



## Glass Passivated Three Phase Rectifier Bridge

**VRRM** 800 to 1800V

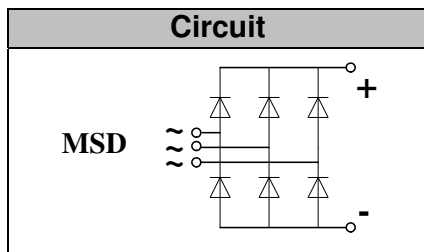
**ID** 75 Amp

### 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
MSD75 – 08	800V	900V
MSD75 – 12	1200V	1300V
MSD75 – 16	1600V	1700V
MSD75 – 18	1800V	1900V

### Maximum Ratings

Symbol	Conditions	Values	Units
ID	T <sub>c</sub> =110°C	75	A
IFSM	T=10mS T <sub>vj</sub> =45°C	750	A
i <sup>2</sup> t	T=10mS T <sub>vj</sub> =45°C	2800	A <sup>2</sup> s
Visol	a.c.50Hz;r.m.s.;1min	3000	V
T <sub>vj</sub>		-40 to 150	°C
T <sub>stg</sub>		-40 to 125	°C
Mt	To terminals(M5)	5±15%	Nm
Ms	To heatsink(M5)	5±15%	Nm
Weight	Module	135	g

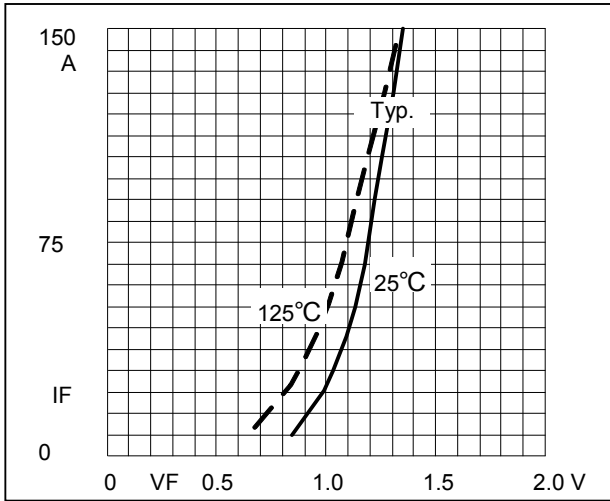
### Thermal Characteristics

Symbol	Conditions	Values	Units
R <sub>th(j-c)</sub>	Per diode	1.1	°C/W
R <sub>th(c-s)</sub>	Module	0.07	°C/W

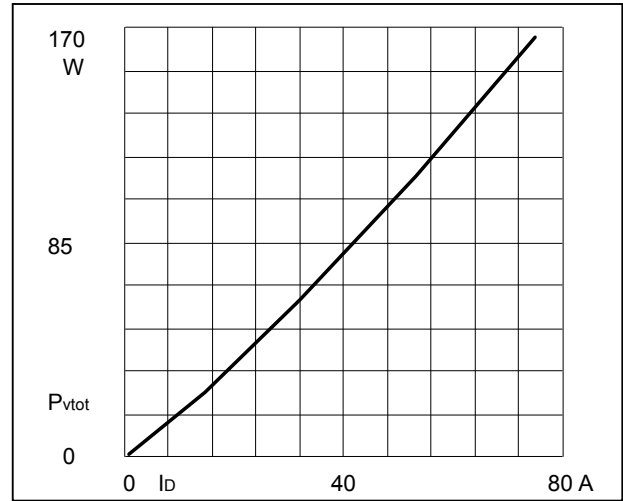
### Electrical Characteristics

Symbol	Conditions	Values	Units
VFM	T=25°C IFM =150A	1.6	V
IRD	T <sub>vj</sub> =25°C VRD=VRRM	≤0.3	mA
	T <sub>vj</sub> =150°C VRD=VRRM	≤5	mA

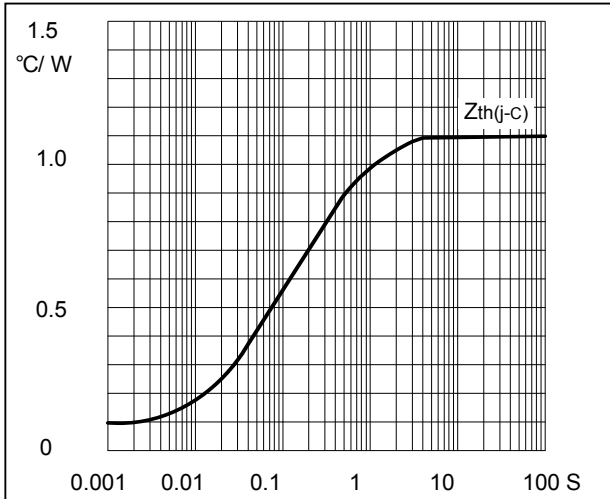
**Performance Curves**



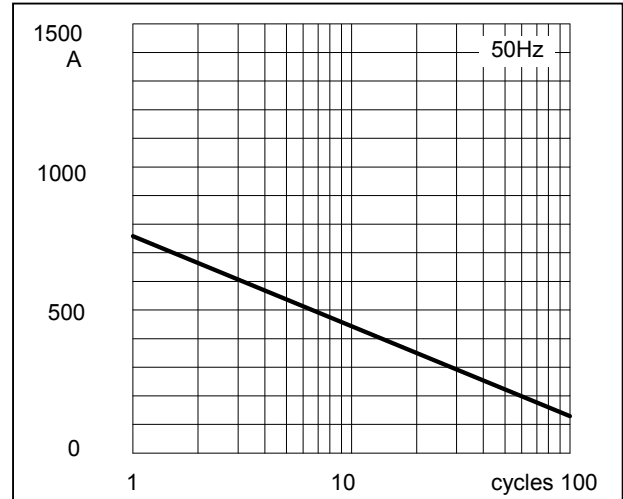
**Fig1. Forward Characteristics**



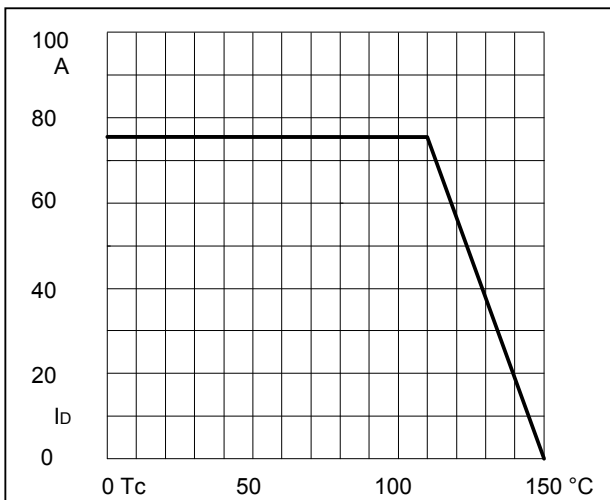
**Fig2. Power dissipation**



**Fig3. Transient thermal impedance**



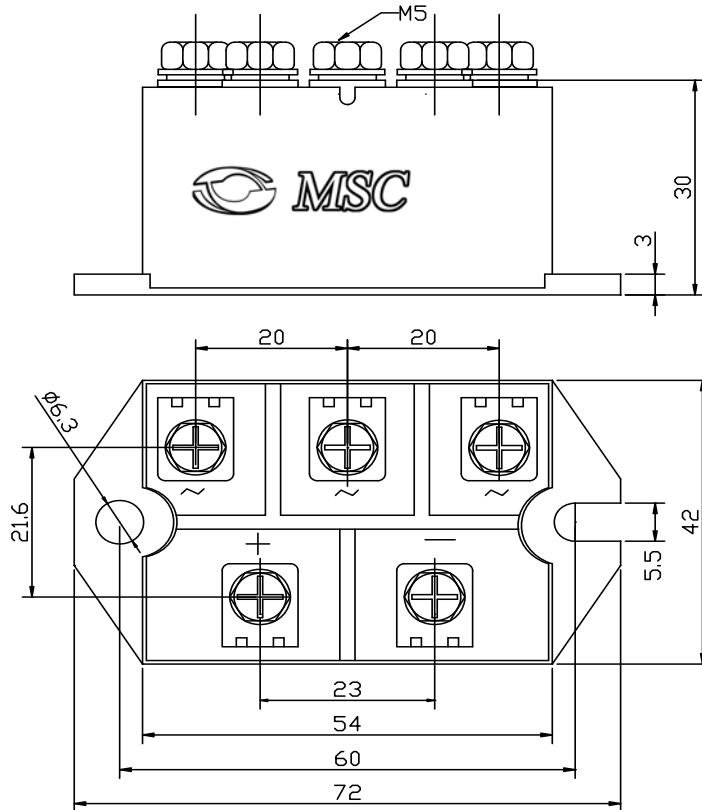
**Fig4. Max Non-Repetitive Forward Surge Current**



**Fig5. Forward Current Derating Curve**

## Package Outline Information

CASE-M2



Dimensions in mm