

GLASS PASSIVATED RECTIFIER DIODE MODULES

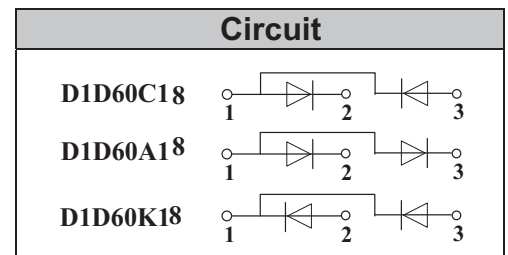
FEATURES

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



APPLICATION

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



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
V _{isol}	a.c.50HZ;r.m.s.;1min	3000	V
Tvj		-40 to +150	°C
T _{stg}		-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
R _{th(j-c)}	Per diode	0.59	°C/W
R _{th(c-s)}	Module	0.1	°C/W

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ELECTRICAL CHARACTERISTICS

Symbol	Conditions	Values			Units
		Min.	Typ.	Max.	
V _{FM}	T=25°C I _F =200A	—	1.30	1.45	V
I _{RD}	T _{vj} =150°C V _{RD} =V _{RRM}	—	—	5	mA

RATING AND CHARACTERISTIC CURVES D1D60C18

Fig1. Power dissipation

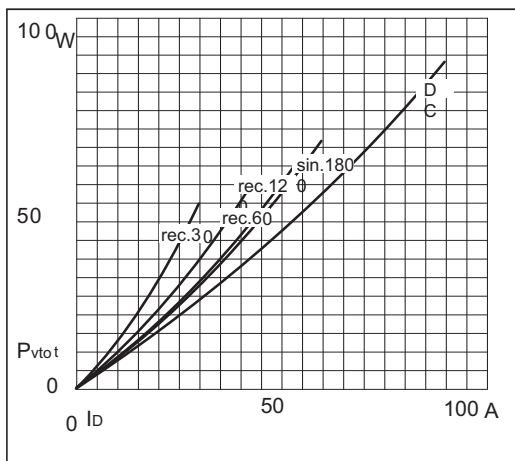


Fig2. Forward Current Derating Curve

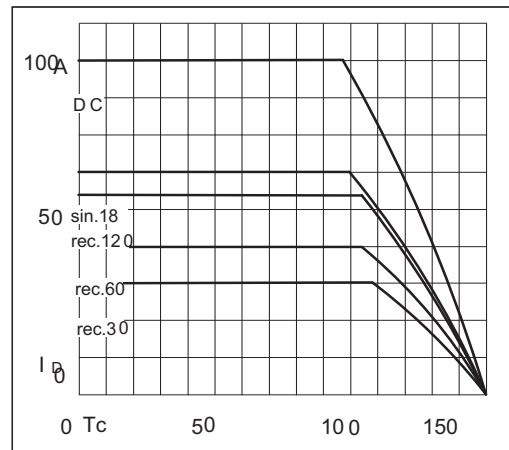


Fig3. Transient thermal impedance

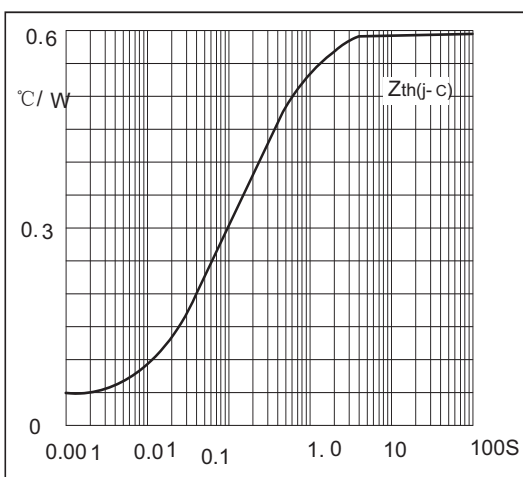
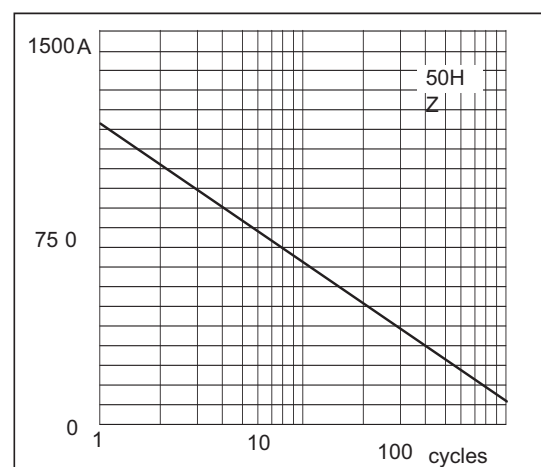
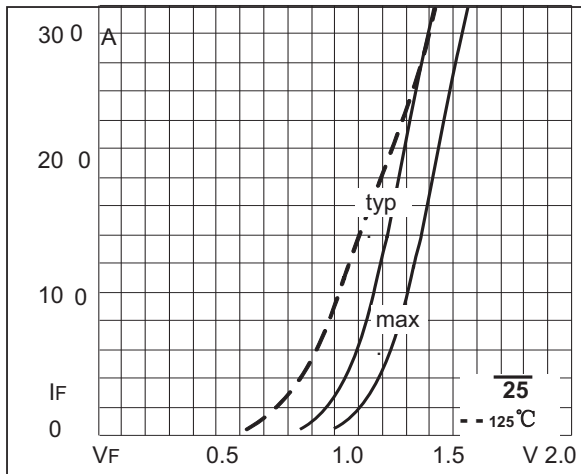


Fig4. Max Non-Repetitive Forward Surge Current

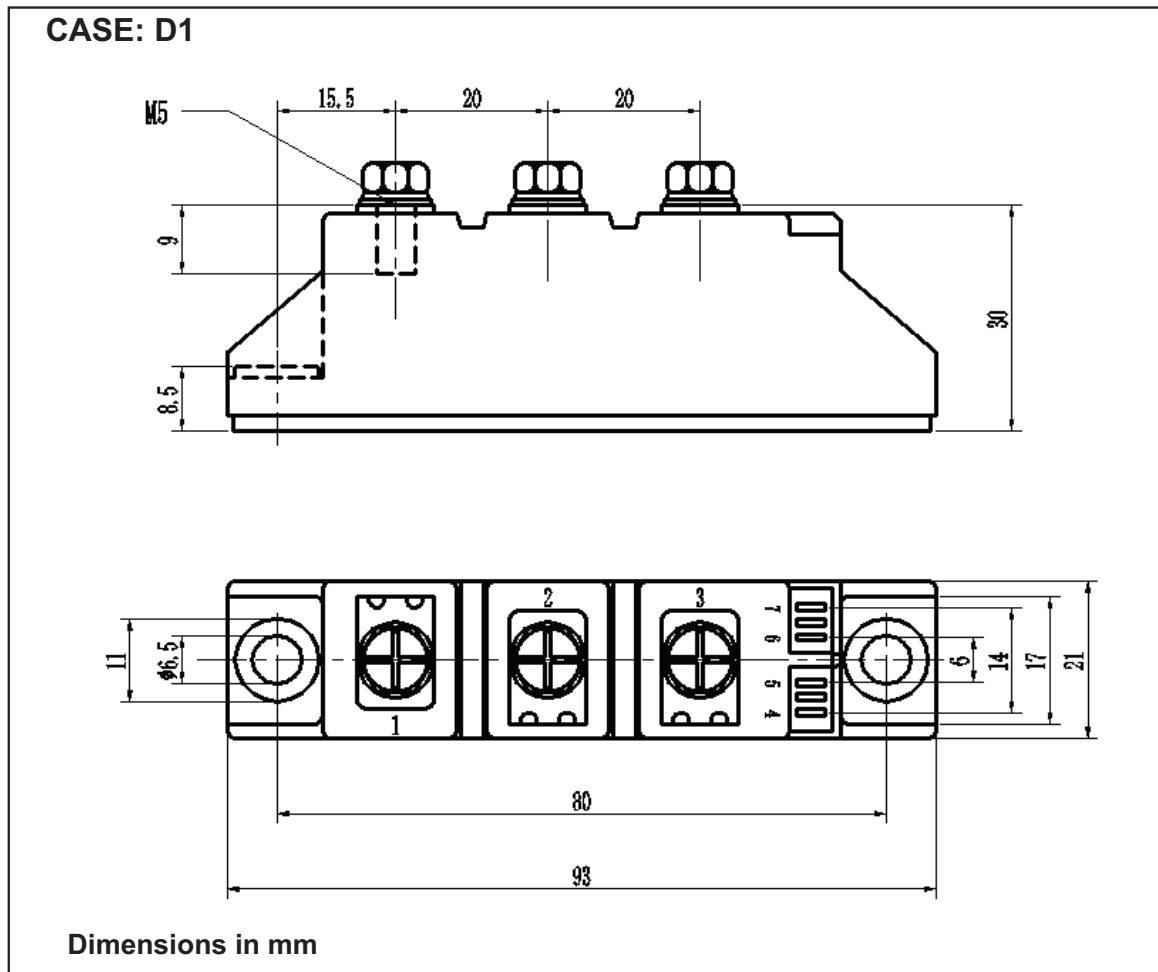


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Fig5. Forward Characteristics



PACKAGE OUTLINE INFORMATION



Disclaimer

All product, product specifications and data are subject to change without notice to improve reliability, function or design or otherwise.