



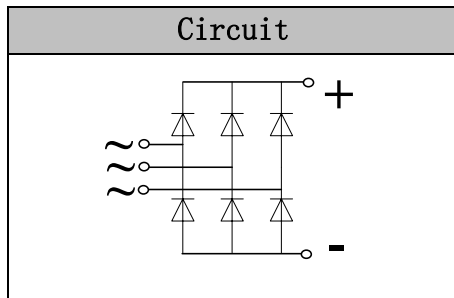
Glass Passivated Three Phase Bridge Rectifiers

VRRM 600 to 1600V

IFAV 50 Amp

Features

- High thermal conductivity package,
- Electrically insulated case
- Centre hole fixing
- Glass passivated chips
- High IFSM
- Epoxy compound has classification UL94V-0



Applications

- Big power supplier
- Field supply for DC motor

Module Type

TYPE	VRRM	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
IO	Average forward output current	T _c =70°C	50	A
IFSM	Forward surge current, max.	t=8.3ms Single Half-Sine-Wave Superimposed On Rated Load (JEDEC METHOD)	500	A
i ² t	Value for fusing	t=8.3mS VR=0	1000	A ² s
Visol	Isolation Breakdown Voltage(R.M.S)	a.c.50HZ;r.m.s.;1min T _j =25°C	2500	V
T _{vj}	Operating Junction Temperature		-55 to +150	°C
T _{stg}	Storage Temperature		-55 to +150	°C
M _t	Mounting Torque		2	N.m
Weight	Bridge(Approximately)		21	g

Thermal Characteristics

Symbol	Item	Conditions	Values	Units
R _{th(j-c)}	Junction to Case	Bridge	0.7	°C/W

Electrical Characteristics

Symbol	Item	Conditions	Values			Units
			Mi	Typ.	Max.	
VFM	Forward Voltage Drop, max.	T=25°C IF =25.0A	—	1.00	1.20	V
IRD	Maximum DC Reverse	T _{vj} =25°C VRD=VRRM T _{vj} =150°C VRD=VRRM	—	—	5.0 3.0	uA mA

Characteristic Curve

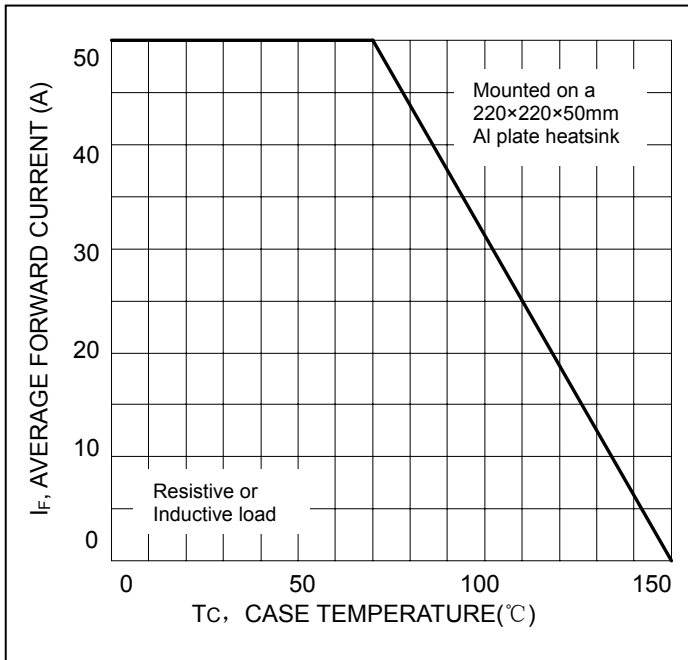


Fig. 1 Forward Current Derating Curve

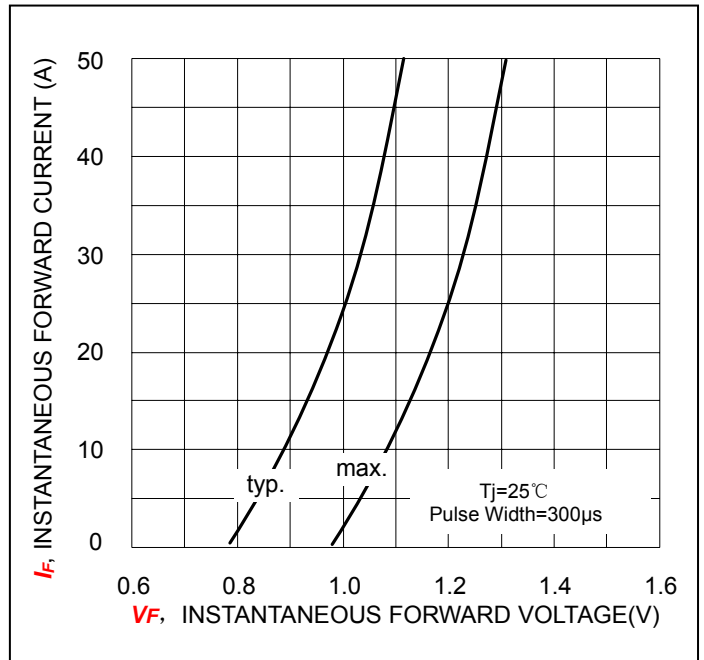


Fig.2 Typical Forward Characteristics

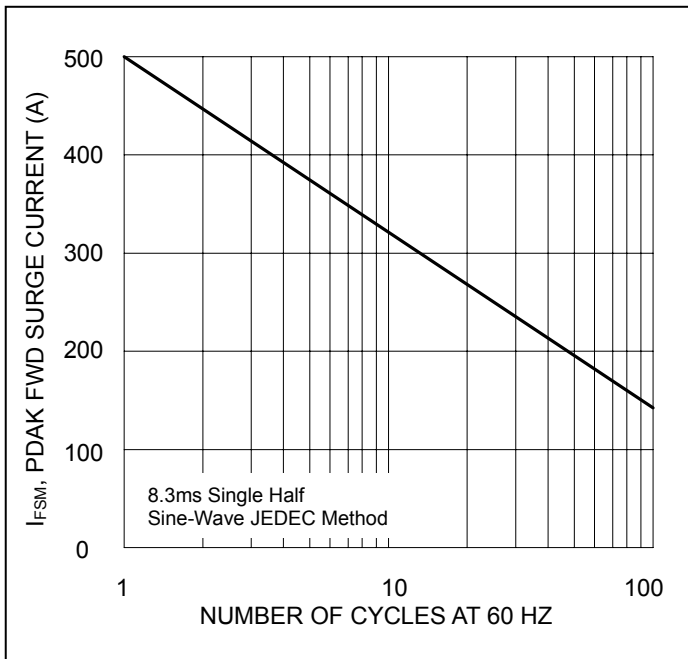


Fig.3 Max Non-Repetitive Peak Surge Current

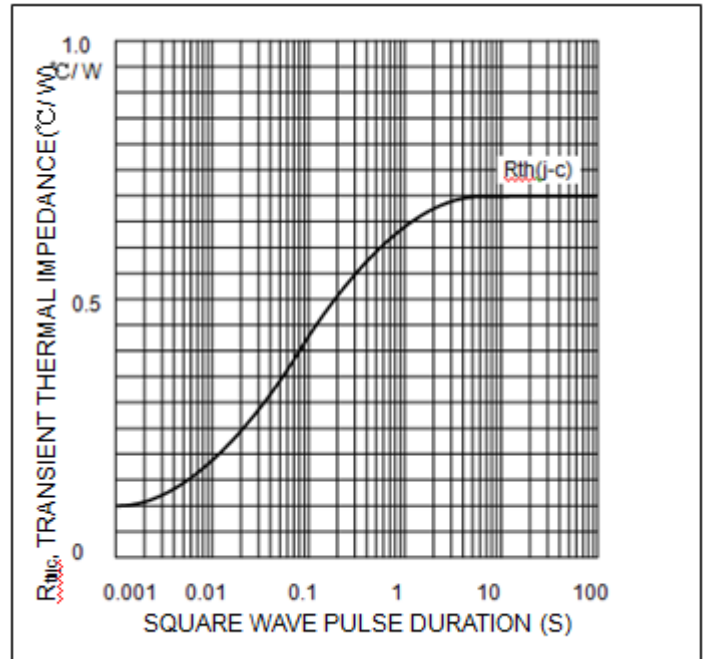
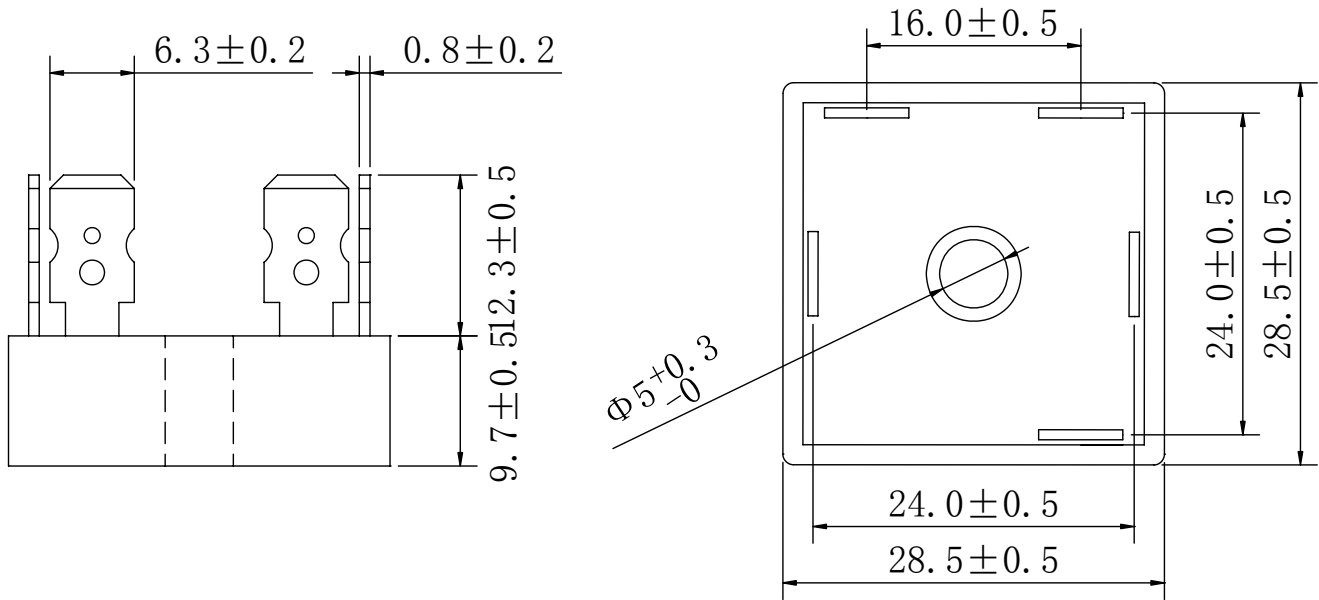


Fig.4. Transient thermal impedance

Package Outline Information

CASE: MT-A



Dimensions in mm