



**Key Parameters**

$V_{RRM}$	= 2800V
$I_{F(AV)}$	= 1087A
$I_{FSM}$	= 32000A
$V_{F(TO)}$	= 0.80V
$r_F$	= 0.110mΩ

**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**

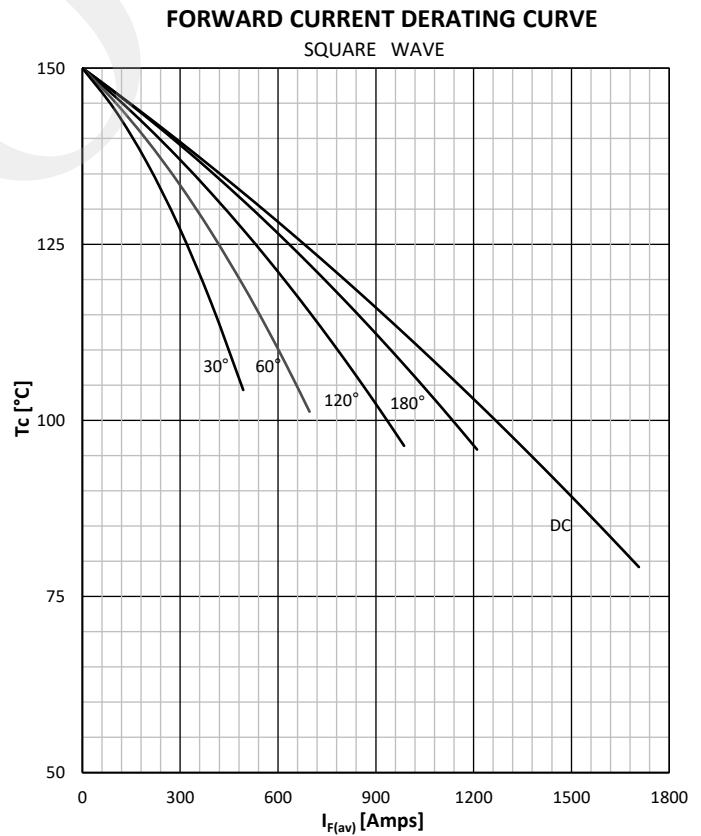
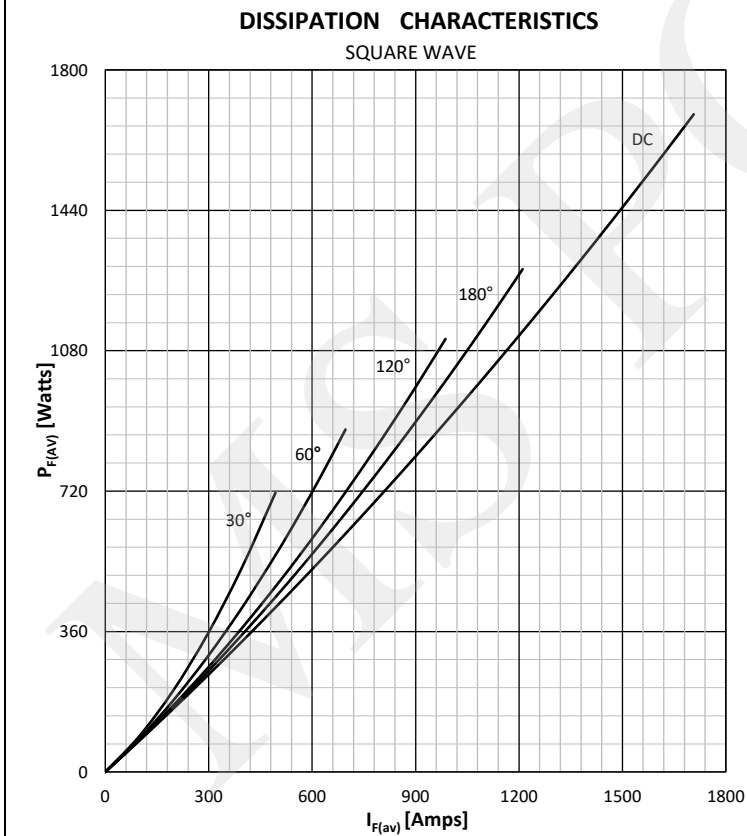
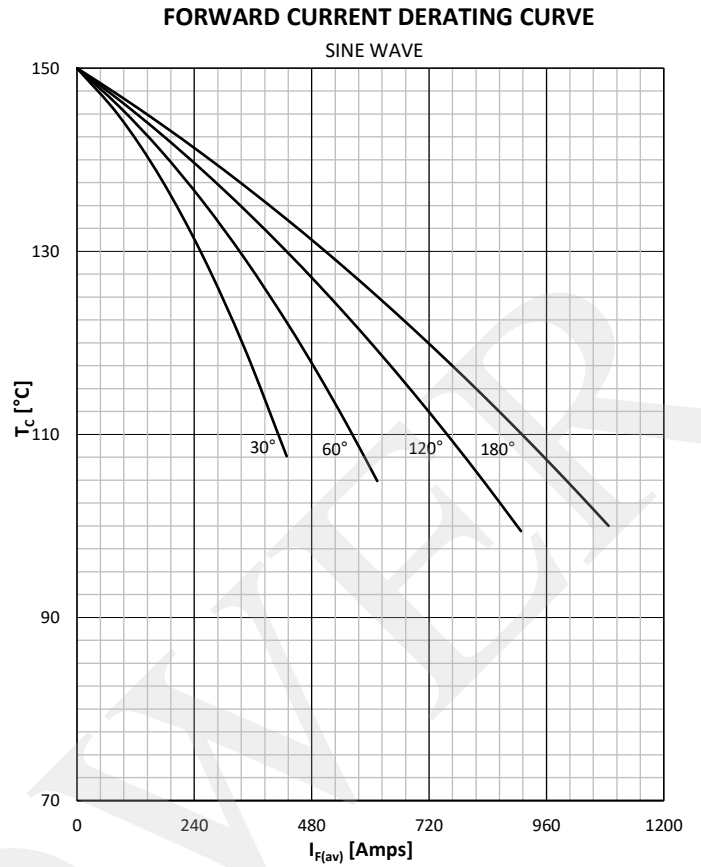
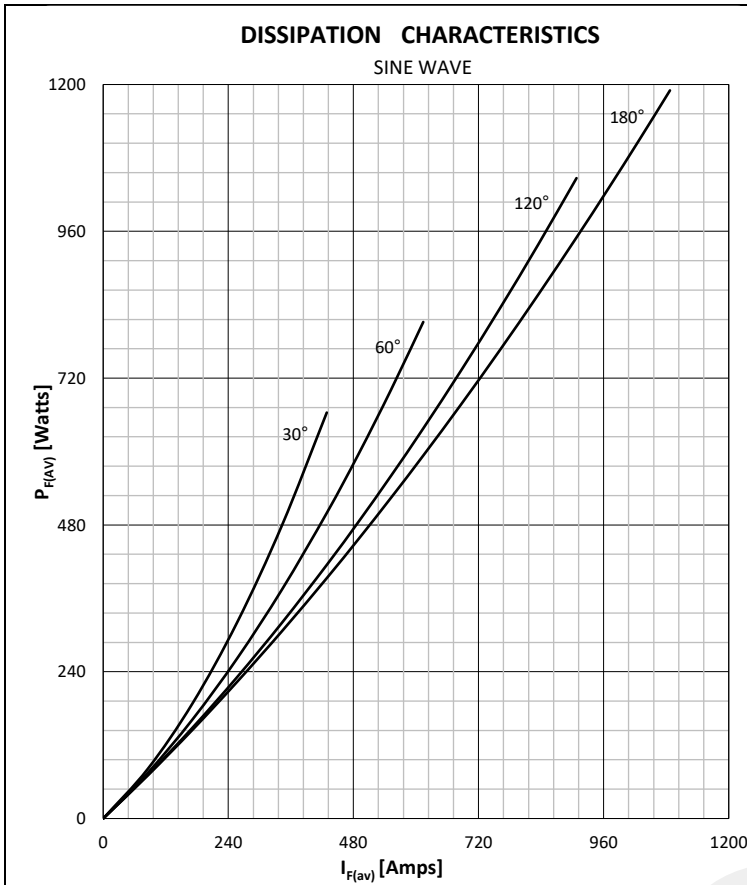
- Power Supplies
- Uncontrolled Rectifiers
- Field supply for DC motors
- Battery Chargers
- UPS

**Ordering Information**

MS	DZ	1080	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 DZ1080K28 : 2800V $V_{RRM}$ , Rectifier Diode Module				

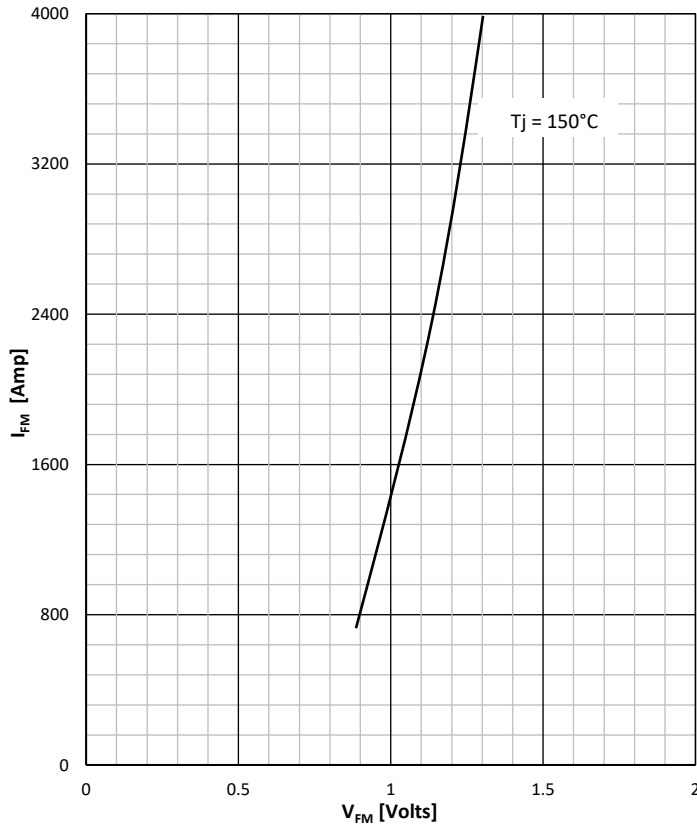
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Symbol	Characteristic	Conditions	T <sub>j</sub> [°C]	Value	Unit
<b>BLOCKING</b>					
V <sub>RRM</sub>	Repetitive peak reverse voltage		150	2000 - 2800	V
V <sub>RSM</sub>	Non-repetitive peak reverse voltage		150	2100 - 2900	V
I <sub>RRM</sub>	Repetitive peak reverse current	V = V <sub>RRM</sub>	150	75	mA
<b>CONDUCTING</b>					
I <sub>F(AV)</sub>	Mean forward current	180° sin ,50 Hz, T <sub>c</sub> =100°C		1087	A
I <sub>FRMS</sub>	RMS current	T <sub>c</sub> =100°C		1707	A
I <sub>FSM</sub>	Surge forward current	Sine wave, 10 ms Without reverse voltage	25	32000	A
			150	30000	A
I <sup>2</sup> t	I <sup>2</sup> t	Sine wave, 10 ms Without reverse voltage	25	5120 x 10 <sup>3</sup>	A <sup>2</sup> s
			150	4500 x 10 <sup>3</sup>	A <sup>2</sup> s
V <sub>F</sub>	Forward voltage	On-state current = 1800A	25	1.20	V
V <sub>F(TO)</sub>	Threshold voltage		150	0.80	V
r <sub>F</sub>	Forward slope resistance		150	0.110	mΩ
<b>MOUNTING</b>					
R <sub>th(j-c)</sub>	Thermal impedance, sin 180°	Junction to case, per module		0.042	°C/W
R <sub>th(c-h)</sub>	Thermal impedance	Case to heatsink, per module		0.015	°C/W
T <sub>j</sub>	Max. junction temperature			150	°C
T <sub>stg</sub>	Storage temperature			-40 .... 150	°C
V <sub>ISOL</sub>	Insulation test voltage, RMS	F=50Hz, 1min		4.5	KV
M1	Mounting torque			4 - 6	Nm
M2	Terminal connection torque			12 - 18	Nm
W	Weight (Approx.)			2800	gm
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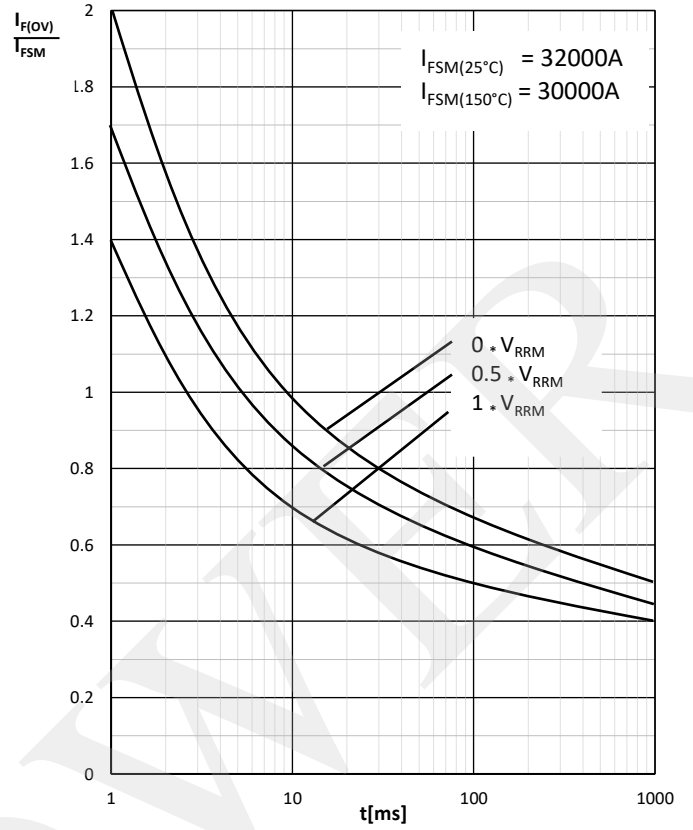


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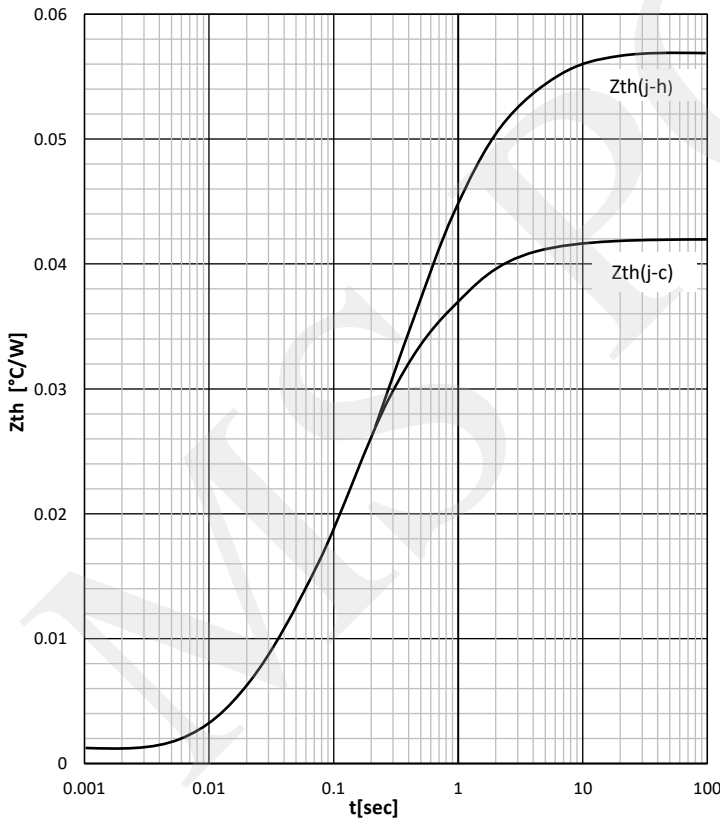
FORWARD CHARACTERISTIC



SURGE CHARACTERISTICS

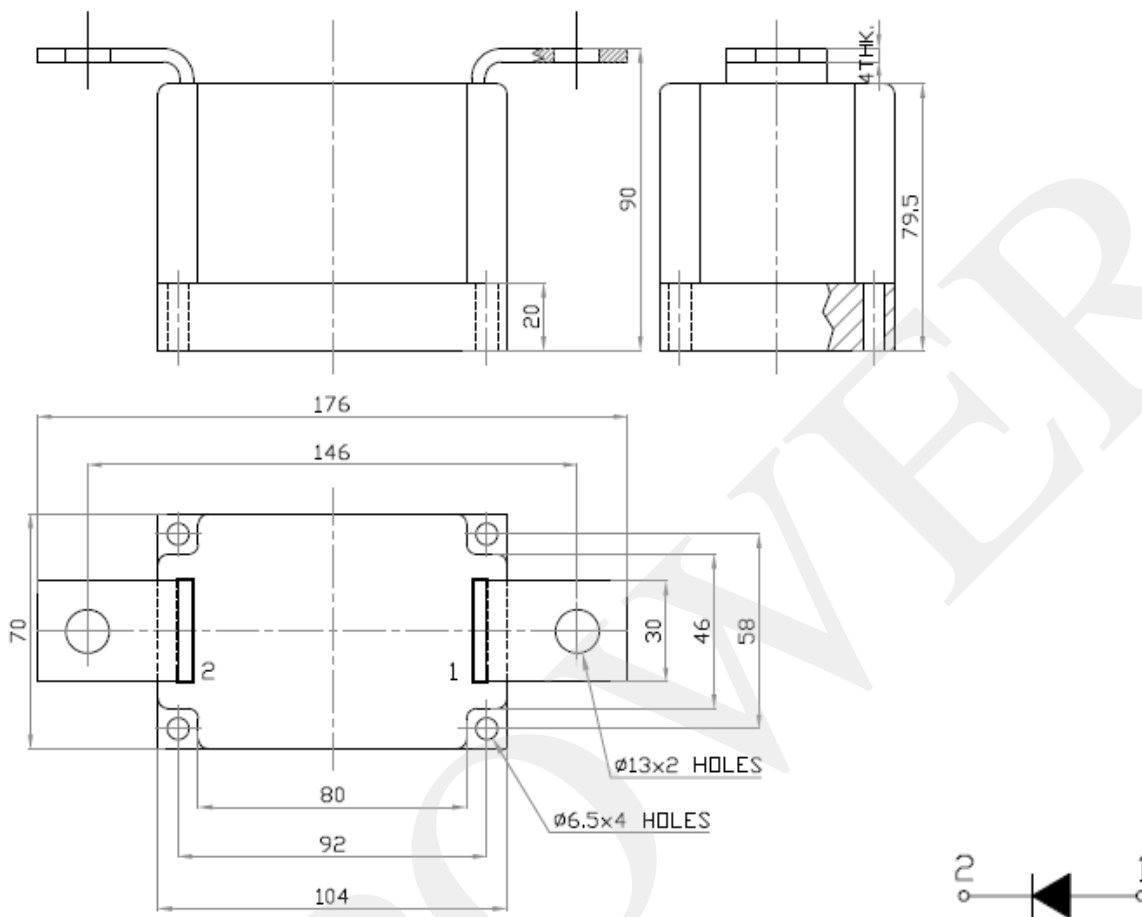


TRANSIENT THERMAL IMPEDANCE



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