



## Glass Passivated Single Phase Bridge Rectifiers

**VRRM** 600 to 1600V

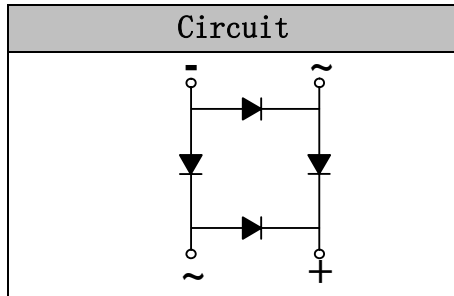
**IFAV** 50 Amp

### 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	VRSM
BR5006	600V	700V
BR5008	800V	900V
BR5010	1000V	1100V
BR5012	1200V	1300V
BR5014	1400V	1500V
BR5016	1600V	1700V

### Maximum Ratings

Symbol	Item	Conditions	Values	Units
IO	Average forward output current	T <sub>c</sub> =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 <sup>2</sup> t	Value for fusing	t=8.3mS VR=0	1000	A <sup>2</sup> s
Visol	Isolation Breakdown Voltage(R.M.S)	a.c.50HZ;r.m.s.;1min T <sub>j</sub> =25°C T <sub>j</sub> =125°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)		25	g

### Thermal Characteristics

Symbol	Item	Conditions	Values	Units
Rth(j-c)	Junction to Case	Bridge	0.5	°C/W

### Electrical Characteristics

Symbol	Item	Conditions	Values			Units
			Min.	Typ.	Max.	
VFM	Forward Voltage Drop, max.	T=25°C I <sub>F</sub> =25.0A	—	1.00	1.20	V
IRD	Maximum DC Reverse	T <sub>vj</sub> =25°C VRD=VRRM T <sub>vj</sub> =150°C VRD=VRRM	—	—	5.0 3.0	uA mA

## Characteristic Curve

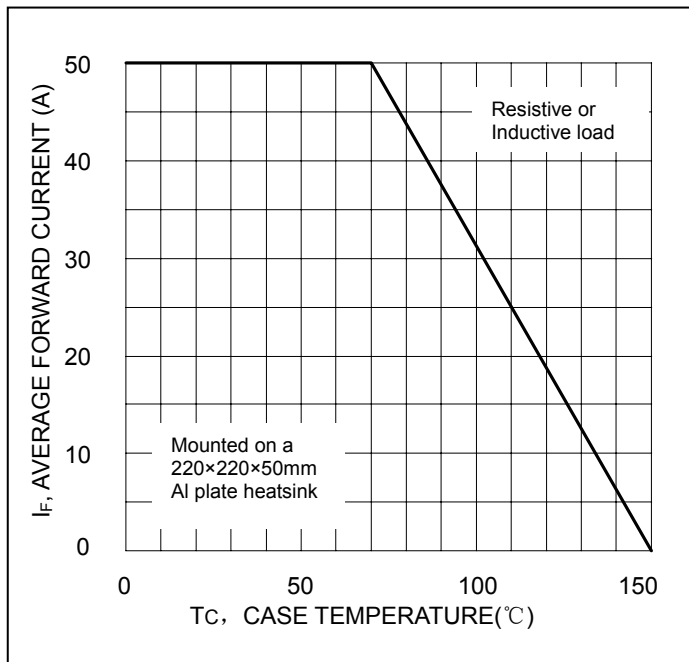


Fig. 1 Forward Current Derating Curve

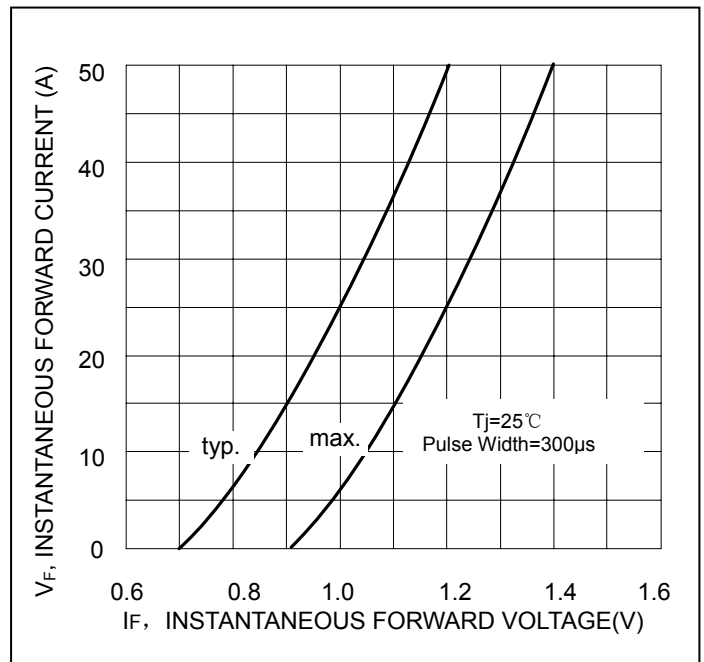


Fig.2 Typical Forward Characteristics

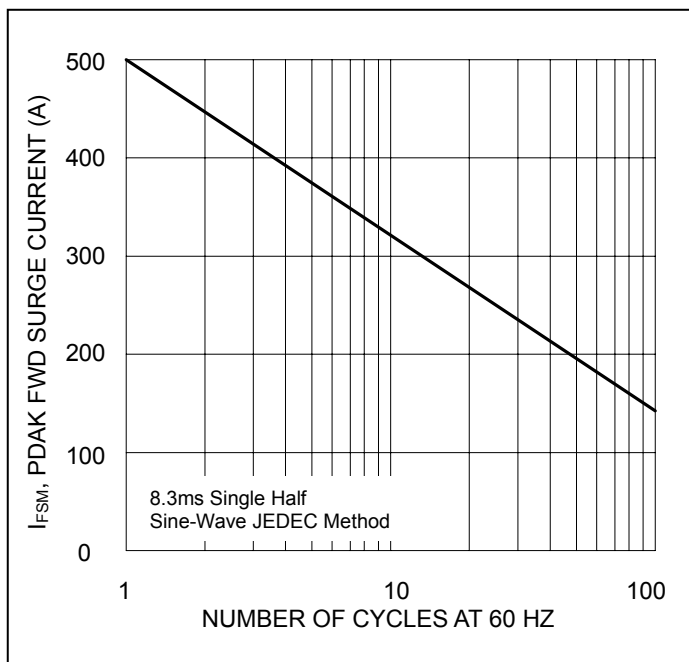


Fig.3 Max Non-Repetitive Peak Surge Current

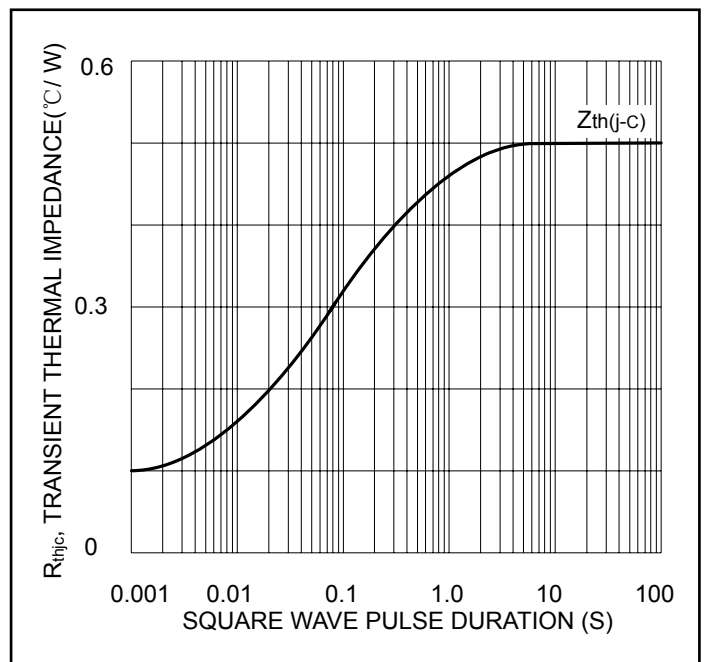


Fig.4. Transient thermal impedance

## Package Outline Information

