RECTRON SEMICONDUCTOR
TECHNICAL SPECIFICATION

MP3505 THRU MP3510

SINGLE-PHASE GLASS PASSIVATED SILICON BRIDGE RECTIFIER

VOLTAGE RANGE 50 to 1000 Volts CURRENT 35 Amperes

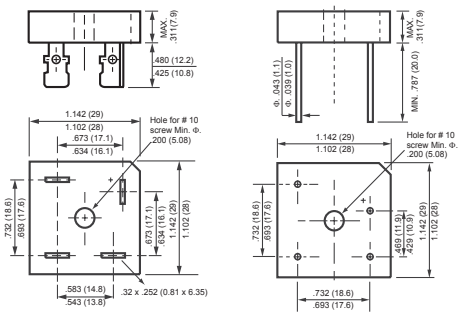
FEATURES

* Superior thermal desing
* 400 amperes surge rating
* 1/4" universal faston terminal
* Holel thru for # 10 screw

MECHANICAL DATA

* Epoxy: Device has UL flammability classification 94V-O
* UL listed the recognized component directory,file #E94233

MP-35 / MP-35W



MP-35 MP-35W

Dimensions in inches and (millimeters)

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 (@ T_A=25 °C unless otherwise noted)

RATINGS	SYMBOL	MP3505	MP351	MP352	MP354	MP356	MP358	MP3510	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°C	I_O	35							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	400							Amps
RMS isolation voltage from case to lead	V_{ISO}	2500							Volts
Typical Thermal Resistance (Note 1)	$R_{\theta JC}$	1.4							°C/W
	$R_{\theta JA}$	19							
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to + 150							°C

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

CHARACTERISTICS		SYMBOL	MP3505	MP351	MP352	MP354	MP356	MP358	MP3510	UNITS
Maximum Instantaneous Forward Voltage at 17.5A DC		V_F	1.1							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	@T_A = 25°C	I_R	5.0							uAmps
	@T_A = 100°C		500							

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

2008-10
REV: A

RATING AND CHARACTERISTICS CURVES (MP3505 THRU MP3510)

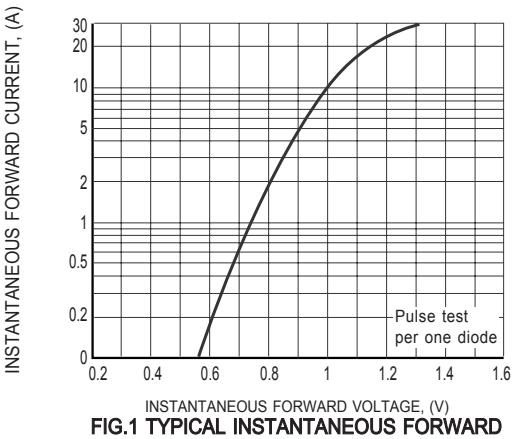


FIG.1 TYPICAL INSTANTANEOUS FORWARD CHARACTERITICS

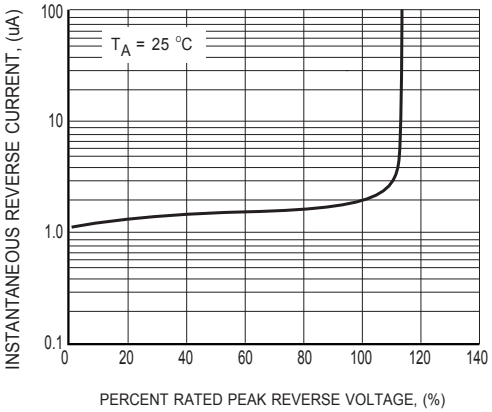


FIG.2 TYPICAL REVERSE CHARACTERISTICS

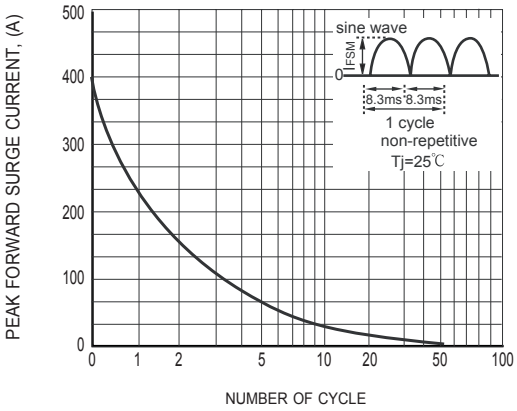


FIG.3 SURGE FORWARD CURRENT CAPABILITY

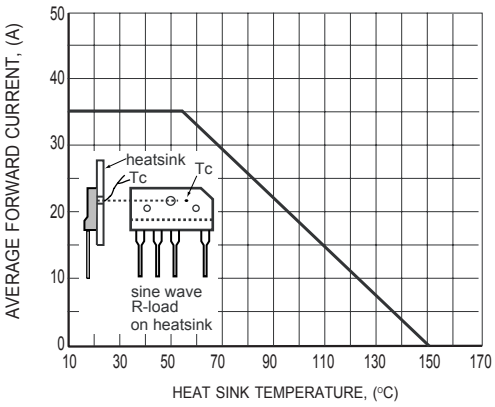


FIG.4 TYPICAL FORWARD CURRENT DERATING CURVE

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