

## Glass Passivated Three Phase Rectifier Bridge

**Reverse Voltage - 1200 to 1800 Volts**  
**Forward Current - 150 Amperes**

### Features

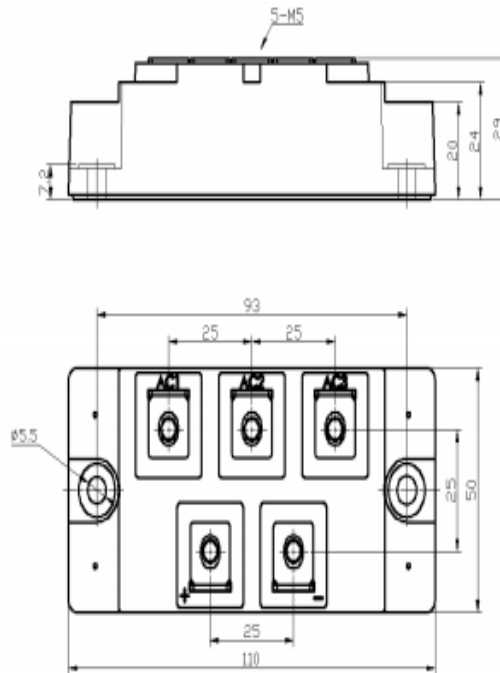
- Three phase bridge rectifier
- Blocking voltage: 1200 to 1800V
- Heat transfer through aluminum oxide DBC
- Ceramic isolated metal baseplate
- Glass passivated chip
- UL recognized applied for file no. E304417

### Applications

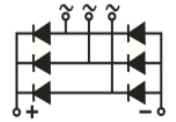
- Three phase rectifiers for power supplies
- Rectifiers for DC motor field supplies
- Battery charger rectifiers
- Input rectifiers for variable frequency drives

Note: Products with logo  or  are made by HY Electronic (Cayman) Limited.

### M10J



RoHS  
COMPLIANT



Package Outline Dimensions in Inches (Millimeters)

## Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

TYPE	VRRM	VRSM
MDS150J-12	1200V	1300V
MDS150J-16	1600V	1700V
MDS150J-18	1800V	1900V

Characteristics	Symbol	Values	Unit		
Three phase, full wave Tc=100°C	ID	150	A		
t=10mS Tvj =45°C	IFSM	1800	A		
t=10mS Tvj =45°C	I <sup>2</sup> t	16200	A <sup>2</sup> s		
a.c.50HZ;r.m.s.;1min	Visol	3000	V		
	Tvj	-40 to + 150	°C		
	Tstg	-40 to + 125			
To terminals(M5)	Mt	3±15%	Nm		
To heatsink(M5)	Ms	3±15%	Nm		
Module (Approximately)	Weight	300	g		
Module	Rth(j-c)	0.12	°C/W		
Module	Rth(c-s)	0.03	°C/W		
T=25°C IF=150A	VFM	Min	Typ	Max	
		/	1.40	1.65	V
Tvj =25°C,VRD=VRRM	IRD	/	/	16	uA
				8	mA

MDS150J-\*-B-92-00

Rev. 1, 17-Apr-2020

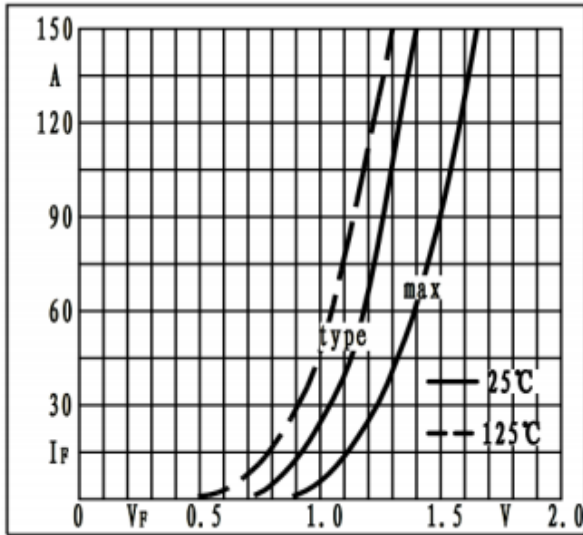


Fig1. Forward characteristics

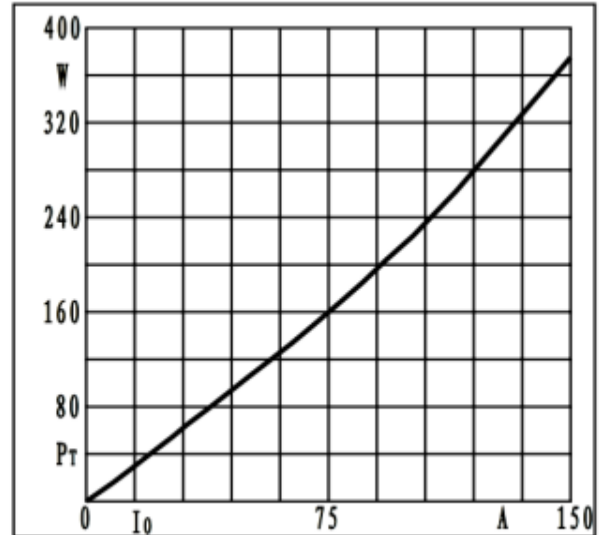


Fig2. Power dissipation

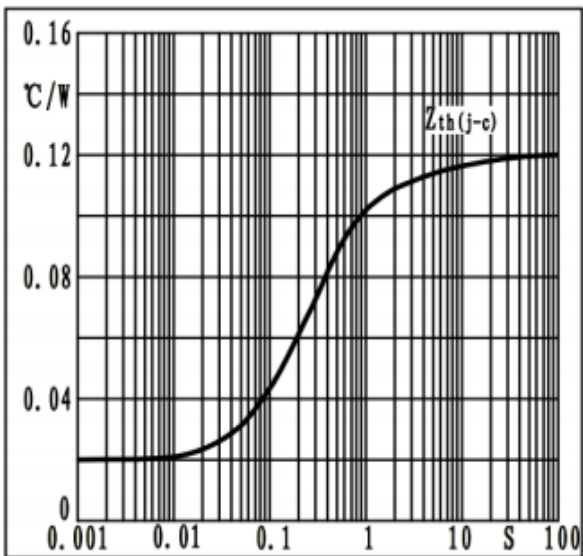


Fig3. Transient thermal impedance

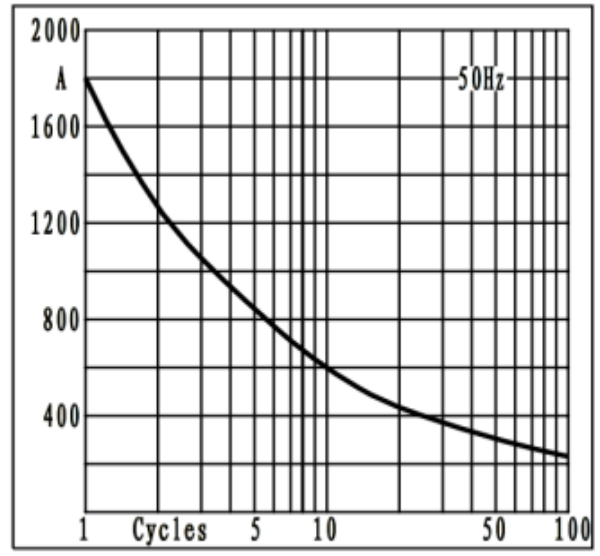


Fig4. Max non-repetitive forward surge current

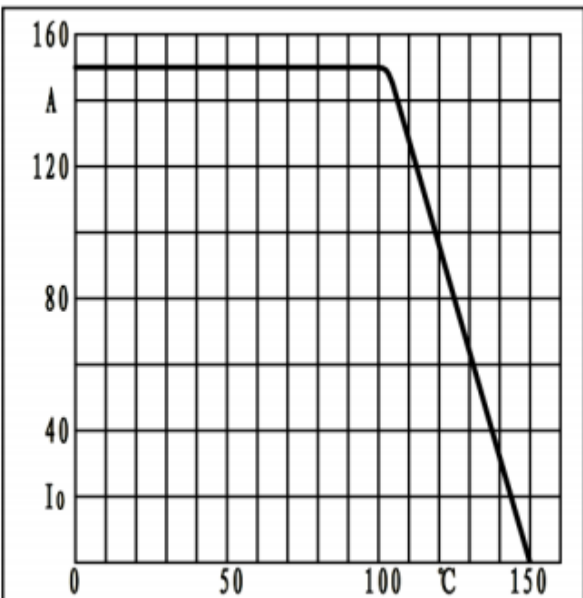


Fig5. Forward current derating curve

The curve above is for reference only.



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