



MT5006 thru MT5016

VRRM 600 to 1600

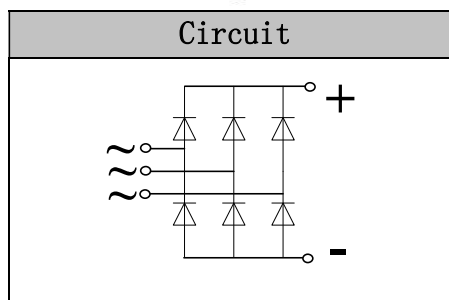
IFAV 50 Amp

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	VRSM
MT5006	600V	700V
MT5008	800V	900V
MT5010	1000V	1100V
MT5012	1200V	1300V
MT5014	1400V	1500V
MT5016	1600V	1700V

Maximum Ratings

Symbol	Item	Conditions	Values	Units
I _O	Average forward output current	T _c =80°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 T _j =125°C	2500	V
T _{vj}	Operating Junction Temperature		-55 to +150	°C
T _{stg}	Storage Temperature		-55 to +150	°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	0.5	°C/W

Electrical Characteristics

Symbol	Item	Conditions	Values			Units
			Min.	Typ.	Max.	
V _{FM}	Forward Voltage Drop, max.	T=25°C I _F =25.0A	—	1.00	1.20	V
I _{RD}	Maximum DC Reverse	T _{vj} =25°C V _{RD} =V _{RRM} T _{vj} =150°C V _{RD} =V _{RRM}	—	—	5.0 3.0	uA mA

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Characteristic Curve

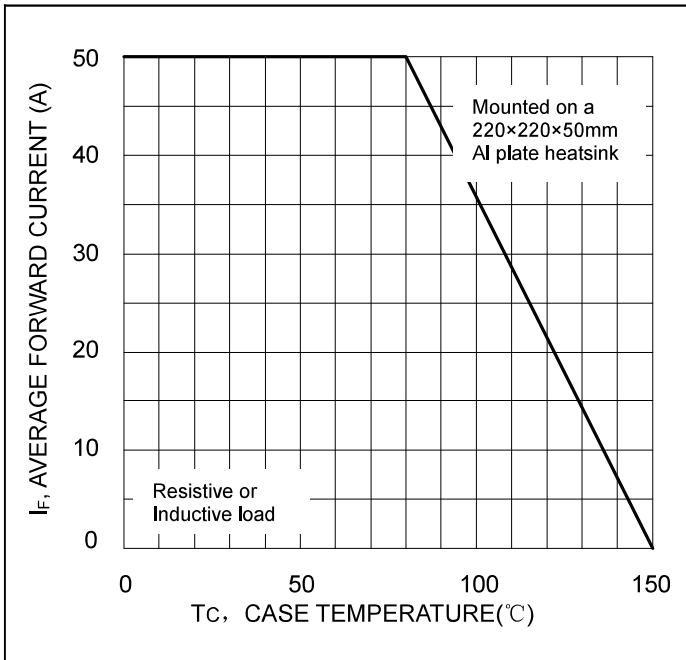


Fig. 1 Forward Current Derating Curve

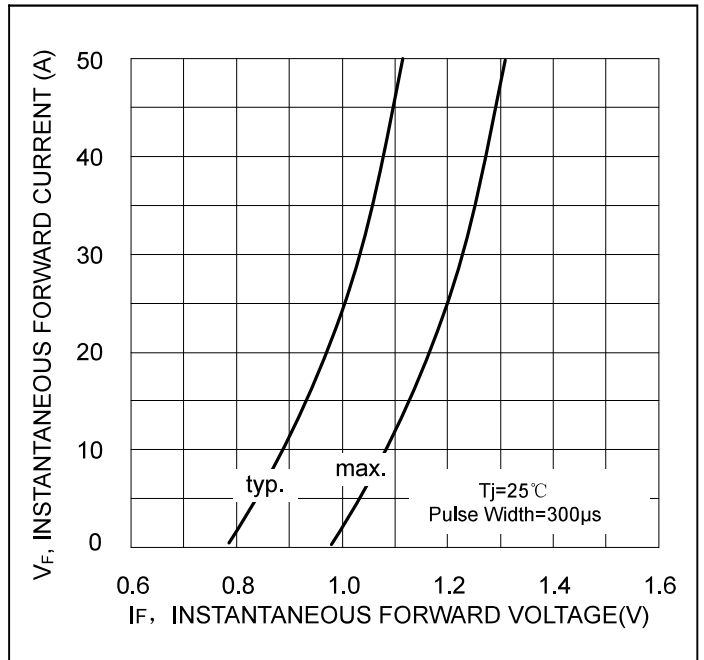


Fig. 2 Typical Forward Characteristics

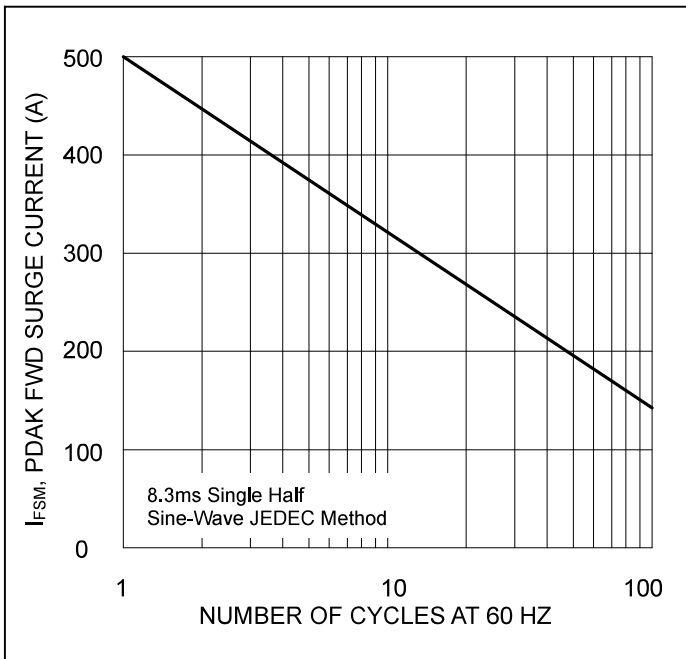


Fig. 3 Max Non-Repetitive Peak Surge Current

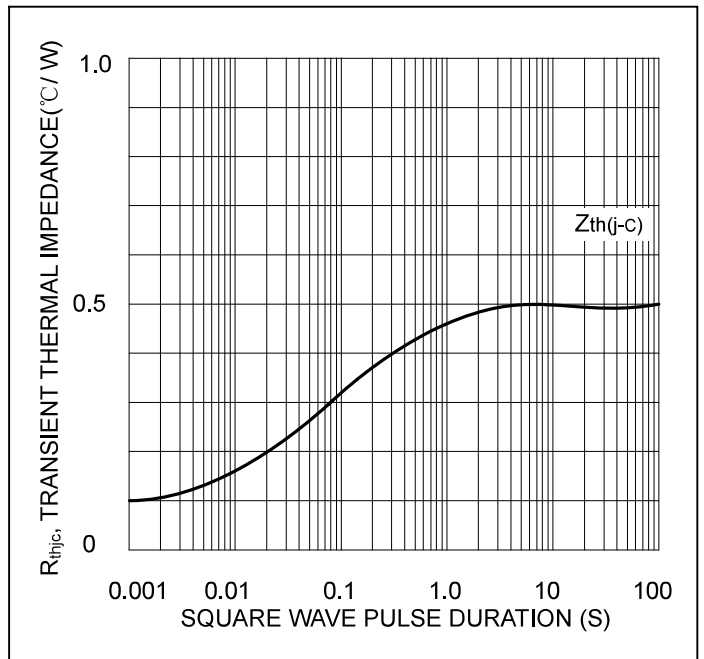
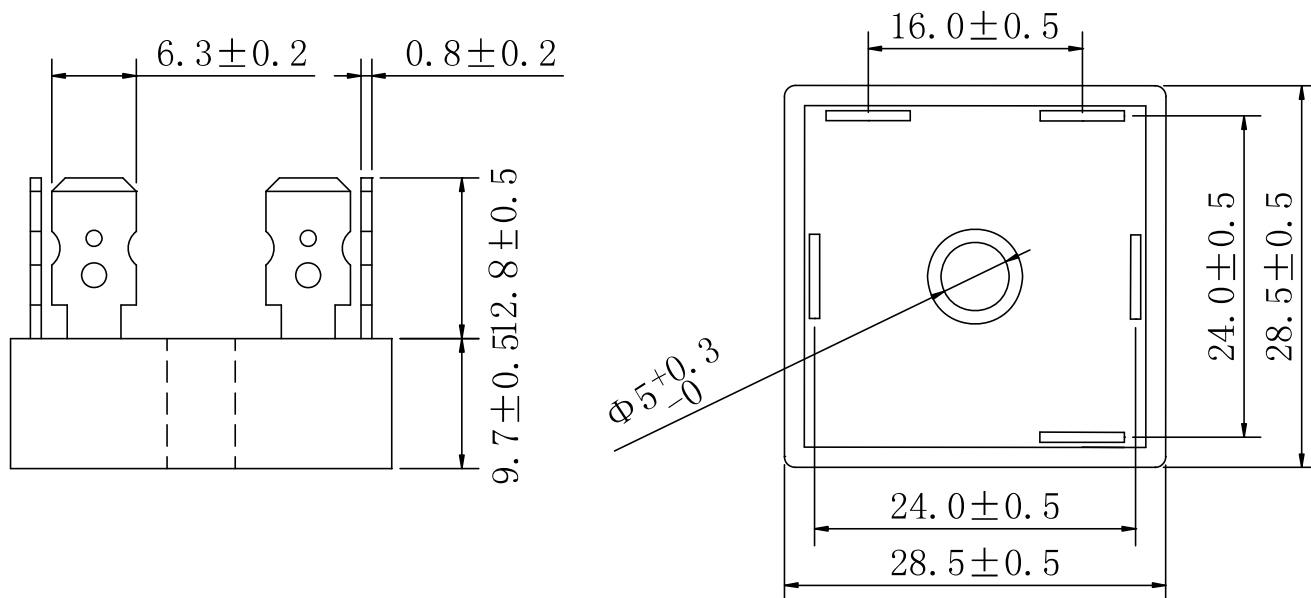


Fig. 4. Transient thermal impedance

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Package Outline Information

CASE: MT



Dimensions in mm