



### Key Parameters

$V_{DRM} / V_{RRM}$	= 2600V
$I_{T(AV)}$	= 150A
$I_{TSM}$	= 4500A
$V_{T(TO)}$	= 1.20V
$r_T$	= 2.30m $\Omega$

### Features

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

### Applications

- Power Supplies
- DC motor control
- Controlled Rectifiers

### Ordering Information

MS	TZ	150	K	XX
Fixed code	TZ - Thyristor Module	Current Code	Technology K = Pressure Contact Technology	Voltage Code Code X 100 = $V_{DRM}/V_{RRM}$
Order Code MS TZ150K26 : 2600V $V_{DRM}, V_{RRM}$ , Thyristor Module				

Prepared by : ABA

Date of Publication : 25.03.2015

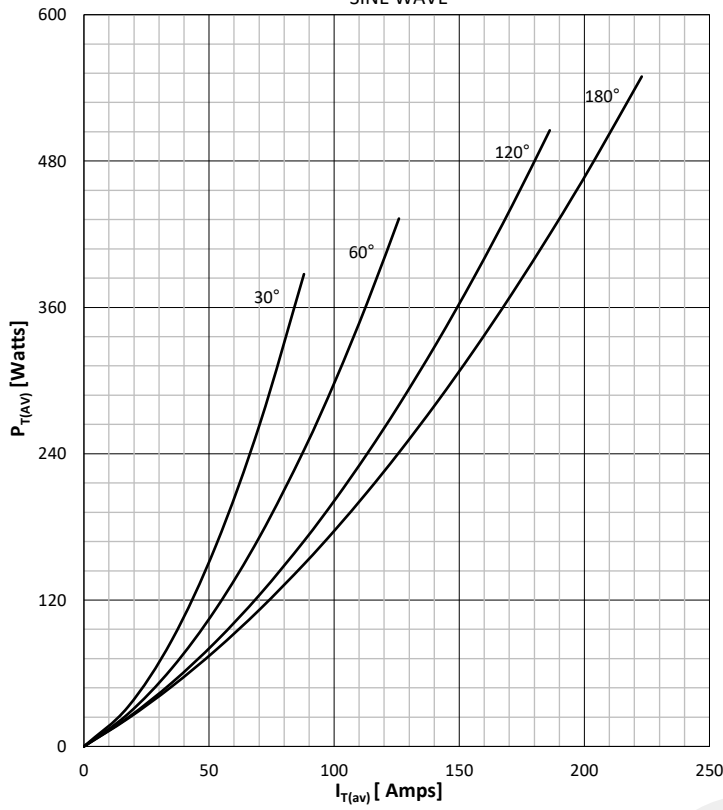
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Symbol	Characteristic	Conditions	T <sub>j</sub> [°C]	Value	Unit
<b>BLOCKING</b>					
V <sub>RRM</sub>	Repetitive peak reverse voltage		125	2000 - 2600	V
V <sub>RSM</sub>	Non-repetitive peak reverse voltage		125	2100 - 2700	V
V <sub>DRM</sub>	Repetitive peak off-state voltage		125	2000 - 2600	V
I <sub>RRM</sub>	Repetitive peak reverse current	V = V <sub>RRM</sub>	125	50	mA
I <sub>DRM</sub>	Repetitive peak off-state current	V = V <sub>DRM</sub>	125	50	mA
<b>CONDUCTING</b>					
I <sub>T(AV)</sub>	Mean on state current	180° sin ,50 Hz, T <sub>c</sub> =85°C 180° sin ,50 Hz, T <sub>c</sub> =54°C		150 223	A
I <sub>RMS</sub>	RMS on-state current			350	A
I <sub>TSM</sub>	Surge on-state current	Sine wave, 10 ms Without reverse voltage	25	4500	A
			125	4000	A
I <sup>2</sup> t	I <sup>2</sup> t	Sine wave, 10 ms Without reverse voltage	25	101 x 10 <sup>3</sup>	A <sup>2</sup> s
			125	80 x 10 <sup>3</sup>	A <sup>2</sup> s
V <sub>T</sub>	On-state voltage	On-state current = 600A	125	2.60	V
V <sub>T(TO)</sub>	Threshold voltage		125	1.20	V
r <sub>T</sub>	On-state slope resistance		125	2.30	mΩ
<b>SWITCHING</b>					
di/dt	Critical rate of rise of on-state current	i <sub>GM</sub> =1.0A, d <sub>iG</sub> /dt=1.0A/μs, f=50Hz	125	60	A/μs
dv/dt	Critical rate of rise of off-state voltage	V <sub>DR</sub> = 67%V <sub>DRM</sub>	125	1000	V/μs
<b>GATE</b>					
I <sub>gt</sub>	Gate trigger current	V <sub>D</sub> =6V	25	200	mA
V <sub>gt</sub>	Gate trigger voltage	V <sub>D</sub> =6V	25	3.0	V
I <sub>H</sub>	Holding current	V <sub>D</sub> =6V, gate open circuit	25	300	mA
I <sub>L</sub>	Latching current	V <sub>D</sub> =6V	25	1000	mA
<b>MOUNTING</b>					
R <sub>th(j-c)</sub>	Thermal impedance, sin 180°	Junction to case, per module		0.13	°C/W
R <sub>th(j-c)</sub>	Thermal impedance, rec120°	Junction to case, per module		0.14	°C/W
R <sub>th(c-h)</sub>	Thermal impedance	Case to heatsink, per module		0.04	°C/W
T <sub>j</sub>	Max. junction temperature			125	°C
T <sub>stg</sub>	Storage temperature			-40 .... 130	°C
V <sub>ISOL</sub>	Insulation test voltage,RMS	F=50Hz, 1min		3.0	KV
M1	Mounting torque			7 ± 15%	Nm
M2	Terminal connection torque			12 ± 15%	Nm
W	Weight (Approx.)			850	gm
			Prepared by : ABA	Date of Publication : 25.03.2015	
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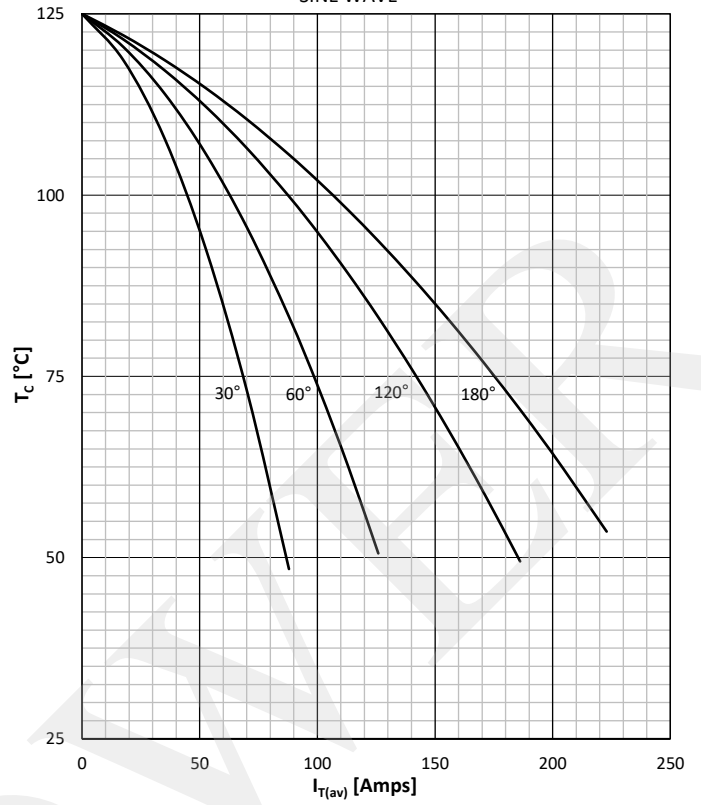
DISSIPATION CHARACTERISTICS

SINE WAVE



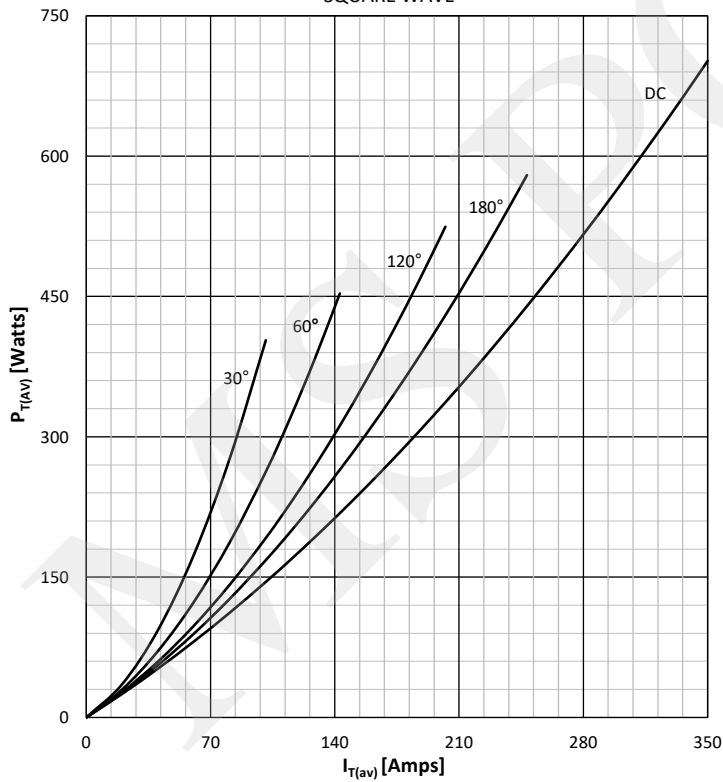
ON STATE CURRENT DERATING CURVE

SINE WAVE



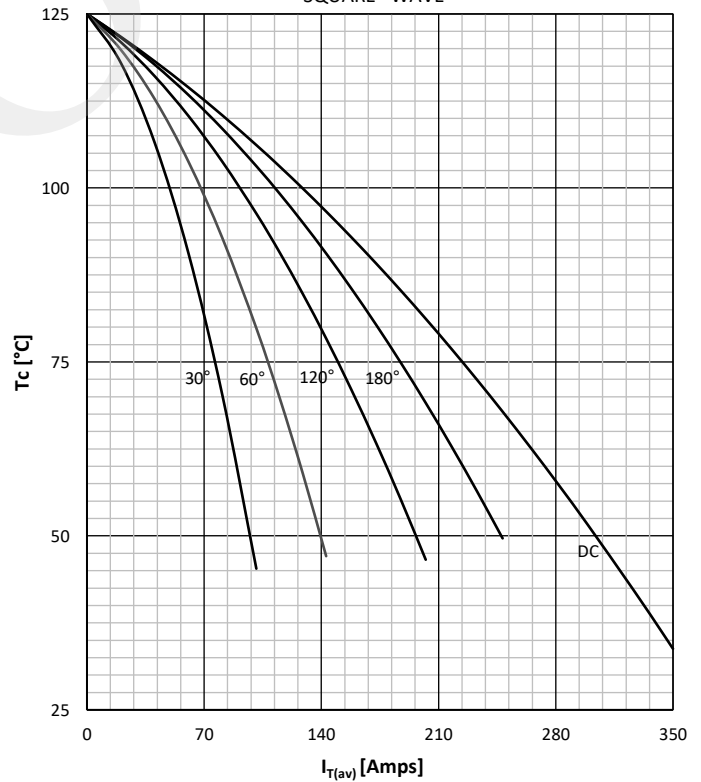
DISSIPATION CHARACTERISTICS

SQUARE WAVE



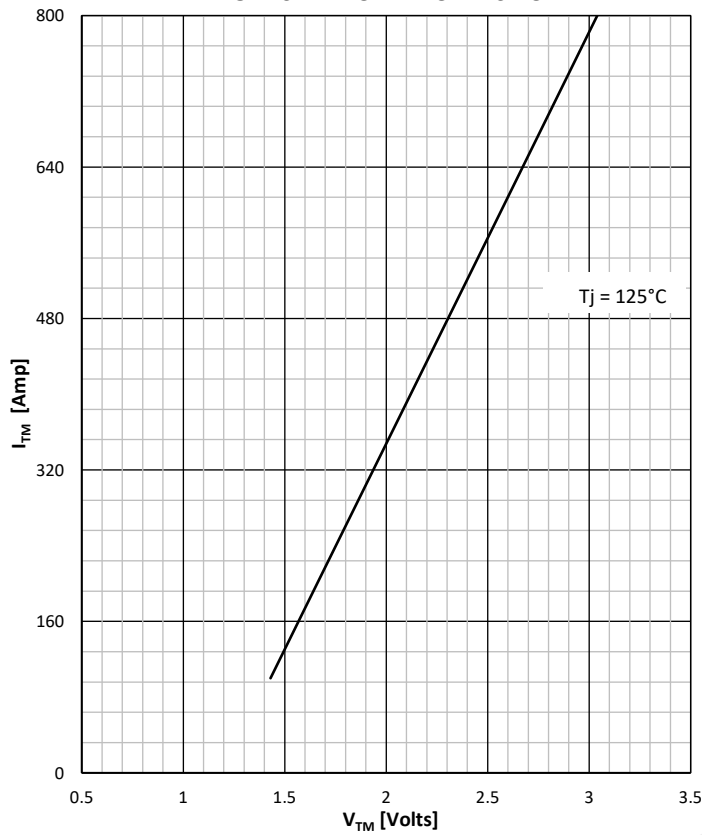
ON STATE CURRENT DERATING CURVE

SQUARE WAVE

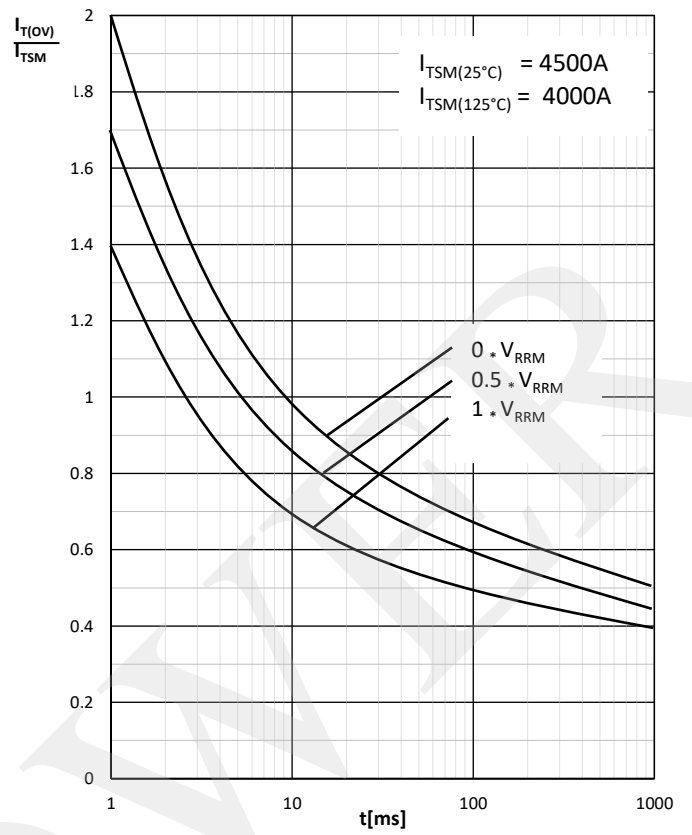


Prepared by : ABA	Date of Publication : 25.03.2015
Approved by : RBS	Revision : 1

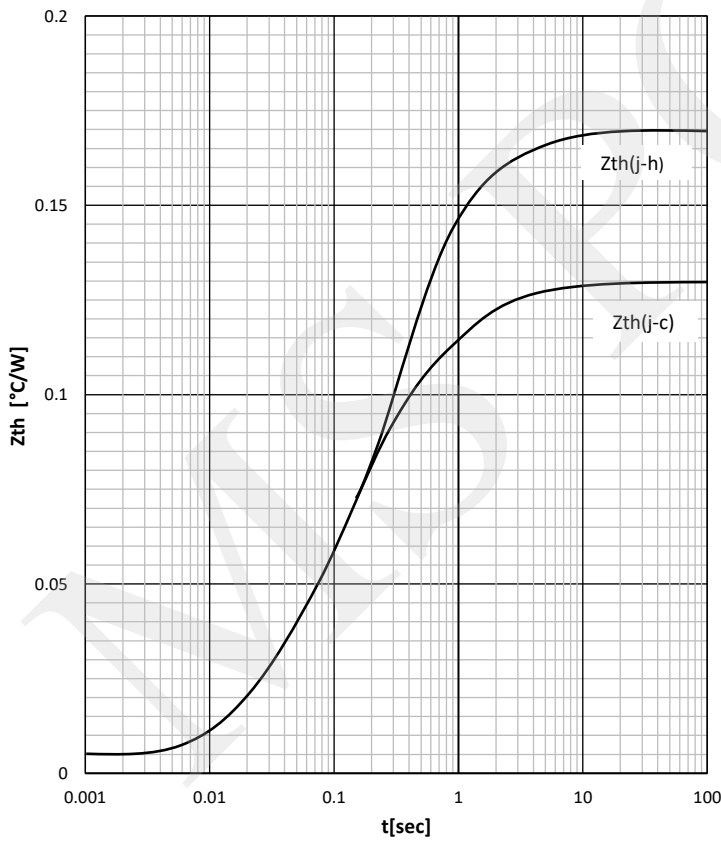
ON -STATE CHARACTERISTIC



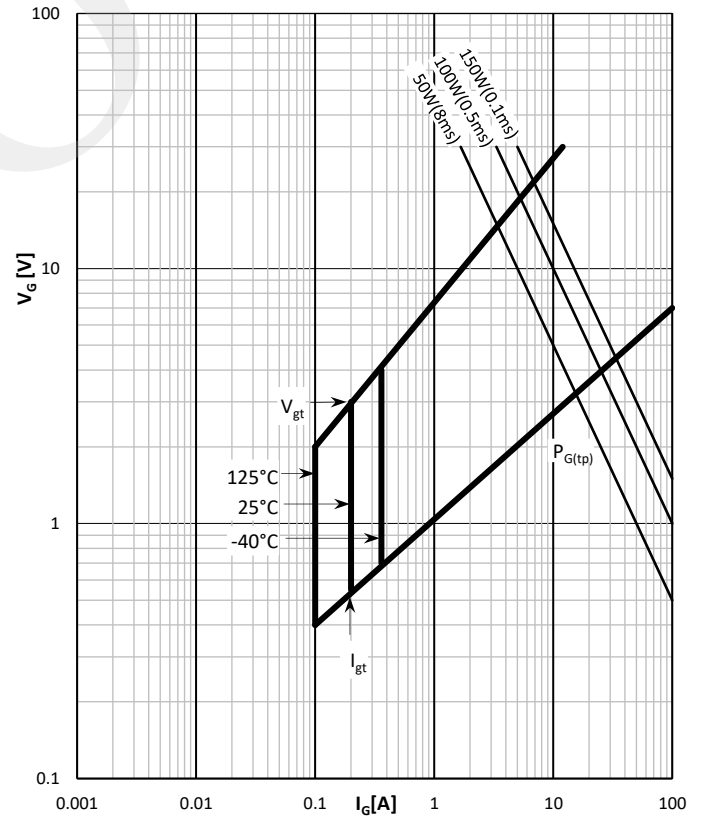
SURGE CHARACTERISTICS



TRANSIENT THERMAL IMPEDANCE, PER ARM



GATE TRIGGER CHARACTERISTICS



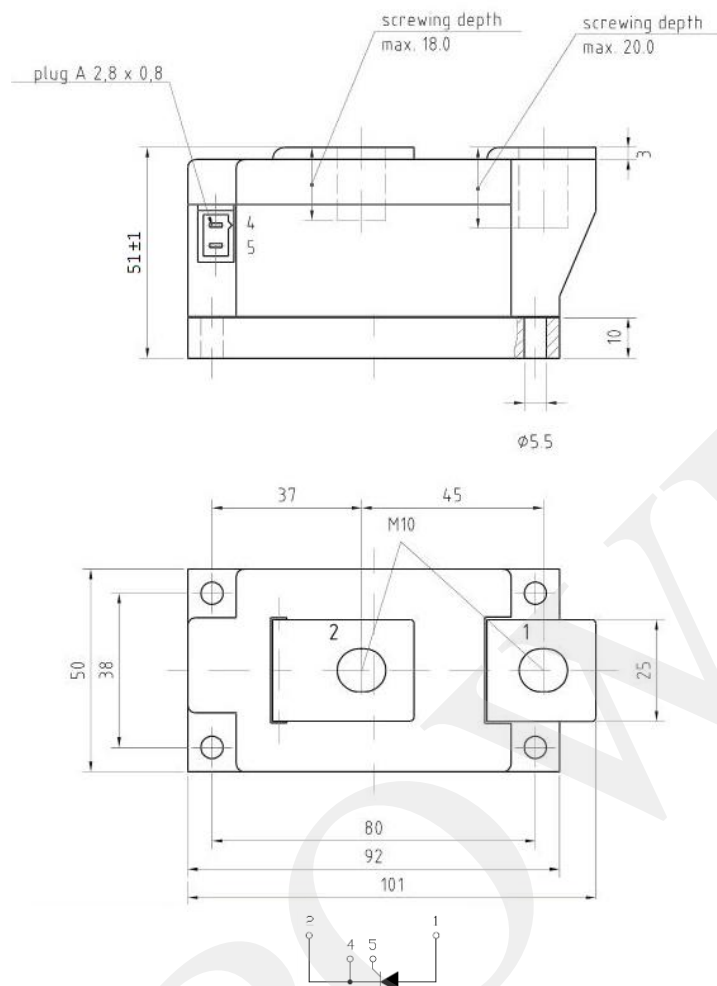
Prepared by : ABA

Date of Publication : 25.03.2015

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Outline



Note : All dimensions are in mm  
Tolerance: ±0.3mm

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Date of Publication : 25.03.2015

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Prepared by : ABA	Date of Publication : 25.03.2015
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