

## Glass Passivated Three Phase Rectifier Bridge

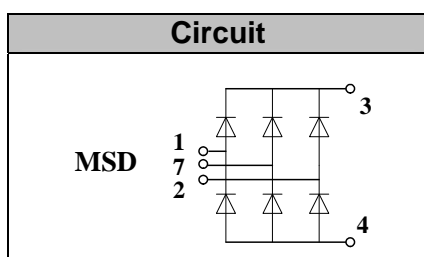
**V<sub>RRM</sub>** 800 to 1800V  
**ID** 30 Amp

### 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	V <sub>RRM</sub>	V <sub>RSM</sub>
MSD30-08	800V	900V
MSD30-12	1200V	1300V
MSD30-16	1600V	1700V
MSD30-18	1800V	1900V

### Maximum Ratings

Symbol	Conditions	Values	Units
ID	T <sub>c</sub> =85°C	30	A
IFSM	t=10mS Tvj =45°C	300	A
i <sup>2</sup> t	t=10mS Tvj =45°C	450	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
Ms	To heatsink(M5)	3±5%	Nm
Weight	Module	78	g

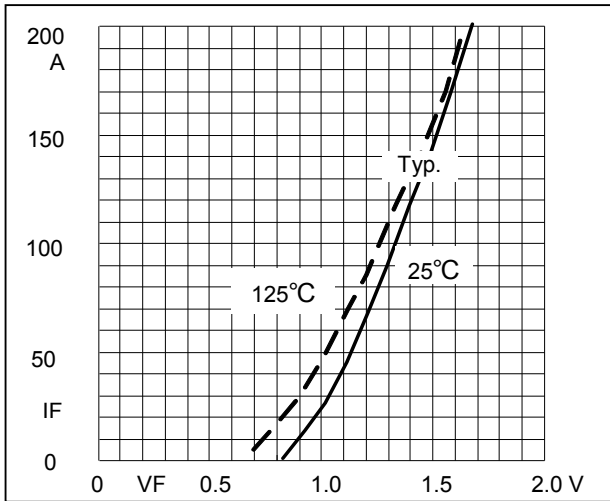
### Thermal Characteristics

Symbol	Conditions	Values	Units
Rth(j-c)	Per diode	1.5	°C/W
Rth(c-s)	Module	0.2	°C/W

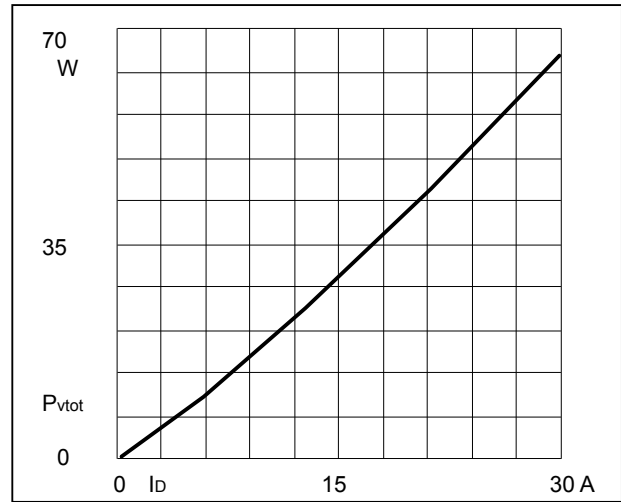
### Electrical Characteristics

Symbol	Conditions	Values	Units
VFM	T=25°C IFM =100A	1.6	V
IRD	Tvj =25°C VRD=VRRM	≤0.2	mA
	Tvj =150°C VRD=VRRM	≤3	mA

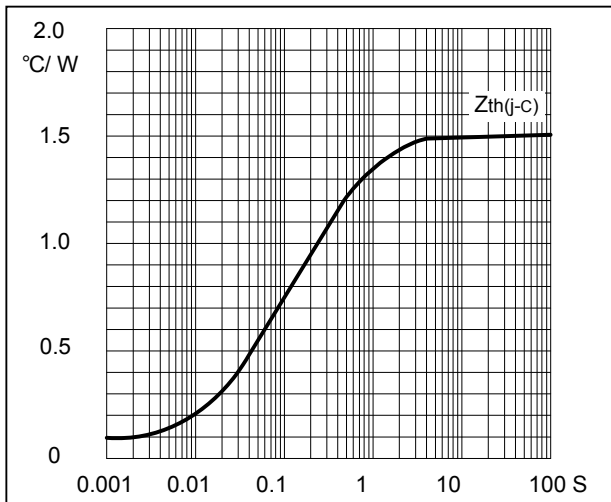
**Performance Curves**



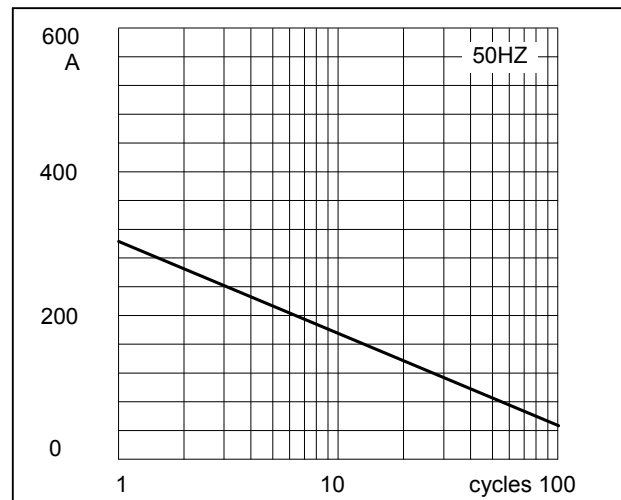
**Fig1. Forward Characteristics**



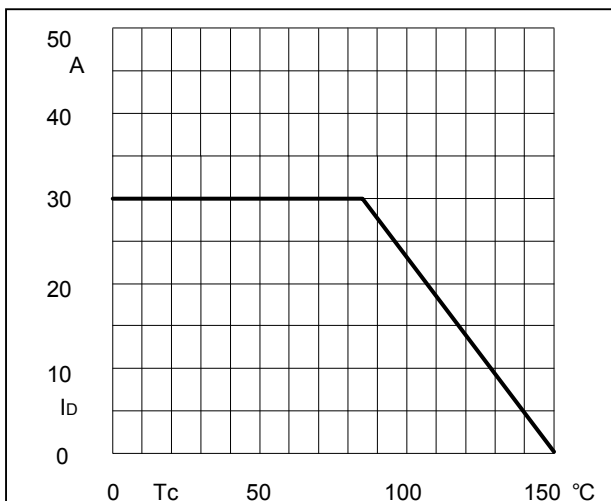
**Fig2. Power dissipation**



**Fig3. Transient thermal impedance**



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



**Fig5. Forward Current Derating Curve**

## Package Outline Information

