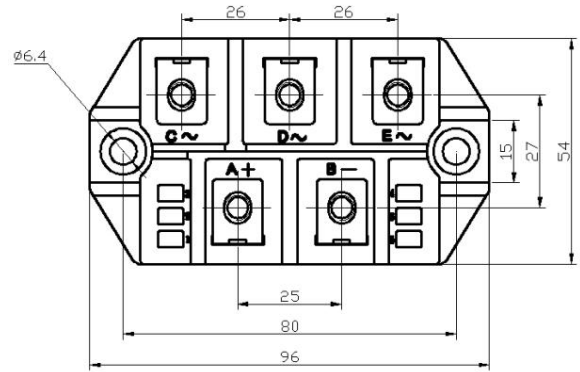
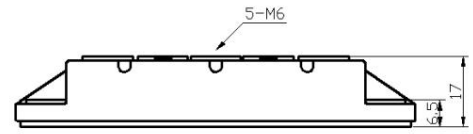
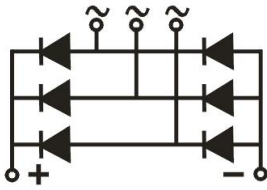


MDS150P

Glass Passivated Three Phase Rectifier Bridge



Dimensions in mm

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
- UL recognized applied for file no. E304417

Module Type

TYPE	VRRM	VRSM
MDS150P-12	1200V	1300V
MDS150P-16	1600V	1700V
MDS150P-18	1800V	1900V

Maximum Ratings

Symbol	Conditions	Values	Units
ID	Three phase, full wave Tc=100°C	150	A
IFSM	t=10mS Tvj =45°C	1800	A
i ² t	t=10mS Tvj =45°C	16200	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	0.12	°C/W
Rth(c-s)	Module	0.03	°C/W

Electrical Characteristics

Symbol	Conditions	Values			Units
		Min.	Typ.	Max.	
V _{FM}	T=25°C I _F =150A	—	1.40	1.65	V
I _{RD}	T _{vj} =25°C V _{RD} =V _{RRM}	—	—	16	µA
	T _{vj} =150°C V _{RD} =V _{RRM}	—	—	8	mA

MDS150P

Performance Curves

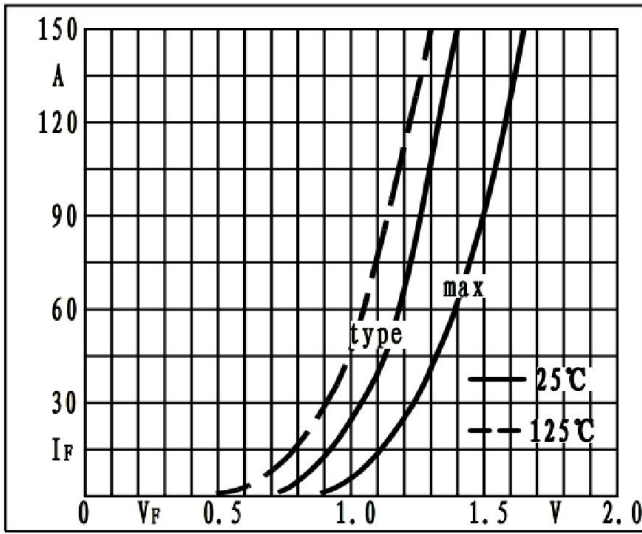


Fig1. Forward characteristics

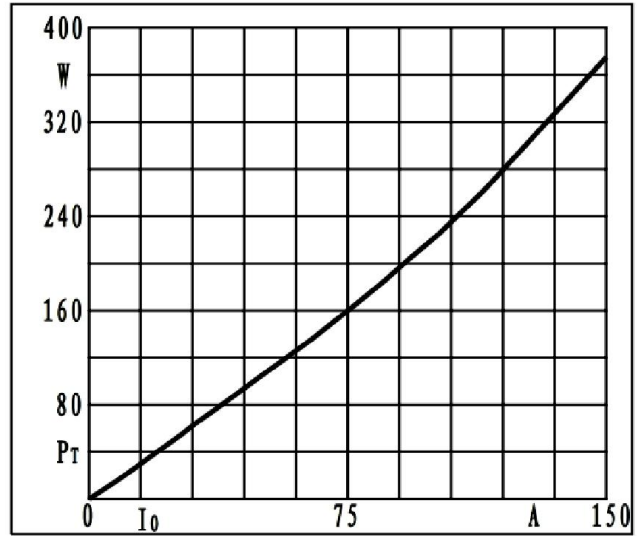


Fig2. Power dissipation

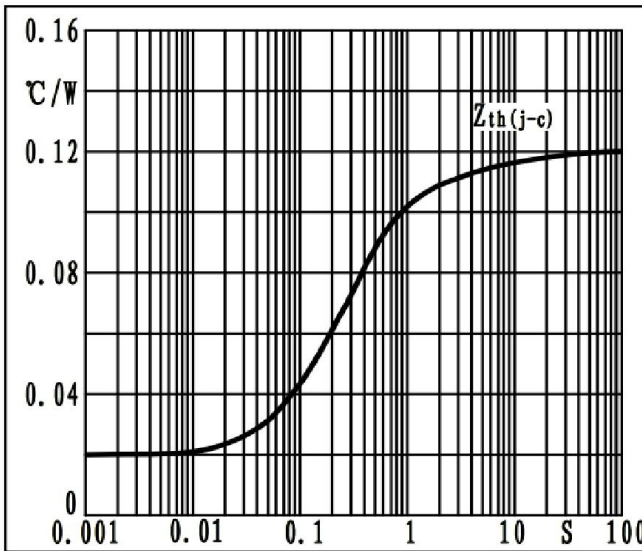


Fig3. Transient thermal impedance

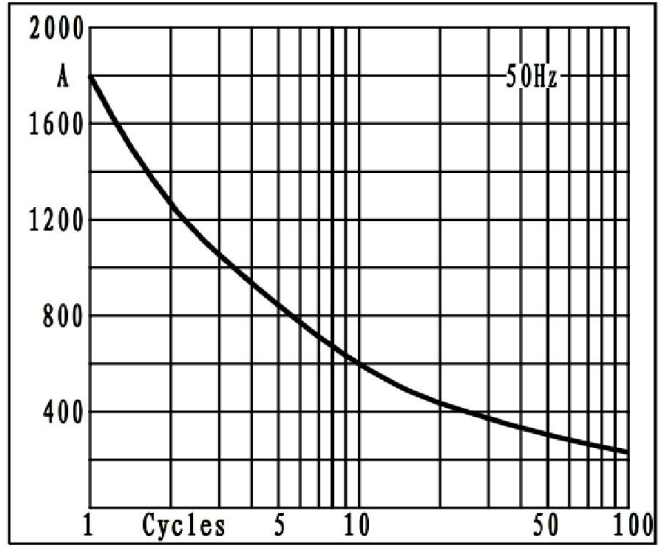


Fig4. Max non-repetitive forward surge current

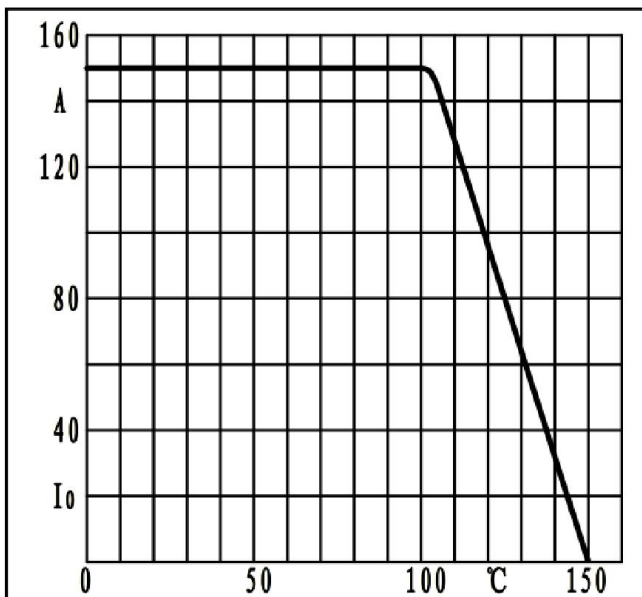


Fig5. Forward current derating curve