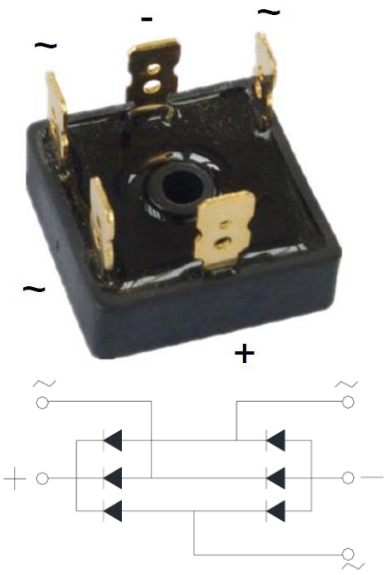
Three Phase Bridge Rectifiers



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-B
  Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- **Terminals**: Au 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	MT3504B	MT3506B	MT3508B	MT3510B	MT3512B	MT3514B	MT3516B
Device marking code				MT3504B	MT3506B	MT3508B	MT3510B	MT3512B	MT3514B	MT3516B
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	V	400	600	800	1000	1200	1400	1600
Maximum RMS Voltage		V_{RMS}	V	280	420	560	700	840	980	1120
Maximum DC blocking Voltage		V_{DC}	V	400	600	800	1000	1200	1400	1600
Average rectified output current @60Hz sine wave, R-load	With heatsink Tc =110℃	I_O	A	35						
Forward Surge Current (Non-repetitive) @8.3ms,Half-sine wave,1 cycle, Tj=25℃		I_{FSM}	A	400						
Current squared time @1ms≤t≤8.3ms Tj=25℃, Rating of per diode		I^2t	A^2s	664						
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	MT3504B	MT3506B	MT3508B	MT3510B	MT3512B	MT3514B	MT3516B
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℃	5						
			T_j=125℃	500						
Typical junction capacitance	Cj	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	200				150		

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

PARAMETER		SYMBOL	UNIT	MT3504B	MT3506B	MT3508B	MT3510B	MT3512B	MT3514B	MT3516B
Typical Thermal Resistance	Between junction and case, With heatsink	$R_{\theta J-C}$	℃/W	0.6						

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
MT3504B ~ MT3516B	A1	Approximate 26	50	50	500	Paper Box

■ Characteristics (Typical)

FIG1:Io-Tc Curve

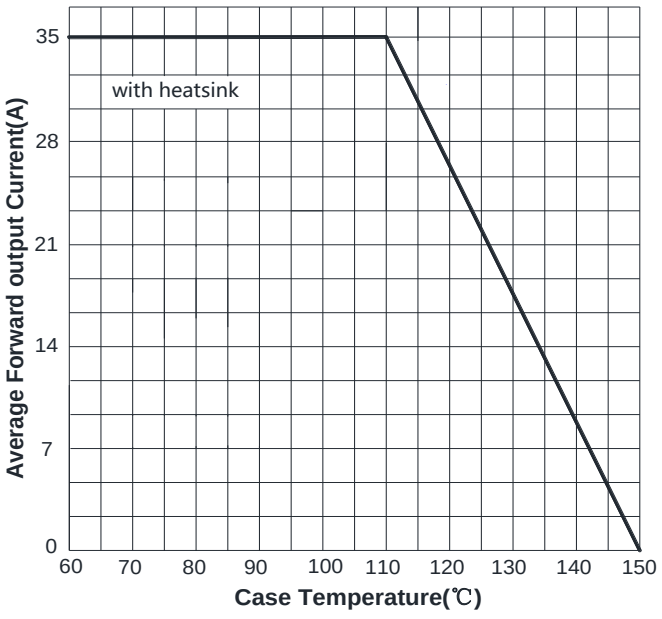


FIG2:Surge Forward Current Capability

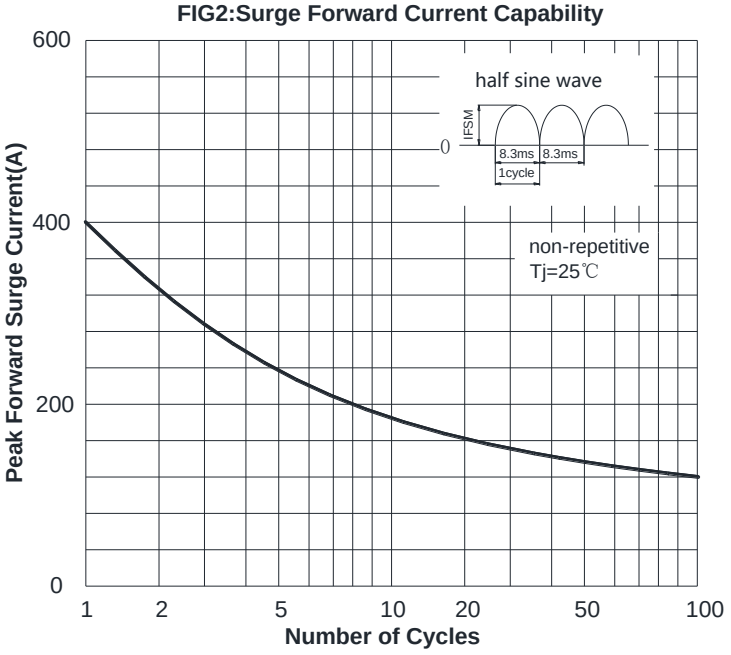


FIG3: Typical Forward Voltage

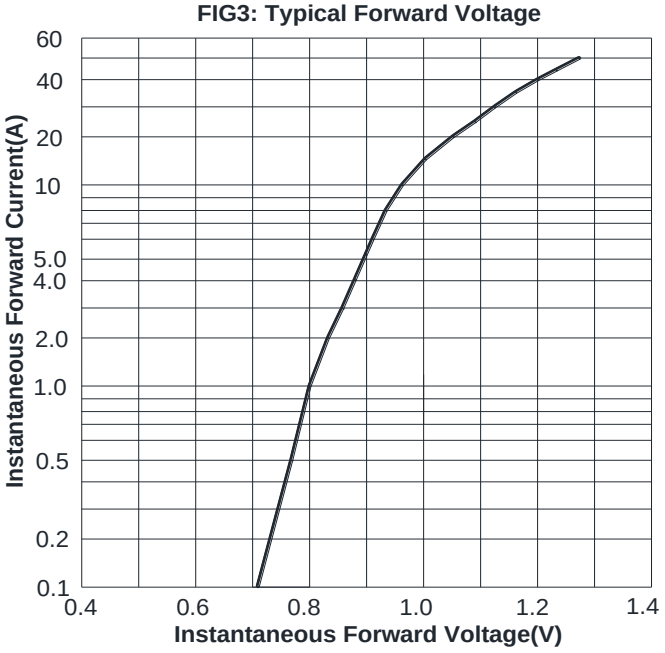
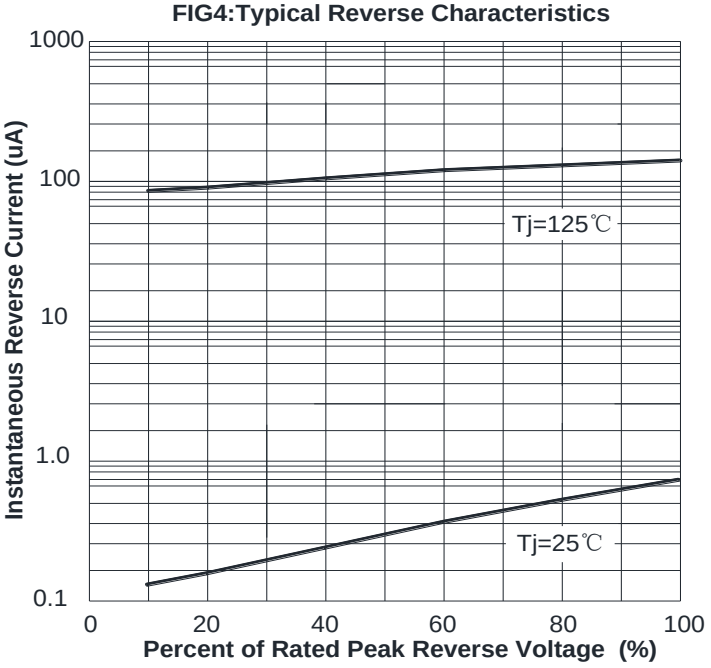
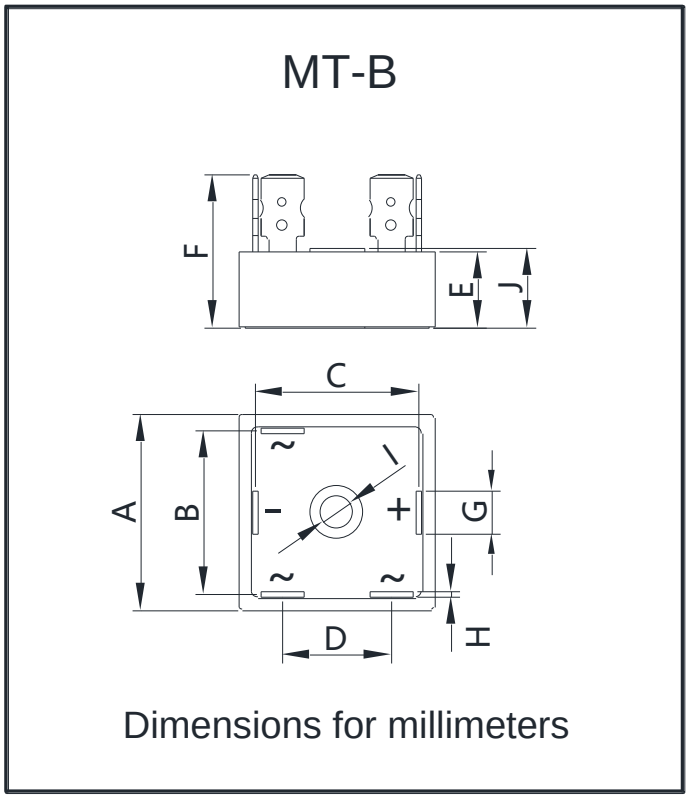


FIG4:Typical Reverse Characteristics



■ Outline Dimensions



MT-B		
Dim	**Min**	**Max**
A	28.0	29.0
B	23.5	24.5
C	23.5	24.5
D	15.5	16.5
E	10.9	11.5
F	22.0	23.0
G	6.2	6.4
H	0.75	0.85
I	4.5	5.5

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