



Glass Passivated Three Phase Rectifier Bridge

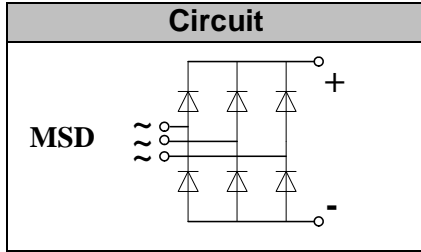
VRRM 800 to 1800V
ID 100 Amp

Applications

- Three phase rectifiers for power supplies
- Rectifiers for DC motor field supplies
- Battery charger rectifiers
- Input rectifiers for variable frequency drives

Features

- Three phase bridge rectifier
- Blocking voltage: 800 to 1800V
- Heat transfer through aluminum oxide DCB ceramic isolated metal baseplate
- Glass passivated chip



Module Type

TYPE	VRRM	VRSM
MSD100 – 08	800V	900V
MSD100 – 12	1200V	1300V
MSD100 – 16	1600V	1700V
MSD100 – 18	1800V	1900V

Maximum Ratings

Symbol	Conditions	Values	Units
ID	T _c =100°C	100	A
IFSM	t=10mS T _{vj} =45°C	920	A
i ² t	t=10mS T _{vj} =45°C	4200	A ² s
Visol	a.c.50Hz;r.m.s.;1min	3000	V
T _{vj}		-40 to 150	°C
T _{stg}		-40 to 125	°C
M _t	To terminals(M6)	5±15%	Nm
M _s	To heatsink(M6)	5±15%	Nm
Weight	Module	230	g

Thermal Characteristics

Symbol	Conditions	Values	Units
R _{th(j-c)}	Per diode	0.9	°C/W
R _{th(c-s)}	Module	0.03	°C/W

Electrical Characteristics

Symbol	Conditions	Values	Units
VFM	T=25°C IFM =300A	1.9	V
IRD	T _{vj} =25°C VRD=VRRM	≤ 0.3	mA
	T _{vj} =150°C VRD=VRRM	≤ 5	mA

Performance Curves

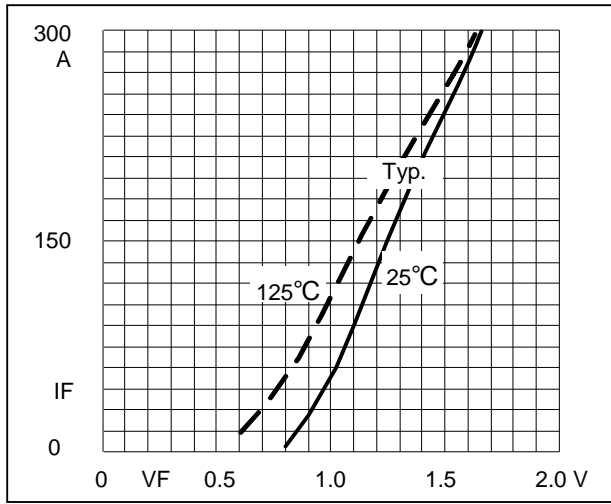


Fig1. Forward Characteristics

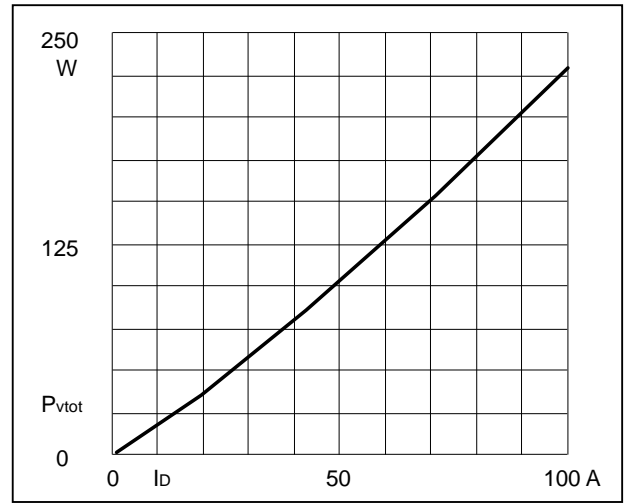


Fig2. Power dissipation

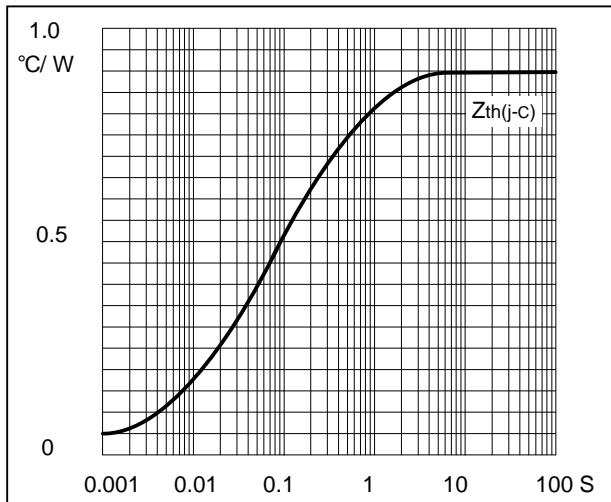


Fig3. Transient thermal impedance

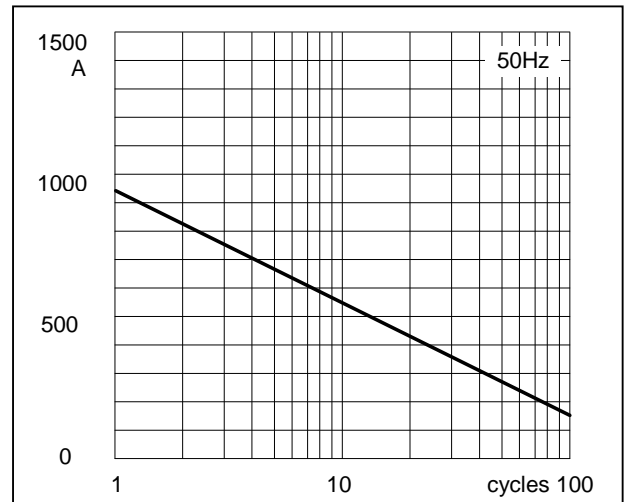


Fig4. Max Non-Repetitive Forward Surge Current

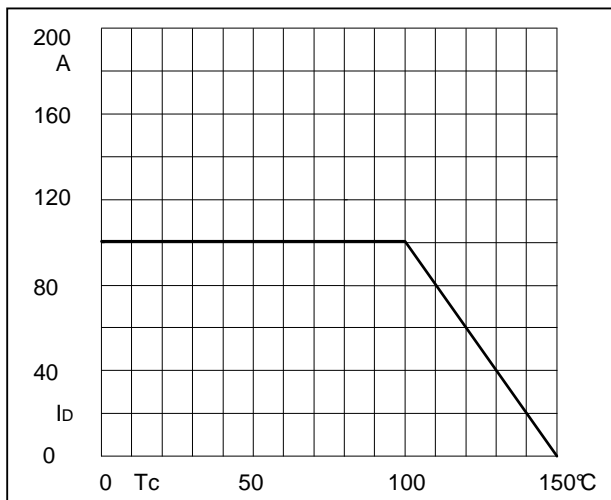


Fig5. Forward Current Derating Curve

Package Outline Information

