

■ 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 (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	MT5004A	MT506A	MT5008A	MT5010A	MT5012A	MT5014A	MT5016A
Device marking code			MT5004A	MT5006A	MT5008A	MT5010A	MT5012A	MT5014A	MT5016A
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 _c =55°C	I _O	A	50						
Surge(Non-repetitive)Forward Current @60Hz Half- sine Wave, 1 cycle, T _a =25°C	I _{FSM}	A	500						
Current Squared Time @1ms≤t≤8.3ms T _j =25°C, Rating of per diode	I ² t	A ² S	1040						
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	TOR	kg-cm	10						

■ ELECTRICAL CHARACTERISTICS (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	MT5004A	MT5006A	MT5008A	MT5010A	MT5012A	MT5014A	MT5016A
Maximum instantaneous forward voltage drop per diode	V _{FM}	V	I _{FM} =25A	1.2						
Maximum DC reverse current at rated DC blocking voltage per diode	I _{RRM}	µA	V _{RM} =VRRM	10						

■ THERMAL CHARACTERISTICS (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	MT5004A	MT5006A	MT5008A	MT5010A	MT5012A	MT5014A	MT5016A
Thermal Resistance Between junction and case, With heatsink	R _{θ J-C}	°C/W	0.88						

■ **PACKAGING INFORMATION**

PREFERRED P/N	PACKAGE 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)**

FIG1:Io-Tc Curve

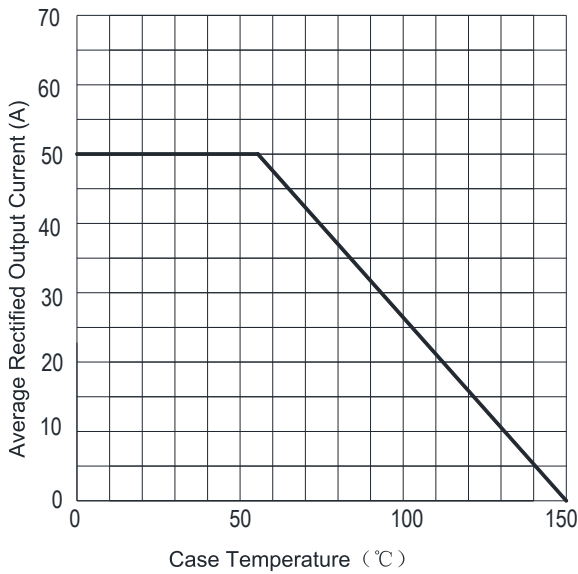


FIG2:Surge Forward Current Capability

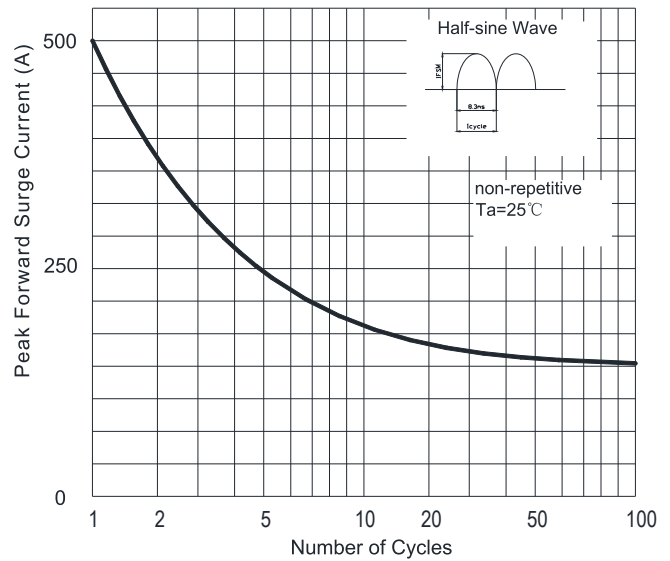


FIG3:Instantaneous Forward Voltage

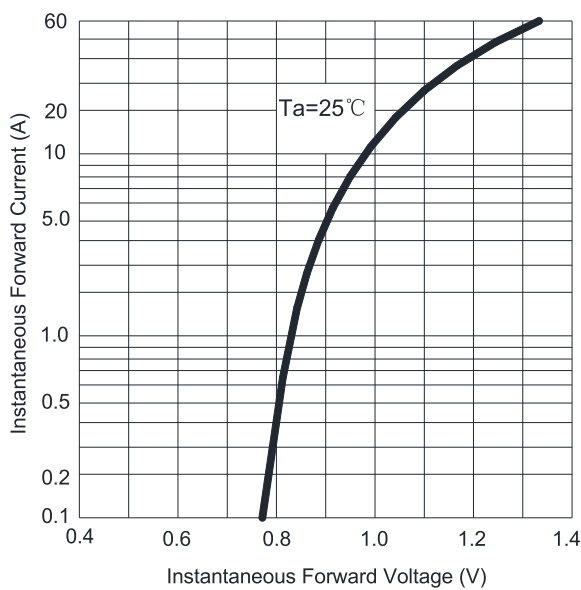
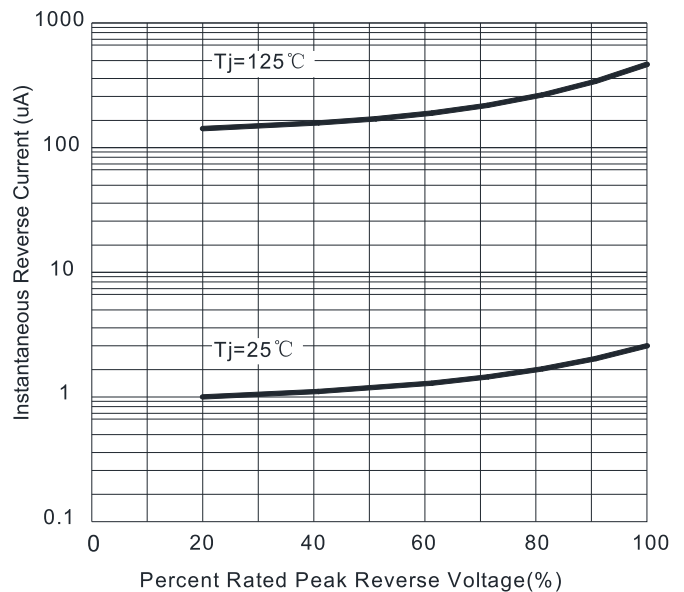
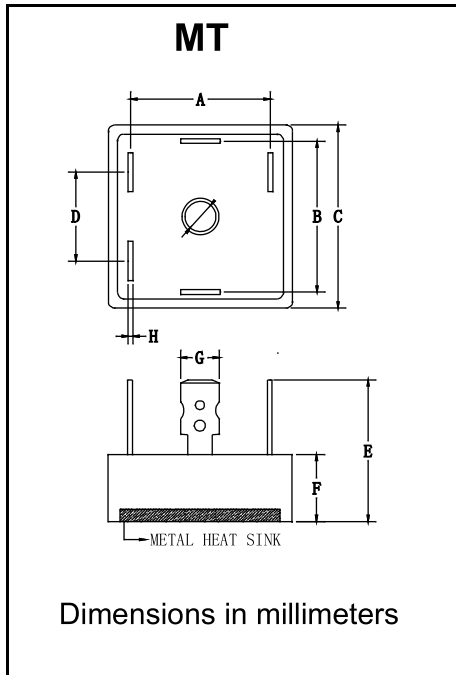


FIG4:Typical Reverse Characteristics



■ **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