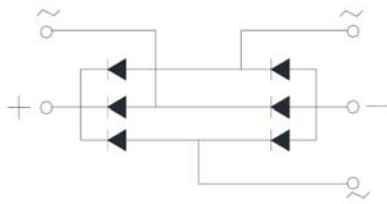
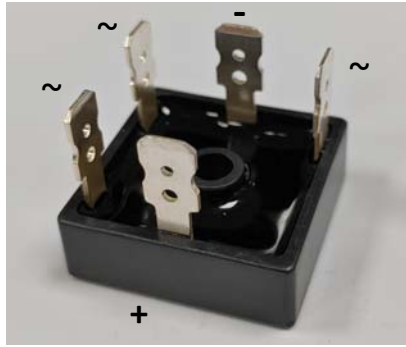




MT5016D

Three Phase Bridge Rectifiers



Features

- UL recognition, file #E230084
- Thin single in-line package
- 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
Molding compound meets UL 94 V-0 flammability rating
- **Terminals:** Ag 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	MT5016D
Device marking code			MT5016D
Maximum Repetitive Peak Reverse Voltage	VRRM	V	1600
Maximum RMS Voltage	VRMS	V	1120
Maximum DC blocking Voltage	VDC	V	1600
Average rectified output current @60Hz sine wave, R-load	With heatsink T _c =100°C IO	A	50
Forward Surge Current (Non-repetitive) @8.3ms Half-sine wave,1 cycle, T _j =25°C	IFSM	A	600
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, T _j =25°C			1200
Current squared time @1ms≤t≤8.3ms T _j =25°C, Rating of per diode	I ² t	A ² s	1494
Storage temperature	T _{stg}	°C	-55 ~ +150
Junction temperature	T _j	°C	-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



MT5016D

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	MT5016D
Maximum instantaneous forward voltage drop per diode	V _F	V	I _{FM} =25A	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	225

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

PARAMETER		SYMBOL	UNIT	MT5016D
Typical Thermal Resistance	Between junction and case, With heatsink	R _{θJ-C}	°C/W	0.7

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
MT5016D	A1	Approximate 17.5	50	50	500	Paper Box

■ Characteristics (Typical)

FIG1: I_o-T_c Curve

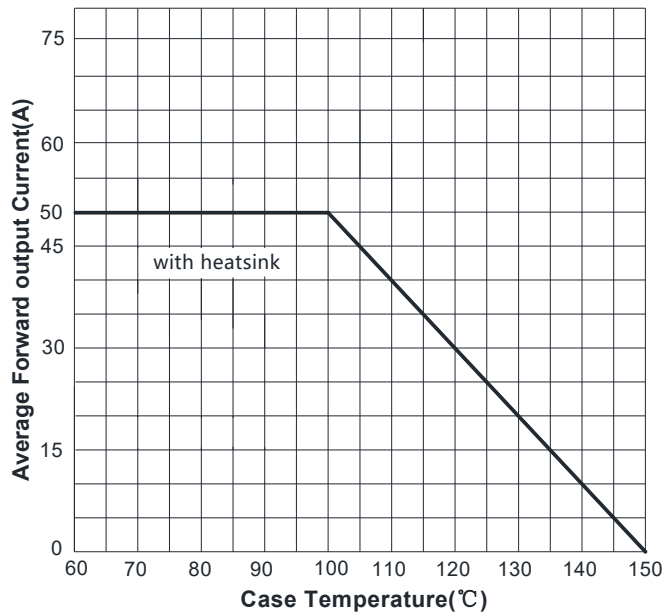
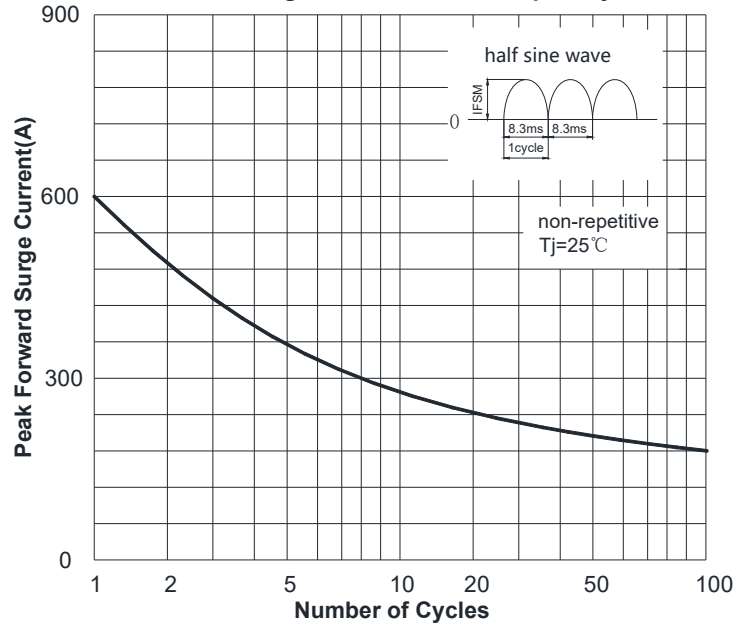


FIG2: Surge Forward Current Capability





MT5016D

FIG3: Typical Forward Voltage

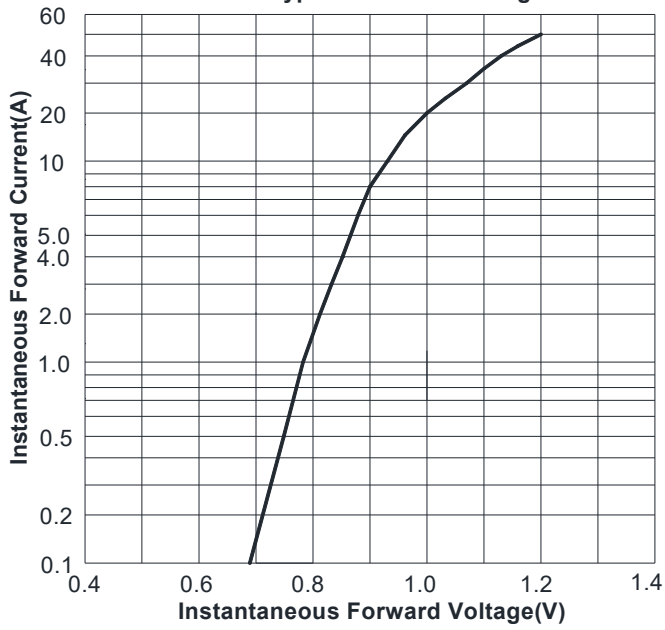
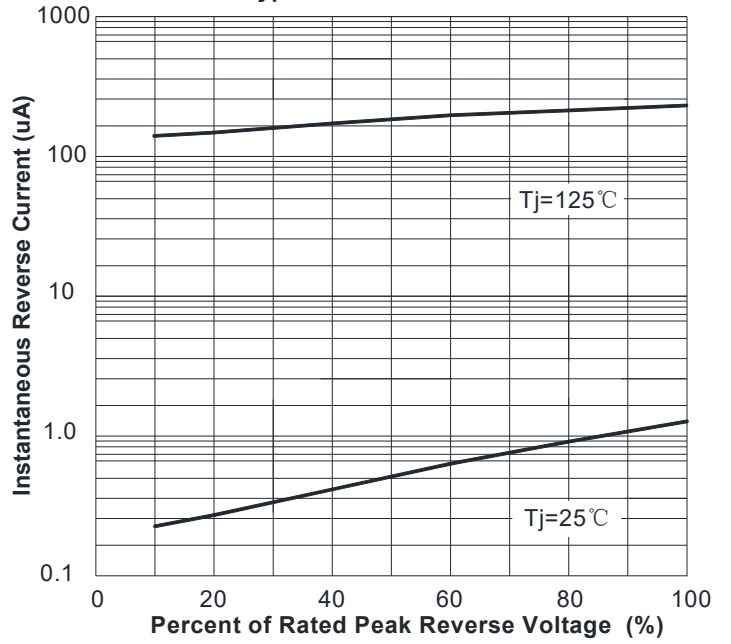
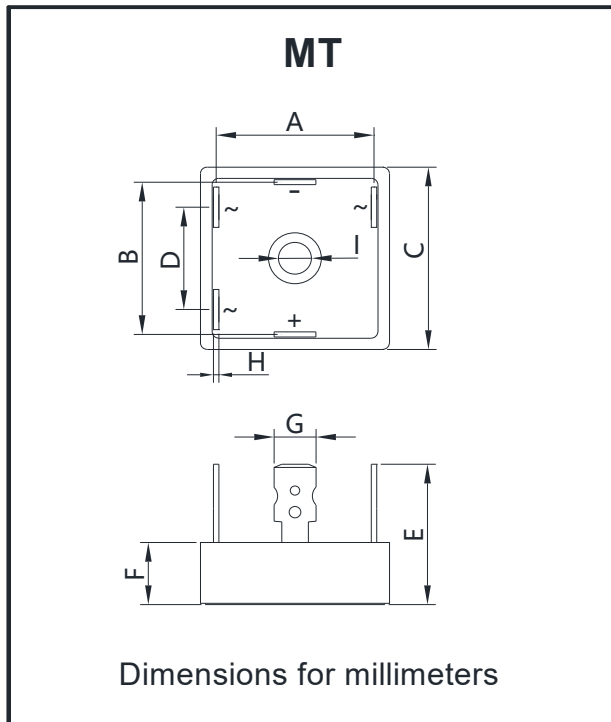


FIG4: Typical Reverse Characteristics



■ Outline Dimensions



MT		
Dim	Min	Max
A	23.3	24.3
B	23.3	24.3
C	28.2	28.8
D	15.5	16.5
E	/	25
F	9.0	10.0
G	6.2	6.4
H	0.75	0.85
I	4.5	5.5



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