

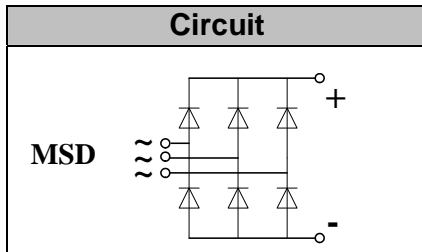


## Glass Passivated Three Phase Rectifier Bridge

**VRRM** 800 to 1800V  
**ID** 160 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
MSD160 – 08	800V	900V
MSD160 – 12	1200V	1300V
MSD160 – 16	1600V	1700V
MSD160 – 18	1800V	1900V

### Maximum Ratings

Symbol	Conditions	Values	Units
ID	Tc=100°C	160	A
IFSM	t=10mS Tvj =45°C	1800	A
i <sup>2</sup> t	t=10mS Tvj =45°C	16200	A <sup>2</sup> s
Visol	a.c.50Hz;r.m.s.;1min	3000	V
Tvj		-40 to 150	°C
Tstg		-40 to 125	°C
Mt	To terminals(M6)	5±15%	Nm
Ms	To heatsink(M6)	5±15%	Nm
Weight	Module	230	g

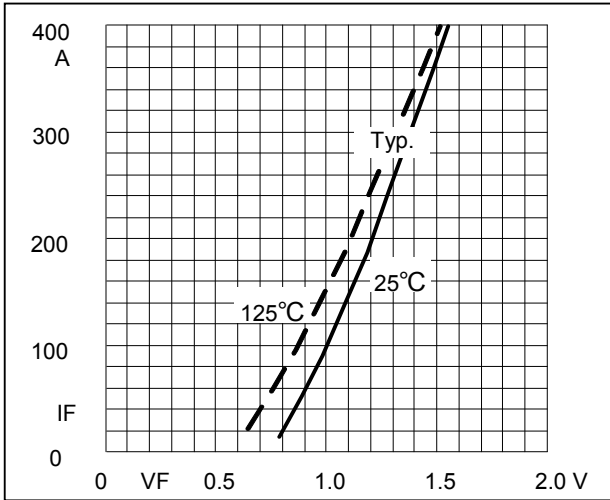
### Thermal Characteristics

Symbol	Conditions	Values	Units
Rth(j-c)	Per diode	0.65	°C/W
Rth(c-s)	Module	0.03	°C/W

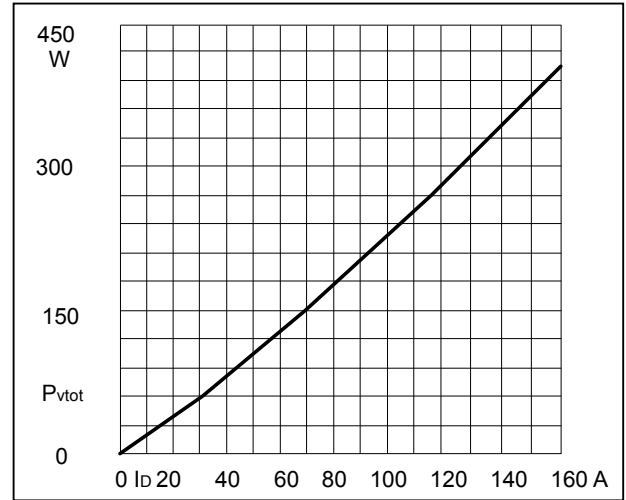
### Electrical Characteristics

Symbol	Conditions	Values	Units
VFM	T=25°C IFM =300A	1.65	V
IRD	Tvj =25°C VRD=VRRM Tvj =150°C VRD=VRRM	≤0.5 ≤6	mA mA

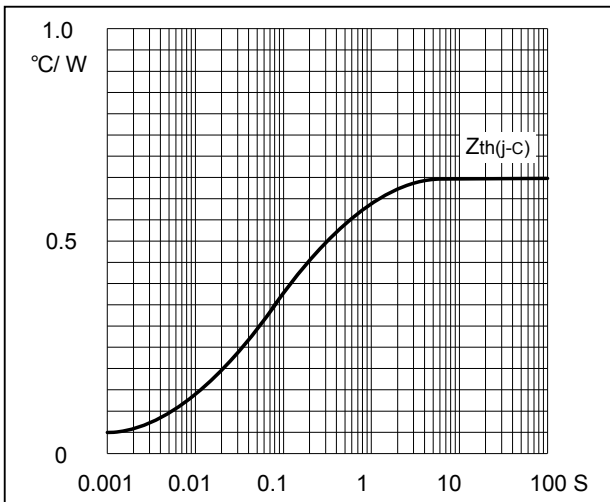
**Performance Curves**



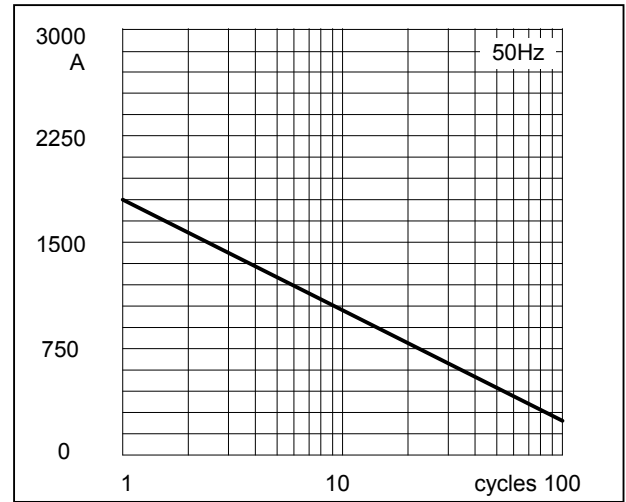
**Fig1. Forward Characteristics**



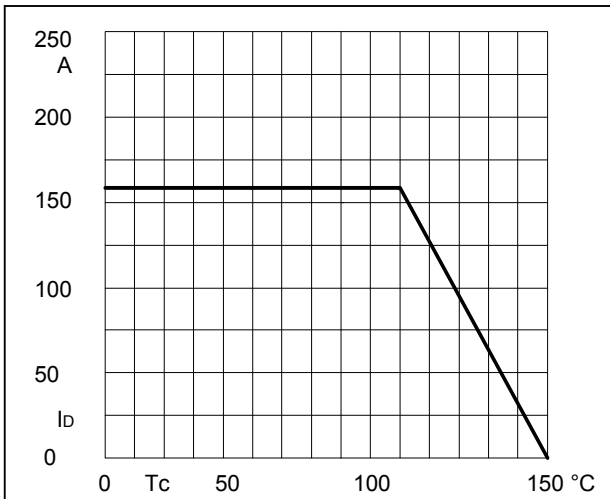
**Fig2. Power dissipation**



**Fig3. Transient thermal impedance**



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



**Fig5. Forward Current Derating Curve**

## Package Outline Information

