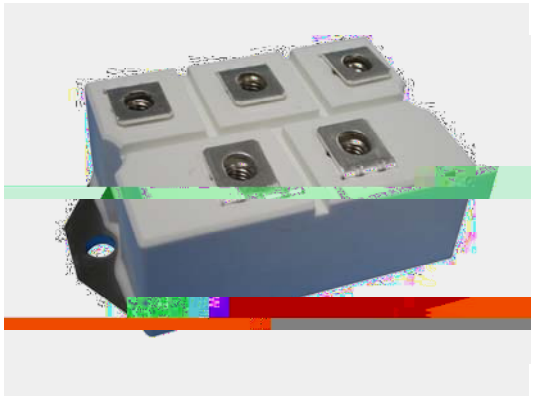
MD250S-M3

RoHS COMPLIANT



Glass Passivated Three Phase Rectifier Bridge

VRRM 800 to 1800V
ID 250 A

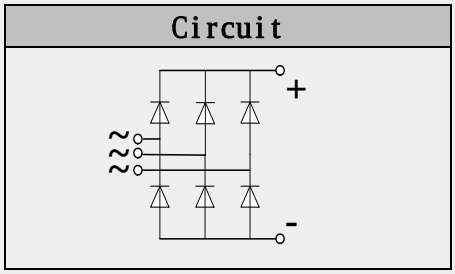
Applications

- 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

Circuit



Module Type

TYPE	VRRM	VRSM
MD250S08M3	800V	900V
MD250S12M3	1200V	1300V
MD250S16M3	1600V	1700V
MD250S18M3	1800V	1900V

Maximum Ratings

Symbol	Conditions	Values	Units
ID	Three phase, full wave Tc=100	250	A
IFSM	t=10mS Tvj =45	2500	A
i^2t	t=10mS Tvj =45	31250	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)	230	g

Thermal Characteristics

Symbol	Conditions	Values	Units
Rth(j-c)	Per diode	0.36	/W
Rth(c-s)	Module (Approximately)	0.02	/W

Electrical Characteristics

Symbol	Conditions	Values			Units
		Min.	Typ.	Max.	
VFM	T=25 IF =300A		1.35	1.6	V
IRD	Tvj=25 VRD=VRRM Tvj=150 VRD=VRRM			0.5 6	mA mA

Performance Curves

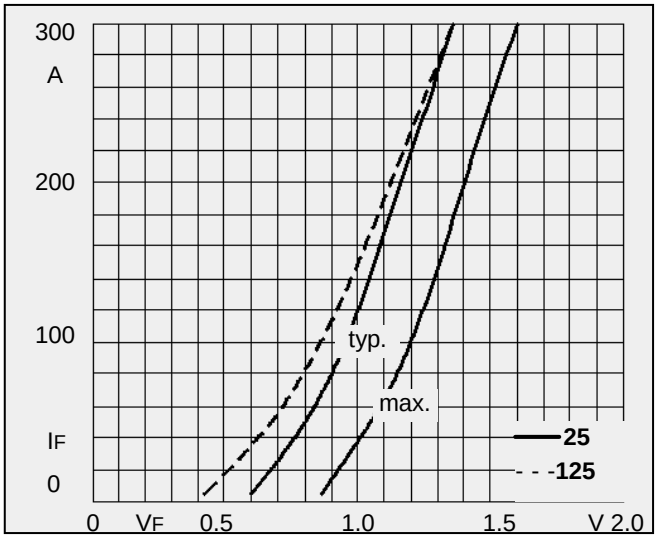


Fig1. Forward Characteristics

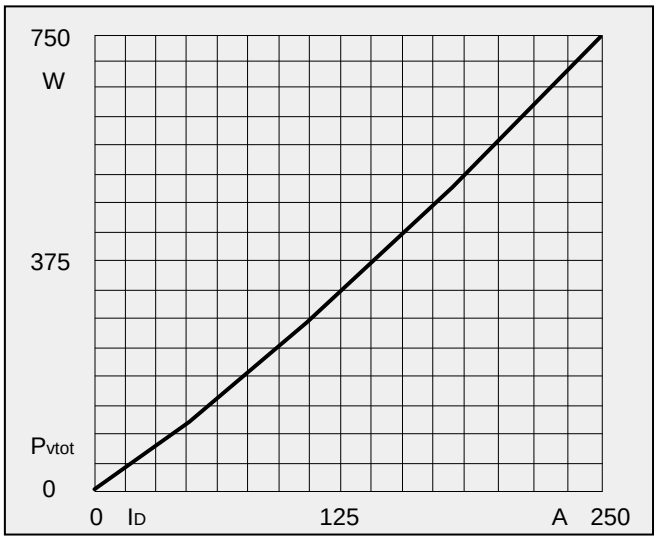


Fig2. Power dissipation

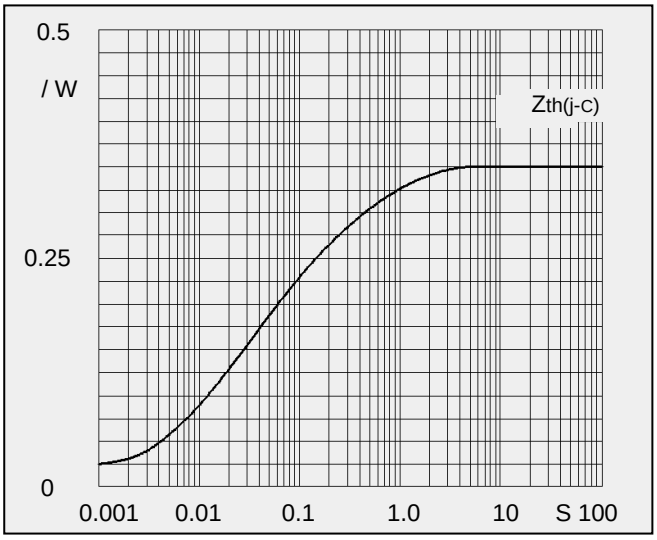


Fig3. Transient thermal impedance

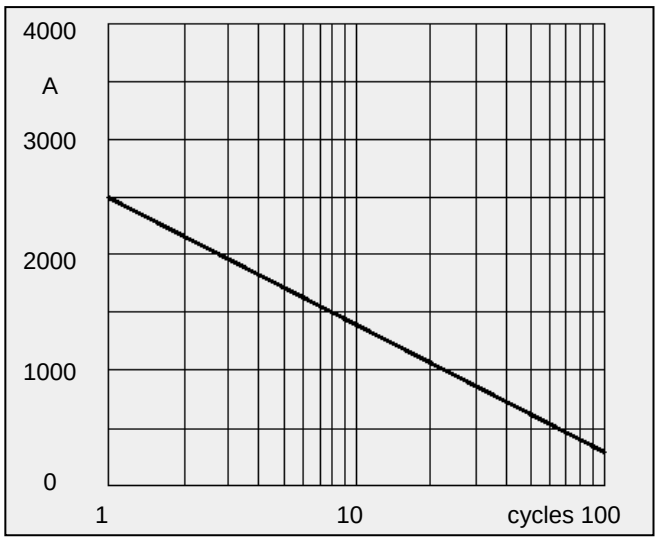


Fig4. Max Non-Repetitive Forward Surge Current

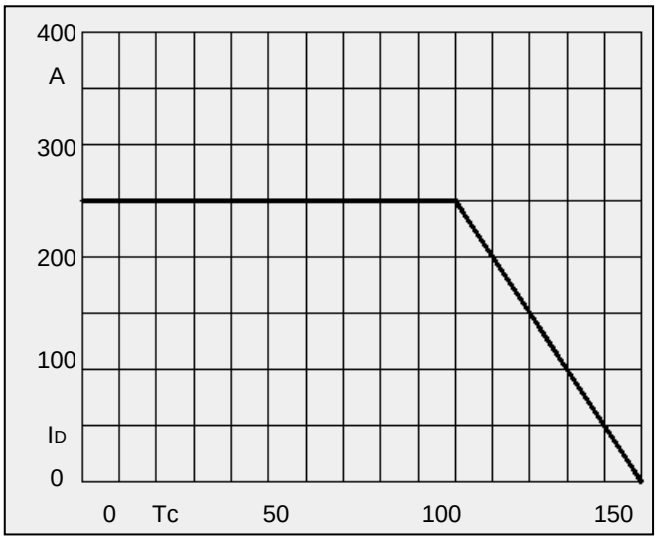
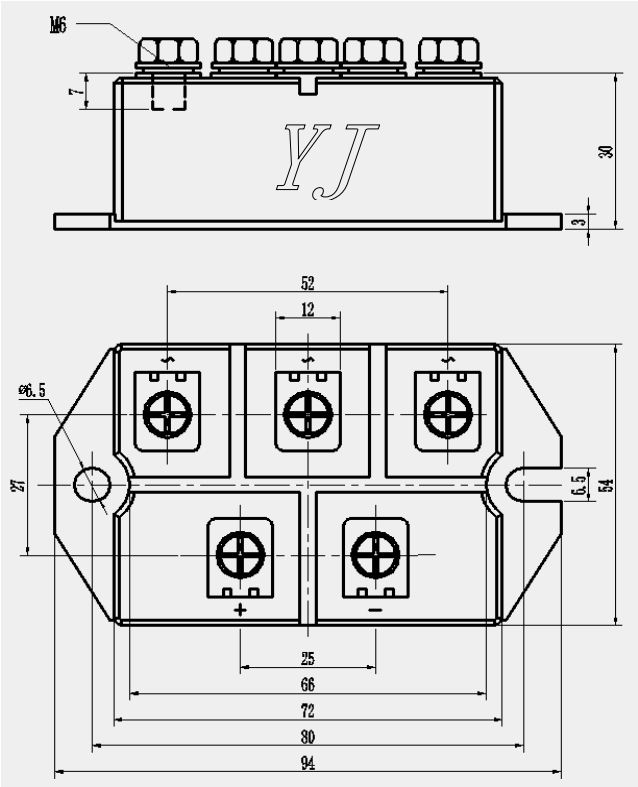


Fig5.Forward Current Derating Curve

Package Outline Information

CASE M3



Dimensions in mm