

THREE - PHASE BRIDGE RECTIFIER

FEATURES

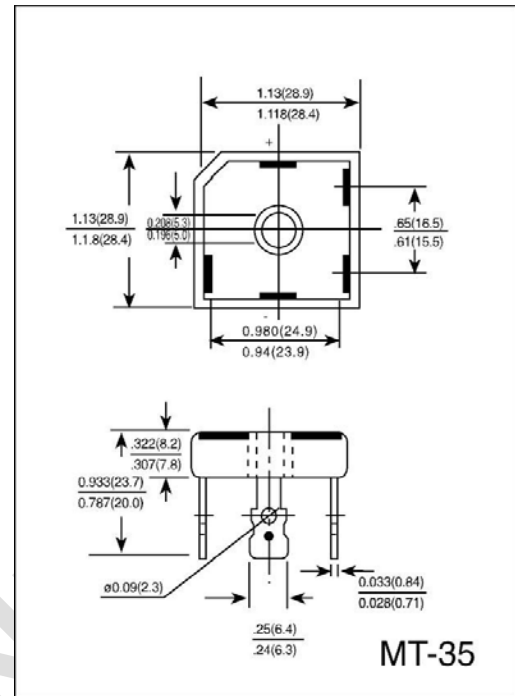
- Integrally molded heatsinks provide very low thermal resistance for maximum heat dissipation.
- surge overload rating to 500 amperes.
- High temperature soldering guaranteed:
260°C/10 second, at 5 lbs tension.

MECHANICAL DATA

- Case: Epoxy, Molded plastic with heatsink integrally mounted in the bridge encapsulation.
- Mounting Position: Bolt down on heatsink with silicon thermal compound between bridge and mounting surface for maximum heat transfer efficiency.
- Mounting Torque: 20 in. lbs max.
- Weight: 0.706 ounce, 20 gram

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 derate current by 20%



	SYMBOLS	MT3508	MT3512	MT3516	UNIT
Peak Repetitive Reverse Voltage	V_{RRM}	800	1200	1600	Volts
Working Peak Reverse Voltage	V_{RWM}	800	1200	1600	Volts
Maximum DC Blocking Voltage	V_{DC}	800	1200	1600	Volts
Maximum Average Forward Rectified Output Current, at $T_C = 55^\circ\text{C}$ (Note 2)	$I_{(AV)}$	35			Amps
Peak Forward Surge Current 8.3ms single half sine - wave superimposed on rated load (JEDEC method)	I_{FSM}	500			Amps
Rating for Fusing ($t < 8.3\text{ms}$)	I^2t	1030			A^2s
Maximum Instantaneous Forward Voltage Drop per bridge element at 17.5A	V_F	1.2			Volts
Maximum DC Reverse Current at rated DC blocking voltage per element $T_A = 25^\circ\text{C}$	I_R	100			μA
Typical Thermal Resistance Per Element	$R_{\theta JC}$	2.0			$^\circ\text{C/W}$
Isolation Voltage from case to leads.	V_{ISO}	2500			V_{AC}
Operating Temperature Range	T_J	(-65 to +150)			$^\circ\text{C}$
Storage Temperature Range	T_{STG}	(-65 to +150)			

1. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts.

2. Unit mounted on 11.8" X 11.8" X 0.6" thick (300 X 200 X 15mm) Copper plate.

FIG.1-TYPICAL FORWARD CURRENT

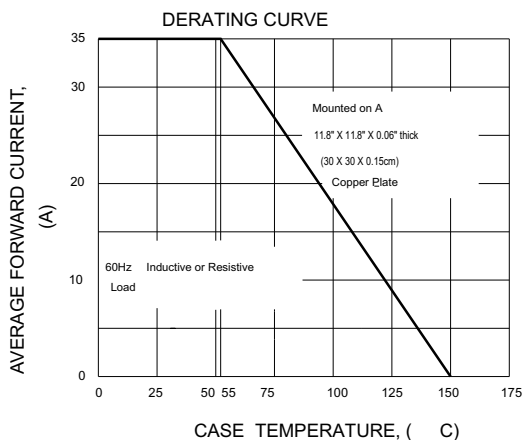


FIG.1-TYPICAL FORWARD CURRENT

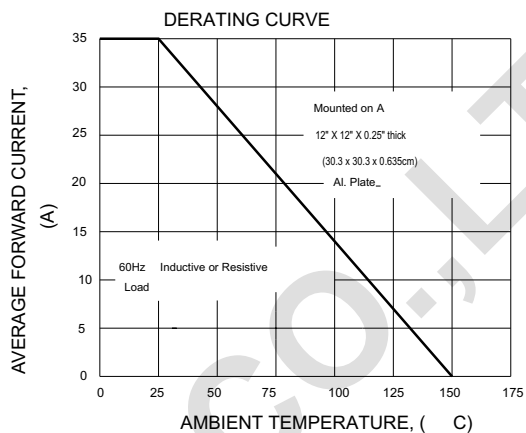


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

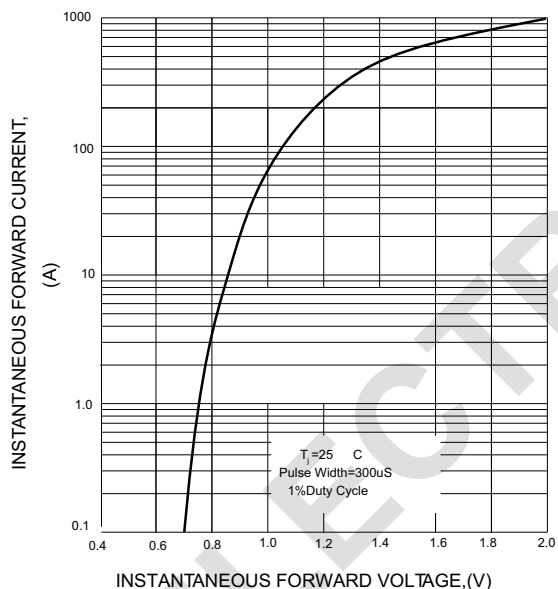


FIG.4-MAXIMUM POWER DISSIPATION

