

Glass Passivated Three Phase Bridge Rectifiers

VRRM 800 to 1600V

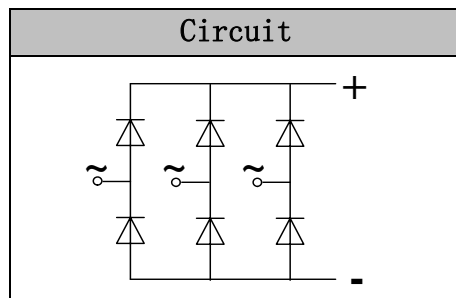
IFAV 50Amp

Features

- High thermal conductivity package, electrically insulated case
- Glass passivated chips
- High IFSM
- Epoxy compound has classification UL94V-0

Applications

- Big power supplier
- Field supply for DC motor



Module Type

TYPE	VRRM	VRRM
MSDP50-08	800V	900V
MSDP50-12	1200V	1300V
MSDP50-16	1600V	1700V

Maximum Ratings

Symbol	Item	Conditions	Values	Units
IF(AV)	Average forward current	Tc=50°C	50	A
IFSM	Forward surge current, max.	t=10mS Tvj =45°C	500	A
i ² t	Value for fusing		1250	A ² s
Visol	Isolation Breakdown Voltage(R.M.S)	a.c.50HZ;r.m.s.;1min	2500	V
Tvj	Operating Junction Temperature		-40 to +150	°C
Tstg	Storage Temperature		-40 to +150	°C
Weight	Approximate Weight		20	g

Thermal Characteristics

Symbol	Item	Conditions	Values	Units
Rth(j-c)	Thermal Impedance, max.	Junction to Case	0.65	°C/W

Electrical Characteristics

Symbol	Item	Conditions	Values			Units
			Min.	Typ.	Max.	
VFM	Forward Voltage Drop, max.	T=25°C IF=25A		1.00	1.20	V
IRRM	Repetitive Peak Reverse Current, max.	Tvj =25°C VRD=VRRM			5	µA
		Tvj =150°C VRD=VRRM			3	mA

Performance Curves

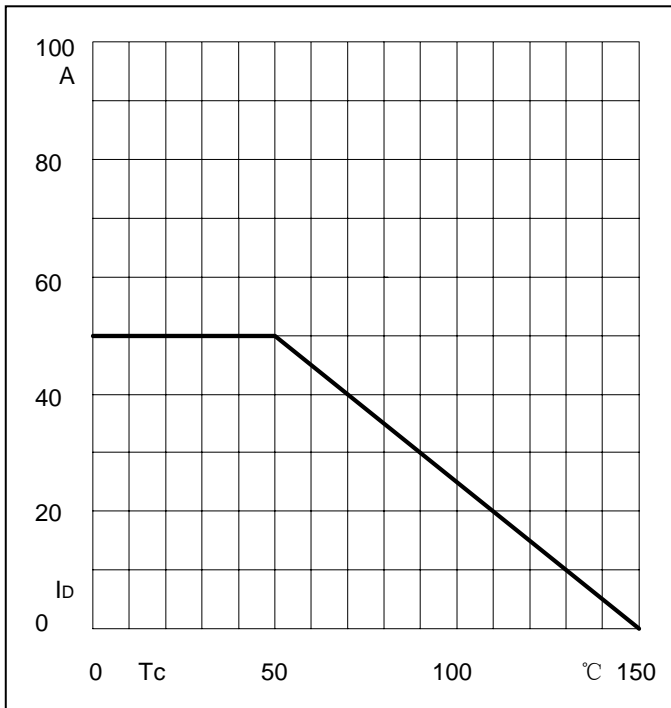


Fig1. Forward Current Derating Curve

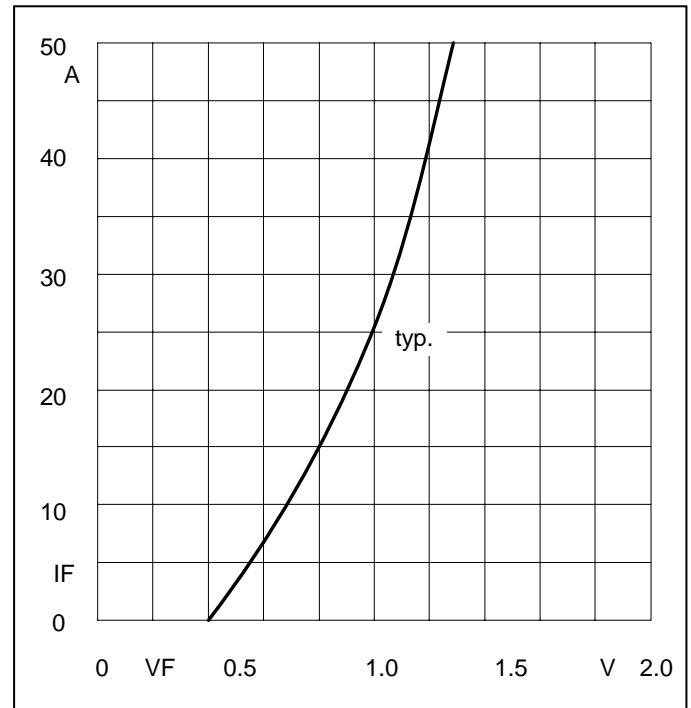


Fig2. Forward Characteristics

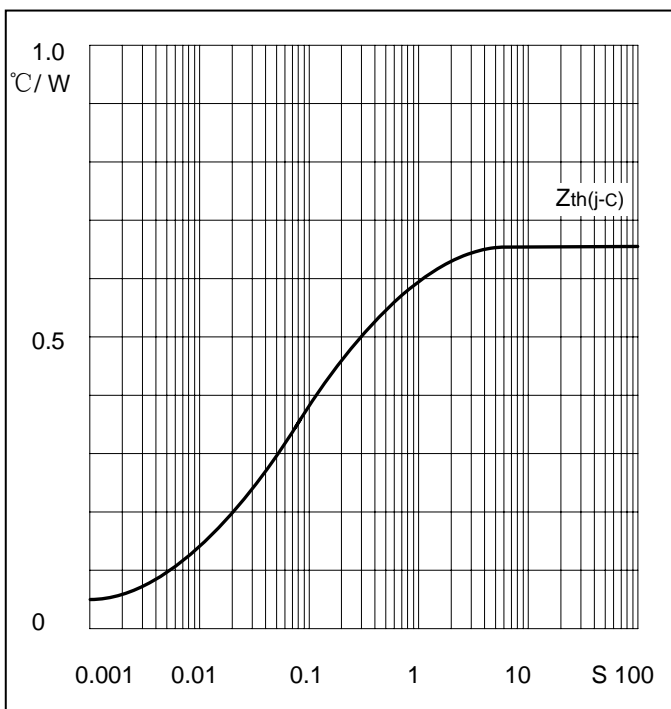


Fig3. Transient thermal impedance

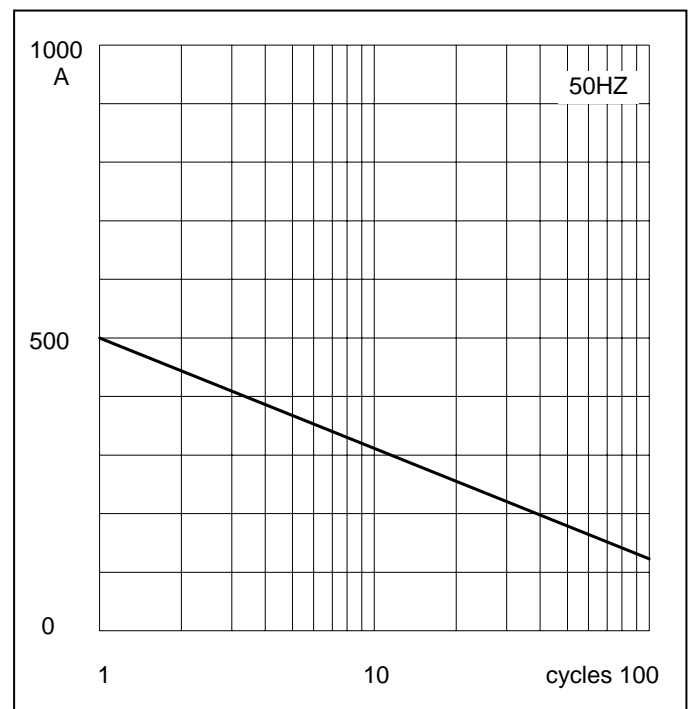


Fig4. Max Non-Repetitive Forward Surge Current

Package Outline Information

