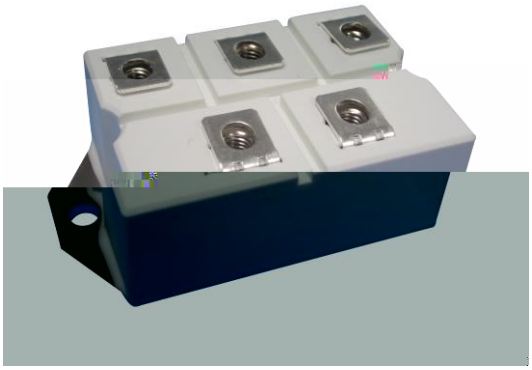


Glass Passivated Three Phase Rectifier Bridge

V_{RRM} 800 to 1800V
I_D 100 A

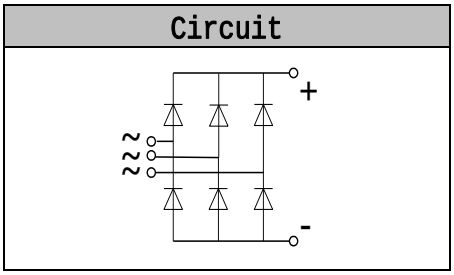
Applications

- 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. E230084

Circuit



Module Type

TYPE	V_{RRM}	V_{RSM}
MD100S08M3	800V	900V
MD100S12M3	1200V	1300V
MD100S16M3	1600V	1700V
MD100S18M3	1800V	1900V

Maximum Ratings

Symbol	Conditions	Values	Units
I_D	Three phase, full wave Tc=100℃	100	A
I_{FSM}	t=10mS Tvj =45℃	1300	A
i^2t	t=10mS Tvj =45℃	8450	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

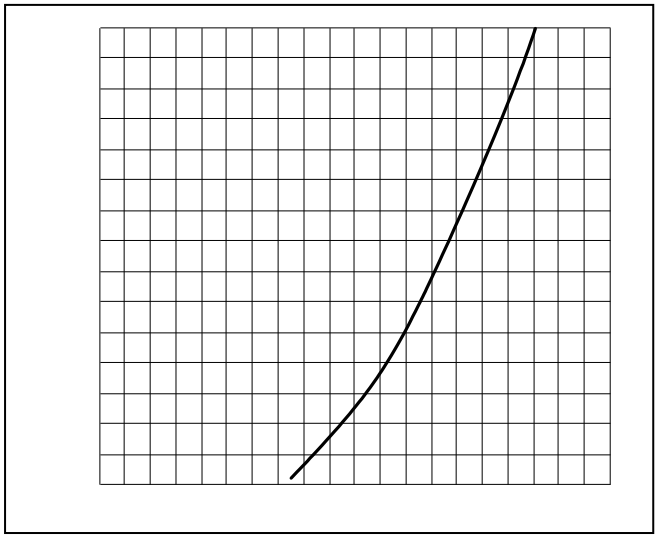
Thermal Characteristics

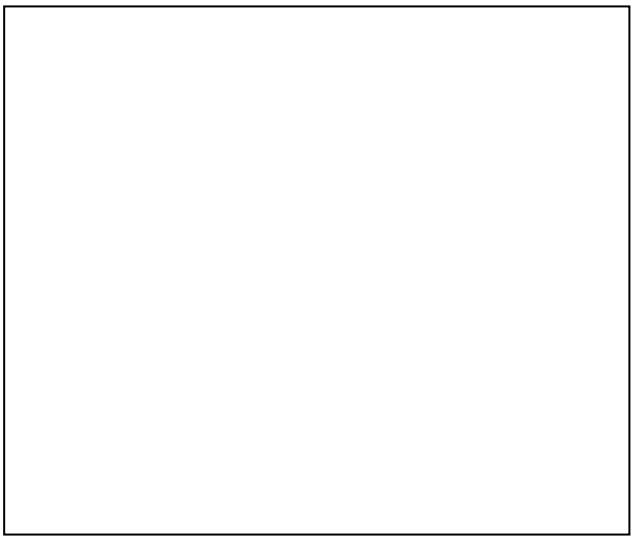
Symbol	Conditions	Values	Units
Rth(j-c)	Per diode	0.9	℃/W
Rth(c-s)	Module	0.03	℃/W

Electrical Characteristics

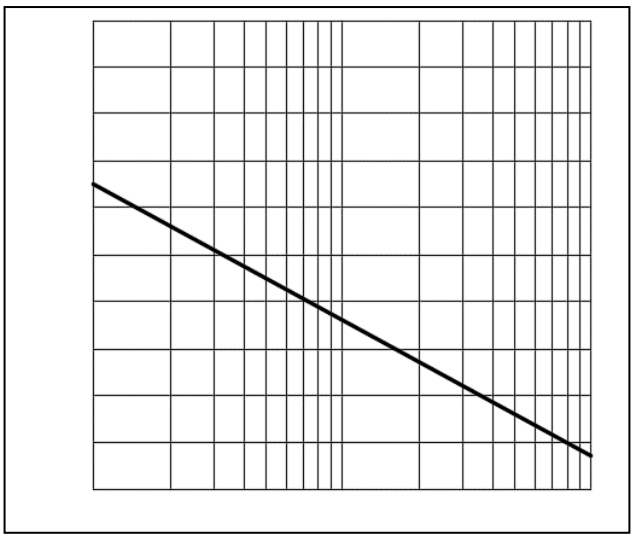
Symbol	Conditions	Values			Units
		Min.	Typ.	Max.	
r_f	T_J=150℃	-	3	-	
V_{fO}	T_J=150℃	-	0.79	-	V
V_{FM}	T=25℃, I_F =100A				

Performance Curves









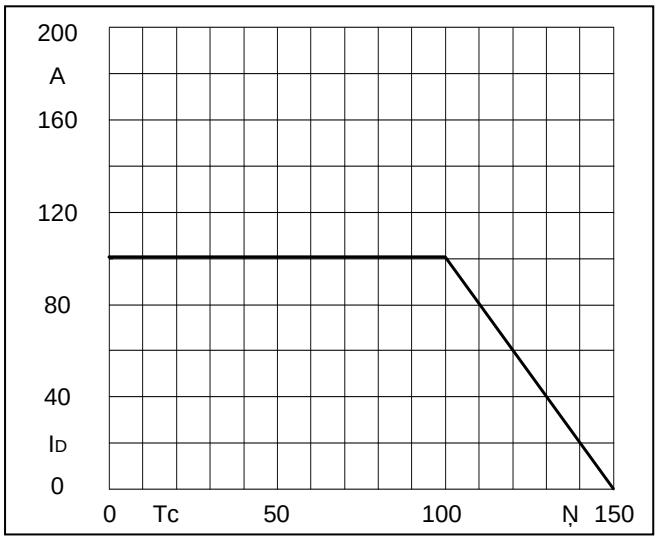
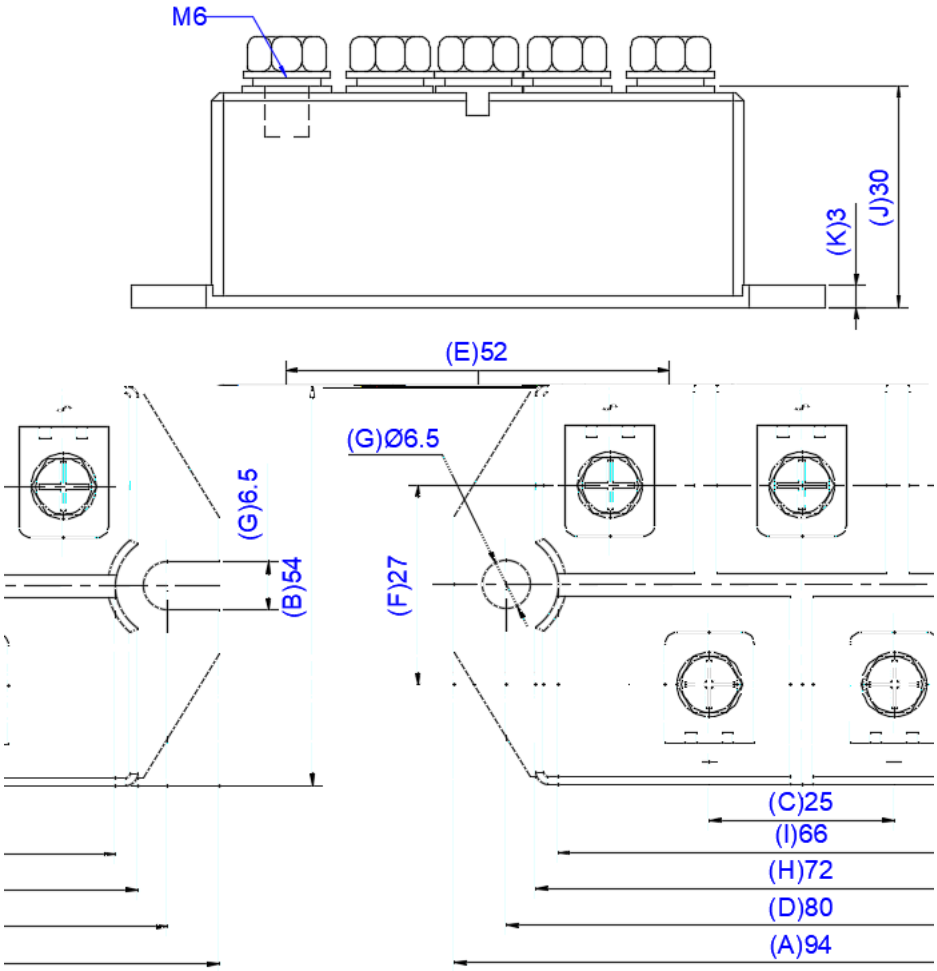


Fig5.Forward Current Derating Curve

Package Outline Information

CASE M3



Dimensions in mm