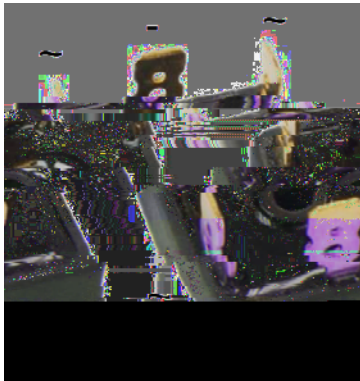




MT5004A THRU MT5016A

Three Phase Bridge Rectifiers



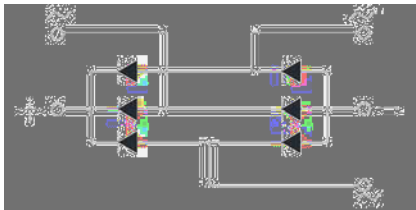
- High surge current capability
- Solder dip 275 °C max, per JESD 22-B106

Typical Applications

General purpose use in AC/DC bridge full wave rectification for { S N J f L J 2 0 S N

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 (Ta = 25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	MT5004A	MT506A	MT5008A	MT5010A	MT5012A	MT5014A	MT5016A
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Device marking code

MT50 < t' t' VRRM V η 400 Ú Maximum Re

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	IO	A	50						

Forward Surr ad l e Z a] φ φ m p e Tc

&XUUHQW VTXDUHG WLP H # PV"W" PV 7M5DWLQJ RI SHU' GLRGH			
6WRUDJH WHP SHUDWXUH	7VWJ	-	a
-XQFWLRQ WHP SHUDWXUH	7M	-	a
'LHOHFWULF VWUHQJWK # 7HUPLQDOV WR FDVH \$&	9GLVWH9 PEQXWH		
ORXQWLQJ WRUTXH # 5HFRPPHQG QWRWTFXH	7RU	NJ	FP



MT5004A THRU MT5016A

Electrical Characteristics $T_a = 25^\circ\text{C}$ Unless otherwise specified

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	MT5004A	MT506A	MT5008A	MT5010A	MT5012A	MT5014A	MT5016A
Maximum instantaneous forward voltage drop per diode	V_F	V	$I_{FM} = 25\text{A}$	1 . 15						
Maximum DC reverse current at rated DC blocking voltage per diode	I_R	μA	$T_j = 25^\circ\text{C}$	5						
			$T_j = 125^\circ\text{C}$	500						
Typical junction capacitance	C_j	pF	Measured at 1MHz and Applied Reverse Voltage of 4 . 0 V . D . C	240				185		

Thermal Characteristics $T_a = 25^\circ\text{C}$ Unless otherwise specified

PARAMETER		SYMBOL	UNIT	MT5004A	MT506A	MT5008A	MT5010A	MT5012A	MT5014A	MT5016A
Typical Thermal Resistance	Between junction and case With heatsink	R_{JA}	$^\circ\text{C/W}$	0 . 8						

Note: Device mounted on 75mm x 45mm x 5 . 5mm Aluminum Plate Heat Sink .

Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
MT5004A ~ MT5016A	A1	Approximate 17 . 5	50	50	500	Paper Box

Characteristics (Typical)



MT5004A THRU MT5016A

FIG3: Typical Forward Voltage

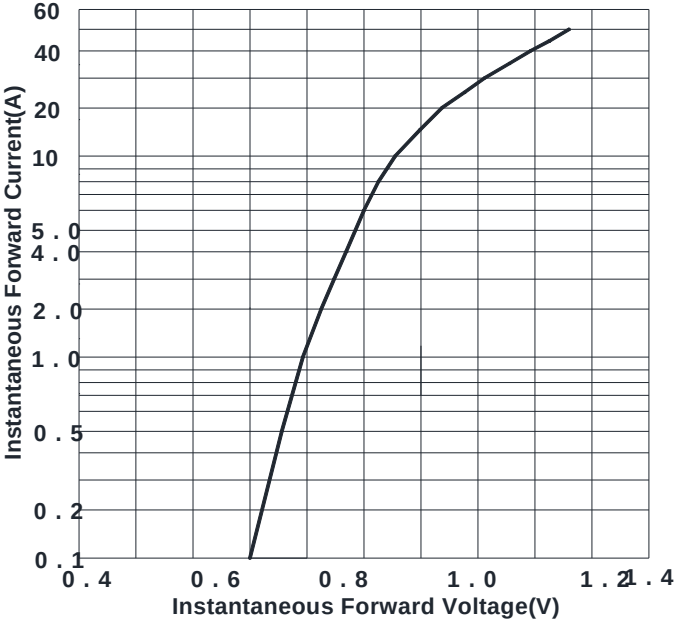
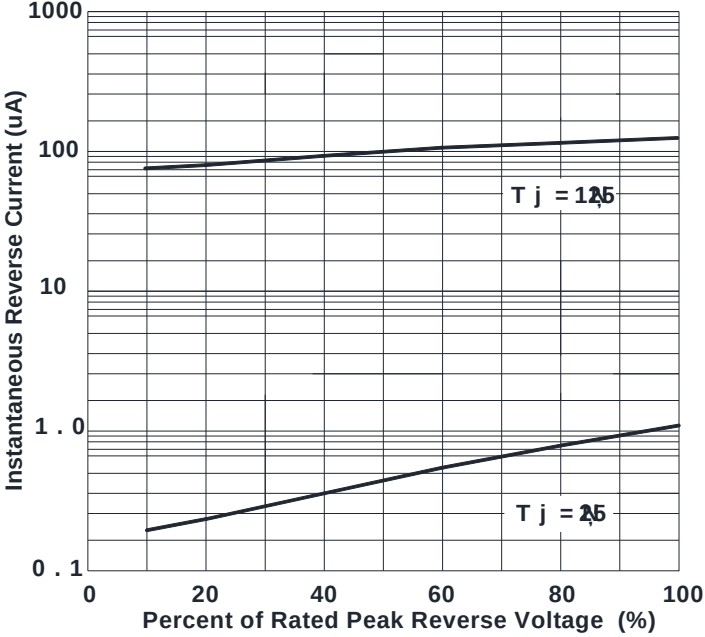
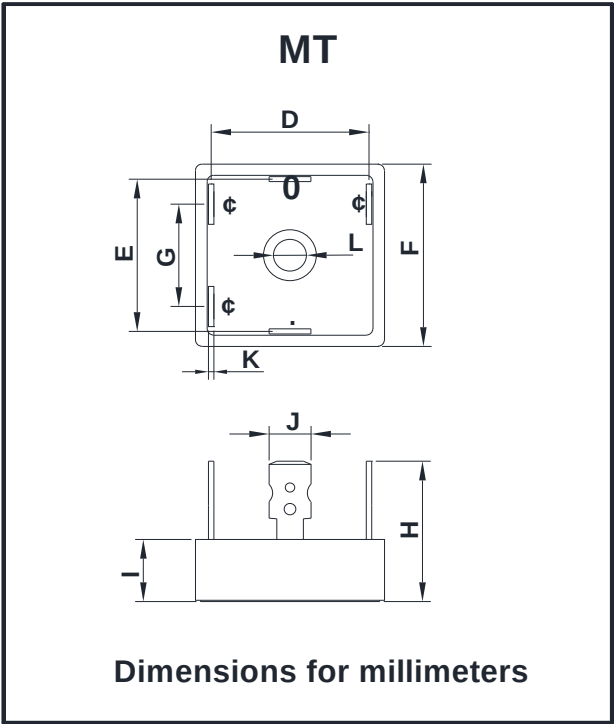


FIG4: Typical Reverse Characteristics



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

