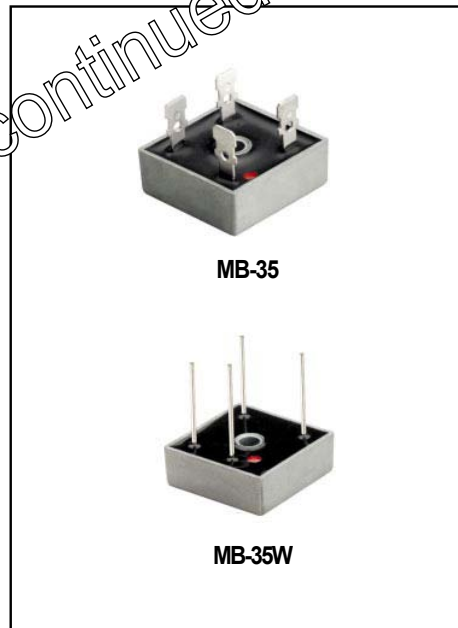
- * Epoxy : Device has UL flammability classification 94V-0
- * UL listed the recongnized component director, file #94233

DISCONTINUED-

"This series is replaced by the MP35 series that meets to the same fit and function parameters.
The MP35 series is preferred for PCB assembly."

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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



MAXIMUM RATINGS (@ TA=25 °C unless otherwise noted)

RATINGS	SYMBOL	MB3505	MB351	MB352	MB354	MB356	MB358	MB3510	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 at $T_C = 55^\circ\text{C}$	I_O	35.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	400							Amps
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	1.4							°C/W
	$R_{\theta JA}$	16							
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to + 150							°C

ELECTRICAL CHARACTERISTICS(@TA=25 °C unless otherwise noted)

CHARACTERISTICS	SYMBOL	MB3505	MB351	MB352	MB354	MB356	MB358	MB3510	UNITS
Maximum Instantaneous Forward Voltage at 17.5ADC	V_F	1.1							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	@ $T_A = 25^\circ\text{C}$	5.0							uAmps
	@ $T_A = 100^\circ\text{C}$	500							

- NOTES : 1. Suffix "W" for wire type.
2. Typical Thermal Resistance: Heat-sink case mounted.
3. "Fully ROHS compliant", "100% Sn plating (Pb-free)".

2007-5

RATING AND CHARACTERISTICS CURVES (MB3505 THRU MB3510)

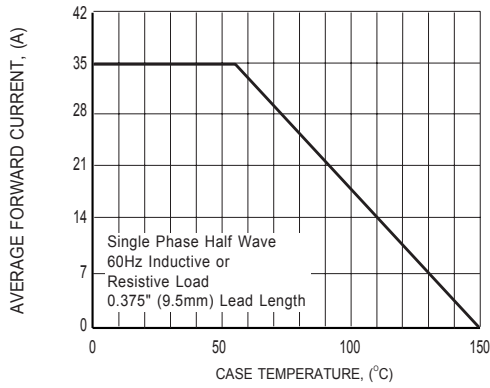


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

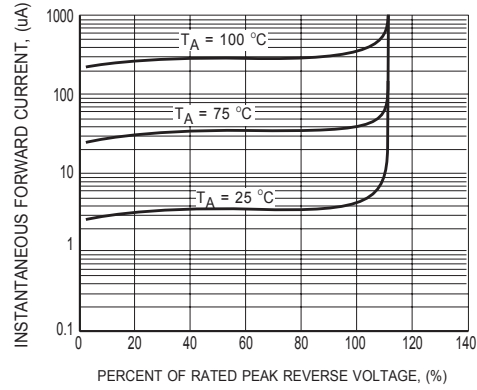


FIG.2 TYPICAL REVERSE CHARACTERISTICS

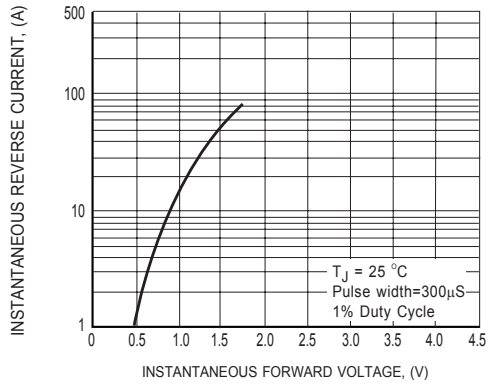


FIG.3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

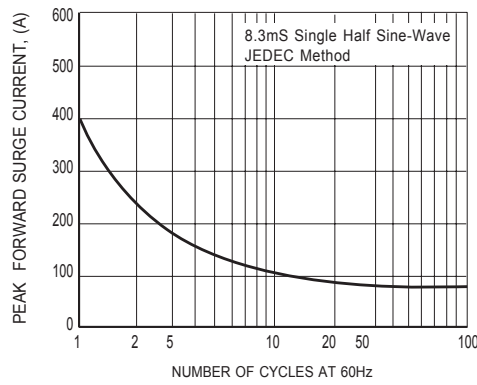
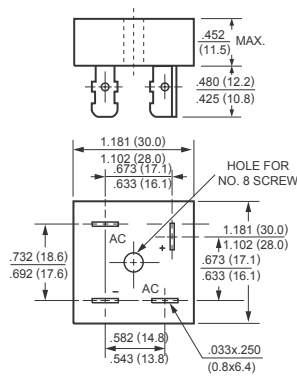
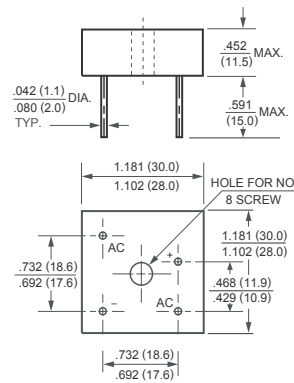


FIG.4 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



MB-35



MB-35W



DISCLAIMER NOTICE

Rectron Inc reserves the right to make changes without notice to any product specification herein, to make corrections, modifications, enhancements or other changes. Rectron Inc or anyone on its behalf assumes no responsibility or liability for any errors or inaccuracies. Data sheet specifications and its information contained are intended to provide a product description only. "Typical" parameters which may be included on RECTRON data sheets and/ or specifications can and do vary in different applications and actual performance may vary over time. Rectron Inc does not assume any liability arising out of the application or use of any product or circuit.

Rectron products are not designed, intended or authorized for use in medical, life-saving implant or other applications intended for life-sustaining or other related applications where a failure or malfunction of component or circuitry may directly or indirectly cause injury or threaten a life without expressed written approval of Rectron Inc. Customers using or selling Rectron components for use in such applications do so at their own risk and shall agree to fully indemnify Rectron Inc and its subsidiaries harmless against all claims, damages and expenditures.

