



**GLASS PASSIVATED VJ TGG'RJ CUG RECTIFIER DT# I G**

**M2D62U18**

**VOLTAGE RANGE**

**800 to 1800V**

**CURRENT**

**82 Ampere**

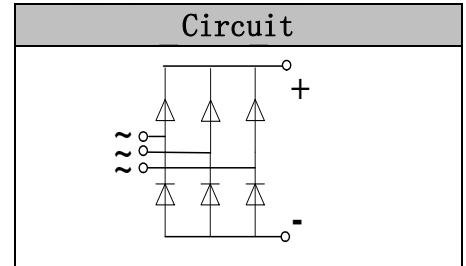
**Applications**

- 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



**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 <sup>2</sup> t	t=10mS Tvj =45°C	1050	A <sup>2</sup> 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.	
V <sub>FM</sub>	T=25°C I <sub>F</sub> =150A	—	1.45	1.80	V
I <sub>RD</sub>	T <sub>vj</sub> =25°C V <sub>RD</sub> =V <sub>RRM</sub> T <sub>vj</sub> =150°C V <sub>RD</sub> =V <sub>RRM</sub>	—	—	0.3 5	mA mA



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Performance Curves

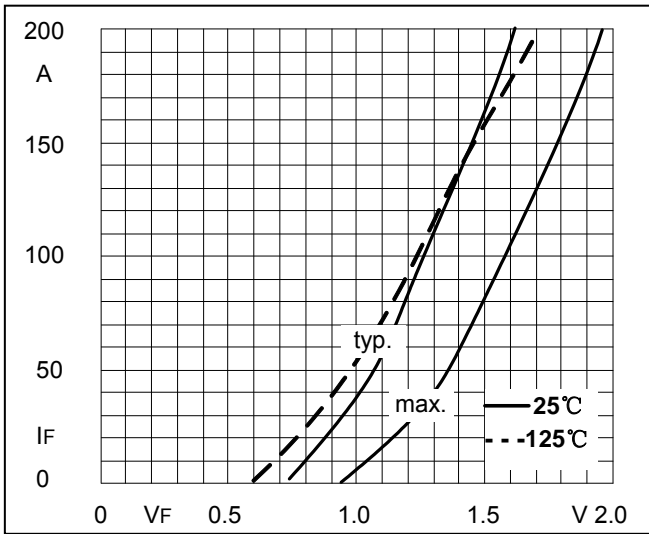


Fig1. Forward Characteristics

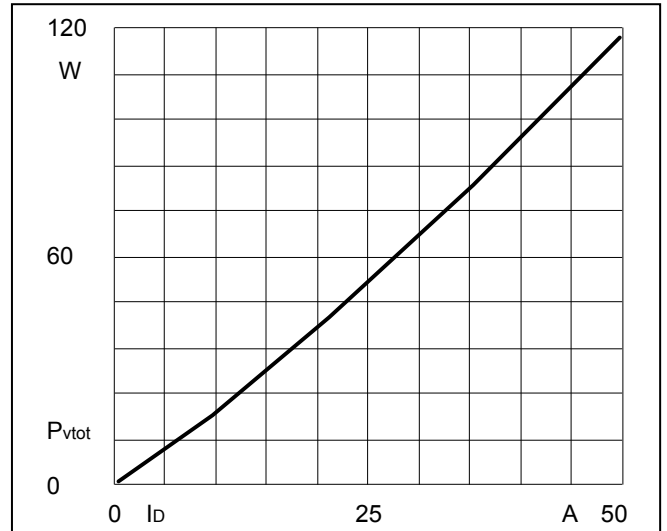


Fig2. Power dissipation

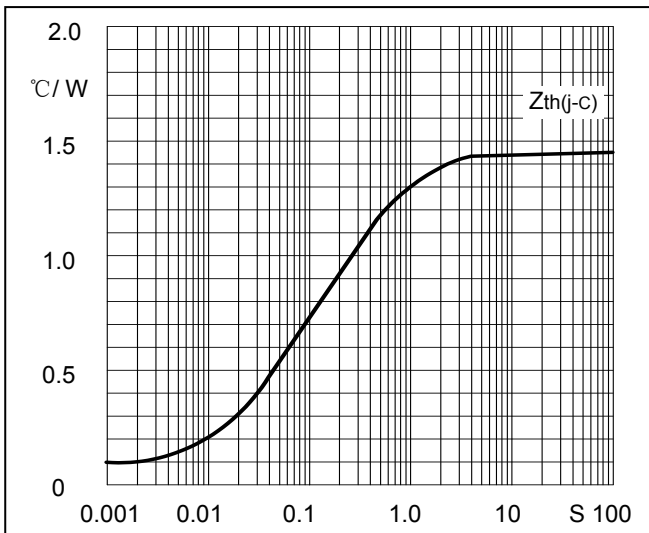


Fig3. Transient thermal impedance

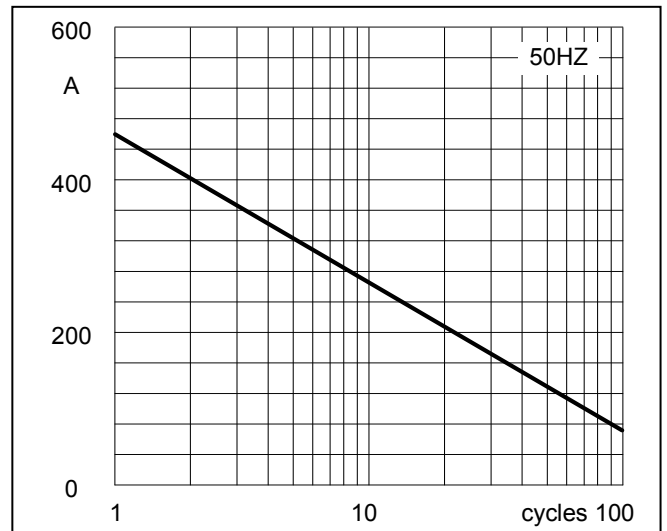


Fig4. Max Non-Repetitive Forward Surge Current

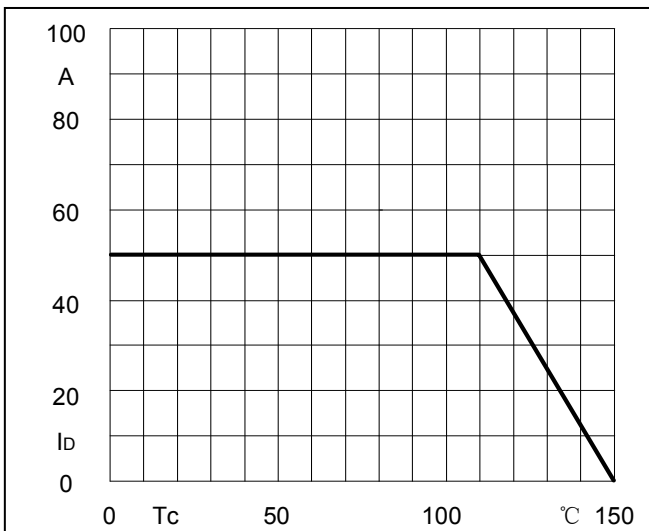


Fig5. Forward Current Derating Curve



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VOLTAGE RANGE

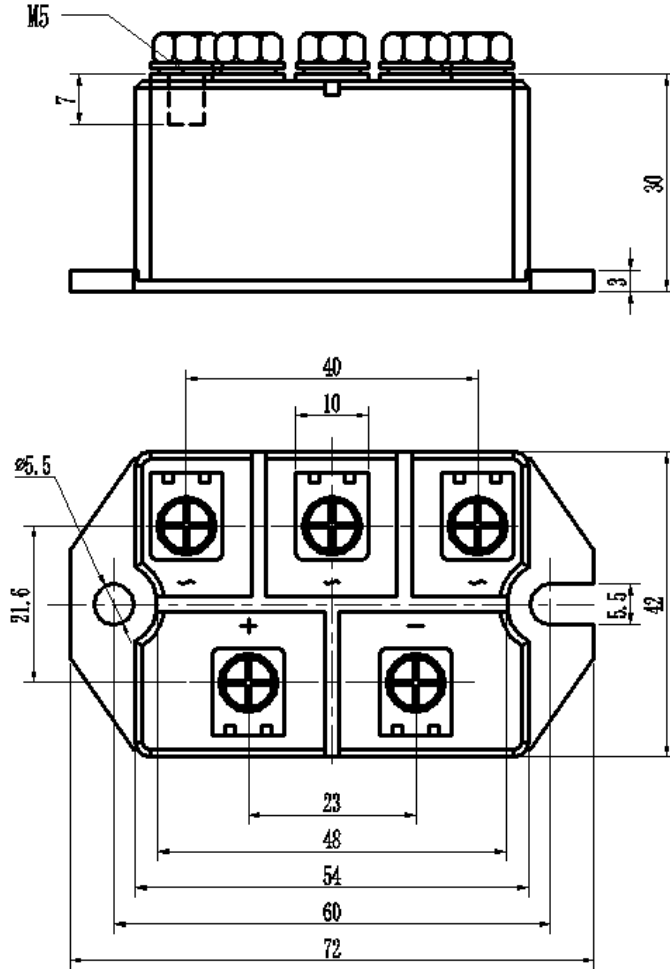
800 to 1800V

CURRENT

82 Ampere

Package Outline Information

CASE: M2



Dimensions in mm