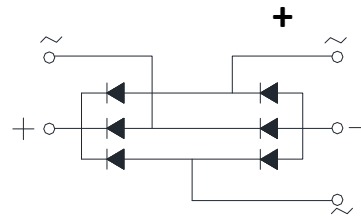




### Features

- UL recognition, file #E476985
- 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 (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	MT1504	MT1506	MT1508	MT1510	MT1512	MT1514	MT1516
Device marking code			MT1504	MT1506	MT1508	MT1510	MT1512	MT1514	MT1516
Repetitive Peak Reverse Voltage	VRRM	V	400	600	800	1000	1200	1400	1600
Average Rectified Output Current @60Hz sine wave, R-load, With heatsink, T <sub>c</sub> =55°C	I <sub>O</sub>	A	15						
Surge(Non-repetitive)Forward Current @60Hz Half- sine Wave, 1 cycle, T <sub>a</sub> =25°C	IFSM	A	180						
Current Squared Time @1ms≤t≤8.3ms T <sub>j</sub> =25°C, Rating of per diode	I <sup>2</sup> t	A <sup>2</sup> S	134.5						
Storage Temperature	T <sub>stg</sub>	°C	-55~+150						
Junction Temperature	T <sub>j</sub>	°C	-55~+150						
Dielectric Strength, Terminals to case, AC 1 minute	V <sub>dis</sub>	KV	2.5						
Mounting Torque	TOR	kg·cm	10						

### ■ Electrical Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	MT1504	MT1506	MT1508	MT1510	MT1512	MT1514	MT1516
Maximum instantaneous forward voltage drop per diode	V <sub>FM</sub>	V	IFM=7.5A	1.2						
Maximum DC reverse current at rated DC blocking voltage per diode	I <sub>RRM</sub>	μA	VRM=VRRM	10						

### ■ Thermal Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	MT1504	MT1506	MT1508	MT1510	MT1512	MT1514	MT1516
Thermal Resistance Between junction and case, With heatsink	R <sub>θ J-C</sub>	°C/W	3.2						

### ■ Characteristics (Typical)

FIG1:Io-Tc Curve

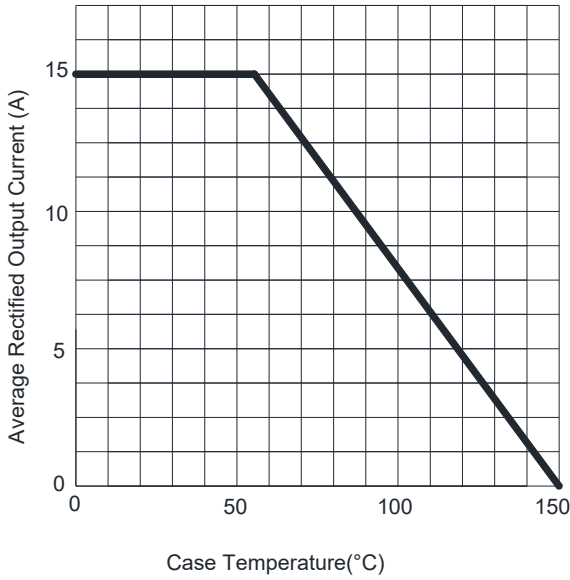


FIG2:Surge Forward Current Capability

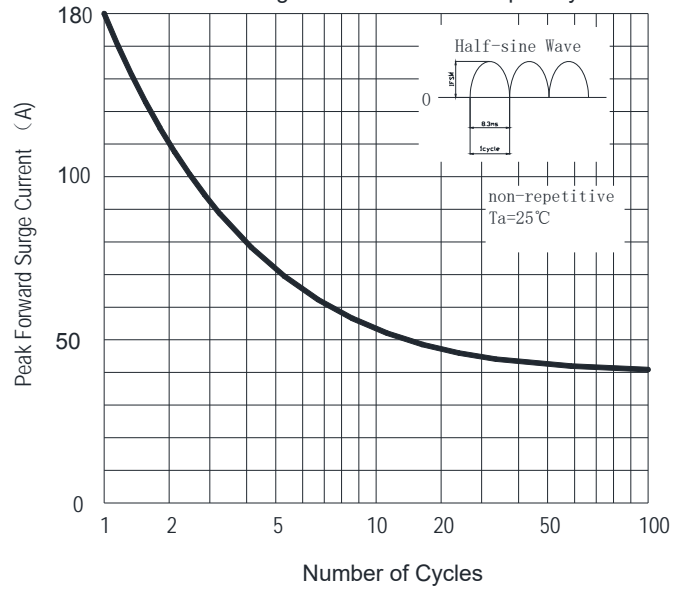


FIG3:Instantaneous Forward Voltage

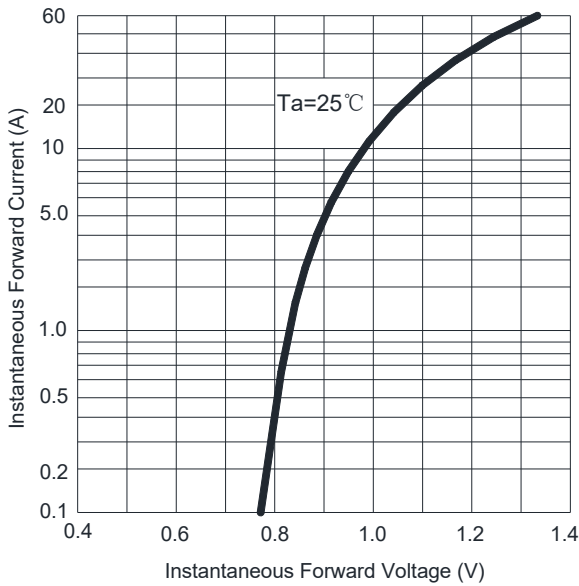
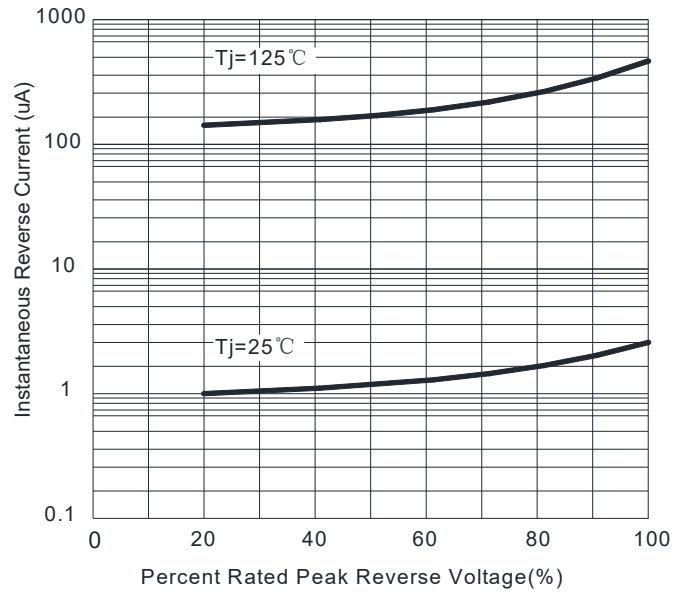
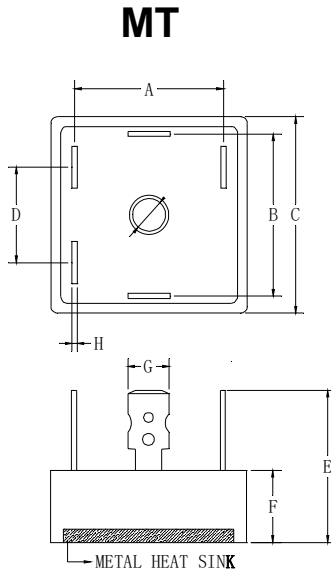


FIG4:Typical Reverse Characteristics



### ■ 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

Dimensions in millimeters