



THREE - PHASE BRIDGE RECTIFIER MT3508 ~ MT3516

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 seconds, at 5lbs(2.3kg) tension
- RoHS and REACH Compliance



Mechanical Data

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

Maximum Ratings ($T_{Ambient}=25^{\circ}\text{C}$ unless noted otherwise)

Symbol	Description	MT3508	MT3512	MT3516	Unit	Conditions
VRRM	Max Recurrent Peak Reverse Voltage	800	1200	1600	V	
VRMS	Max RMS Voltage	800	1200	1600	V	
VDC	Max DC Blocking Voltage	800	1200	1600	V	
I(AV)	Max Average Forward Rectified Current	35			A	@TC=55°C (Note 2)
IFSM	Peak Forward Surge Current	500			A	8.3ms single half sine-wave (JEDEC method)
TJ,TSTG	Operating and Storage Temperature Range	-65 to +150, -65 to +150			°C	
I2t	Rating for Fusing	1030			A2s	T<8.3mS

Electrical Characteristics ($T_{Ambient}=25^{\circ}\text{C}$ unless noted otherwise)

Symbol	Description	MT3508	MT3512	MT3516	Unit	Conditions
V _F	Max Instantaneous Forward Voltage	1.2			V	Drop per Bridge element 17.5A
I _R	Max DC Reverse Current at Rated DC Blocking Voltage	100			μA	T _A =25°C
R _{θ-JC}	Typical Thermal Resistance	2.0			°C/W	
V _{ISO}	Isolation Voltage from case to leads	2500			pF	

Note:

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

MT3508 ~ MT3516

RATINGS AND CHARACTERISTIC CURVES MT3508 THRU MT3516

FIG.1-TYPICAL FORWARD CURRENT

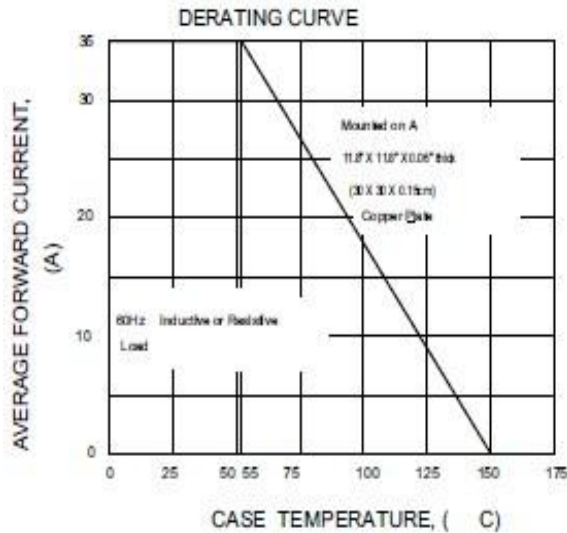


FIG.1-TYPICAL FORWARD CURRENT

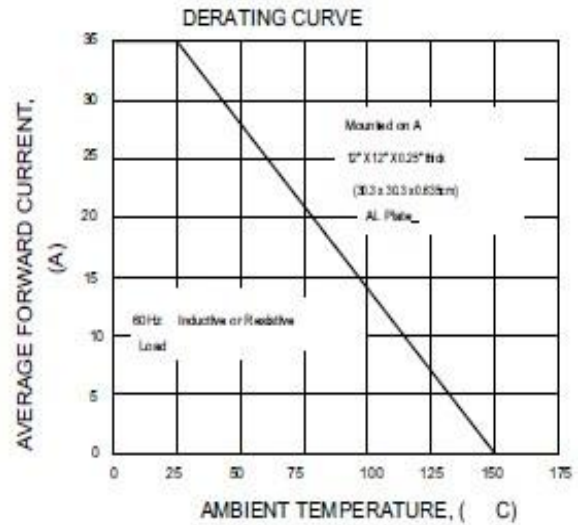


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

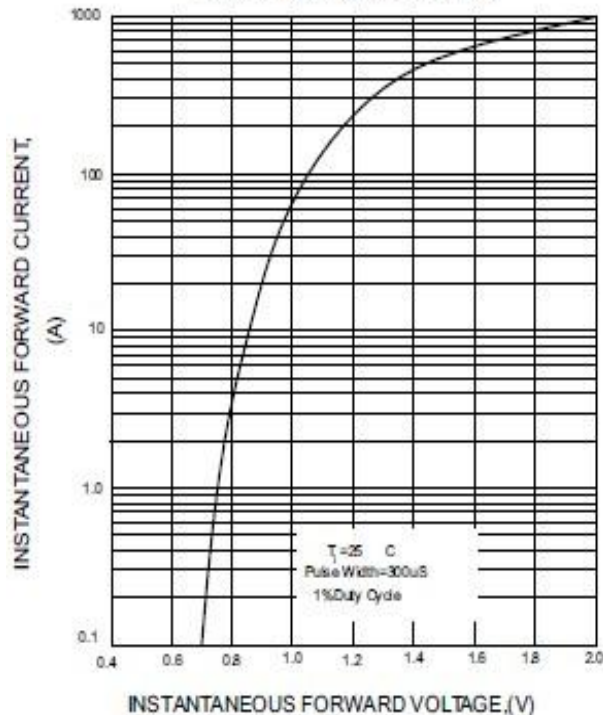
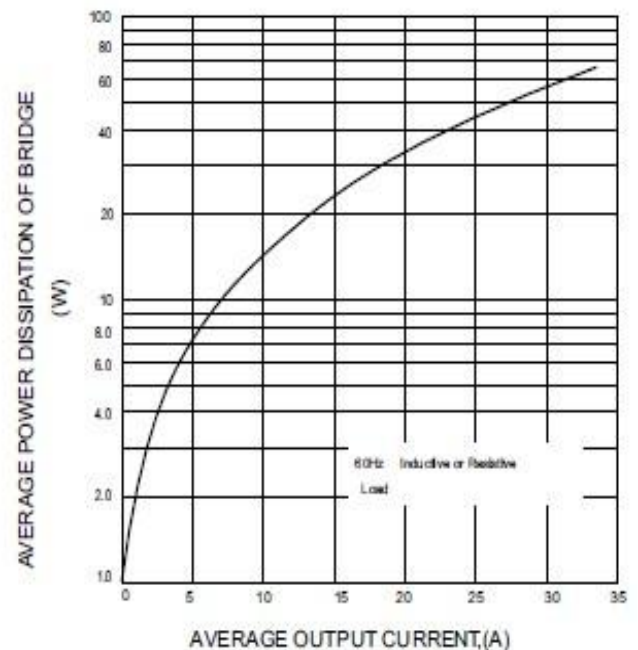
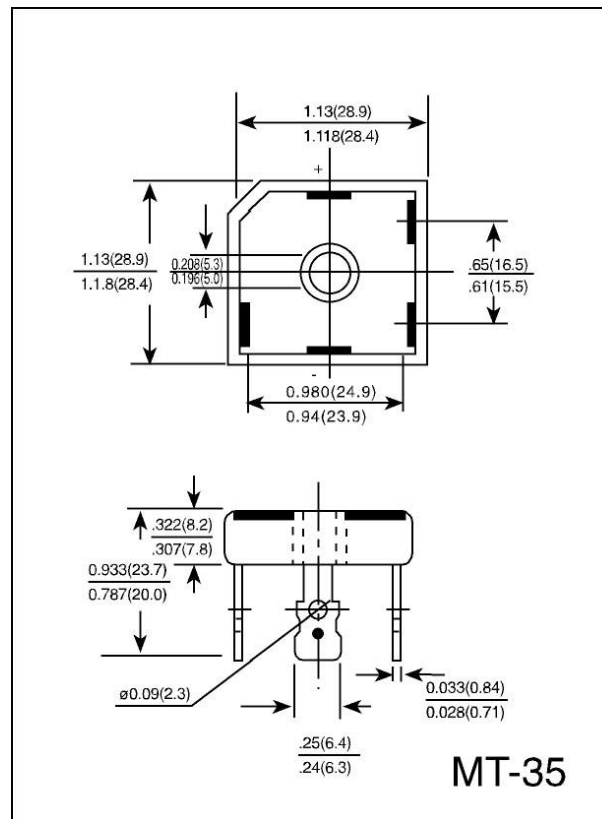


FIG.4-MAXIMUM POWER DISSIPATION



MT3508 ~ MT3516**Dimensions in inches (mm)****Contact us:****US HEADQUARTERS****MEI SEMI INC.****2902** Corvin Drive, Santa Clara, CA95051, USA

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