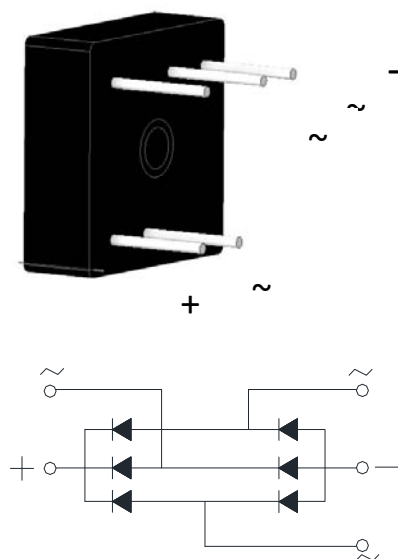


Three Phase Bridge Rectifiers



Features

- UL recognition, file #E230084
- 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°C Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	MT3506W	MT3508W	MT3510W	MT3512W	MT3514W	MT3516W
Device marking code				MT3506W	MT3508W	MT3510W	MT3512W	MT3514W	MT3516W
Maximum Repetitive Peak Reverse Voltage		VRRM	V	600	800	1000	1200	1400	1600
Maximum RMS Voltage		VRMS	V	420	560	700	840	980	1120
Maximum DC blocking Voltage		VDC	V	600	800	1000	1200	1400	1600
Average rectified output current @60Hz sine wave, R-load	With heatsink Tc =85°C	IO	A	35					
Forward Surge Current (Non-repetitive) @8.3ms Half-sine wave,1 cycle, Tj=25°C		IFSM	A	450					
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25°C				900					
Current squared time @1ms≤t≤8.3ms Tj=25°C, Rating of per diode		I²t	A²s	840					
Storage temperature		Tstg	°C	-55 ~ +150					
Junction temperature		Tj	°C	-55 ~ +150					
Dielectric strength @ Terminals to case, AC 1 minute		Vdis	KV	2.5					
Mounting torque @Recommend torque: 5kg·cm		Tor	kg·cm	8					

MT3506W THRU MT3516W

■Electrical Characteristics (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	MT3506W	MT3508W	MT3510W	MT3512W	MT3514W	MT3516W
Maximum instantaneous forward voltage drop per diode	V _F	V	I _{FM} =17.5A	1.1					
Maximum DC reverse current at rated DC blocking voltage per diode	I _R	μA	T _j =25°C	5					
			T _j =125°C	500					
Typical junction capacitance	C _j	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	185					

■Thermal Characteristics (T_a=25°C Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	MT3506W	MT3508W	MT3510W	MT3512W	MT3514W	MT3516W
Thermal Resistance	Between junction and ambient, Without heatsink	R _{θJ-A}	°C/W	25					
	Between junction and case, With heatsink	R _{θJ-C}		0.9					

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

■Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM 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)

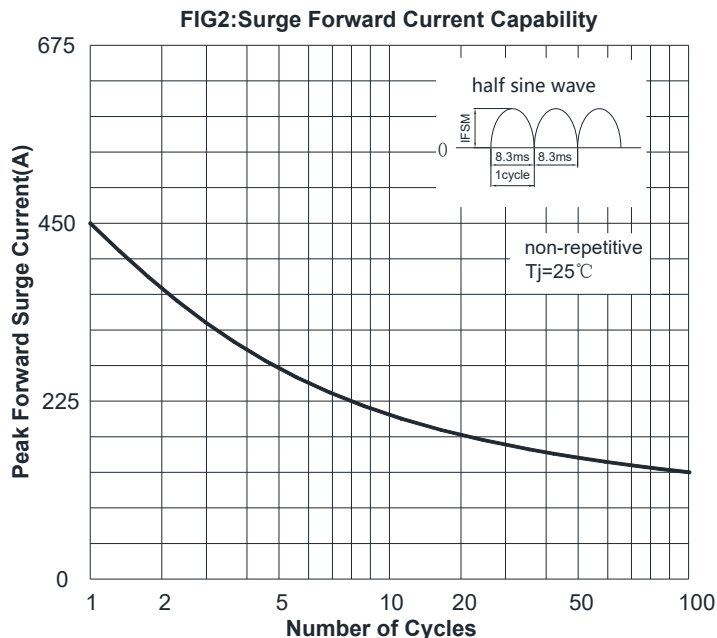
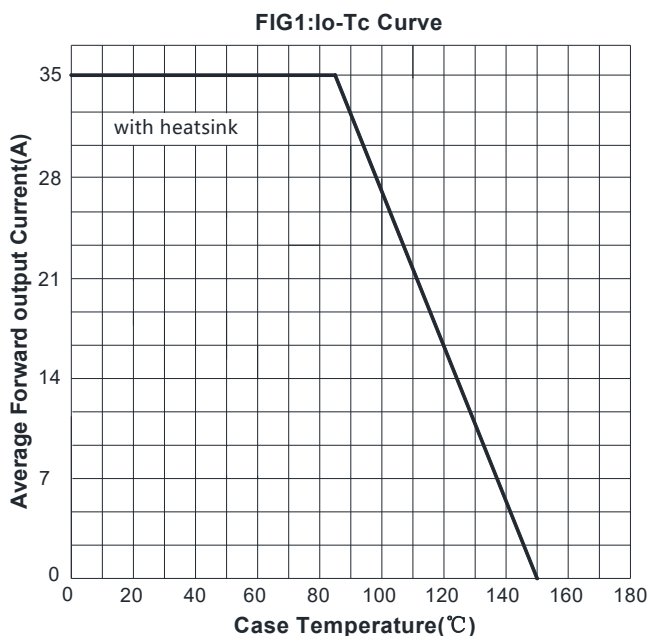


FIG3: Typical Forward Voltage

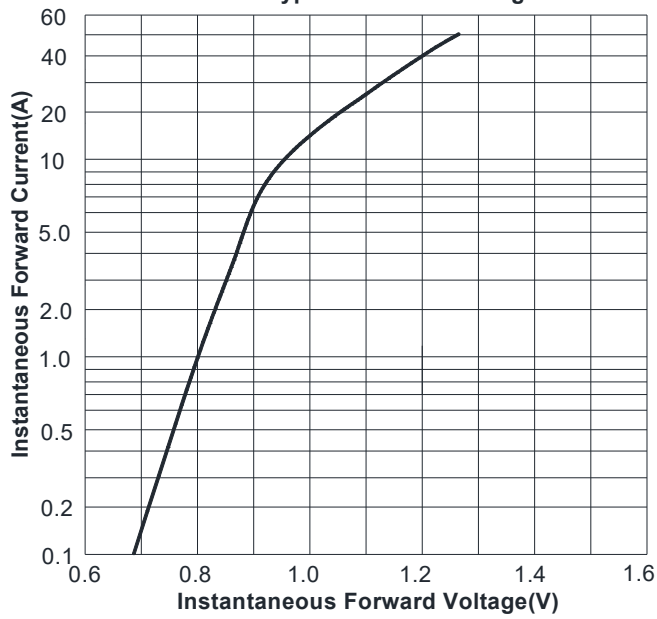
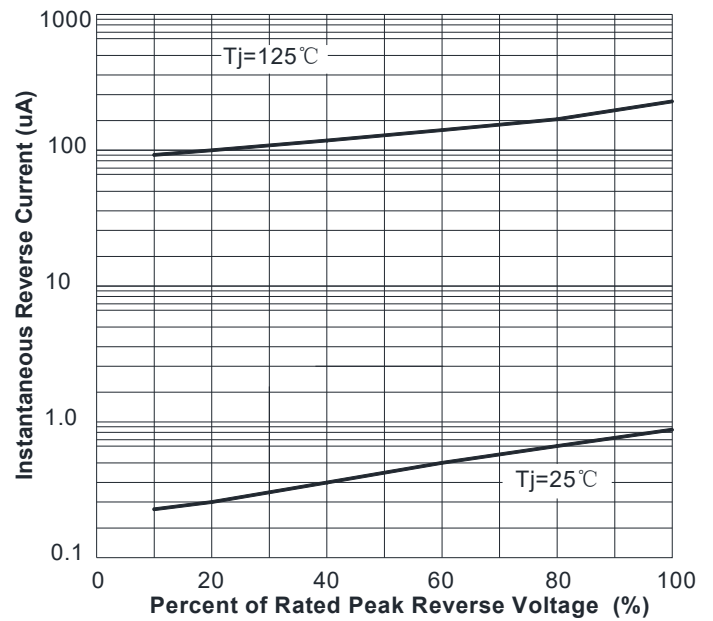
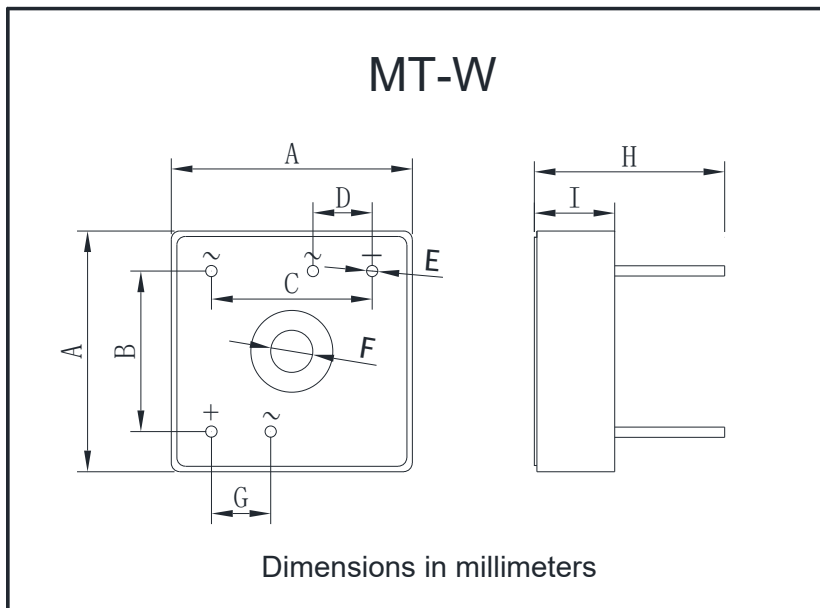


FIG4: Typical Reverse Characteristics



■ 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	9.0	10.0

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