



GLASS PASSIVATED RECTIFIER DIODE MODULES

D1D62C18

VOLTAGE RANGE
CURRENT

800 to 1800V
62 Ampere

Applications

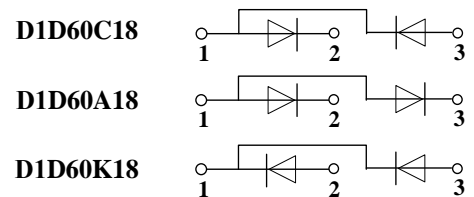
- Non-controllable rectifiers for AC/AC converters
- Line rectifiers for transistorized AC motor controllers
- Field supply for DC motors



Features

- Blocking voltage: 800 to 1800V
- Heat transfer through aluminum oxide DBC ceramic isolated metal baseplate
- Glass passivated chip

Circuit



Module Type

TYPE			VRRM	VRSM
D1D60C08	D1D60A08	D1D60K08	800V	900V
D1D60C12	D1D60A12	D1D60K12	1200V	1300V
D1D60C16	D1D60A16	D1D60K16	1600V	1700V
D1D60C18	D1D60A18	D1D60K18	1800V	1900V

Maximum Ratings

Symbol	Conditions	Values	Units
IFAV	Single phase ,half wave 180° conduction Tc=100°C	60	A
IF(RMS)	Single phase ,half wave 180° conduction Tc=98°C	90	A
IFSM	t=10mS Tvj =45°C	1150	A
i ² t	t=10mS Tvj =45°C	6600	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)	3±15%	Nm
Ms	To heatsink(M6)	5±15%	Nm
Weight	Module (Approximately)	100	g

Thermal Characteristics

Symbol	Conditions	Values	Units
Rth(j-c)	Per diode	0.59	°C/W
Rth(c-s)	Module	0.1	°C/W

Electrical Characteristics

Symbol	Conditions	Values			Units
		Min.	Typ.	Max.	
VFM	T=25°C IF =200A	—	1.30	1.45	V
IRD	Tvj=150°C VRD=VRRM	—	—	5	mA



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Performance Curves

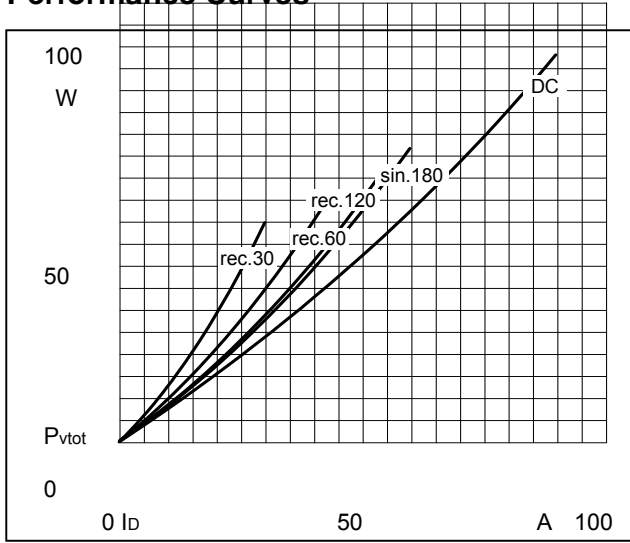


Fig1. Power dissipation

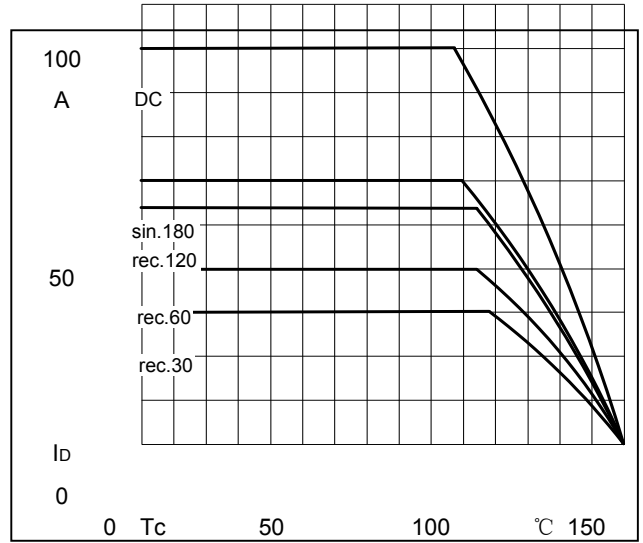


Fig2. Forward Current Derating Curve

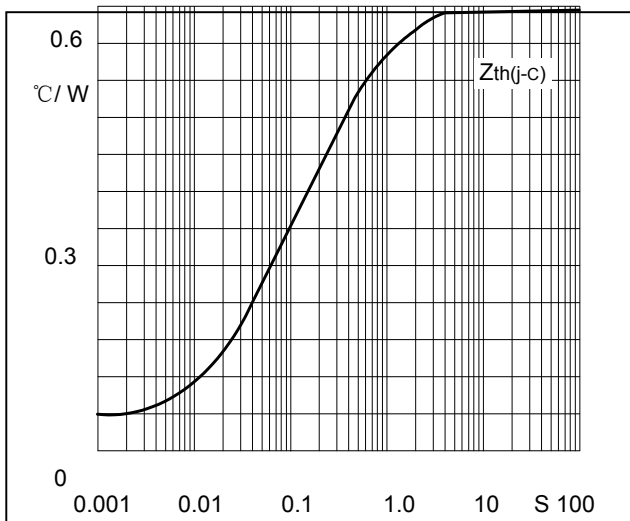


Fig3. Transient thermal impedance

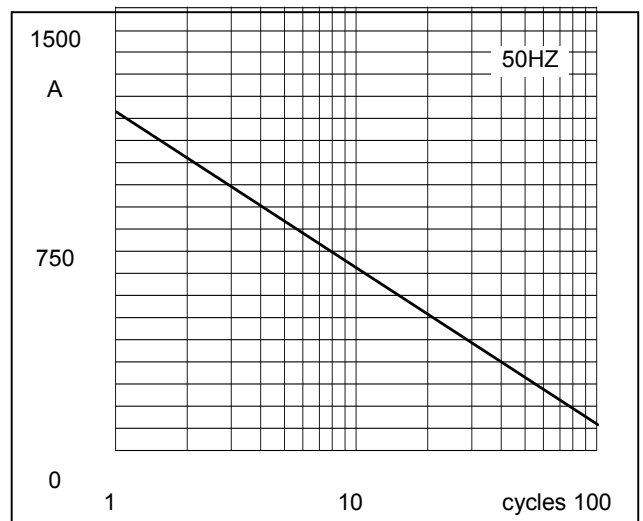


Fig4. Max Non-Repetitive Forward Surge Current

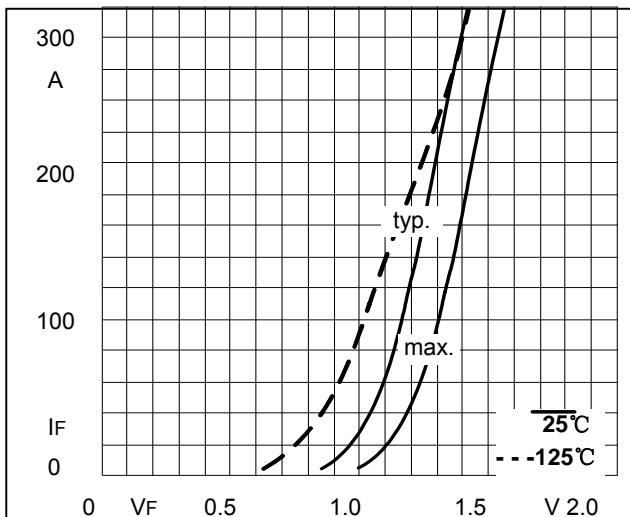


Fig5. Forward Characteristics



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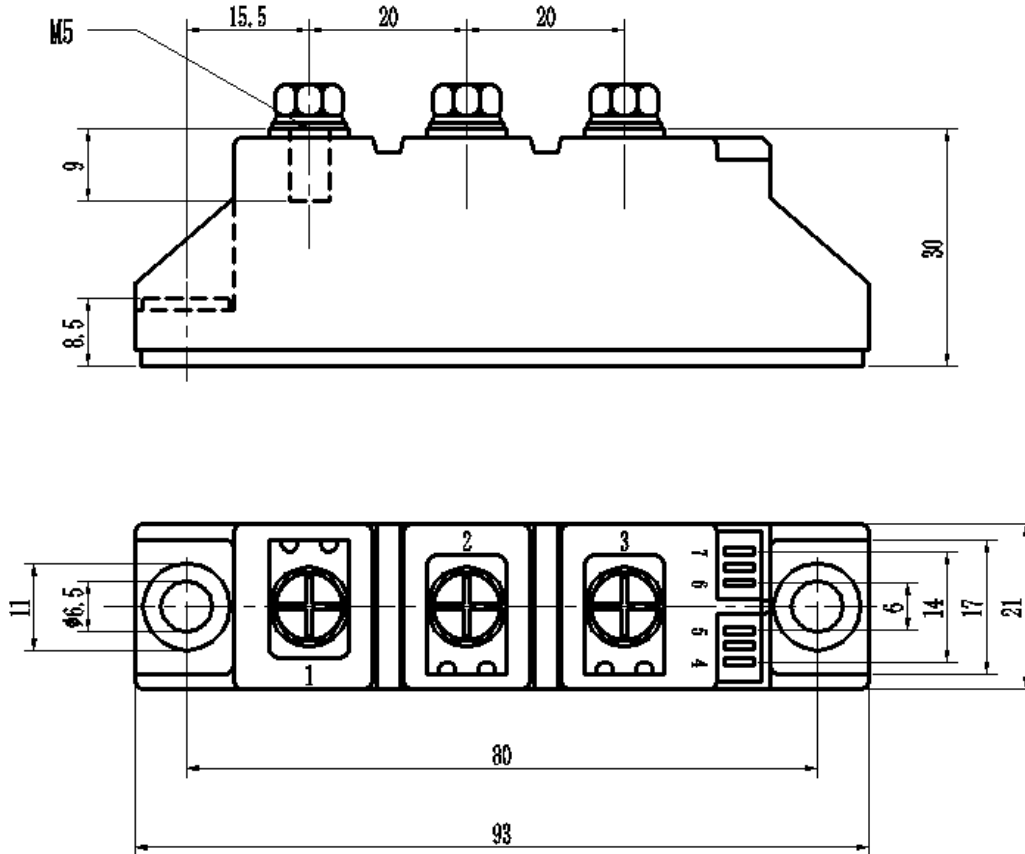
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Package Outline Information

CASE: D1



Dimensions in mm