



GLASS PASSIVATED SINGLE-OHASE BPIDGE RECTIFIER

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MT3508G THRU MT3516G

VOLTAGE RANGE

1600 Volts

CURRENT

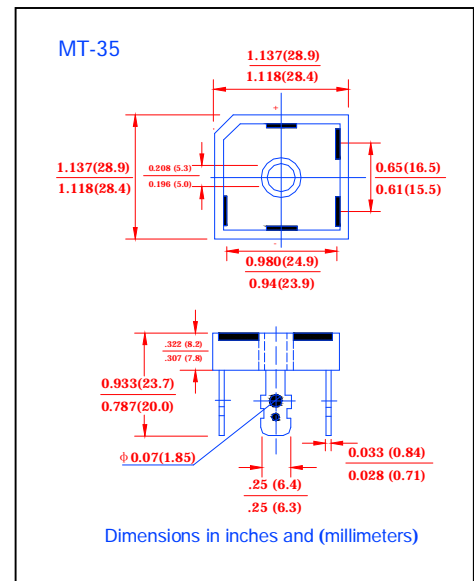
35 Amperes

FEATURES

- Integrally molded heatsink provides very low thermal resistance for maximum heat dissipation
- Glass passivated chip junction
- Surge overload rating to 400 amperes
- High temperature soldering guaranteed:
260°C/10 seconds, 5 lbs tension

MECHANICAL DATA

- Case: Epoxy, Molded Plastic with heatsink integrally Mounted in the bridge encapsulation.
- Mounting Position: Bolt down on heatsink with silicone 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	MT3508G	MT3512G	MT3516G	UNIT
Peak Repetitive Reverse Voltage	V_{RRM}	800	1200	1600	Volts
Working Peak Reverse Voltage	V_{RMS}	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}	400			Amps
Rating for Fusing ($t < 8.3\text{ms}$)	I^2t	1030			A^2s
Maximum Instantaneous Forward Voltage drop Per Bridge element 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	5.0			μAmps
Typical Thermal Resistance per Element	$R_{\theta JC}$	2.0			$^\circ\text{C}/\text{W}$
Isolation Voltage from case to lug	V_{ISO}	2500			V_{AC}
Operating and Storage Temperature Range	T_J, T_{STG}	(-55 to +150)			$^\circ\text{C}$

- Notes:**
1. Measured at 1.0MHz and applied reverse voltage of 4.0 Volts.
 2. Unit mounted on $11.8'' \times 11.8'' \times 0.6''$ thick (300 × 300 × 15mm) Copper plate.



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RATINGS AND CHARACTERISTICS CURVES MT3508G THRU MT3516G

FIG. 1- TYPICAL FORWARD CURRENT DERATING CURVE

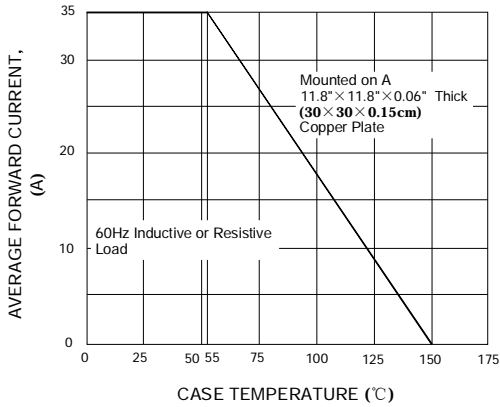


FIG. 2- TYPICAL FORWARD CURRENT DERATING CURVE

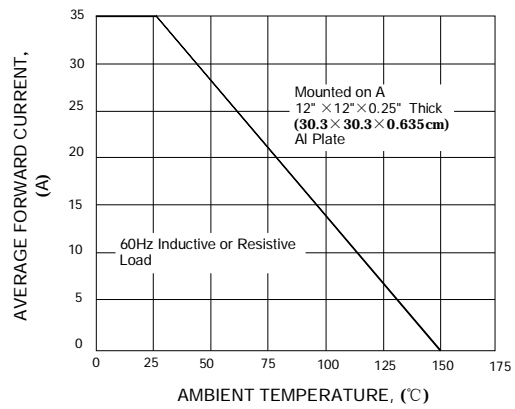


FIG. 3- TYPICAL INSTANTANEOUS FORWARDS CHARACTERISTICS

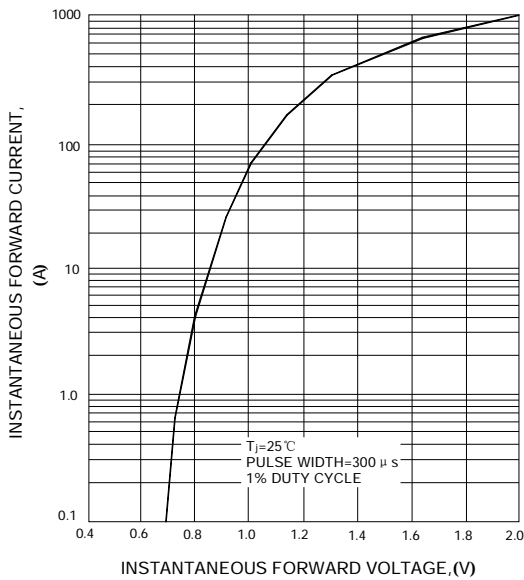


FIG. 3- MAXIMUM POWER DISSIPATION

