

**FEATURES**

- UL recognition, file #E230084
- Glass passivated chip
- High surge current capability
- Low thermal resistance
- Solder dip 275 °C max. 7 s, per JESD 22-B106

**TYPICAL APPLICATIONS**

General purpose use in AC/DC bridge full wave rectification for power supply, home appliances, office equipment, industrial automation applications.

**MECHANICAL DATA**

• **Package:** MT

Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant

• **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102

**MAXIMUM RATINGS** (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	MT2504A	MT2506A	MT2508A	MT2510A	MT2512A	MT2514A	MT2516A
Device marking code			MT2504A	MT2506A	MT2508A	MT2510A	MT2512A	MT2514A	MT2516A
Repetitive Peak Reverse Voltage	VRRM	V	400	600	800	1000	1200	1400	1600
Average Rectified Output Current @60Hz sine wave, R-load, With heatsink, Tc=55°C	IO	A	25						
Surge(Non-repetitive)Forward Current @60Hz Half- sine Wave, 1 cycle, Ta=25°C	IFSM	A	400						
Current Squared Time @1ms≤t≤8.3ms Tj=25°C, Rating of per diode	I <sup>2</sup> t	A <sup>2</sup> S	660						
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	TOR	kg-cm	10						

**ELECTRICAL CHARACTERISTICS** (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	MT2504A	MT2506A	MT2508A	MT2510A	MT2512A	MT2514A	MT2516A
Maximum instantaneous forward voltage drop per diode	VFM	V	IFM=12.5A	1.2						
Maximum DC reverse current at rated DC blocking voltage per diode	I <sub>RRM</sub>	µA	V <sub>RM</sub> =V <sub>RRM</sub>	10						

**THERMAL CHARACTERISTICS** (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	MT2504A	MT2506A	MT2508A	MT2510A	MT2512A	MT2514A	MT2516A
Thermal Resistance Between junction and case, With heatsink	R θ J-C	°C/W	1.7						

■ **PACKAGING INFORMATION**

PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
MT2504A~MT2516A	A1	Approximate 17.5	50	50	500	Paper Box

■ **CHARACTERISTICS (TYPICAL)**

FIG1:Io-Tc Curve

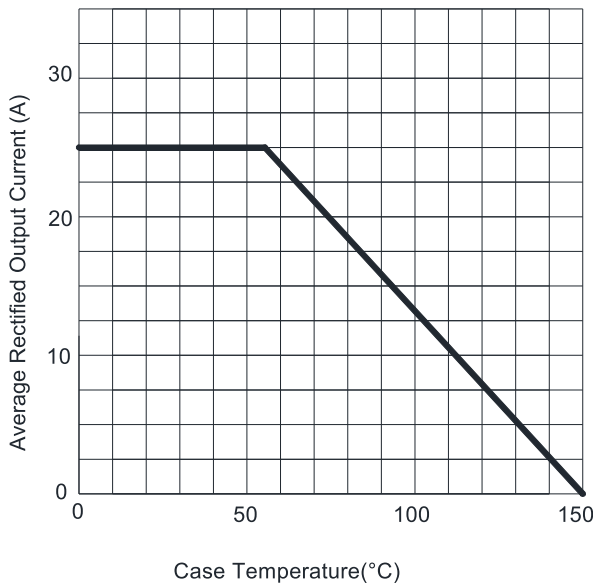


FIG2: Surge Forward Current Capability

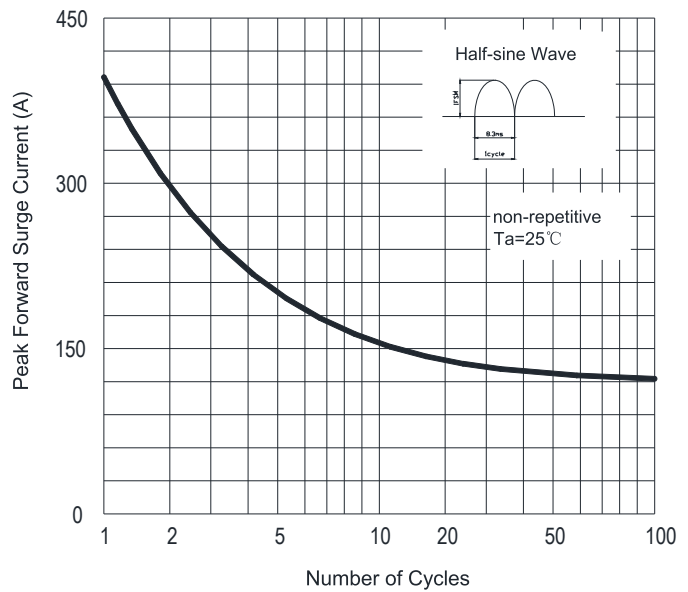


FIG3: Instantaneous Forward Voltage

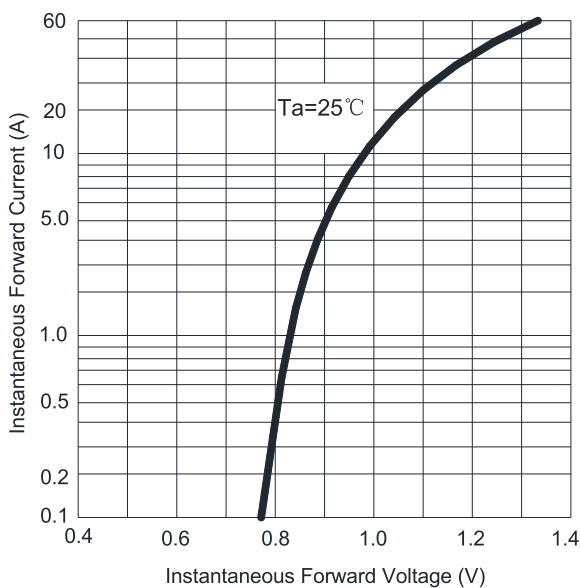
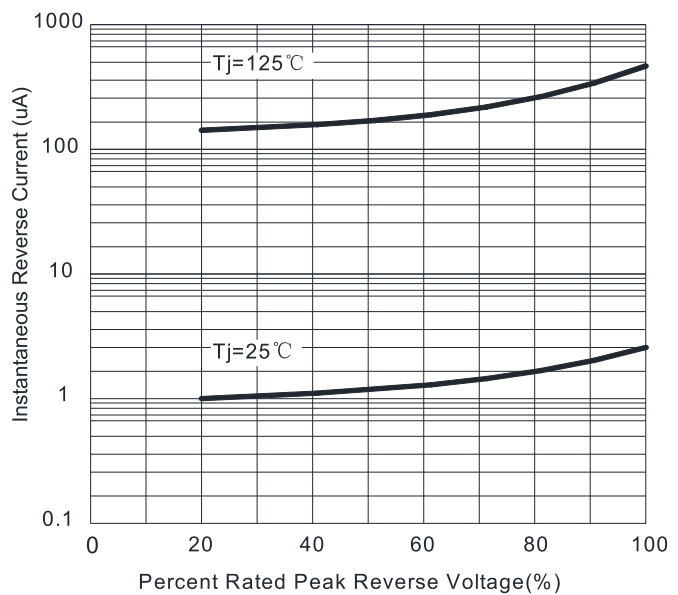
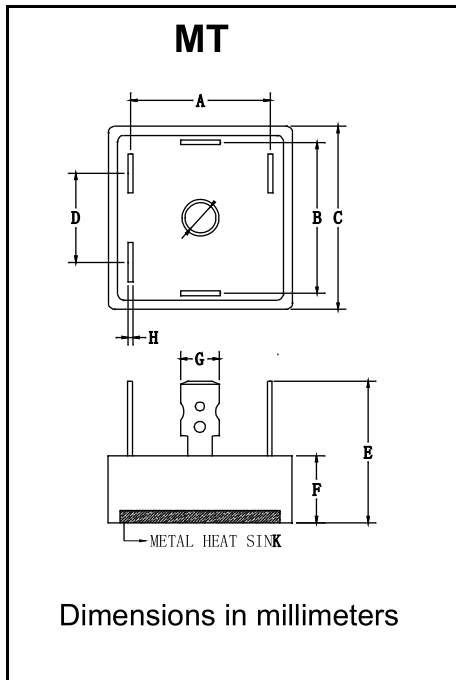


FIG4: Typical Reverse Characteristics



■ **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	10
G	6.2	6.4
H	0.75	0.85