



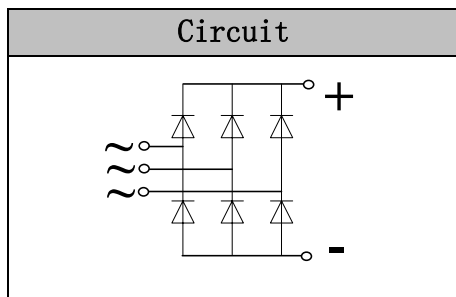
Glass Passivated Three Phase Bridge Rectifiers

VRRM 600 to 1600V

IFAV 35 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	VRSM
MT3506	600V	700V
MT3508	800V	900V
MT3510	1000V	1100V
MT3512	1200V	1300V
MT3514	1400V	1500V
MT3516	1600V	1700V

Maximum Ratings

Symbol	Item	Conditions	Values	Units
I_o	Average forward output current	$T_c = 78^\circ\text{C}$	35	A
IFSM	Forward surge current, max.	$t = 8.3\text{ms}$ Single Half-Sine-Wave Superimposed On Rated Load (JEDEC METHOD)	450	A
i^2t	Value for fusing	$t = 8.3\text{ms}$ VR=0	840	A^2s
Visol	Isolation Breakdown Voltage(R.M.S)	a.c.50HZ;r.m.s.;1min $T_j = 25^\circ\text{C}$	2500	V
T_{vj}	Operating Junction Temperature		-55 to +150	$^\circ\text{C}$
T_{stg}	Storage Temperature		-55 to +150	$^\circ\text{C}$
Mt	Mounting Torque		2	N.m
Weight	Bridge(Approximately)		28	g

Thermal Characteristics

Symbol	Item	Conditions	Values	Units
$R_{th(j-c)}$	Junction to Case	Bridge	0.9	$^\circ\text{C}/\text{W}$

Electrical Characteristics

Symbol	Item	Conditions	Values			Units
			Min.	Typ.	Max.	
VFM	Forward Voltage Drop, max.	$T = 25^\circ\text{C}$ $I_F = 17.5\text{A}$	—	1.00	1.20	V
IRD	Maximum DC Reverse	$T_{vj} = 25^\circ\text{C}$ VRD=VRRM $T_{vj} = 150^\circ\text{C}$ VRD=VRRM	—	—	5.0 2.0	μA mA

Characteristic Curve

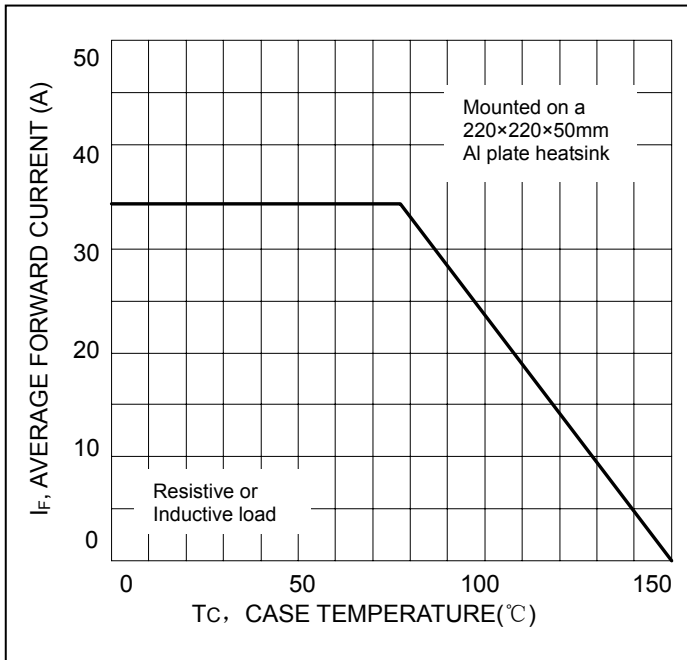


Fig. 1 Forward Current Derating Curve

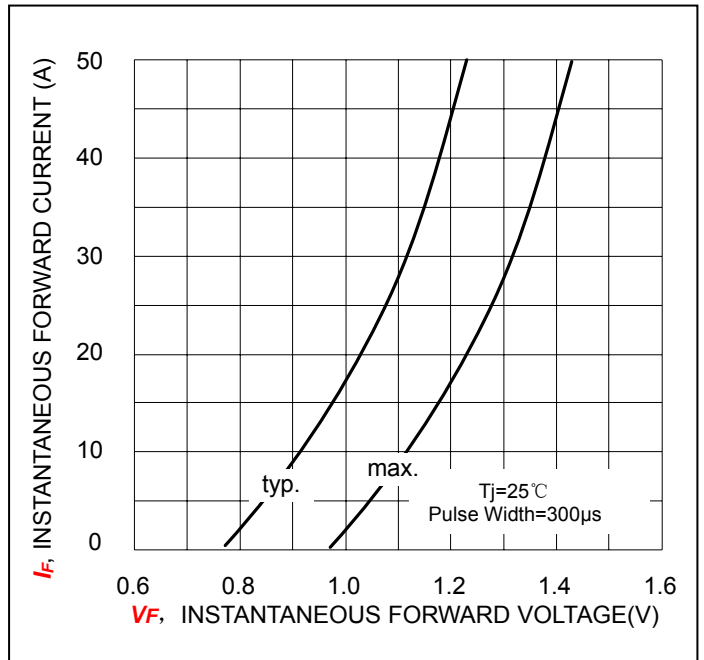


Fig.2 Typical Forward Characteristics

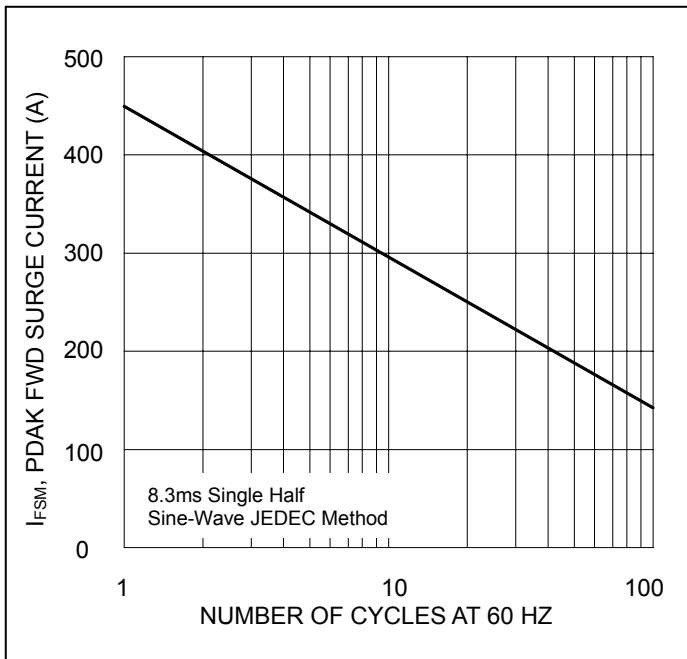


Fig.3 Max Non-Repetitive Peak Surge Current

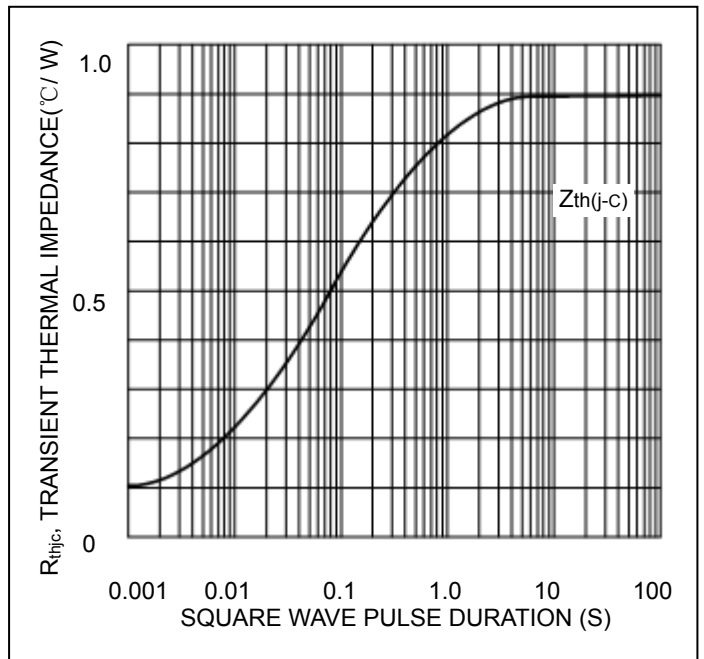
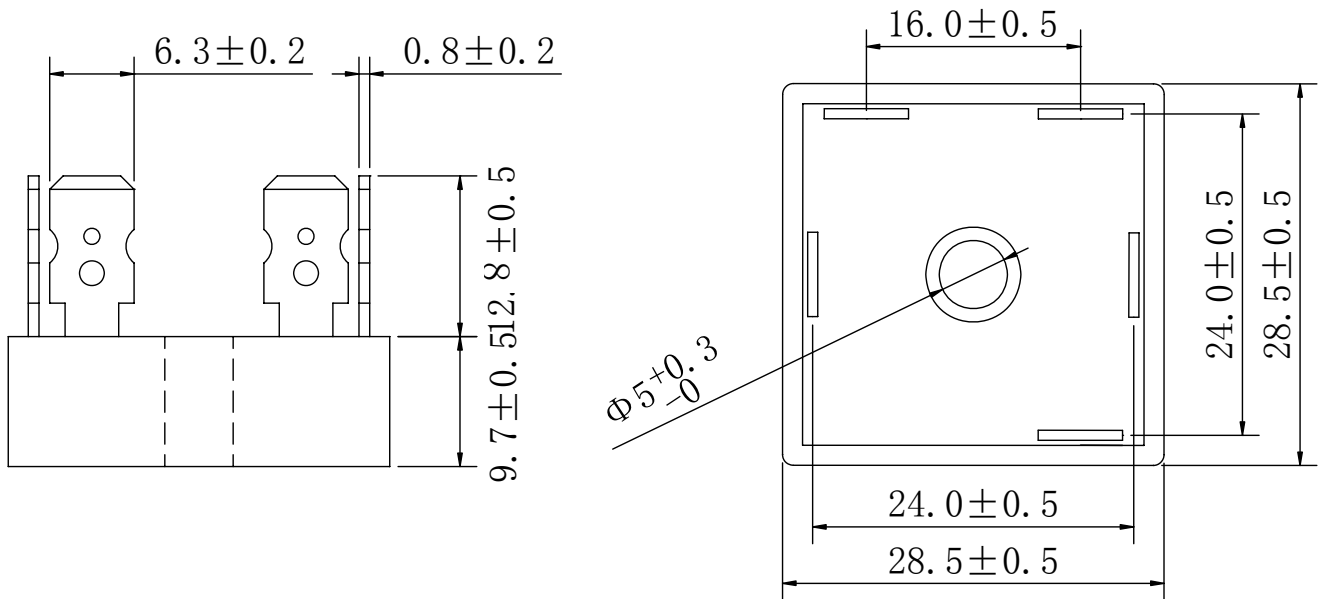


Fig.4. Transient thermal impedance

Package Outline Information

CASE: MT



Dimensions in mm