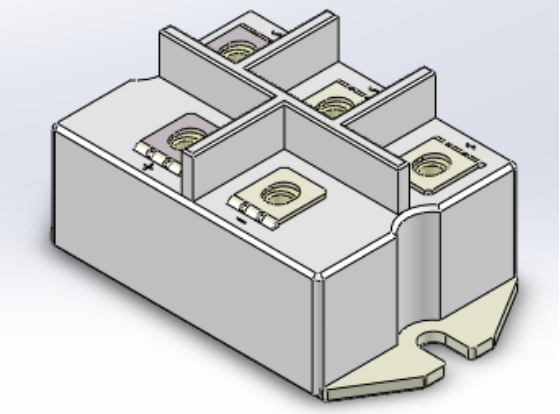


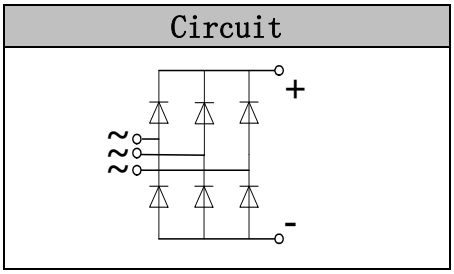
Glass Passivated Three Phase Rectifier Bridge

V_{RRM} 800 to 1800V
I_D 250 A

Applications

- Three phase rectifiers for power supplies
- Rectifiers for DC motor field supplies
- Battery charger rectifiers
- Input rectifiers for variable frequency drives

Circuit



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	V_{RRM}	V_{RSM}
MD250S08NM3	800V	900V
MD250S12NM3	1200V	1300V
MD250S16NM3	1600V	1700V
MD250S18NM3	1800V	1900V

Maximum Ratings

Symbol	Conditions	Values	Units
I_D	Three phase, full wave Tc=100℃	250	A
I_{FSM}	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.	

Performance Curves

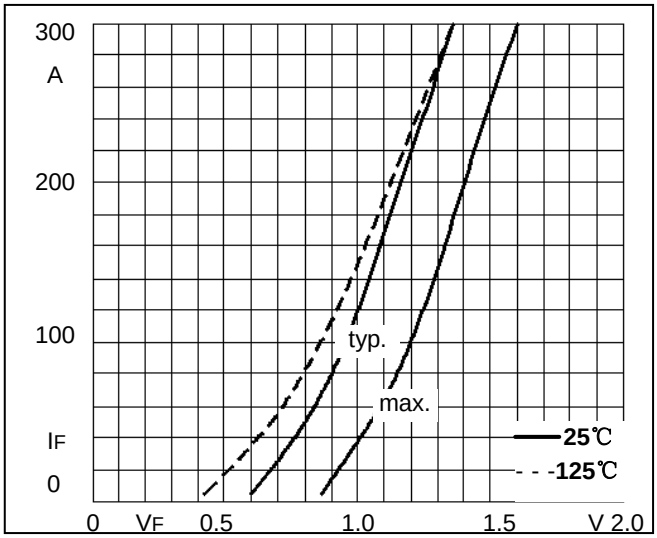


Fig1. Forward Characteristics

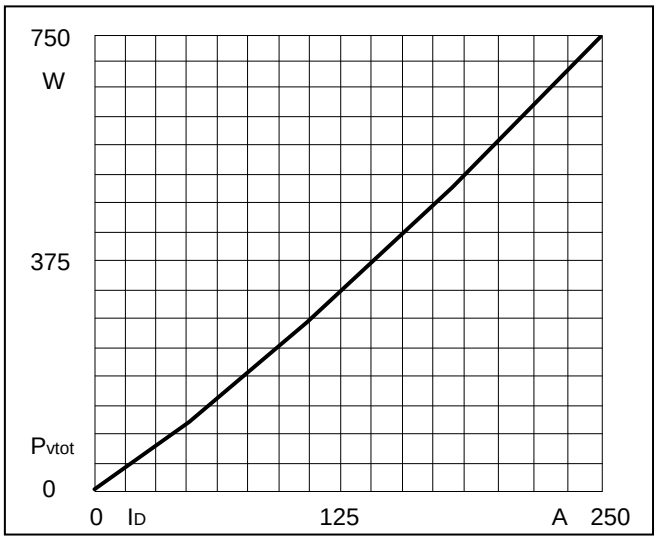


Fig2. Power dissipation

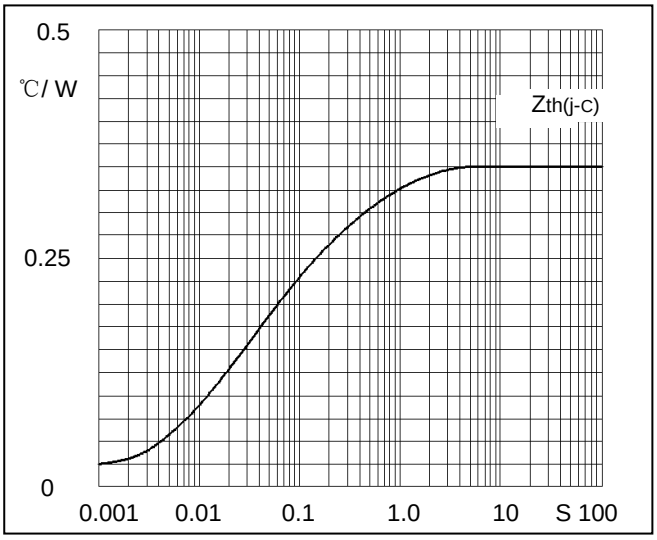


Fig3. Transient thermal impedance

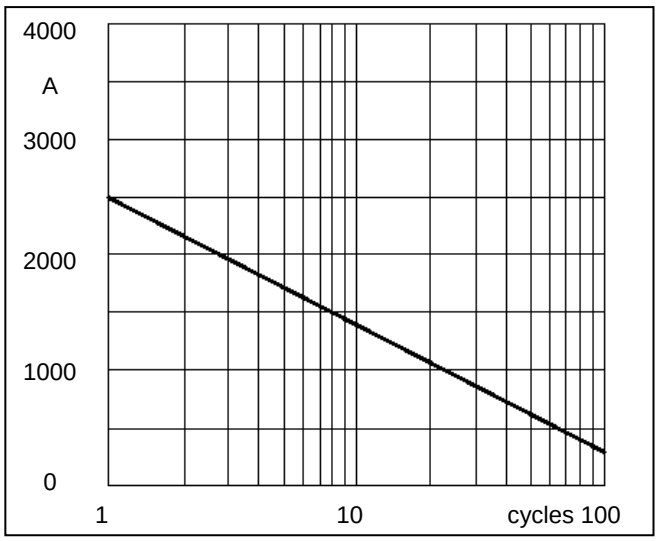
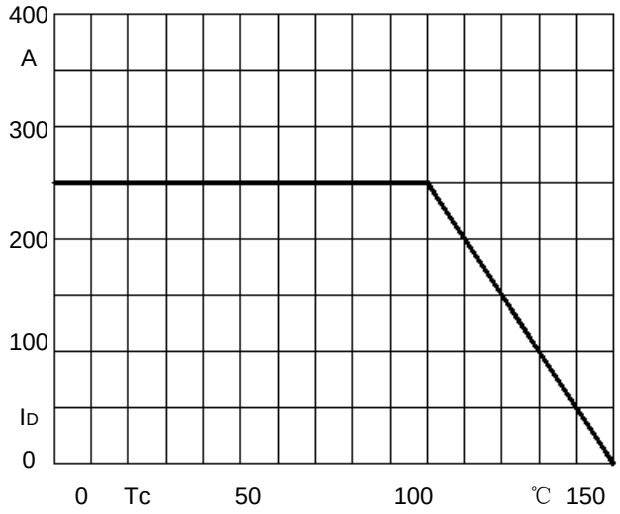
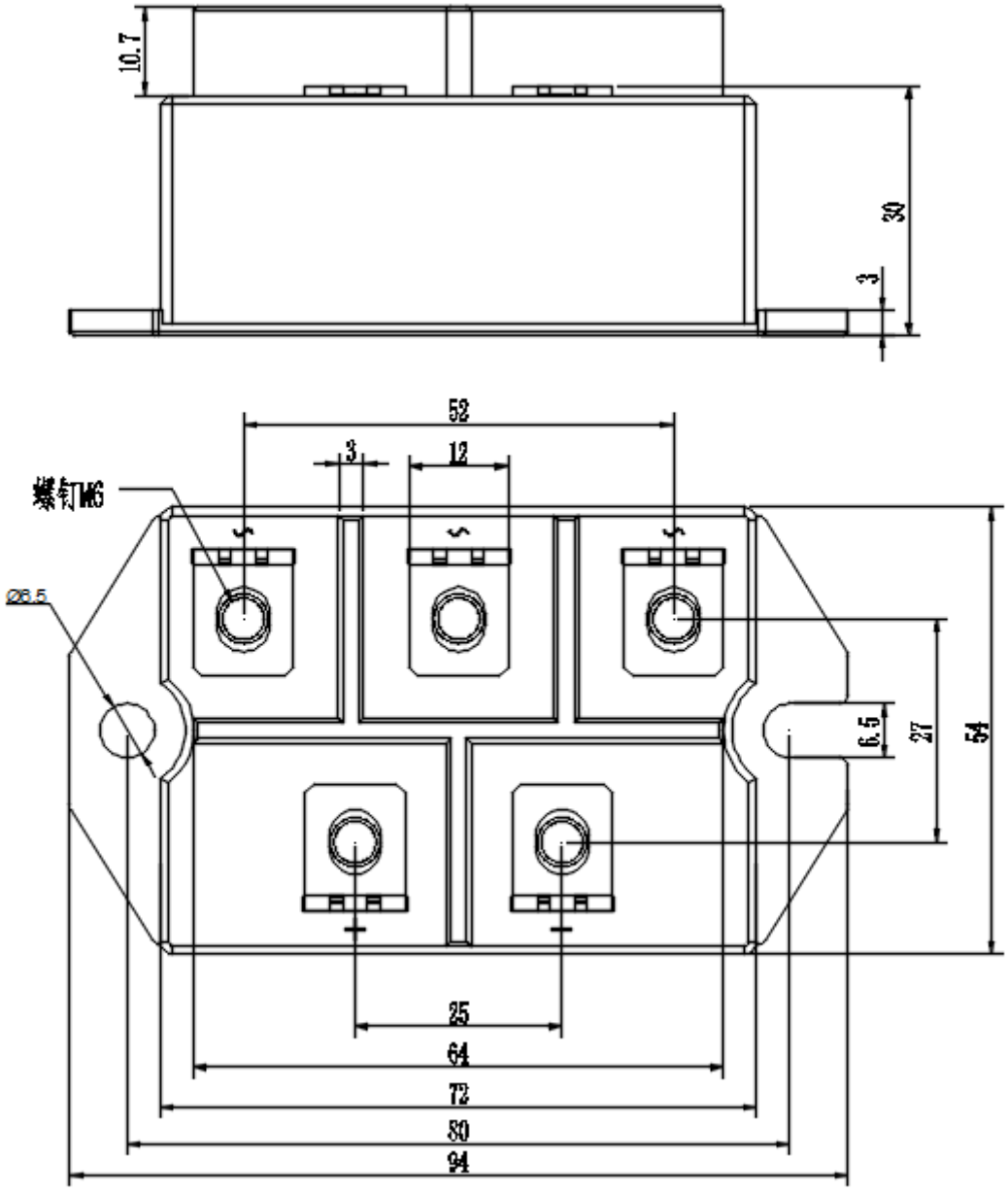


Fig4. Max Non-Repetitive Forward Surge Current



Package Outline Information

CASE：NM3



Dimensions in mm