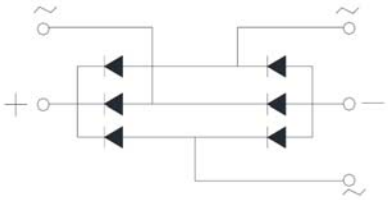
Three Phase Bridge Rectifiers





Features

- Low thermal resistance
- Glass passivated chip junction
- High surge current capability
- Solder dip 275 °C max. 7 s, per JESD 22-B106

Typical Applications

General purpose use in AC/DC bridge full wave rectification for Server、Frequency converter、Industrial power supply.

Mechanical Data

- **Package**: MT-M
  Molding compound meets UL 94 V-0 flammability rating
- **Terminals**: Gold plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** As marked on body

■Maximum Ratings (T_a=25℃ Unless otherwise specified）

PARAMETER		SYMBOL	UNIT	MT5006M	MT5008M	MT5010M	MT5012M	MT5014M	MT5016M
Device marking code				MT5006M	MT5008M	MT5010M	MT5012M	MT5014M	MT5016M
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	V	600	800	1000	1200	1400	1600
Maximum RMS Voltage		V_{RMS}	V	420	560	700	840	980	1120
Maximum DC blocking Voltage		V_{DC}	V	600	800	1000	1200	1400	1600
Average rectified output current @60Hz sine wave, R-load	With heatsink Tc =90℃	I_O	A	50.0					
Forward Surge Current (Non-repetitive) @8.3ms Half-sine wave,1 cycle, Tj=25℃		I_{FSM}	A	500					
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25℃				1000					
Current squared time @1ms≤t≤8.3ms Tj=25℃, Rating of per diode		I^2t	A^2s	1037.5					
Storage temperature		T_{stg}	℃	-55 ~ +150					
Junction temperature		T_j	℃	-55 ~ +150					
Dielectric strength @ Terminals to case, AC 1 minute		V_{dis}	KV	2.5					
Mounting torque		Tor	kg·cm	10					

■Electrical Characteristics（T_a=25℃ Unless otherwise specified）

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	MT5006M	MT5008M	MT5010M	MT5012M	MT5014M	MT5016M
Maximum instantaneous forward voltage drop per diode	VF	V	I_{FM}=25A	1.15					
Maximum DC reverse current at rated DC blocking voltage per diode	IR	μA	T_j =25℃	5					
			T_j =125℃	500					
Typical junction capacitance	Cj	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	185					

■Thermal Characteristics （T_a=25℃ Unless otherwise specified）

PARAMETER		SYMBOL	UNIT	MT5006M	MT5008M	MT5010M	MT5012M	MT5014M	MT5016M
Typical Thermal Resistance	Between junction and case, With heatsink	RθJ-C	℃/W	0.9					

Note: Device mounted on 75mm x 45mm x 5.5mm Aluminum Plate Heatsink.

■Ordering Information (Example)

PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
MT5006M ~ MT5016M	A1	Approximate 16	50	50	500	Paper Box

■ Characteristics (Typical)

FIG1:Io-Tc Curve

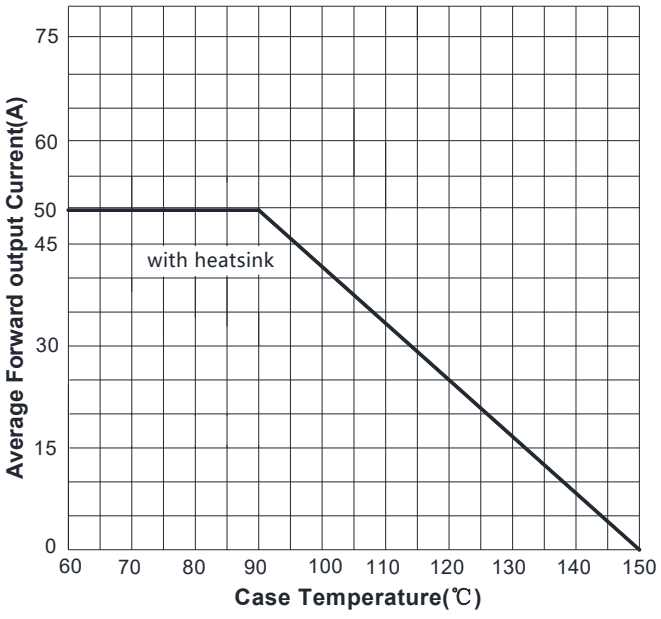


FIG2:Surge Forward Current Capability

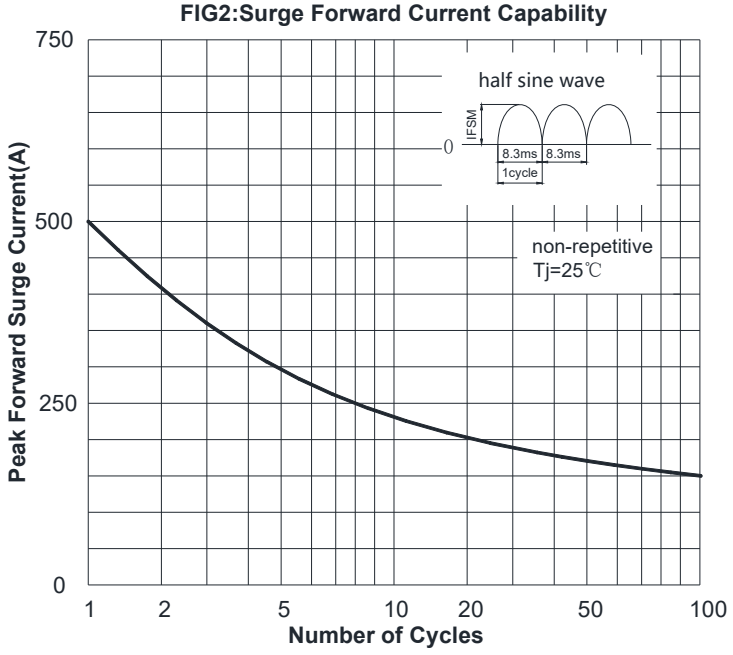


FIG3: Typical Forward Voltage

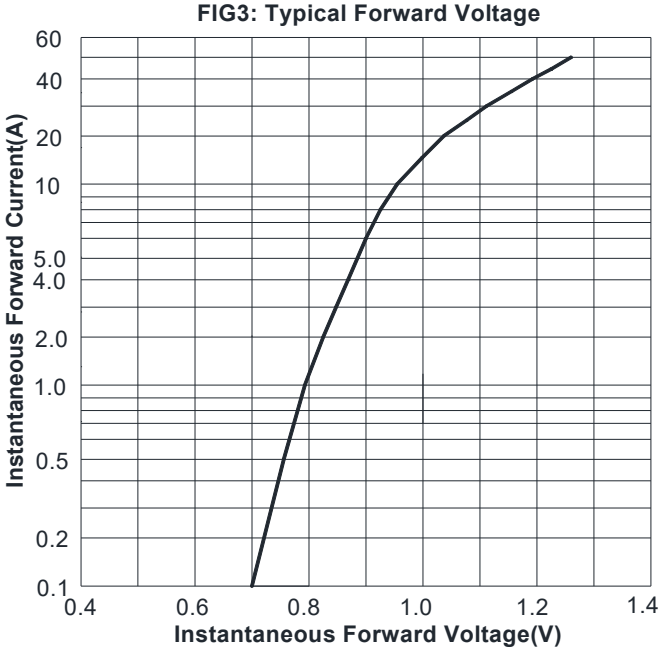
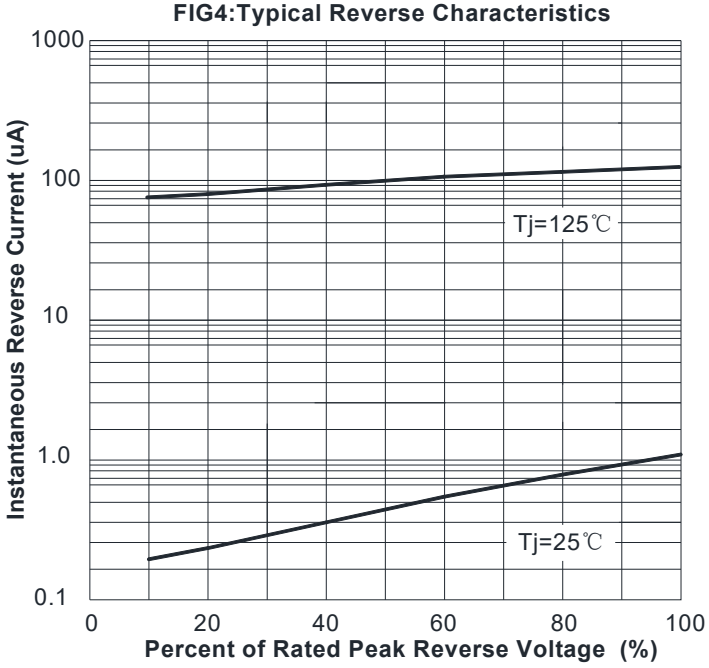
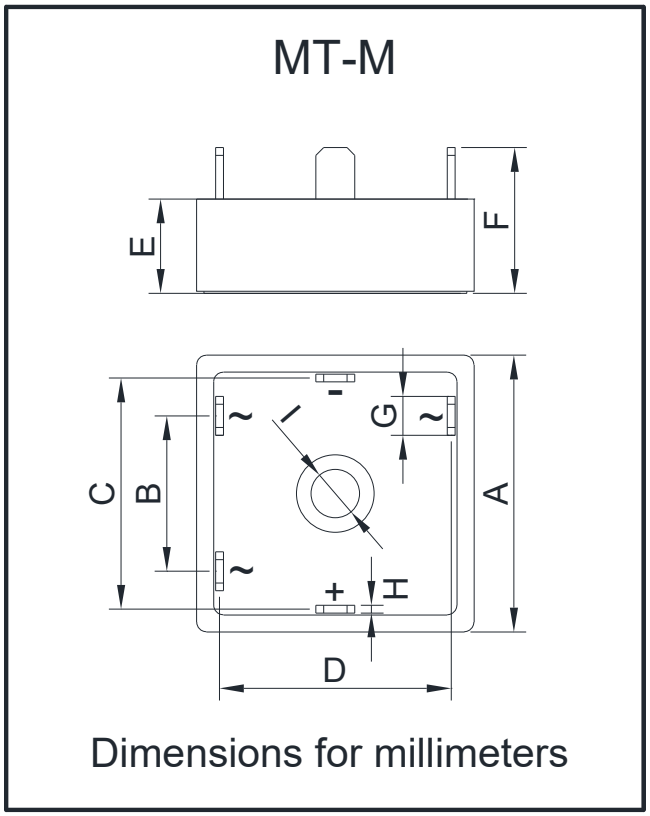


FIG4:Typical Reverse Characteristics



■ Outline Dimensions



MT-M		
Dim	**Min**	**Max**
A	28.2	28.8
B	15.5	16.5
C	23.3	24.3
D	23.3	24.3
E	9.0	10.0
F	14.5	15.5
G	3.8	4.2
H	0.75	0.85
I	4.5	5.5

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