



GLASS PASSIVATED THREE PHASE RECTIFIER BRIDGE

M2D60S18

VOLTAGE RANGE - 800 to 1800 V
CURRENT - 60 A

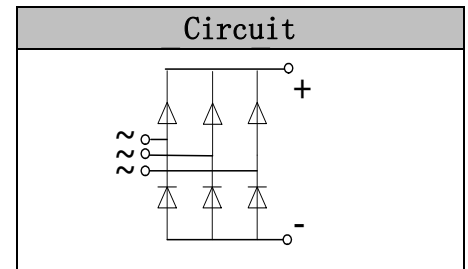
APPLICATION

- 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



MODULE TYPE

TYPE	VRRM	VRSM
M2D60S08	800V	900V
M2D60S12	1200V	1300V
M2D60S16	1600V	1700V
M2D60S18	1800V	1900V

MAXIMUM RATINGS

Symbol	Conditions	Values	Units
ID	Three phase, full wave Tc=110°C	60	A
IFSM	t=10mS Tvj =45°C	460	A
i ² t	t=10mS Tvj =45°C	1050	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(M5)	5±15%	Nm
Ms	To heatsink(M5)	5±15%	Nm
Weight	Module (Approximately)	130	g

THERMAL CHARACTERISTICS

Symbol	Conditions	Values	Units
Rth(j-c)	Per diode	1.45	°C/W
Rth(c-s)	Module	0.07	°C/W

ELECTRICAL CHARACTERISTICS

Symbol	Conditions	Values			Units
		Min.	Typ.	Max.	
VFM	T=25°C IF =150A	—	1.45	1.80	V
IRD	Tvj=25°C VRD=VRRM	—	—	0.3	mA
	Tvj=150°C VRD=VRRM	—	—	5	mA



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Performance Curves

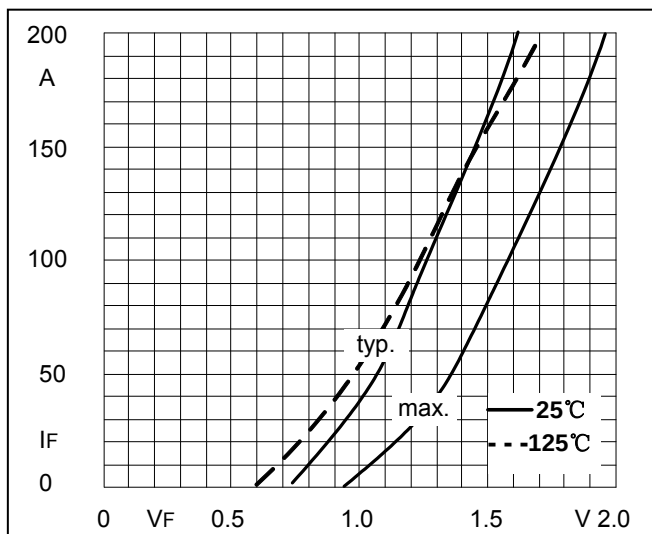


Fig1. Forward Characteristics

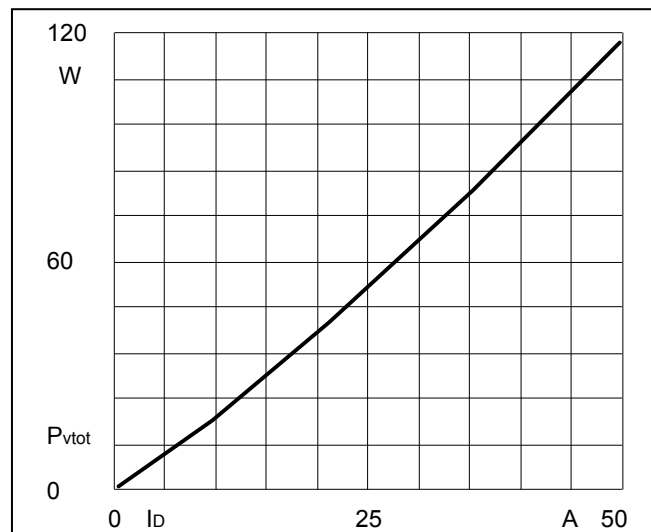


Fig2. Power dissipation

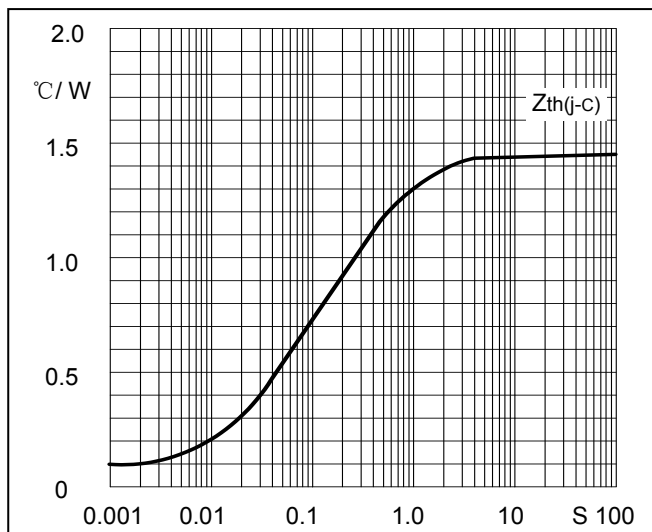


Fig3. Transient thermal impedance

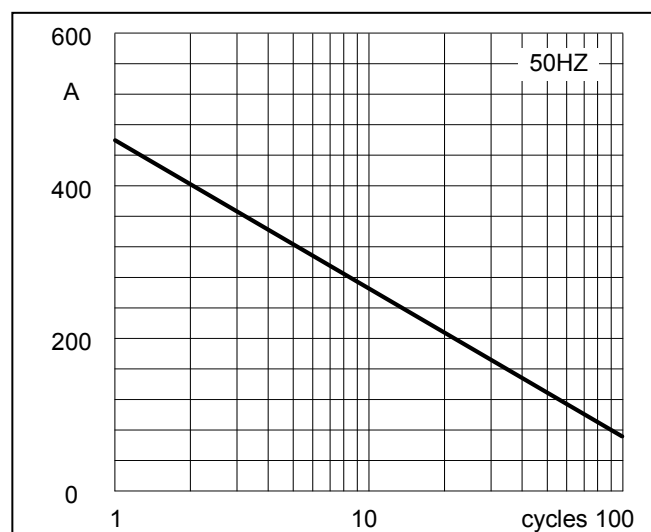


Fig4. Max Non-Repetitive Forward Surge Current

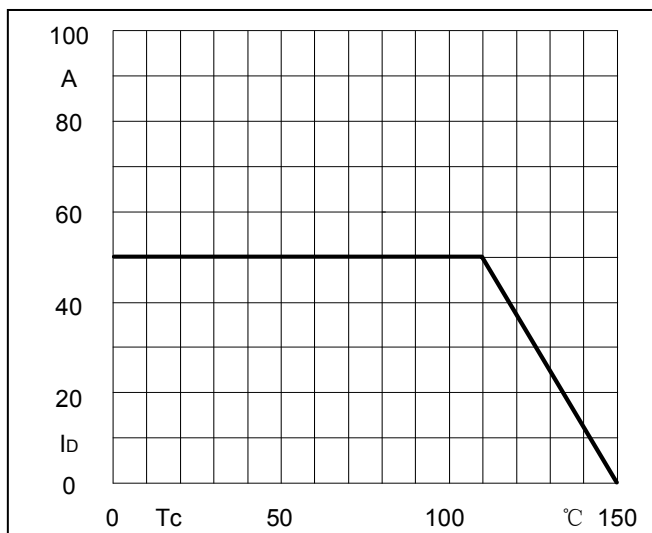


Fig5. Forward Current Derating Curve



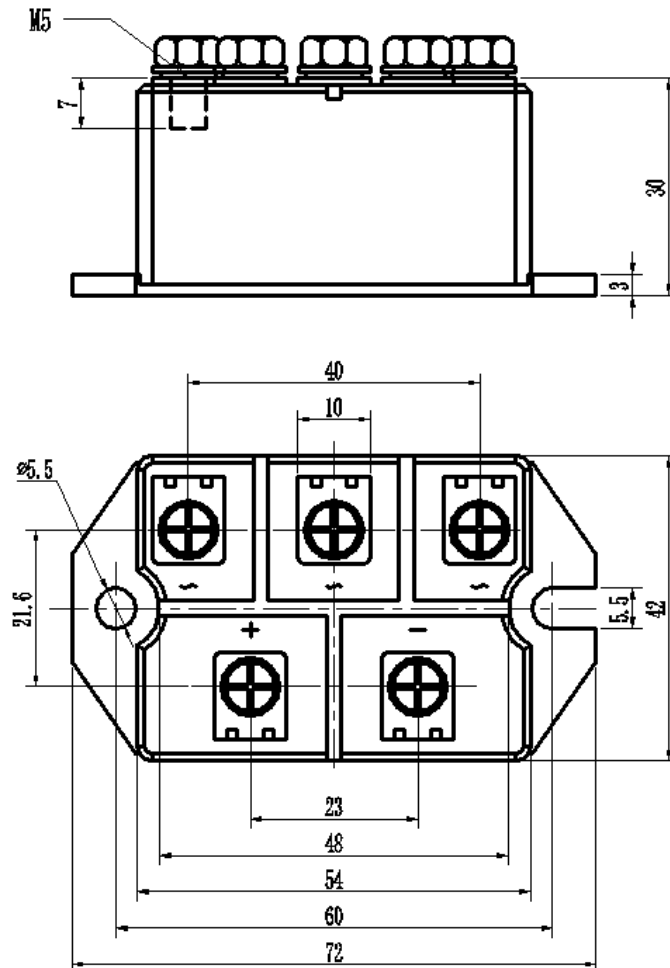
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Package Outline Information

CASE: M2



Dimensions in mm