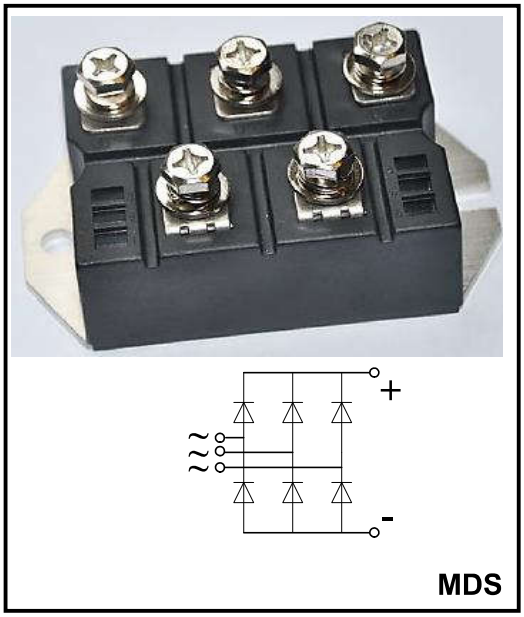
Glass Passivated Three Phase Rectifier Bridge

V_{RRM} = 800 V - 1800 V

I_D = 200 A



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

Parameter	Symbols	MDS200-08	MDS200-12	MDS200-16	MDS200-18	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	800V	1200V	1600V	1800V	V
Maximum RMS voltage	V_{RMS}	900V	1300V	1700V	1900V	V

Maximum Ratings

Symbol	Conditions	Values	Units
I_D	Tc=100℃	200	A
I_{FSM}	t=10mS Tvj =45℃	2240	A
i^2t	t=10mS Tvj =45℃	25000	A^2s
V_{isol}	a.c.50Hz;r.m.s.;1min	3000	V
T_{vj}		-40 to 150	℃
T_{stg}		-40 to 125	℃
Mt	To terminals(M6)	5±15%	Nm
Ms	To heatsink(M6)	5±15%	Nm
Weight	Module	230	g

Thermal Characteristics

Symbol	Conditions	Values	Units
$R_{th(j-c)}$	Per diode	0.45	℃/W
$R_{th(c-s)}$	Module	0.025	℃/W

Electrical Characteristics

Symbol	Conditions	Values	Units
V_{FM}	T=25℃ I_{FM} =300A	1.55	V
I_{RD}	T_{vj} =25℃ V_{RD}=V_{RRM} T_{vj} =150℃ V_{RD}=V_{RRM}	≤0.3 ≤5	mA mA

Performance Curves

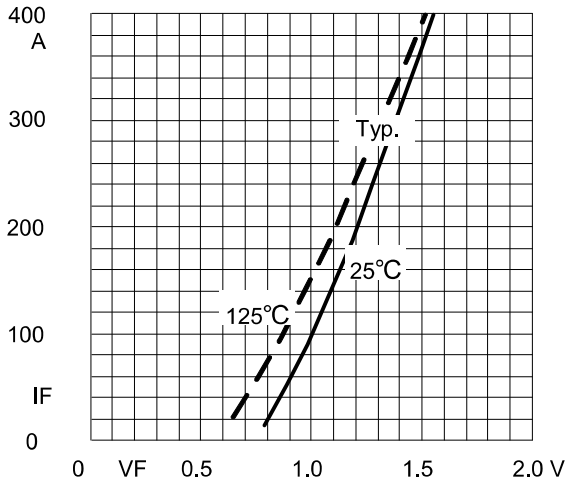


Fig1. Forward Characteristics

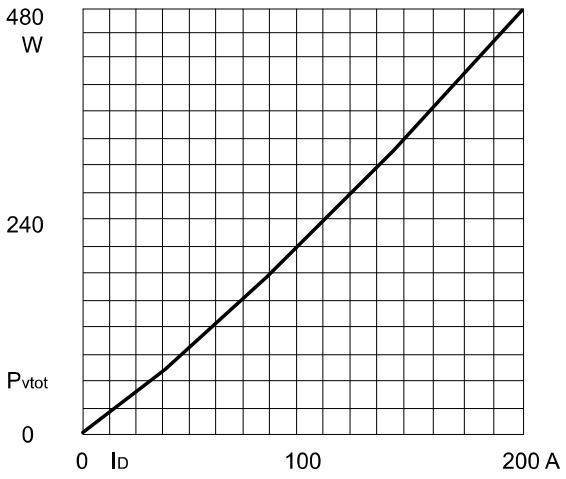


Fig2. Power dissipation

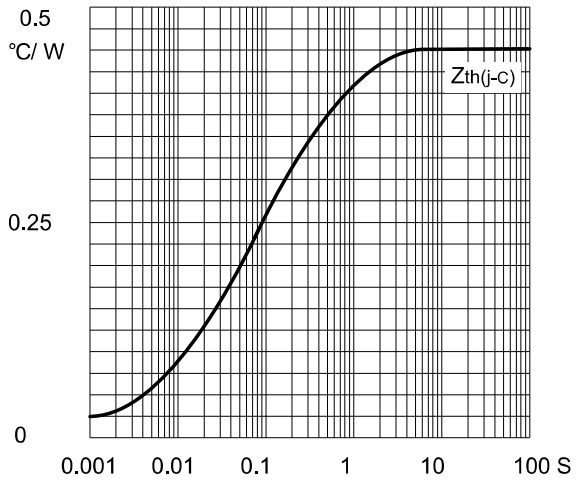


Fig3. Transient thermal impedance

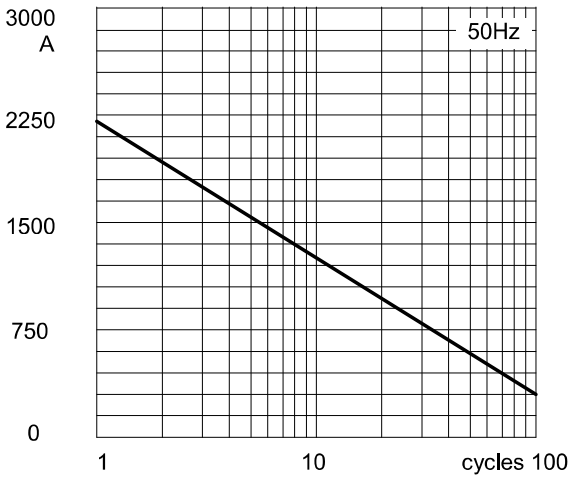


Fig4. Max Non-Repetitive Forward Surge Current

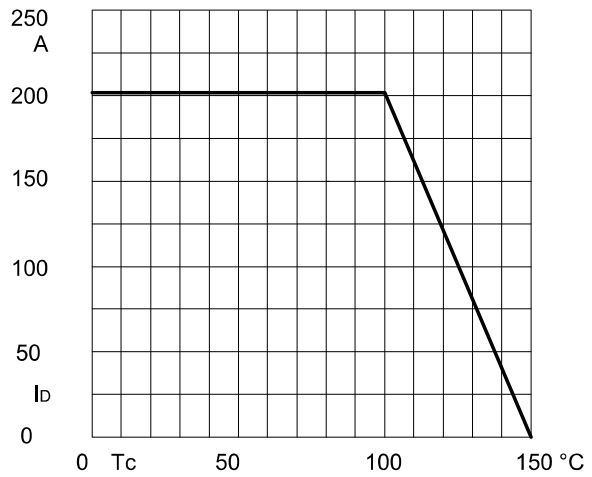


Fig5.Forward Current Derating Curve

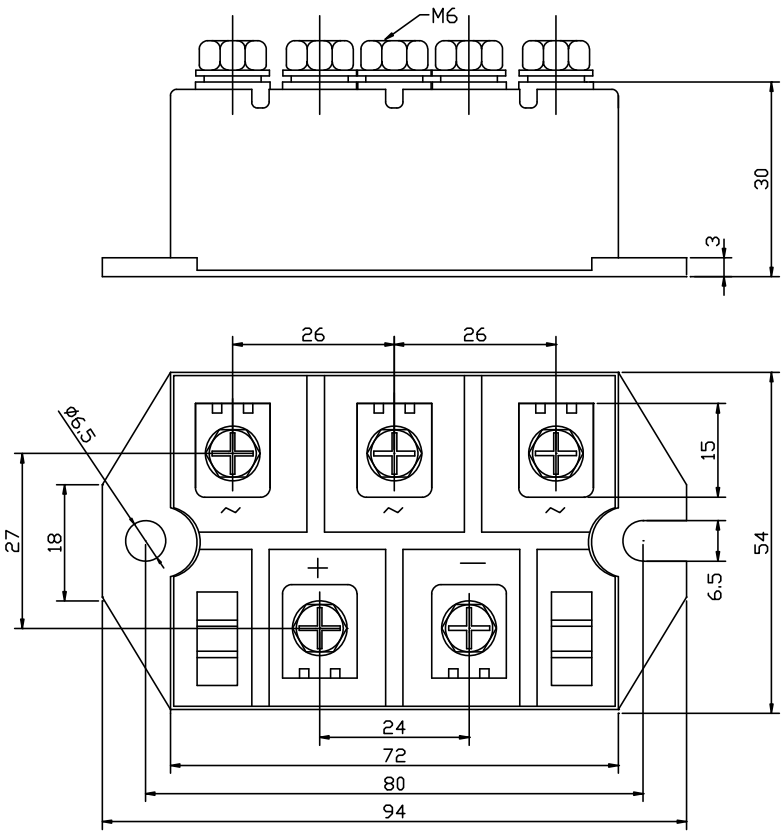
Ordering information

Model name	Package	Unit Weight	Base Quantity
MDSXXX-XX	MDS	-	6pcs/ Box

Package Dimensions

MDS

unit: **Millimeter**



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