



Glass Passivated Single Phase Rectifier Bridge

VRRM 800 to 1800V

IFAV 30Amp

Applications

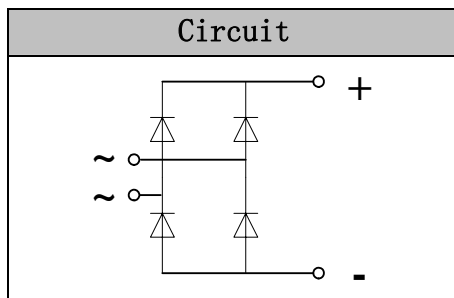
- Supplies for DC power equipment
- Input rectifiers for PWM inverter
- Battery DC power supplies
- Field supply for DC motors

Features

- Blocking voltage:800 to 1800V
- Low forward voltage drop
- Glass passivated chip

Advantages

- Easy to mount
- Space and weight savings



Module Type

TYPE	VRRM	VRSM
MSB30-08	800V	900V
MSB30-12	1200V	1300V
MSB30-16	1600V	1700V
MSB30-18	1800V	1900V

Maximum Ratings

Symbol	Item	Conditions	Values	Units
ID	Output Current(D.C.)	Tc=100°C	30	A
IFSM	Surge forward current	t=10mS Tvj =45°C	400	A
i ² t	Circuit Fusing Consideration		800	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
Mt	Mounting Torque	To terminals(M4)	1.5±15%	Nm
Ms		To heatsink(M4)	5±15%	Nm
Weight	Module (Approximately)		145	g

Thermal Characteristics

Symbol	Item	Conditions	Values	Units
Rth(j-c)	Thermal Impedance, max.	Junction to Case Per diode	0.80	°C/W
Rth(c-s)	Thermal Impedance, max.	Case to Heatsink Module	0.10	°C/W

Electrical Characteristics

Symbol	Item	Conditions	Values			Units
			Min.	Typ.	Max.	
VFM	Forward Voltage Drop, max.	T=25°C IF =15A			1.10	V
IRRM	Repetitive Peak Reverse Current, max.	Tvj =25°C VRD=VRRM	≤5			μA
		Tvj =150°C VRD=VRRM	≤3			mA

Performance Curves

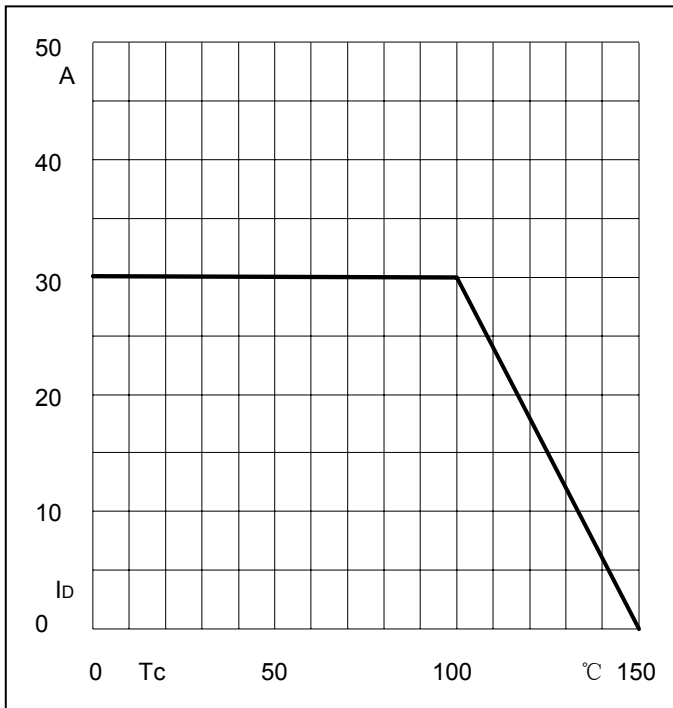


Fig1. Forward Current Derating Curve

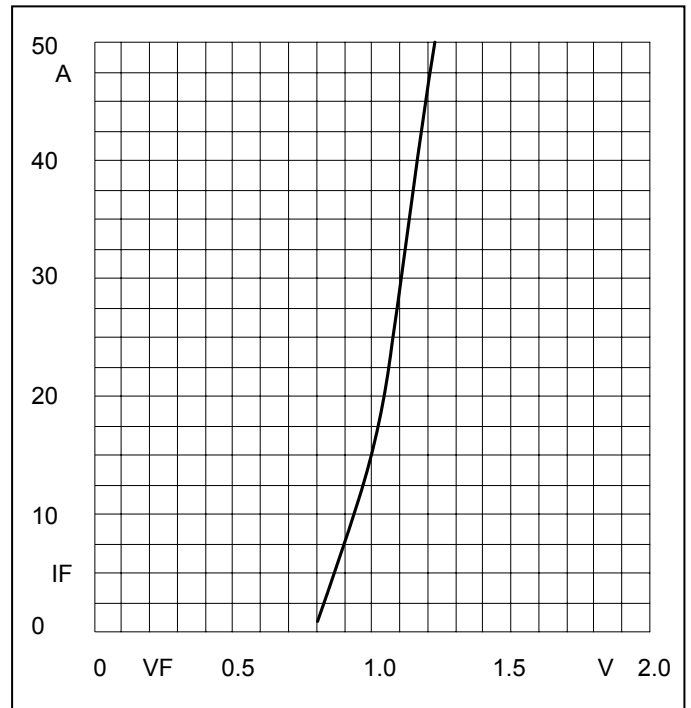


Fig2. Forward Characteristics

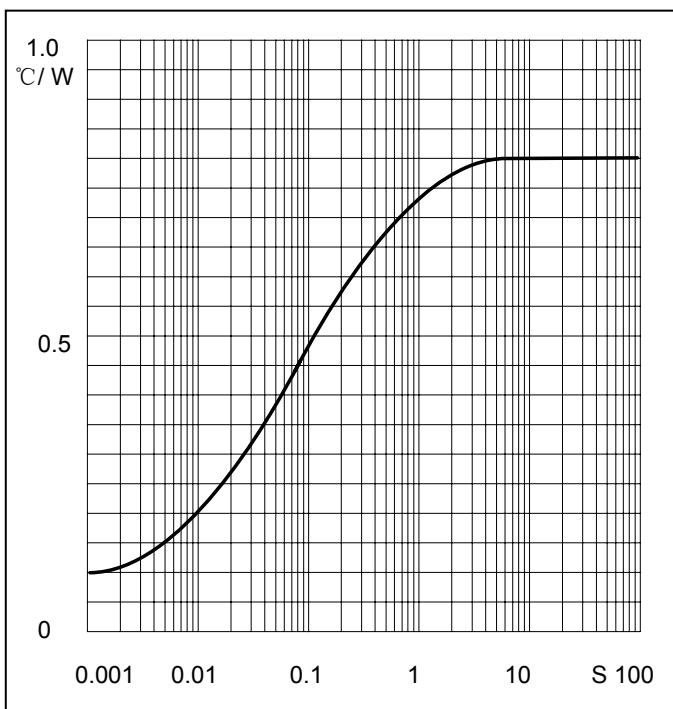


Fig3. Transient thermal impedance

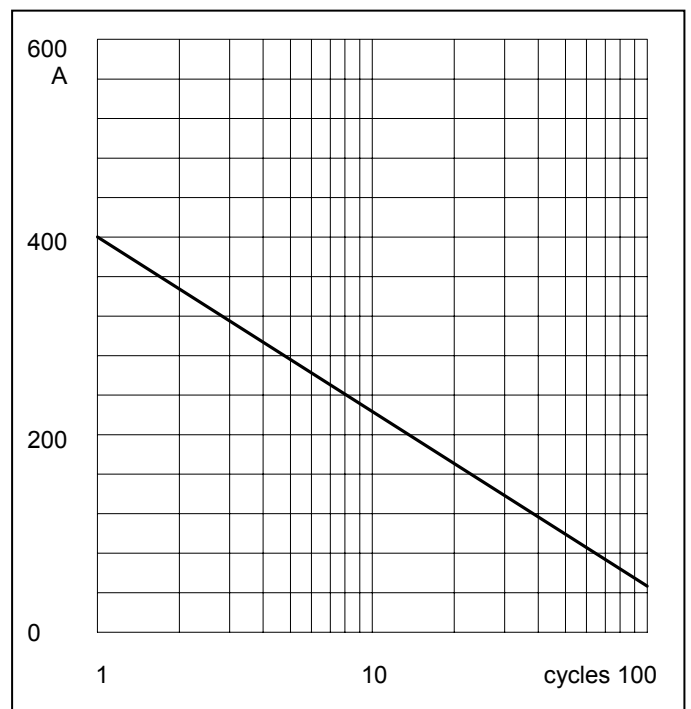


Fig4. Max Non-Repetitive Forward Surge Current

Package Outline Information

