

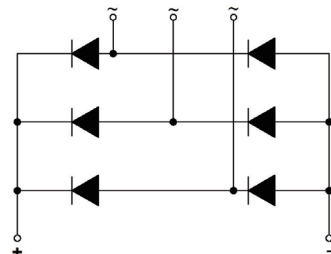
MDS200-...FS Glass Passivated Three Phase Rectifier Bridge

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: 1200 to 1800V
- ▶ Heat transfer through aluminum oxide DBC ceramic isolated metal baseplate
- ▶ Glass passivated chip



Module Type

TYPE	VRRM	VRSM
MDS200-12FS	1200V	1300V
MDS200-16FS	1600V	1700V
MDS200-18FS	1800V	1900V

Maximum Ratings

Symbol	Conditions	Values	Units
ID	Three phase, full wave Tc=100°C	200	A
IFSM	t=10mS Tvj =45°C	2240	A
i ² t	t=10mS Tvj =45°C	25000	A ² s
Visol	a.c.50HZ;r.m.s.;1min	3000	V
Tvj		-40 to +150	°C
Tstg		-40 to +125	°C
Mt	To terminals(M6)	5±15%	Nm
Ms	To heatsink(M6)	5±15%	Nm
Weight	Module (Approximately)	220	g

Thermal Characteristics

Symbol	Conditions	Values	Units
Rth(j-c)	Module	0.10	°C/W
Rth(c-s)	Module	0.025	°C/W

Electrical Characteristics

Symbol	Conditions	Values			Units
		Min.	Typ.	Max.	
VFM	T=25°C IF =200A	—	1.45	1.70	V
IRD	Tvj=25°C VRD=VRRM	—	—	16	uA
	Tvj=150°C VRD=VRRM	—	—	8	mA

MDS200-...FS Glass Passivated Three Phase Rectifier Bridge

Performance Curves

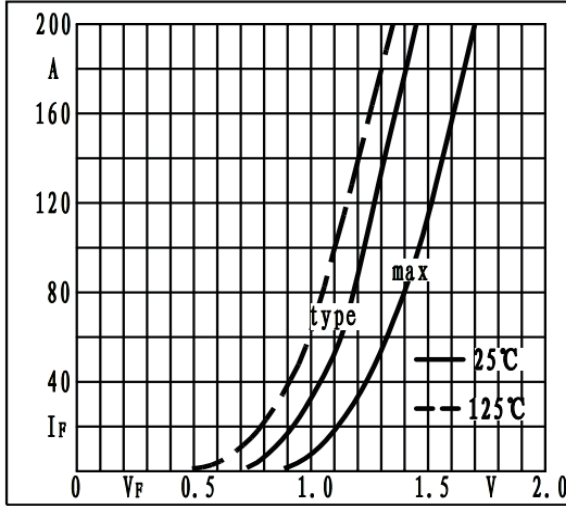


Fig1. Forward characteristics

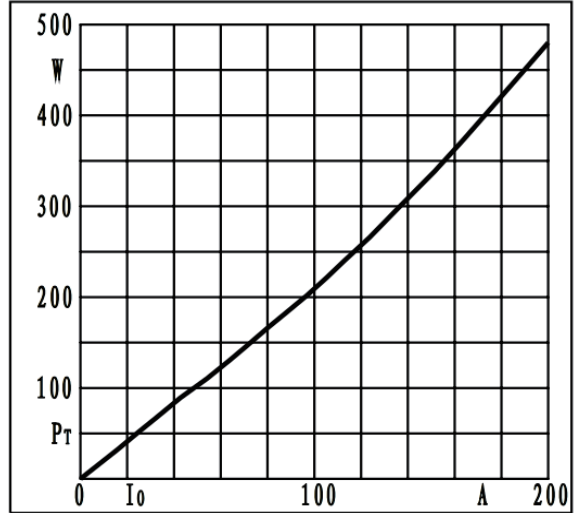


Fig2. Power dissipation

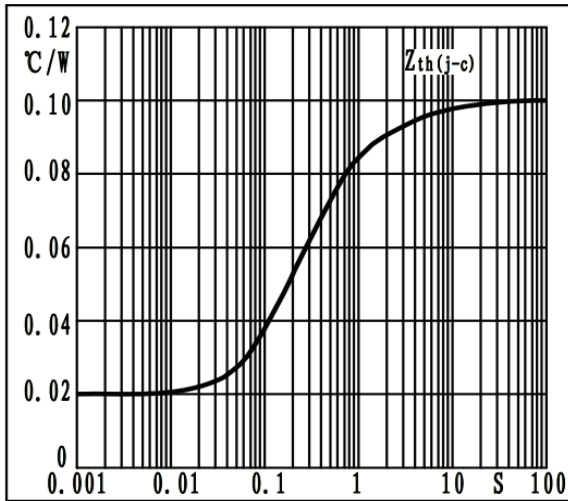


Fig3. Transient thermal impedance

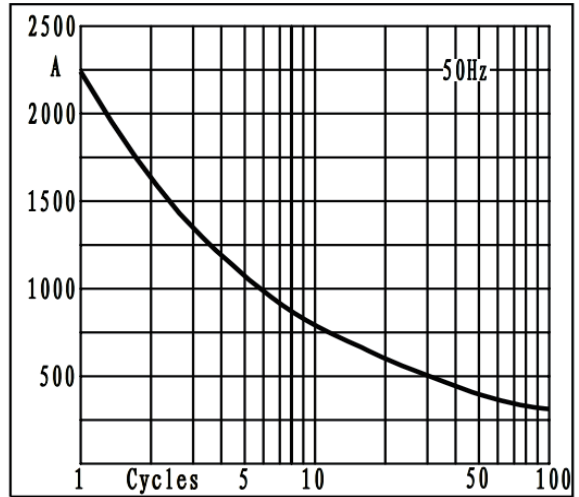


Fig4. Max non-repetitive forward surge current

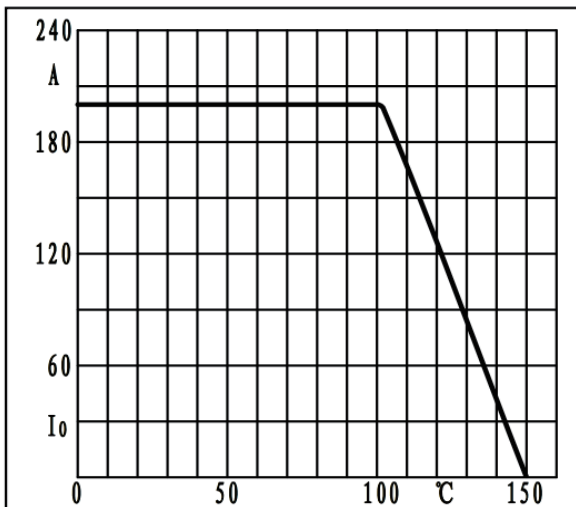
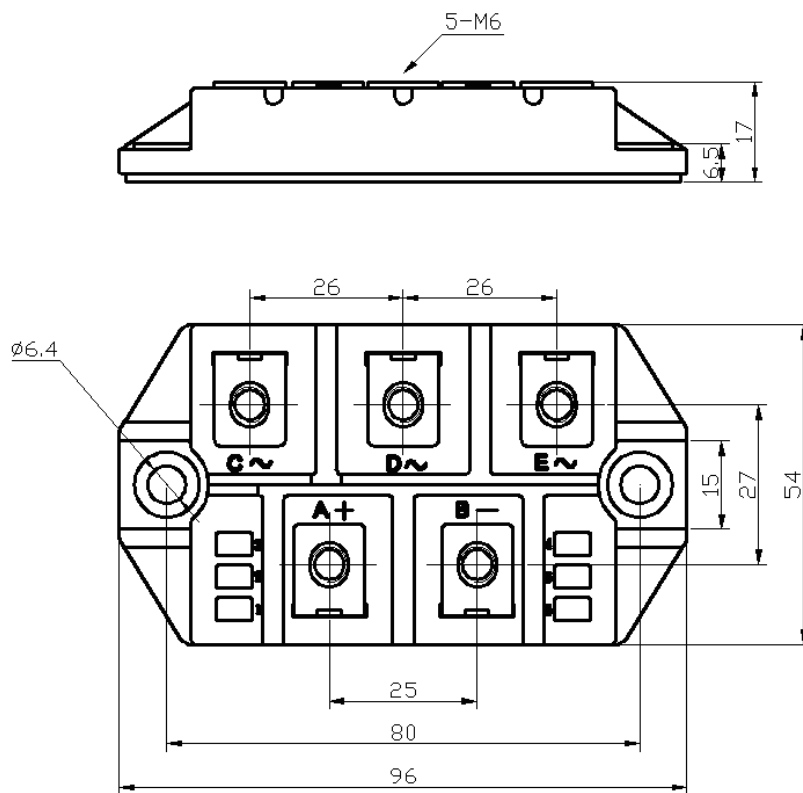


Fig5. Forward current derating curve

MDS200-...FS Glass Passivated Three Phase Rectifier Bridge

Package Outline Information



Dimensions in mm