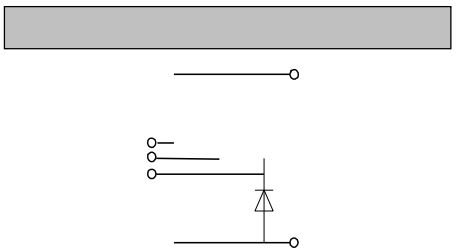
RoHS
COMPLIANT

Glass Passivated Three Phase Rectifier Bridge

V_{RRM} 800 to1800V
I_D 100A



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 to1800V
- Heat transfer through aluminum oxide DBC ceramic isolated metal baseplate
- Glass passivated chip

Module Type

TYPE	V_{RRM}	V_{RSM}
MD100S08M8	800V	900V
MD100S12M8	1200V	1300V
MD100S16M8	1600V	1700V
MD100S18M8	1800V	1900V

Maximum Ratings

Symbol	Conditions	Values	Units
I_D	Three phase, full wave Tc=100	100	A
I_{FSM}	t=10mS Tvj =45	920	A
i^2t	t=10mS Tvj =45	4200	A^2s
Visol	a.c.50HZ;r.m.s.;1min	3000	V
Tvj		-40 to +150	
Tstg		-40 to +125	
Mt	To terminals (M5)	3±15%	Nm
Ms	To heatsink (M6)	5±15%	Nm
Weight	Module (Approximately)	168	g

Thermal Characteristics

Symbol	Conditions	Values	Units
Rth(j-c)	Per diode	0.9	/W
Rth(c-s)	Module	0.03	/W

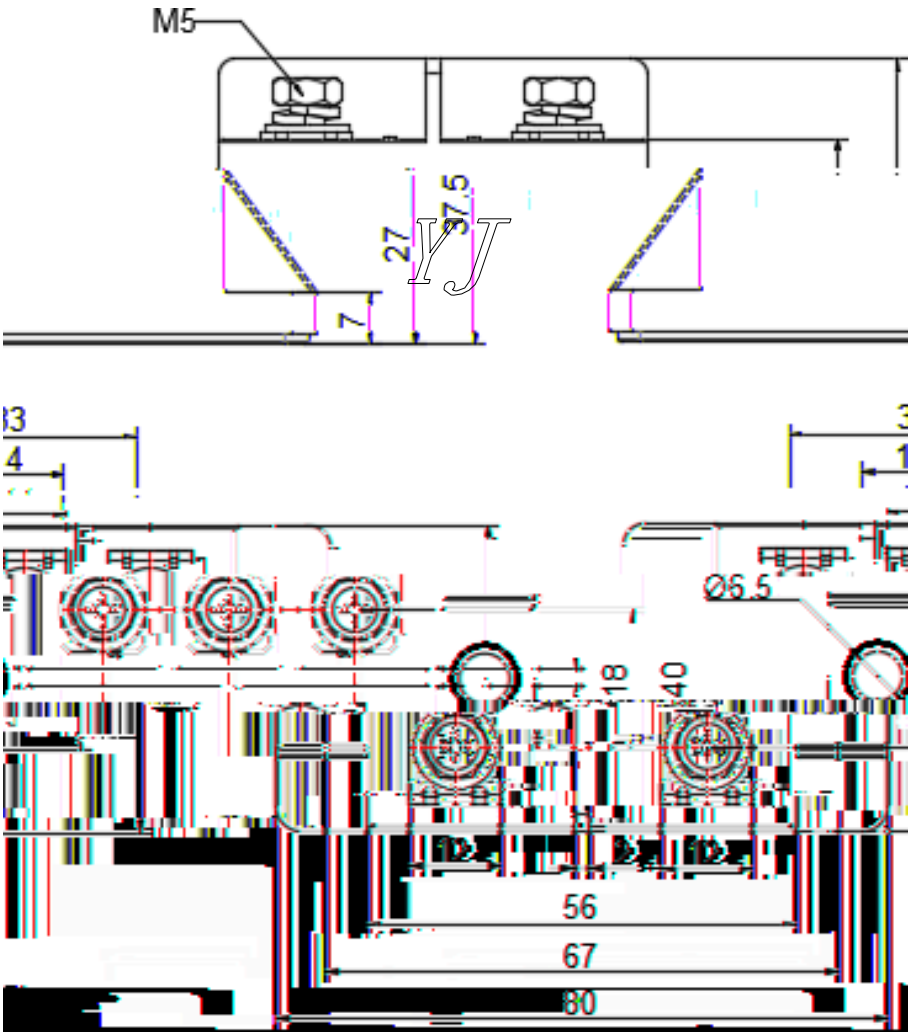
Electrical Characteristics

Symbol	Conditions	Values			Units
		Min.	Typ.	Max.	
V_{FM}	T=25 I_F =300A		1.70	1.90	V
I_{RD}	T_{vj}=25 V_{RD}=V_{RRM}			0.3	mA
	T_{vj}=150 V_{RD}=V_{RRM}			5	mA

Performance Curves

Package Outline Information

CASE M8



Dimensions in mm
Tolerance 0.5mm