MT5006A thru MT5016A



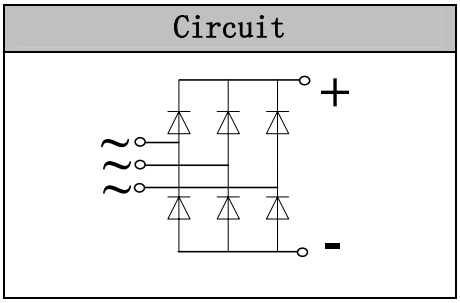
Glass Passivated Three Phase Bridge Rectifiers

V_{RRM} 600 to 1600V
I_{FAV} 50 Amp

Features

- High thermal conductivity packge,electrically insulated case
- Centre hole fixing
- Glass passivated chips
- High IFSM

Circuit



Applications

- Big power supplier
- Field supply for DC motor

Module Type

TYPE	V_{RRM}	V_{RSM}
MT5006A	600V	700V
MT5008A	800V	900V
MT5010A	1000V	1100V
MT5012A	1200V	1300V
MT5014A	1400V	1500V
MT5016A	1600V	1700V

Maximum Ratings

Symbol	Item	Conditions	Values	Units
I_O	Average forward output current	Tc=50℃	50	A
I_{FSM}	Forward surge current, max.	t=8.3ms Single Half-Sine-Wave Superimposed On Rated Load (JEDEC METHOD)	500	A
i^2t	Value for fusing	t=8.3mS VR=0	1000	A^2s
Visol	Isolation Breakdown Voltage(R.M.S)	a.c.50HZ;r.m.s.;1min Tj=25℃	2500	V
Tvj	Operating Junction Temperature		-55 to +150	℃
Tstg	Storage Temperature		-55 to +150	℃
Mt	Mounting Torque		2	N.m
Weight	Bridge(Approximately)		21	g

Thermal Characteristics

Symbol	Item	Conditions	Values	Units
Rth(j-c)	Junction to Case	Bridge	0.9	℃/W

Electrical Characteristics

Symbol	Item	Conditions	Values			Units
			Min.	Typ.	Max.	
V_{FM}	Forward Voltage Drop, max.	T=25℃ I_F =25.0A	—	1.00	1.20	V
I_{RD}	Maximum DC Reverse	T_{vj} =25℃ V_{RD}=V_{RRM} T_{vj} =150℃ V_{RD}=V_{RRM}	—	—	5.0 3.0	uA mA

Characteristic Curve

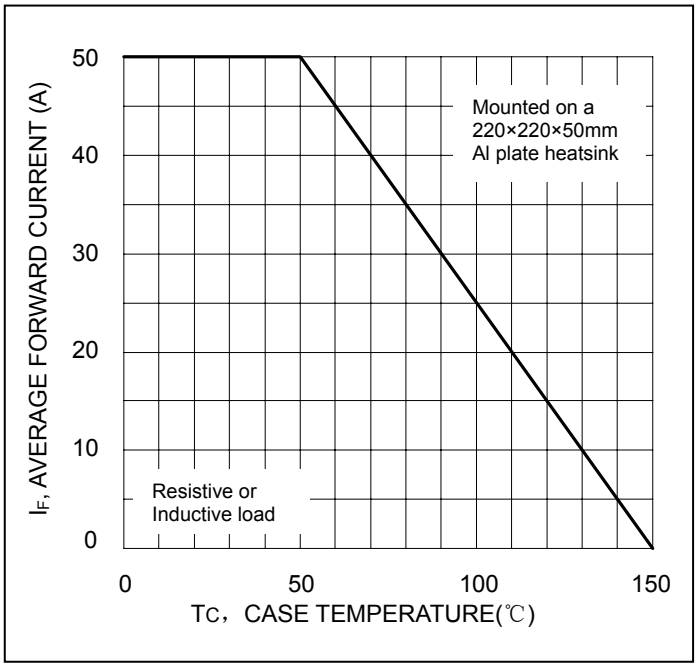


Fig. 1 Forward Current Derating Curve

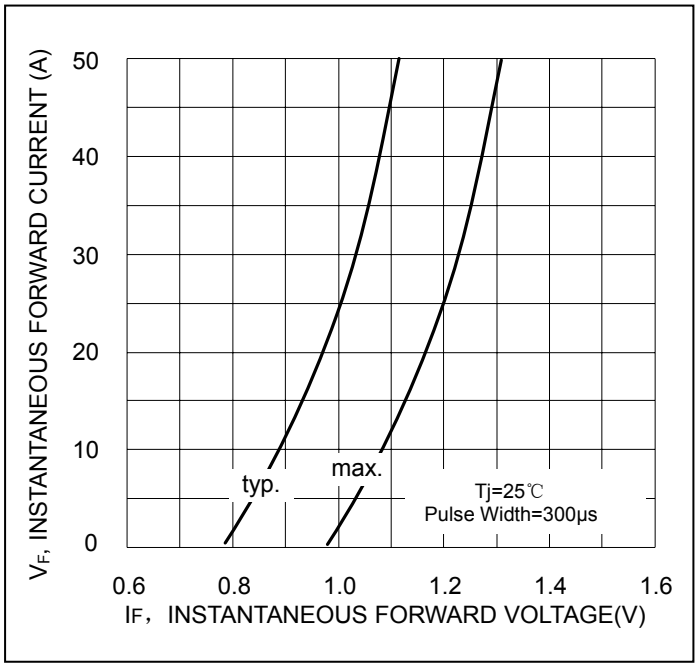


Fig.2 Typical Forward Characteristics

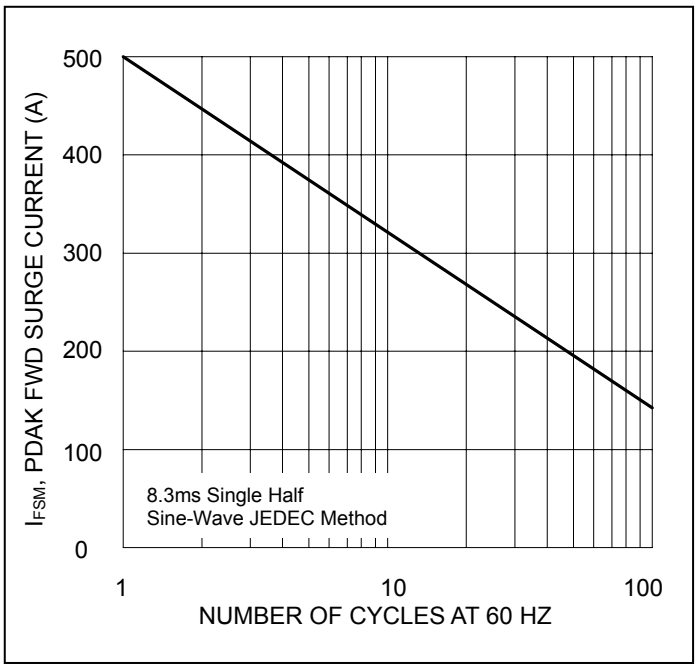


Fig.3 Max Non-Repetitive Peak Surge Current

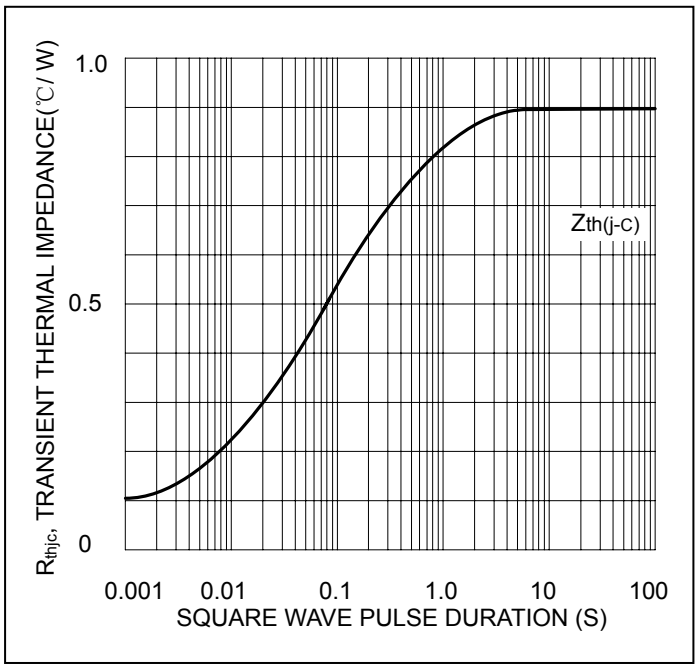
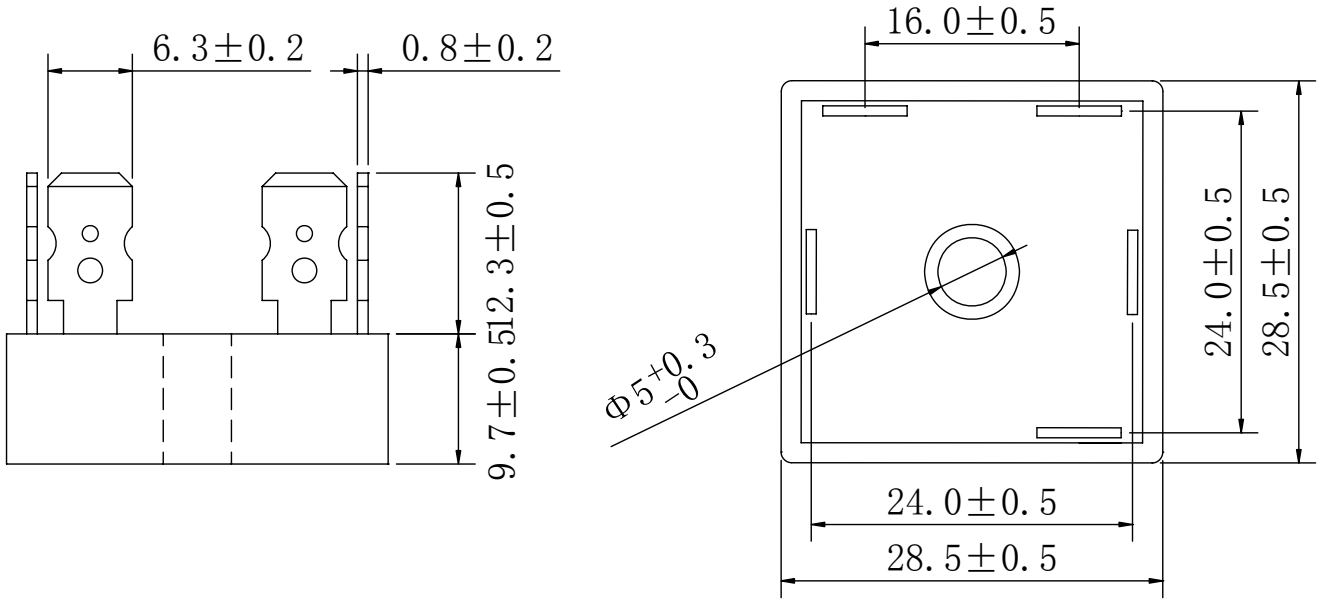


Fig4. Transient thermal impedance

Package Outline Information

CASE：MT-A



Dimensions in mm