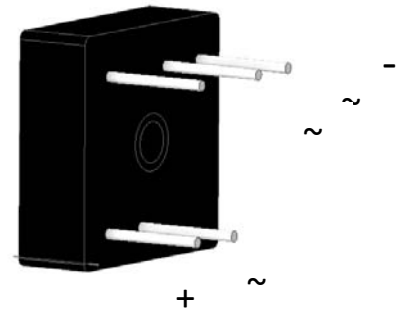
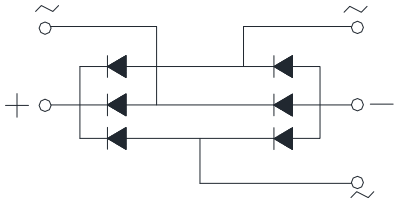
Three Phase Bridge Rectifiers





Features

- Glass passivated chip junction
- Low reverse leakage current
- 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-W
  Molding compound meets UL 94 V-0 flammability rating
- **Terminals**: Tin 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	MT5006W	MT5008W	MT5010W	MT5012W	MT5014W	MT5016W
Device marking code				MT5006W	MT5008W	MT5010W	MT5012W	MT5014W	MT5016W
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 =60℃	IO	A	50					
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℃		I_{FSM}	A	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 @Recommend torque：5kg·cm		Tor	kg·cm	8					

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	MT5006W	MT5008W	MT5010W	MT5012W	MT5014W	MT5016W
Maximum instantaneous forward voltage drop per diode	V_F	V	I_{FM}=25A	1.15					
Maximum DC reverse current at rated DC blocking voltage per diode	I_R	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	MT5006W	MT5008W	MT5010W	MT5012W	MT5014W	MT5016W
Thermal Resistance	Between junction and ambient, Without heatsink	$R_{\theta J-A}$	℃/W	24.0					
	Between junction and case, With heatsink	$R_{\theta J-C}$		0.85					

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
MT3506W – MT3516W	A1	Approximate 17.7	50	50	500	Paper Box

■ Characteristics (Typical)

FIG1:Io-Tc Curve

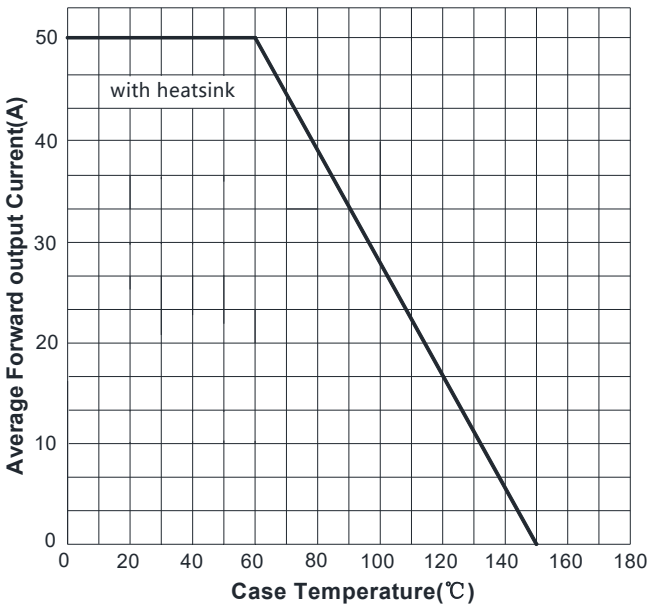
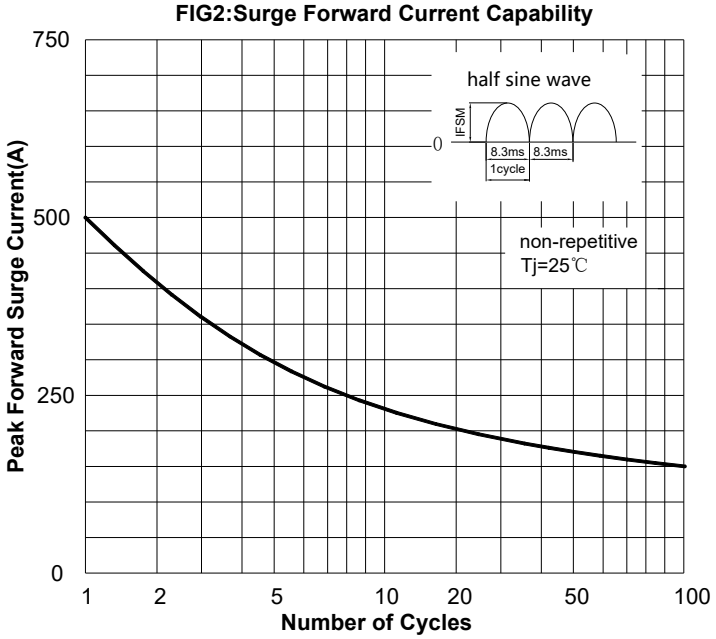
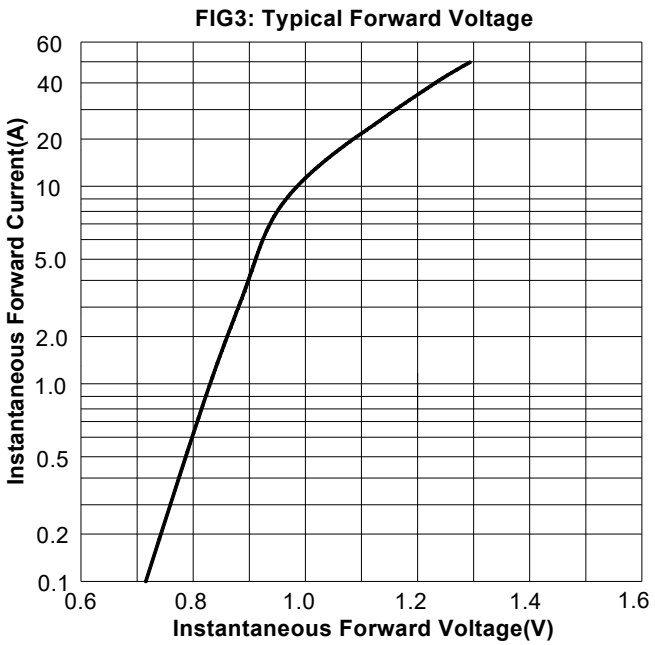
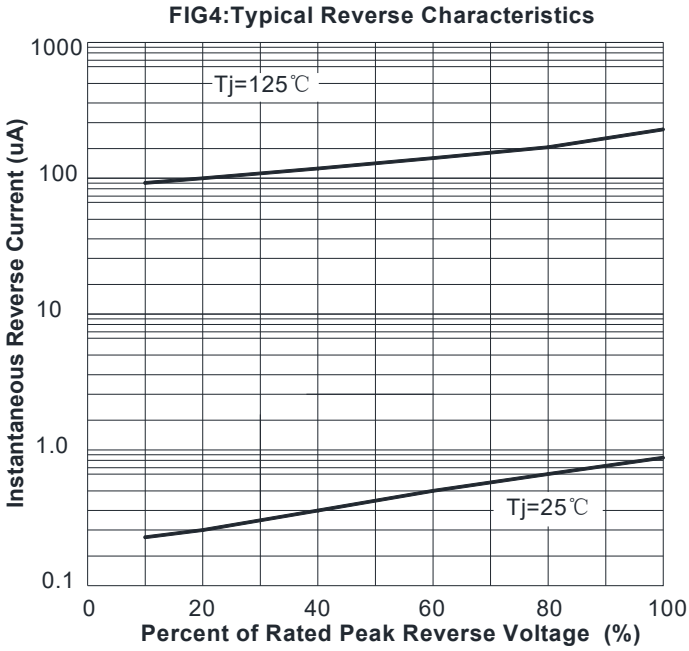


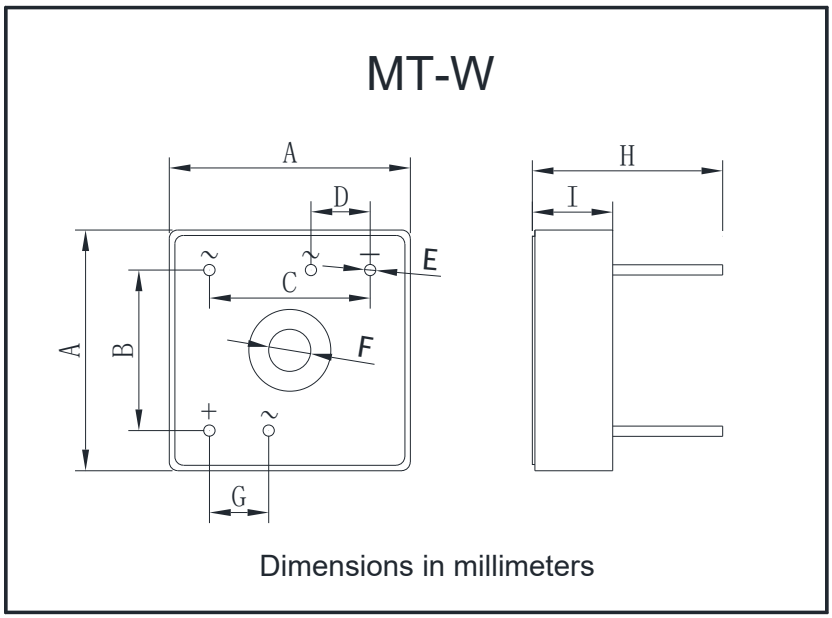
FIG2:Surge Forward Current Capability







■ Outline Dimensions



MT-W		
Dim	**Min**	**Max**
A	28.0	29.0
B	18.5	19.5
C	18.5	19.5
D	6.5	7.5
E	1.1	1.5
F	4.5	5.5
G	6.5	7.5
H	22.0	24.0
I	9.2	10.2

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