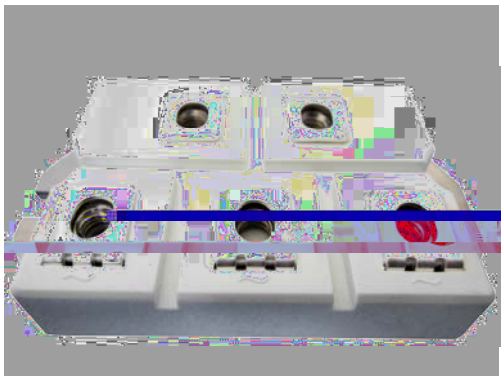
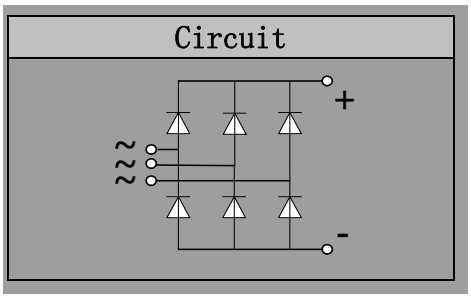
MD200S-M5

RoHS COMPLIANT



Glass Passivated Three Phase Rectifier Bridge

VRRM 800 to 1800V
ID 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 DBC ceramic isolated metal baseplate
- Glass passivated chip
- UL recognized applied for file no. E360040

Module Type

TYPE	VRRM	VRSM
MD200S08M5	800V	900V
MD200S12M5	1200V	1300V
MD200S16M5	1600V	1700V
MD200S18M5	1800V	1900V

Maximum Ratings

Symbol	Conditions	Values	Units
ID	Three phase, full wave Tc=100℃	200	A
IFSM	t=10mS Tvj =45℃	2240	A
i^2t	t=10mS Tvj =45℃	25000	A^2s
Visol	a.c.50HZ;r.m.s.;1min	3000	V
Tvj		-40 to +150	℃
Tstg		-40 to +125	℃
Mt	To terminals(M6)	5±15%	Nm
Ms	To heatsink(M6)	5±15%	Nm
Weight	Module (Approximately)	194	g

Thermal Characteristics

Symbol	Conditions	Values	Units
Rth(j-c)	Per diode	0.45	℃/W
Rth(c-s)	Module (Approximately)	0.025	℃/W

Electrical Characteristics

Symbol	Conditions	Values			Units
		Min.	Typ.	Max.	
VFM	T=25℃ IF =300A	—	1.45	1.70	V
IRD	Tvj=25℃ VRD=VRRM Tvj=150℃ VRD=VRRM	—	—	0.5 6	mA mA

Performance Curves

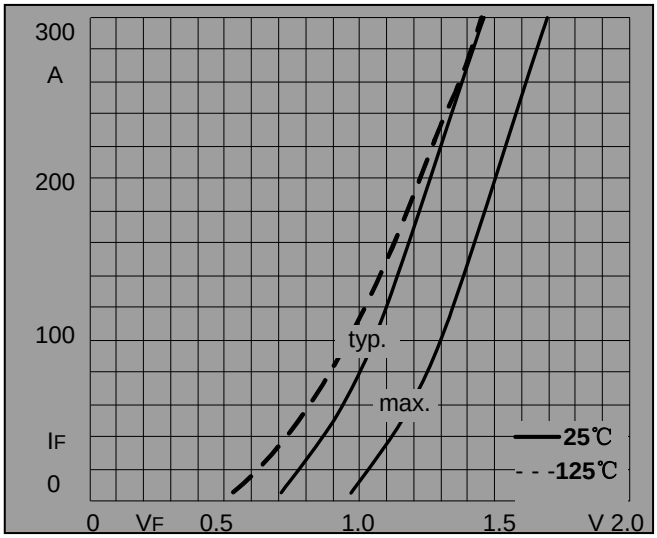


Fig1. Forward Characteristics

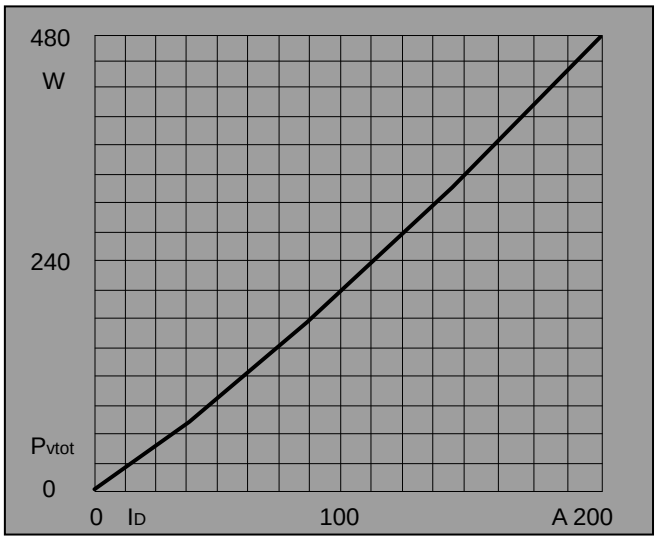


Fig2. Power dissipation

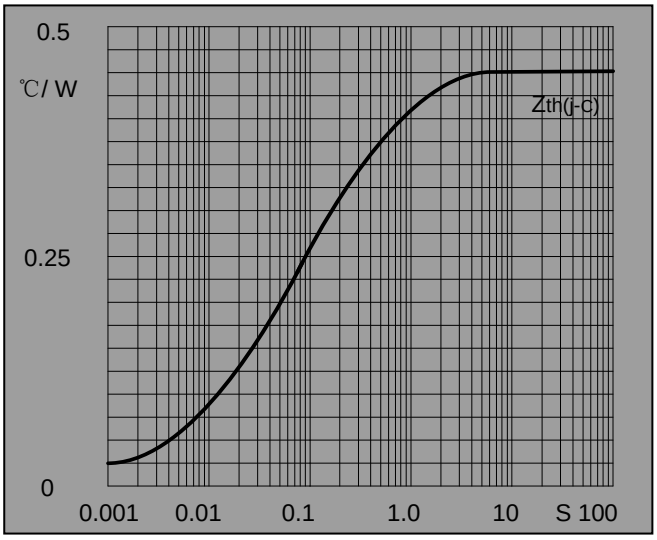


Fig3. Transient thermal impedance

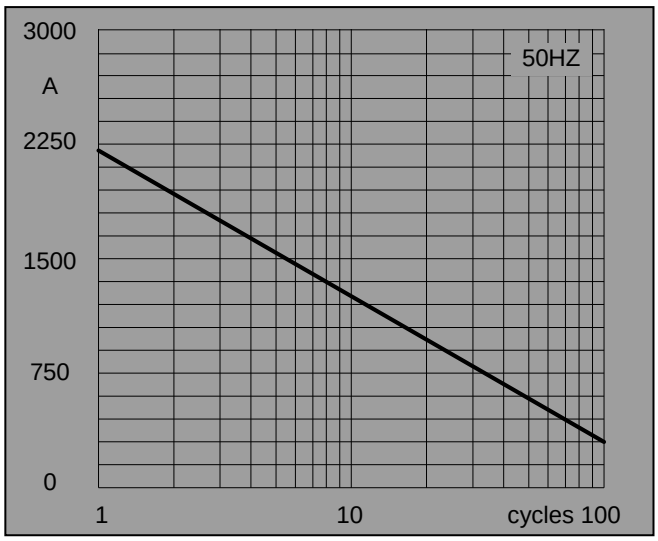


Fig4. Max Non-Repetitive Forward Surge Current

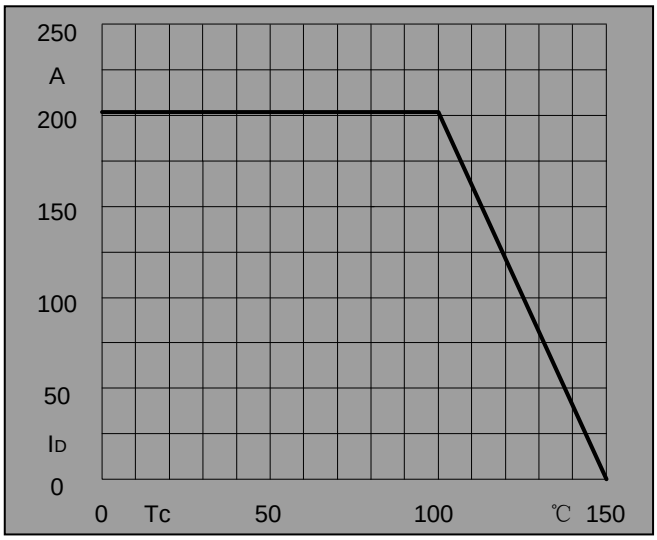
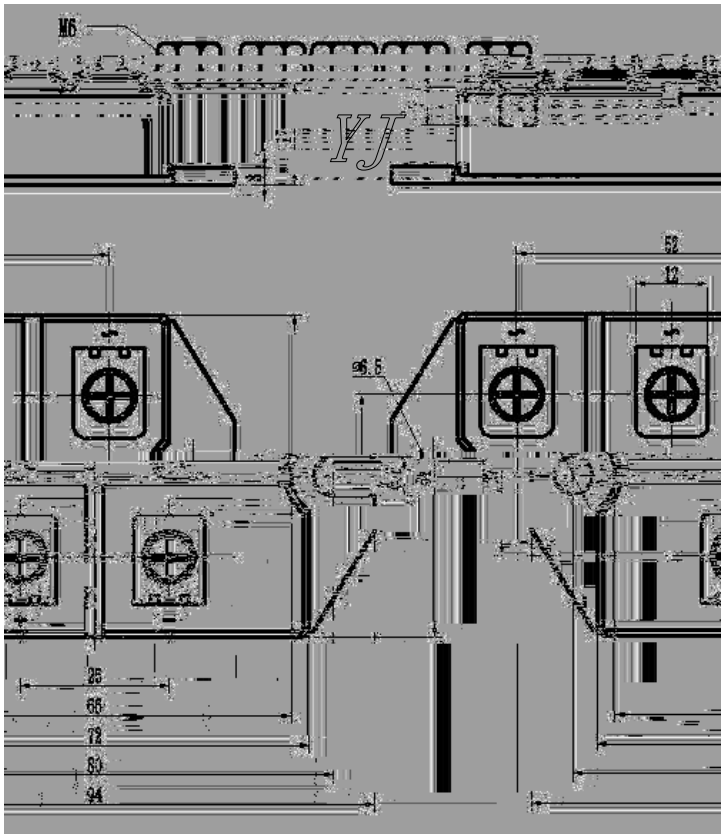


Fig5.Forward Current Derating Curve

Package Outline Information

CASE：M5



Dimensions in mm