

MT3504A THRU MT3516A



Typical Applications

General purpose use in AC/DC bridge full wave rectification for { S o u r c e } { I n p u t } { F r e q u e n c y } { V o l t a g e } { P o w e r } { T e m p e r a t u r e } { E n v i r o n m e n t } { M o u n t i n g } { T e s t i n g } { P a c k a g e } { M a t e r i a l } { F a b r i c a t i o n } { Q u a l i t y } { R e l i a b i l i t y } { L i f e } { C o s t } { E n v i r o n m e n t } { M o u n t i n g } { T e s t i n g } { P a c k a g e } { M a t e r i a l } { F a b r i c a t i o n } { Q u a l i t y } { R e l i a b i l i t y } { L i f e } { C o s t }

Mechanical Data

χ Package: MT

Molding compound meets UL 94 V-0 flammability rating

χ Terminals: Au plated leads , solderable per J -STD-002 and J ESD22-B102

χ Polarity: As marked on body

Maximum Ratings (Ta = 25°C Unless otherwise specified)

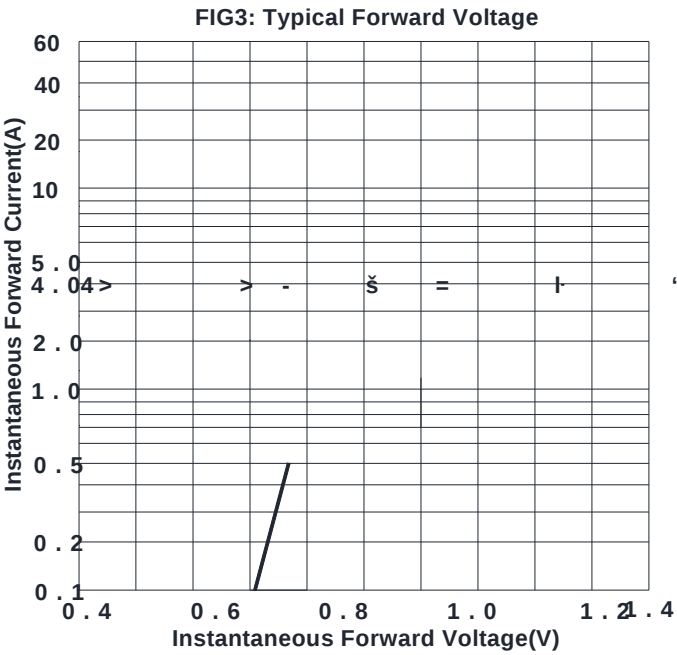
PARAMETER	SYMBOL	UNIT	MT3504A	MT3506A	MT3508A	MT3510A	MT3512A	MT3514A	MT3516A
Device marking code			MT3504A	MT3506A	MT3508A	MT3510A	MT3512A	MT3514A	MT3516A
Maximum Repetitive Peak Reverse Voltage	VRRM	V	400	600	800	1000	1200	1400	1600
Maximum RMS Voltage	VRMS	V	280	420	560	700	840	980	1120
Maximum DC blocking Voltage	VDC	V	400	600	800	1000	1200	1400	1600
Average rectified output current @60Hz sine wave , R-load	IO	A	35						
Forward Surge Current (Non-repetitive) @8.3ms , Half-sine wave , 1 cycle , Tj = 25°C	IFSM	A	400						
Forward Surge Current (Non-repetitive) @1ms , square wave , 1 cycle , Tj = 25°C			800						
Current squared time @1ms to 8.3ms , Tj = 25°C	I²t	A²s	664						
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	Tor	kg-cm	8						



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Electrical Characteristics $T_a = 25^{\circ}\text{C}$ 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} = 1.7 ~ 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 4.0V D.C	200			150			



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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