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With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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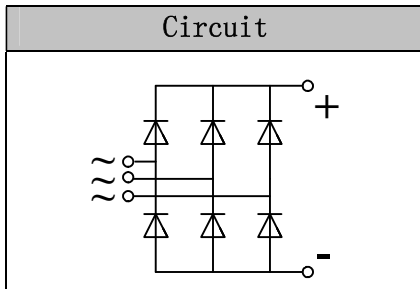
## Glass Passivated Three Phase Rectifier Bridge

**VRRM** 800 to 1800V

**ID** 100Amp

### 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 DBC ceramic isolated metal baseplate
- Glass passivated chip

### Module Type

TYPE	VRRM	VRSM
MSDM100-08	800V	900V
MSDM100-12	1200V	1300V
MSDM100-16	1600V	1700V
MSDM100-18	1800V	1900V

### Maximum Ratings

Symbol	Item	Conditions	Values	Units
ID	Output current (D.C)	Tc=100°C	100	A
IFSM	Forward surge current, max.	t=10mS Tvj =45°C	920	A
i <sup>2</sup> t	Value for fusing		4200	A <sup>2</sup> s
Visol	Isolation Breakdown Voltage(R.M.S)	a.c.50HZ;r.m.s.;1min	3000	V
Tvj	Operating Junction Temperature		-40 to +150	°C
Tstg	Storage Temperature		-40 to +150	°C
Mounting Torque	To terminals(M5)		3±15%	Nm
	To heatsink(M5)		5±15%	Nm
Weight	Approximate Weight	Module	145	g

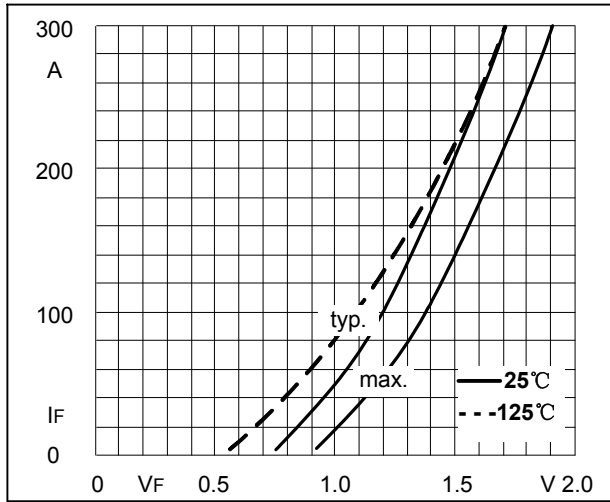
### Thermal Characteristics

Symbol	Item	Conditions	Values	Units
Rth(j-c)	Thermal Impedance, max.	Per Module	0.18	°C/W

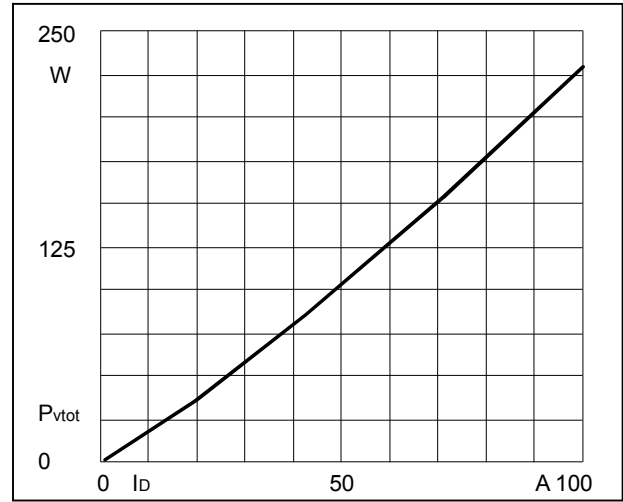
### Electrical Characteristics

Symbol	Item	Conditions	Values			Units
			Min.	Typ.	Max.	
VFM	Forward Voltage Drop, max.	T=25°C IF =300A		1.70	1.90	V
I <sub>RRM</sub>	Repetitive Peak Reverse Current, max.	Tvj =25°C VRD=VRRM Tvj =150°C VRD=VRRM			0.5 5	mA mA

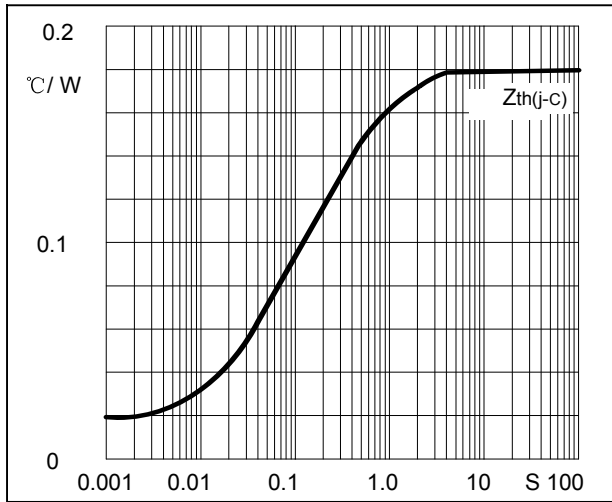
**Performance Curves**



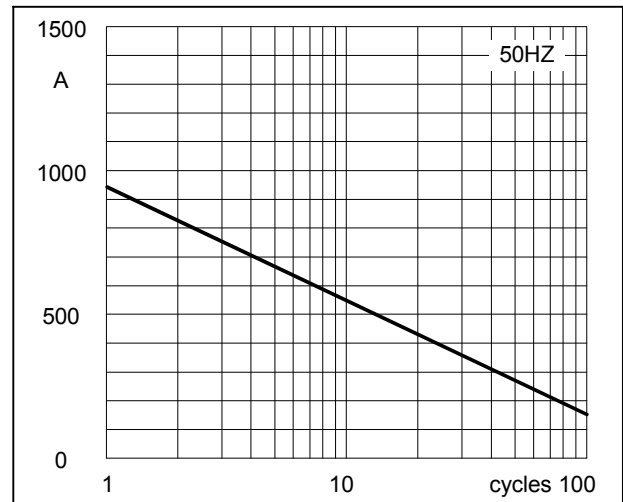
**Fig1. Forward Characteristics**



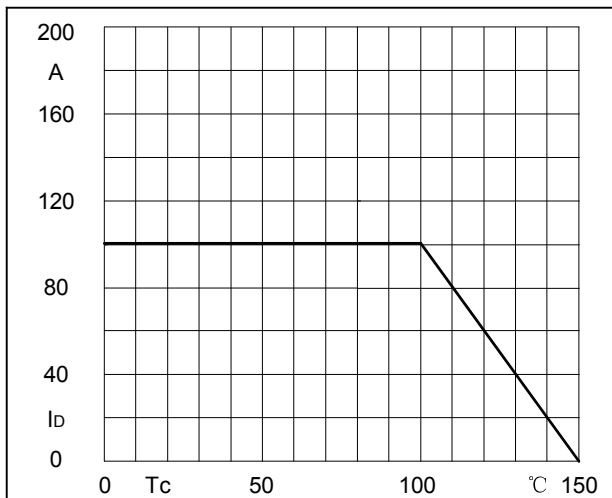
**Fig2. Power dissipation**



**Fig3. Transient thermal impedance**



**Fig4. Max Non-Repetitive Forward Surge Current**



**Fig5. Forward Current Derating Curve**

## Package Outline Information

