



Glass Passivated Three Phase Bridge Rectifiers

VRRM 600 to 1600V

IFAV 50 Amp

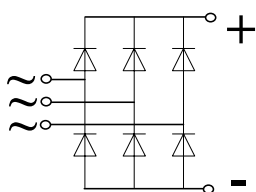
Features

- 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

Circuit



Module Type

TYPE	VRRM	VRSM
MT5006W	600V	700V
MT5008W	800V	900V
MT5010W	1000V	1100V
MT5012W	1200V	1300V
MT5014W	1400V	1500V
MT5016W	1600V	1700V

Maximum Ratings

Symbol	Item	Conditions	Values	Units
IO	Average forward output current	Tc=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 Tj=25°C	2500	V
Tvj	Operating Junction Temperature		-55 to +150	°C
Tstg	Storage Temperature		-55 to +150	°C
Mt	Mounting Torque		2	N.m
Weight	Bridge(Approximately)		20	g

Thermal Characteristics

Symbol	Item	Conditions	Values	Units
Rth(j-c)	Junction to Case	Bridge	0.7	°C/W

Electrical Characteristics

Symbol	Item	Conditions	Values			Units
			Min.	Typ.	Max.	
VFM	Forward Voltage Drop, max.	T=25°C IF =25.0A	—	1.10	1.20	V
IRD	Maximum DC Reverse	Tvj =25°C VRD=VRRM Tvj =150°C VRD=VRRM	—	—	5.0 3.0	uA mA

Characteristic Curve

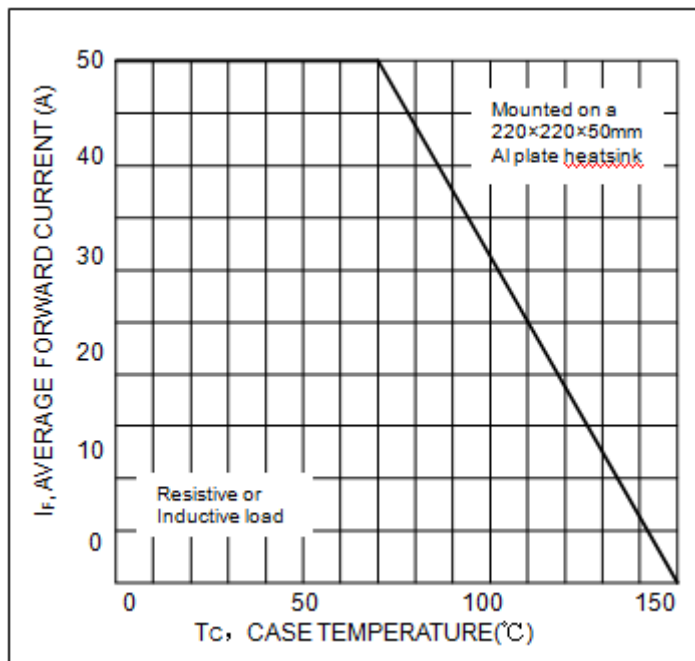


Fig. 1 Forward Current Derating Curve

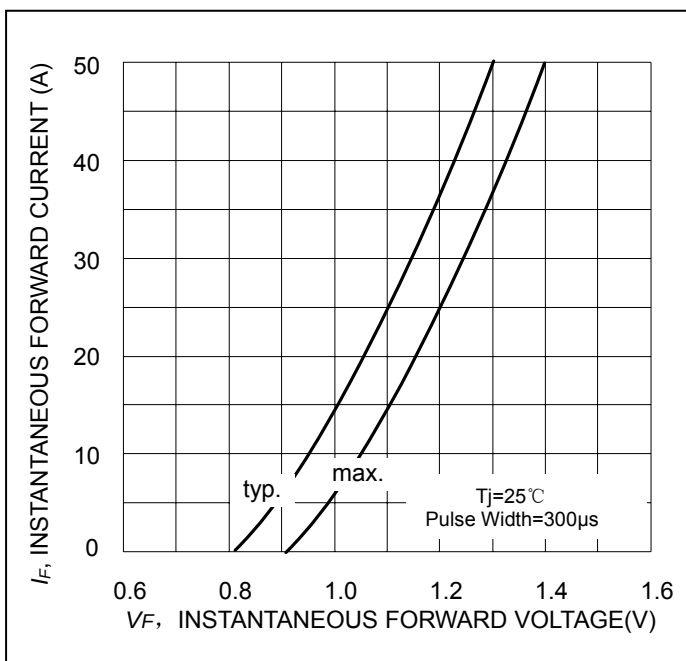


Fig.2 Typical Forward Characteristics

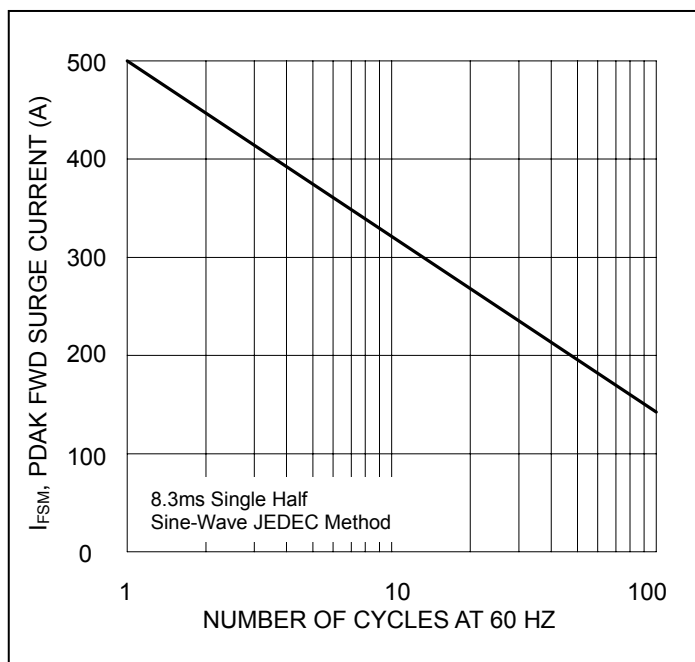


Fig.3 Max Non-Repetitive Peak Surge Current

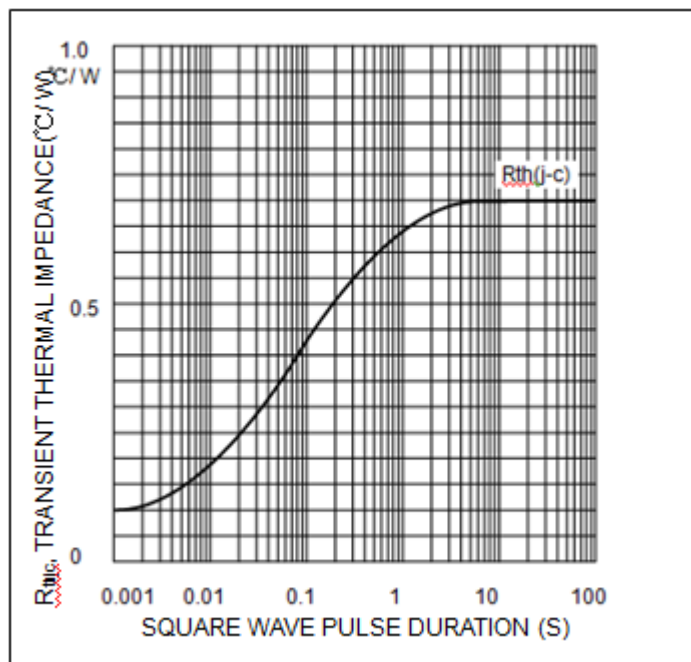
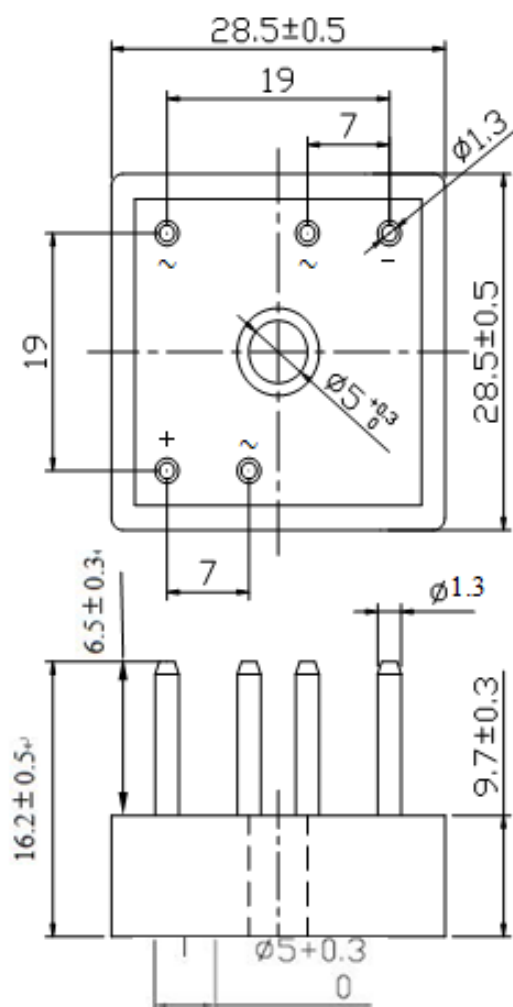


Fig4. Transient thermal impedance

Package Outline Information

CASE: MT-W



Dimensions in mm