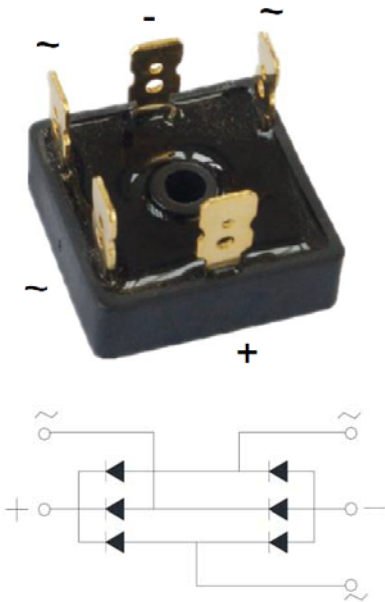


Three Phase Bridge Rectifiers



Features

- UL recognition, file #E230084
- 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
Molding compound meets UL 94 V-0 flammability rating
- **Terminals:** Au 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	MT3504A	MT3506A	MT3508A	MT3510A	MT3512A	MT3514A	MT3516A
Device marking code				MT3504A	MT3506A	MT3508A	MT3510A	MT3512A	MT3514A	MT3516A
Maximum Repetitive Peak Reverse Voltage		VRRM	V	400	600	800	1000	1200	1400	1600
Maximum RMS Voltage		VRMS	V	280	420	560	700	840	980	1120
Maximum DC blocking Voltage		VDC	V	400	600	800	1000	1200	1400	1600
Average rectified output current @60Hz sine wave, R-load	With heatsink T _c =100°C	IO	A	35						
Forward Surge Current (Non-repetitive) @8.3ms, Half-sine wave, 1 cycle, T _j =25°C	IFSM	A		400						
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, T _j =25°C				800						
Current squared time @1ms≤t≤8.3ms T _j =25°C, Rating of per diode	I ² t	A ² s		664						
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						

MT3504A THRU MT3516A

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	MT3504A	MT3506A	MT3508A	MT3510A	MT3512A	MT3514A	MT3516A
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	200				150		

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

PARAMETER		SYMBOL	UNIT	MT3504A	MT3506A	MT3508A	MT3510A	MT3512A	MT3514A	MT3516A
Typical Thermal Resistance	Between junction and case, With heatsink	R _{θJ-C}	°C/W	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
MT3504A ~ MT3516A	A1	Approximate 17.5	50	50	500	Paper Box

■ Characteristics (Typical)

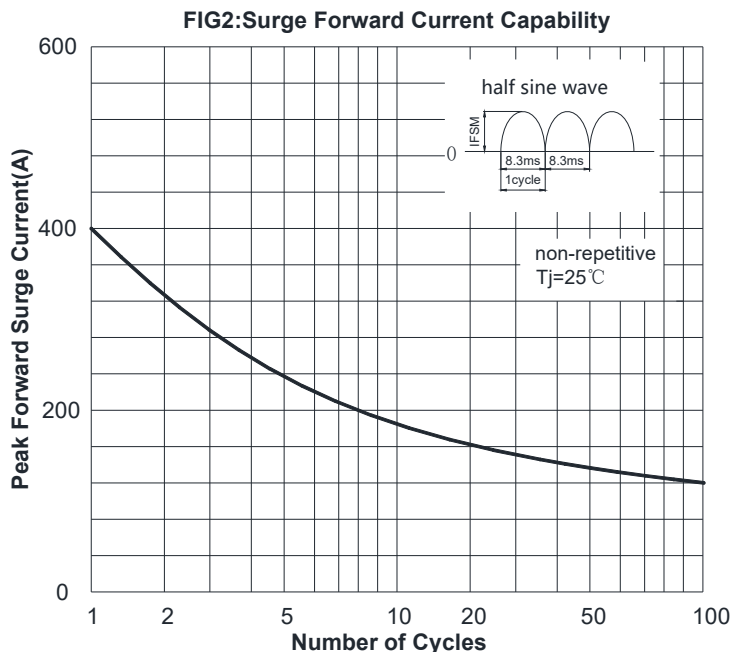
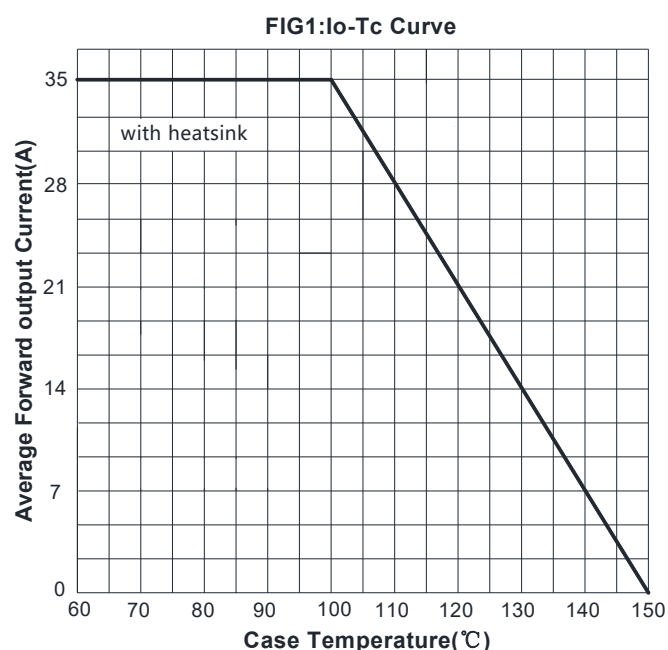


FIG3: Typical Forward Voltage

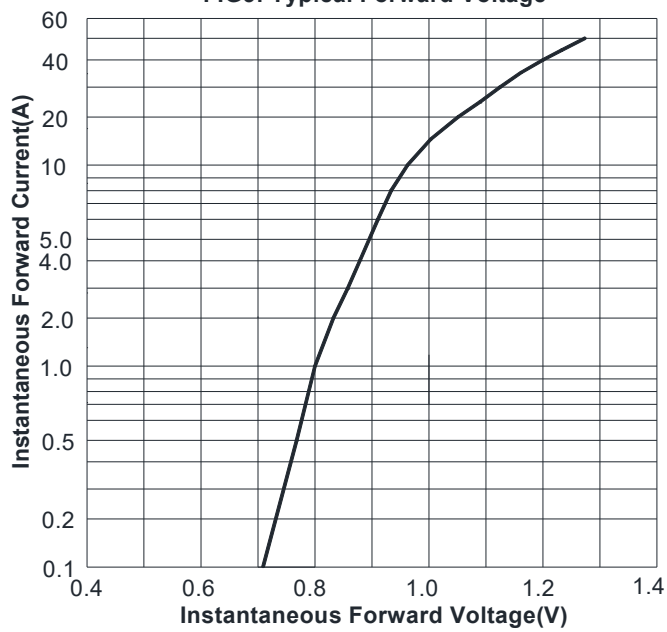
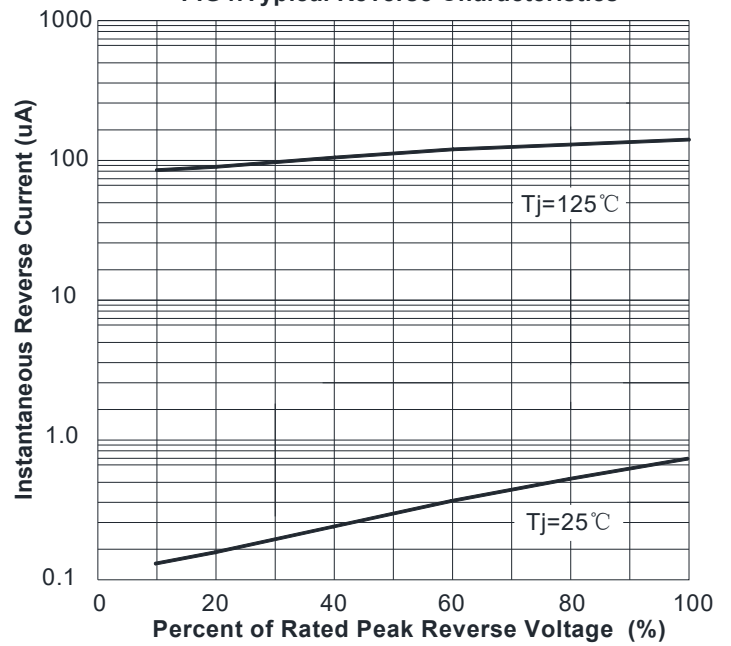
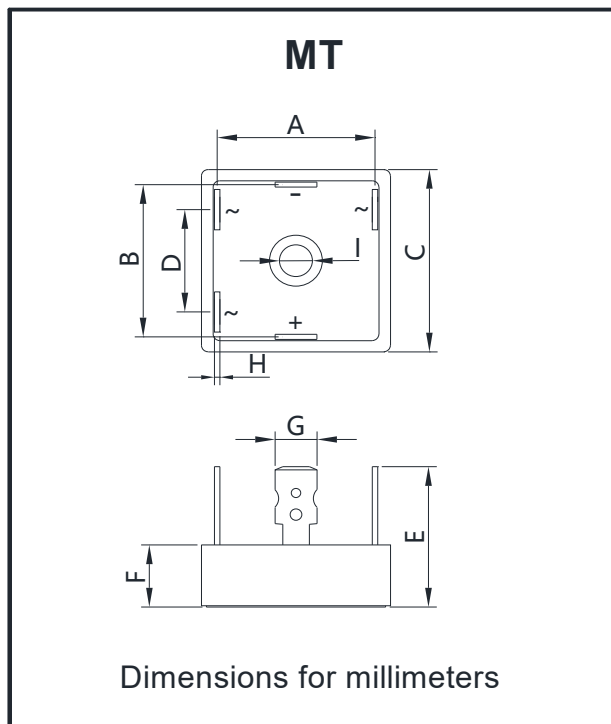


FIG4: Typical Reverse Characteristics



■ 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

Disclaimer

The information presented in this document is for reference only. Shanghai Sunco Electronics Co., Ltd reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Russiansunco or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

This publication supersedes & replaces all information previously supplied. For additional information, please visit our website [http:// www.russiansunco.com](http://www.russiansunco.com) , or consult your nearest Russiansunco's sales office for further assistance.