

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

FEATURES

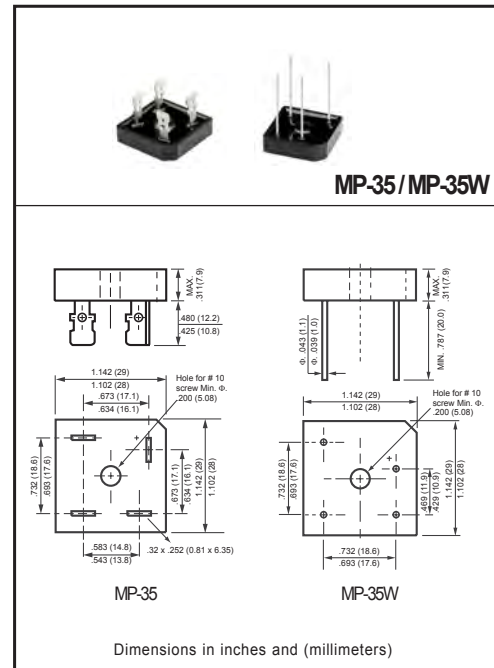
- * Superior thermal desing
- * 400 amperes surge rating
- * 1/4" universal faston terminal
- * Hole thru for # 10 screw

MECHANICAL DATA

- * Epoxy: Device has UL flammability classification 94V-0
- * UL listed the recognized component directory, file #E94233

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	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 _{θJC}	1.4							°C/W
	R _{θJA}	19							
Operating and Storage Temperature Range	T _J , T _{STG}	-55 to + 150							°C

ELECTRICAL CHARACTERISTICS (@ TA=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	5.0							uAmps
	@ T _A = 100°C								

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.

RATING AND CHARACTERISTICS CURVES (MP3505 THRU MP3510)

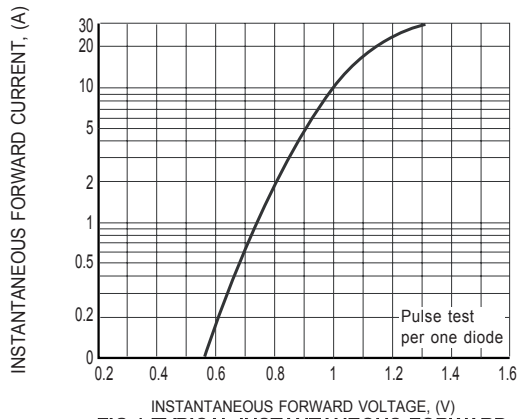


FIG.1 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

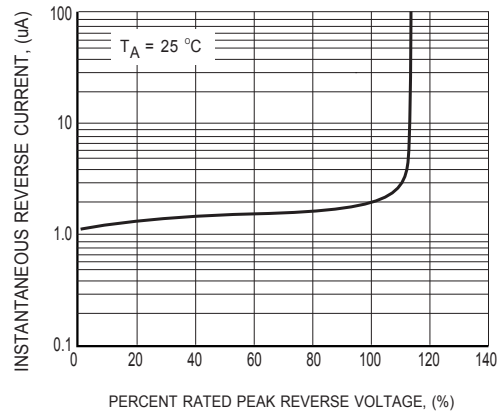


FIG.2 TYPICAL REVERSE CHARACTERISTICS

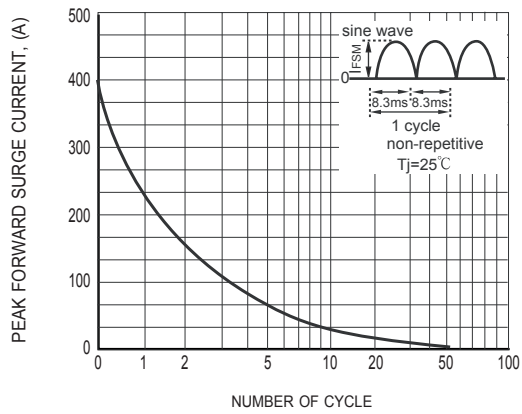


FIG.3 SURGE FORWARD CURRENT CAPABILITY

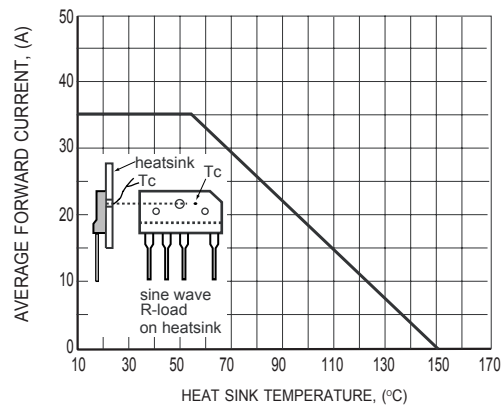


FIG.4 TYPICAL FORWARD CURRENT DERATING CURVE

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