

Key Parameters

V_{RRM}	= 1800V
$I_{F(AV)}$	= 600A
I_{FSM}	= 22000A
$V_{F(TO)}$	= 0.75V
r_F	= 0.215mΩ

Features

- Full blocking capability over wide temperature range
- Heat transfer through aluminium nitride ceramic isolated metal base plate
- Pressure contacts technology for high reliability

Applications

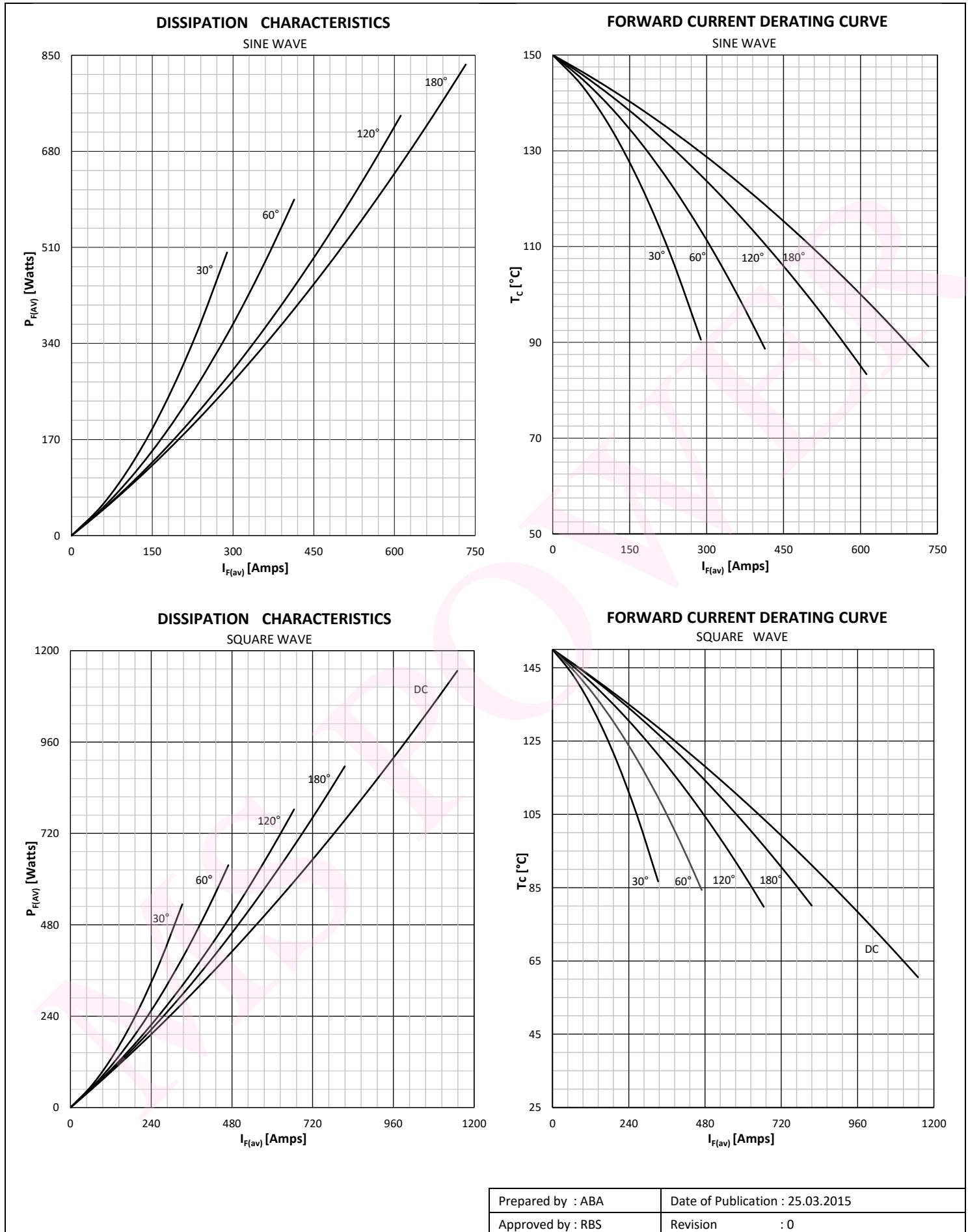
- Power Supplies
- Uncontrolled Rectifiers
- Field supply for DC motors
- Battery Chargers
- UPS

Ordering Information

MS	DZ	600	K	XX
Fixed code	DZ- Rectifier Diode Module	Current Code	Technology K = Pressure Contact Technology	Voltage Code Code X 100 = V_{RRM}
Order Code MS DZ600K18 : 1800V V_{RRM} , Rectifier Diode Module				

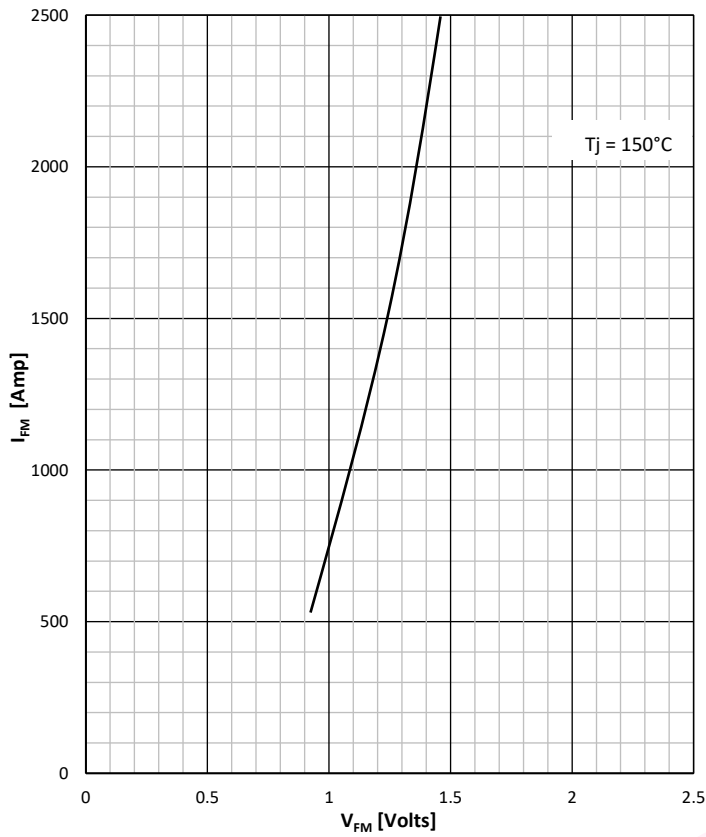
Prepared by : ABA	Date of Publication : 25.03.2015
Approved by : RBS	Revision : 0

Symbol	Characteristic	Conditions	T _j [°C]	Value	Unit
BLOCKING					
V _{RRM}	Repetitive peak reverse voltage		150	1200 - 1800	V
V _{RSM}	Non-repetitive peak reverse voltage		150	1300 - 1900	V
I _{RRM}	Repetitive peak reverse current	V = V _{RRM}	150	40	mA
CONDUCTING					
I _{F(AV)}	Mean forward current	180° sin ,50 Hz, T _c =100°C 180° sin ,50 Hz, T _c =84°C		600 735	A
I _{FRMS}	RMS current	T _c =84°C		1150	A
I _{FSM}	Surge forward current	Sine wave, 10 ms Without reverse voltage	25	22000	A
			150	19000	A
I ² t	I ² t	Sine wave, 10 ms Without reverse voltage	25	2420 x 10 ³	A ² s
			150	1805 x 10 ³	A ² s
V _F	Forward voltage	On-state current = 2200A	150	1.40	V
V _{F(TO)}	Threshold voltage		150	0.75	V
r _F	Forward slope resistance		150	0.215	mΩ
MOUNTING					
R _{th(j-c)}	Thermal impedance, sin 180°	Junction to case, per module		0.078	°C/W
R _{th(c-h)}	Thermal impedance	Case to heatsink, per module		0.02	°C/W
T _j	Max. junction temperature			150	°C
T _{stg}	Storage temperature			-40 150	°C
V _{ISOL}	Insulation test voltage, RMS	F=50Hz, 1min		3.0	KV
M1	Mounting torque			5 ± 15%	Nm
M2	Terminal connection torque			12 ± 10%	Nm
W	Weight (Approx.)			900	gm
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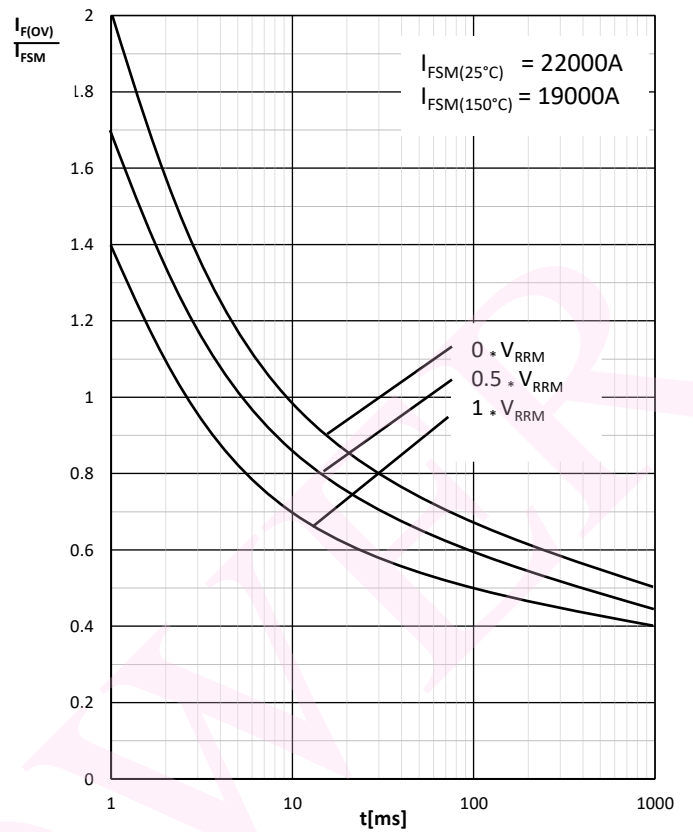


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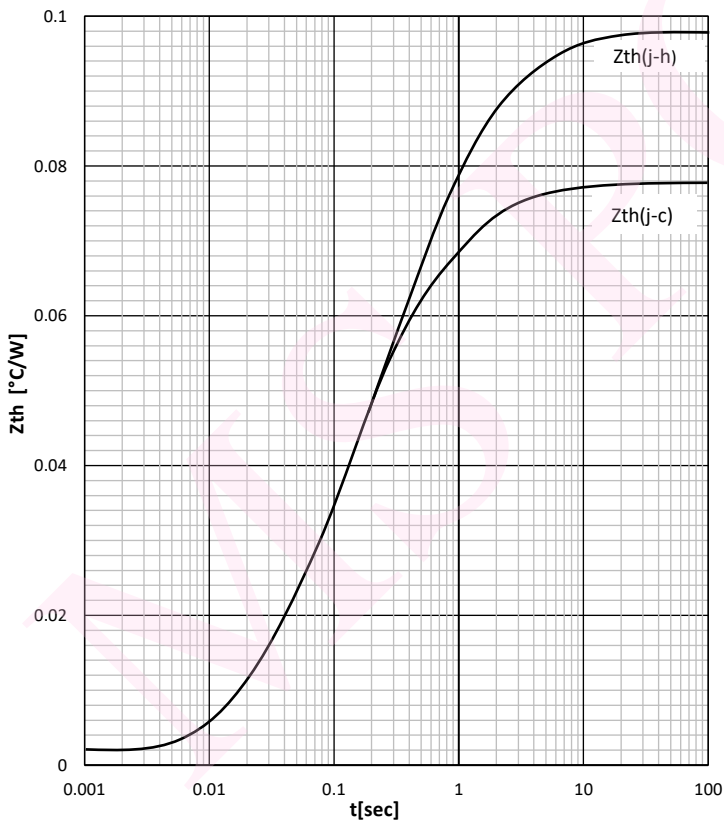
FORWARD CHARACTERISTIC



SURGE CHARACTERISTICS



TRANSIENT THERMAL IMPEDANCE



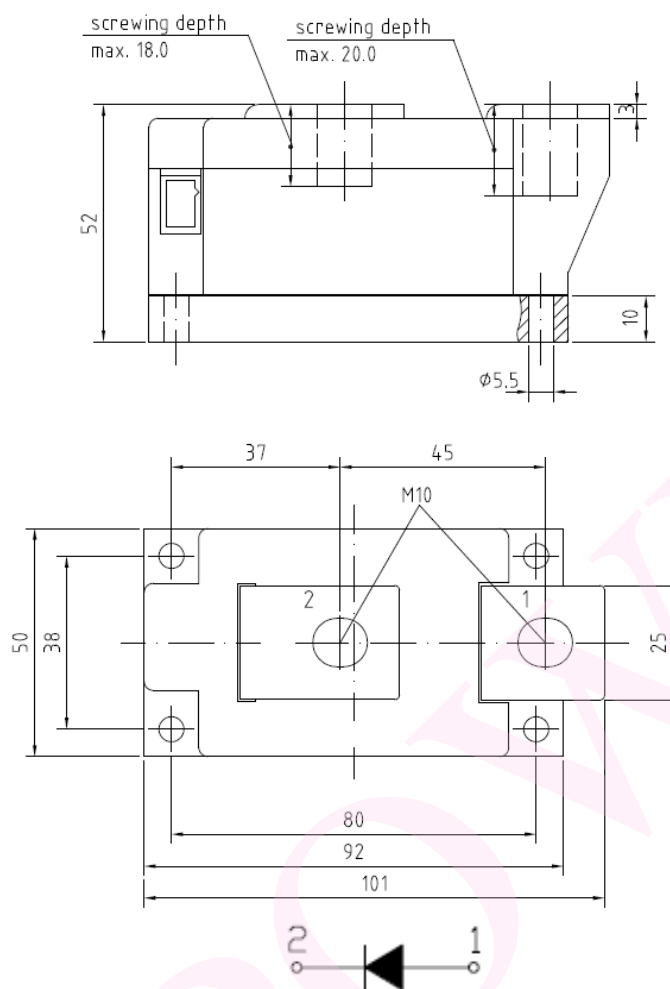
Prepared by : ABA

Date of Publication : 25.03.2015

Approved by : RBS

Revision : 0

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