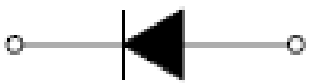
MS DZ1100



DZ

Key Parameters

V_{RRM}	= 1800V
$I_{F(AV)}$	= 1100A
I_{FSM}	= 41000A
$V_{F(TO)}$	= 0.75V
r_F	= 0.073mΩ

Features

- Full blocking capability over wide temperature range
- Heat transfer through aluminium oxide 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	1100	K	X X
Fixed code	DZ- Rectifier Diode Module	Current Code	Technology K = Pressure Contact Technology	Voltage Code Code X 100 = V_{RRM}
Order Code MS DZ1100K18 : 1800V V_{RRM}, Rectifier Diode Module				

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MS DZ1100

Symbol	Characteristic	Conditions	Tj [°C]	Value	Unit
BLOCKING					
V_{RRM}	Repetitive peak reverse voltage		150	600 - 1800	V
V_{RSM}	Non-repetitive peak reverse voltage		150	700 - 1900	V
I_{RRM}	Repetitive peak reverse current	V= V_{RRM}	150	150	mA
CONDUCTING					
$I_{F(AV)}$	Mean forward current	180° sin ,50 Hz, T_c=100°C		1100	A
I_{FRMS}	RMS current			1727	A
I_{FSM}	Surge forward current	Sine wave, 10 ms Without reverse voltage	25	41000	A
			150	35000	A
I^2t	I^2t	Sine wave, 10 ms Without reverse voltage	25	8405×10^3	A^2s
			150	6125×10^3	A^2s
V_F	Forward voltage	On-state current = 3000A	150	1.11	V
$V_{F(TO)}$	Threshold voltage		150	0.75	V
r_F	Forward slope resistance		150	0.073	mΩ
MOUNTING					
$R_{th(j-c)}$	Thermal impedance, sin 180°	Junction to case, per module		0.048	°C/W
$R_{th(c-h)}$	Thermal impedance	Case to heatsink, per module		0.015	°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			6 ± 15%	Nm
M2	Terminal connection torque			18 ± 10%	Nm
W	Weight (Approx.)			2000	gm

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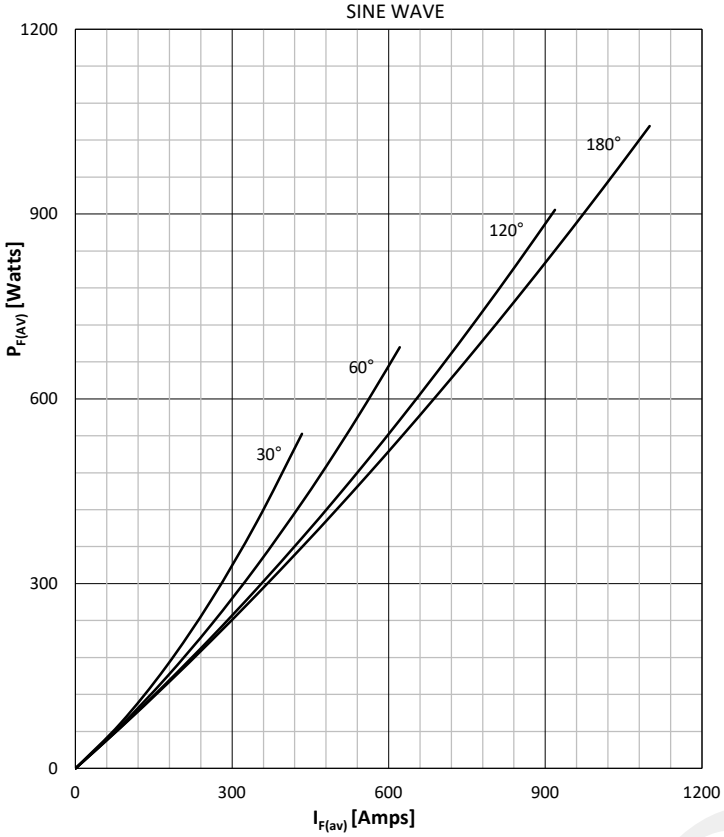
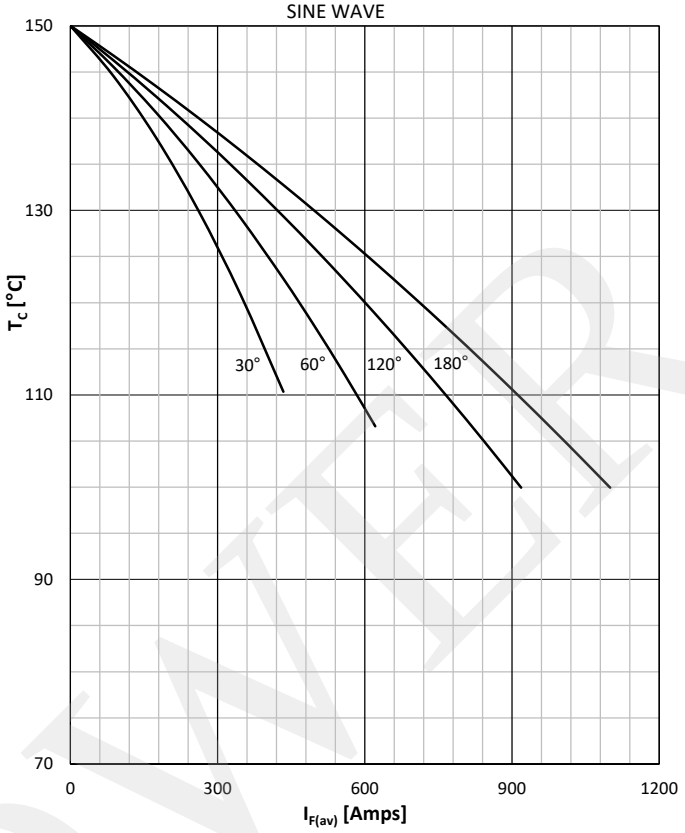
DISSIPATION CHARACTERISTICS

SINE WAVE



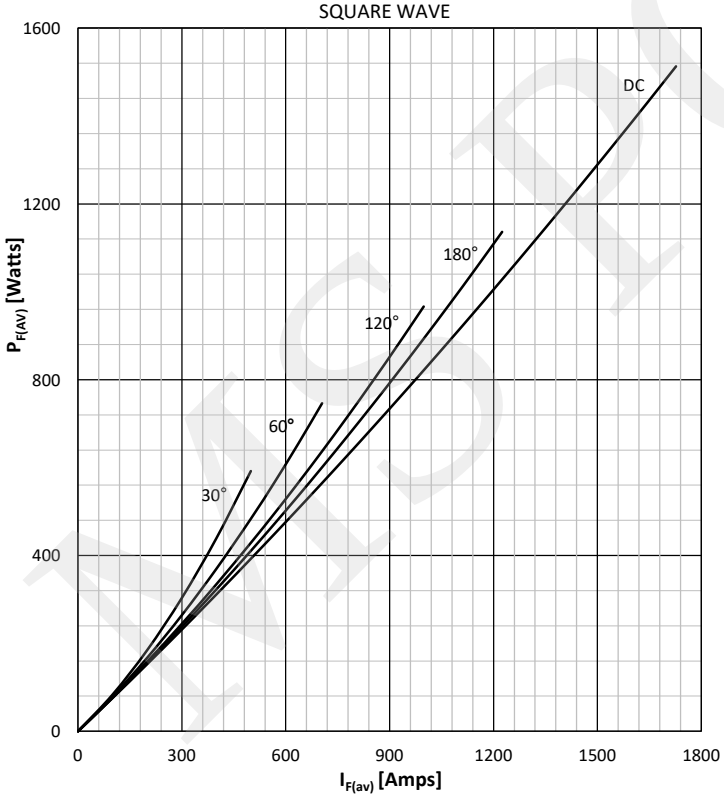
FORWARD CURRENT DERATING CURVE

SINE WAVE



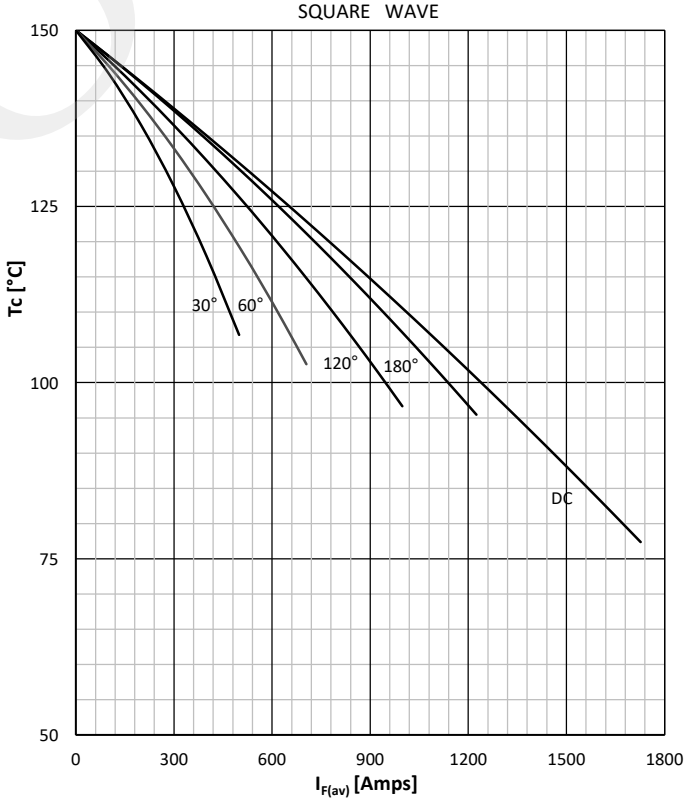
DISSIPATION CHARACTERISTICS

SQUARE WAVE



FORWARD CURRENT DERATING CURVE

SQUARE WAVE



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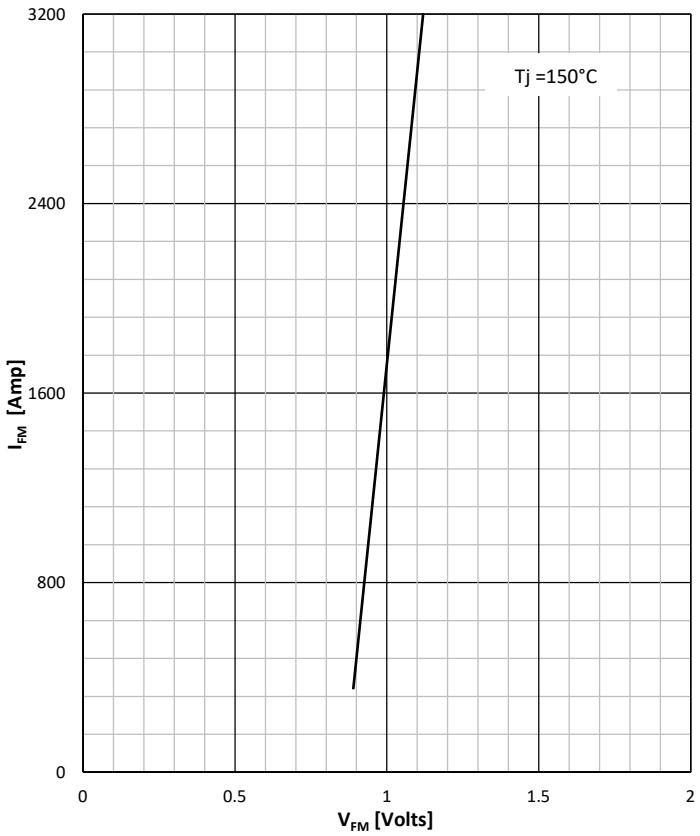
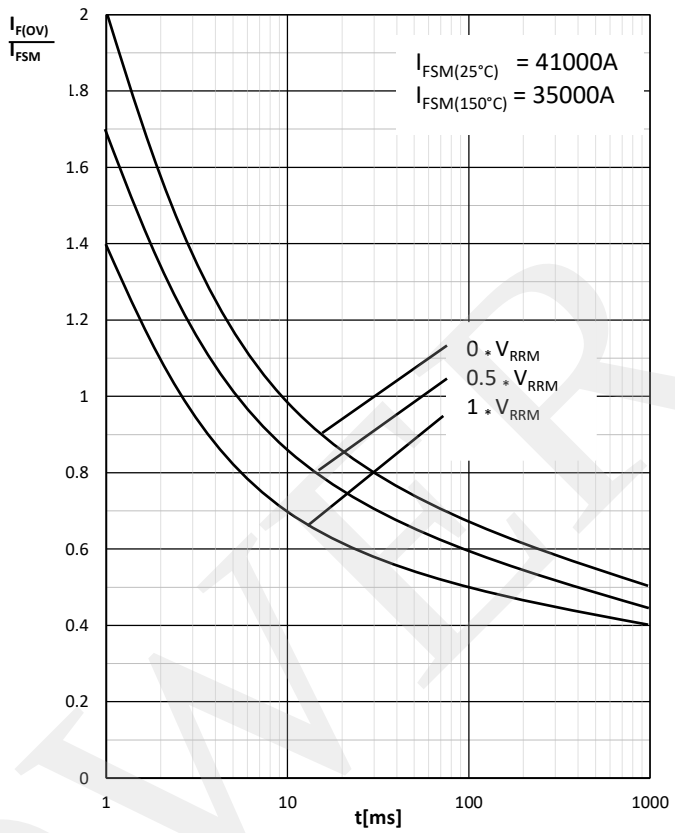
MS DZ1100

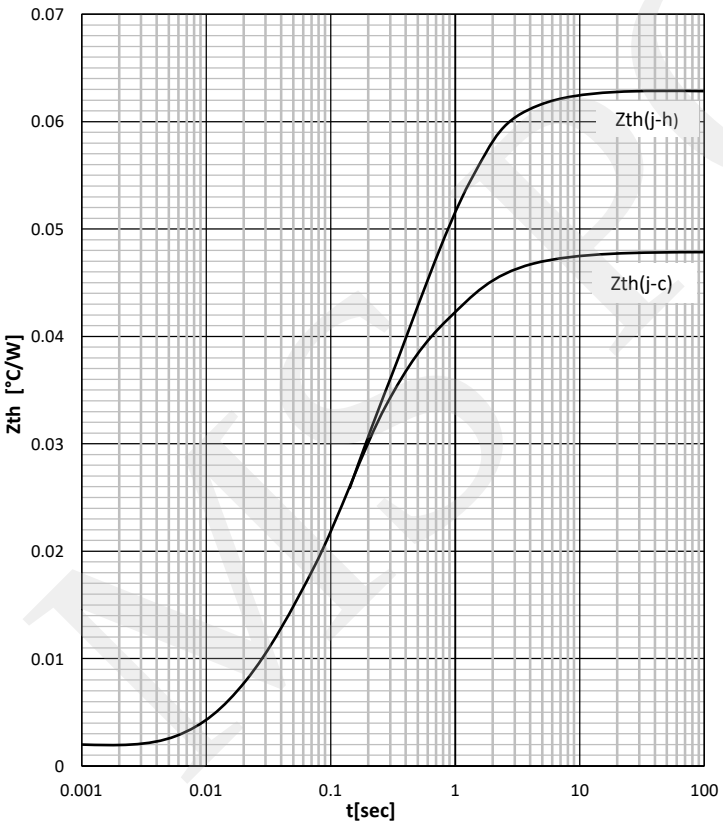
FORWARD CHARACTERISTIC



SURGE CHARACTERISTICS



TRANSIENT THERMAL IMPEDANCE



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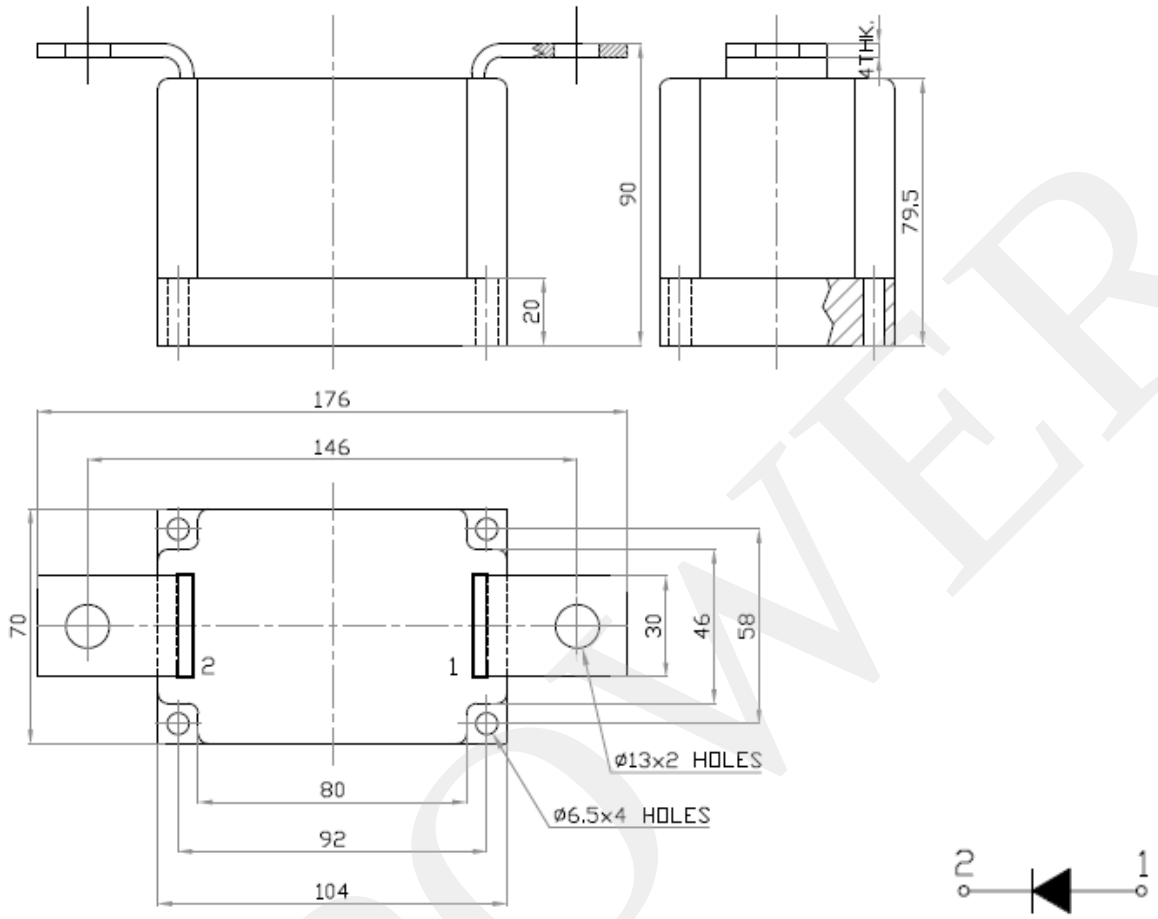
Outline



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