



**Key Parameters**

$V_{RRM}$	= 600V
$I_{F(AV)}$	= 6720A
$I_{FSM}$	= 57000A
$V_{F(TO)}$	= 0.645V
$r_F$	= 0.044m $\Omega$

**Features**

- Full blocking capability over wide temperature range
- Hermetically sealed ceramic package
- High case non-rupture current

**Applications**

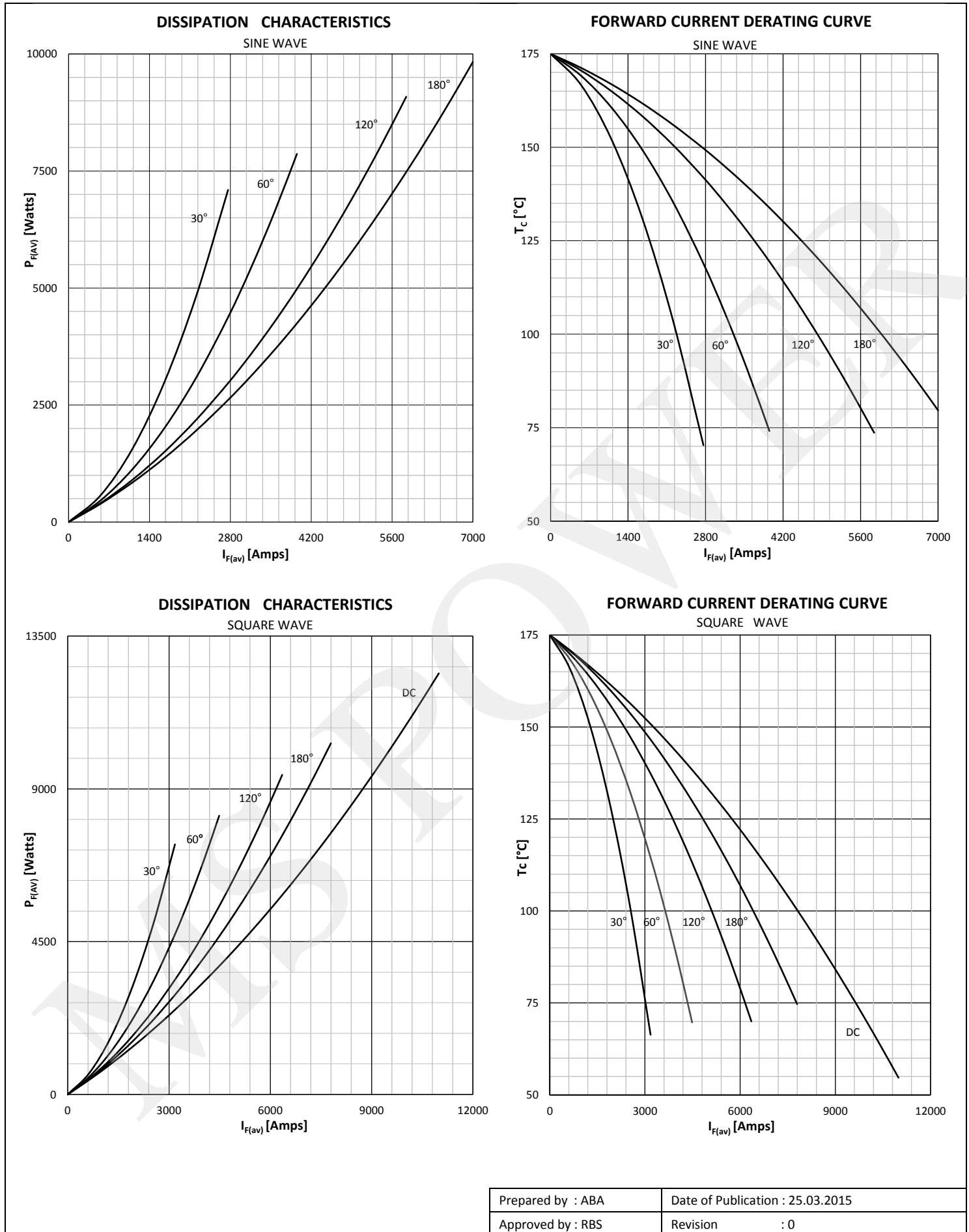
- Traction Rectifiers
- Uncontrolled Rectifiers
- Welding
- Induction Heating / Melting

**Ordering Information**

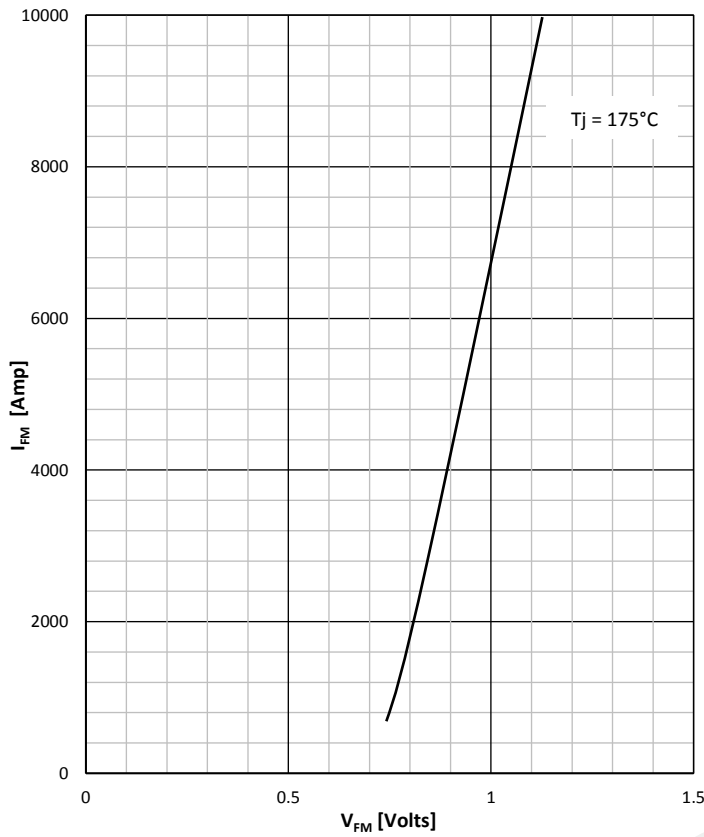
<b>MS D</b>	<b>6720</b>	<b>C</b>	<b>XX</b>
Rectifier Diode	Current code	C - Capsule package with Alloyed silicon technology	Voltage Code Code X 100 = $V_{RRM}$
Order Code MS D6720C06 : 600V $V_{RRM}$ , Capsule Diode			

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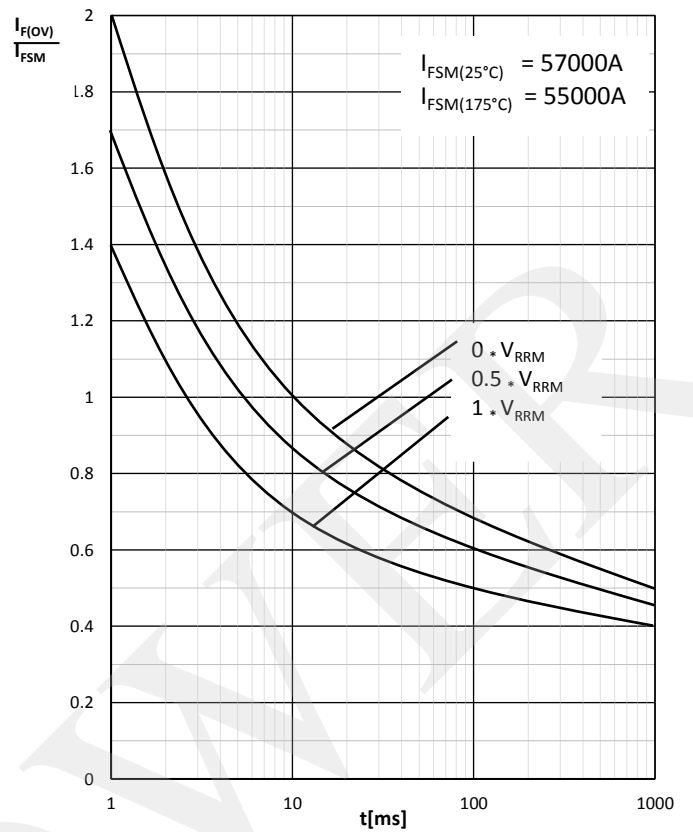
Symbol	Characteristic	Conditions	T <sub>j</sub> [°C]	Value	Unit
<b>BLOCKING</b>					
V <sub>RRM</sub>	Repetitive peak reverse voltage		175	200 - 600	V
V <sub>RSM</sub>	Non-repetitive peak reverse voltage		175	300 - 700	V
I <sub>RRM</sub>	Repetitive peak reverse current	V = V <sub>RRM</sub>	175	100	mA
<b>CONDUCTING</b>					
I <sub>F(AV)</sub>	Mean forward current	180° sin, 50 Hz, T <sub>c</sub> =85°C, double side cooled 180° sin, 50 Hz, T <sub>c</sub> =79°C, double side cooled		6720 7000	A
I <sub>FRMS</sub>	RMS current	T <sub>c</sub> =79°C, double side cooled		10990	A
I <sub>FSM</sub>	Surge forward current	Sine wave, 10 ms Without reverse voltage	25	57000	A
			175	55000	A
I <sup>2</sup> t	I <sup>2</sup> t	Sine wave, 10 ms Without reverse voltage	25	16245 x 10 <sup>3</sup>	A <sup>2</sup> s
			175	15125 x 10 <sup>3</sup>	A <sup>2</sup> s
V <sub>F</sub>	Forward voltage	On-state current = 3000A	175	0.85	V
V <sub>F(TO)</sub>	Threshold voltage		175	0.645	V
r <sub>F</sub>	Forward slope resistance		175	0.044	mΩ
<b>MOUNTING</b>					
R <sub>th(j-c)</sub>	Thermal impedance, sin 180°	Junction to case, double side cooled		0.0095	°C/W
R <sub>th(c-h)</sub>	Thermal impedance	Case to heatsink, double side cooled		0.002	°C/W
T <sub>j</sub>	Max. junction temperature			175	°C
T <sub>stg</sub>	Storage temperature			-40 .... 175	°C
M	Clamping force			27 - 45	KN
W	Weight (Approx.)			1100	gm
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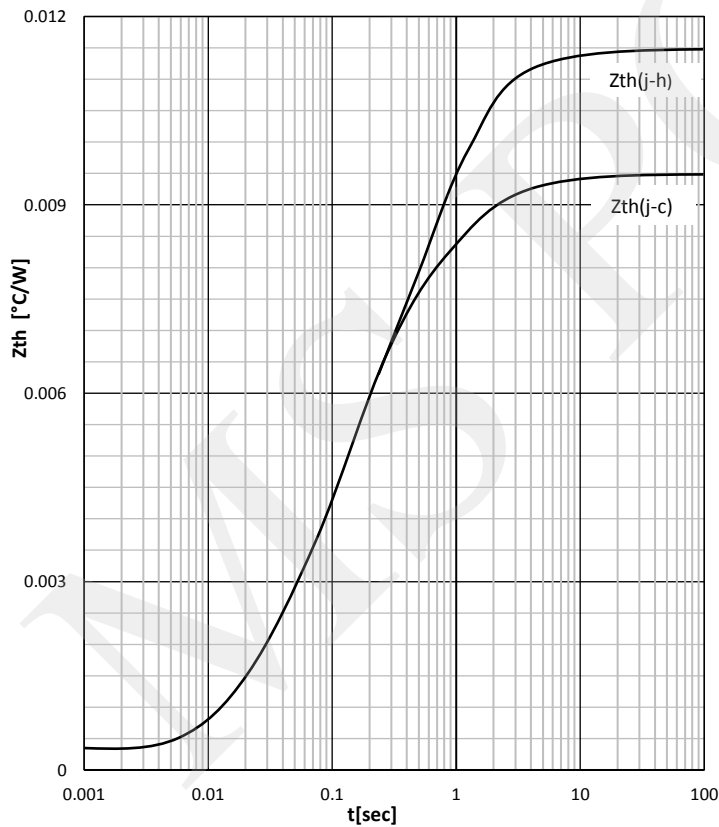
FORWARD CHARACTERISTIC



SURGE CHARACTERISTICS

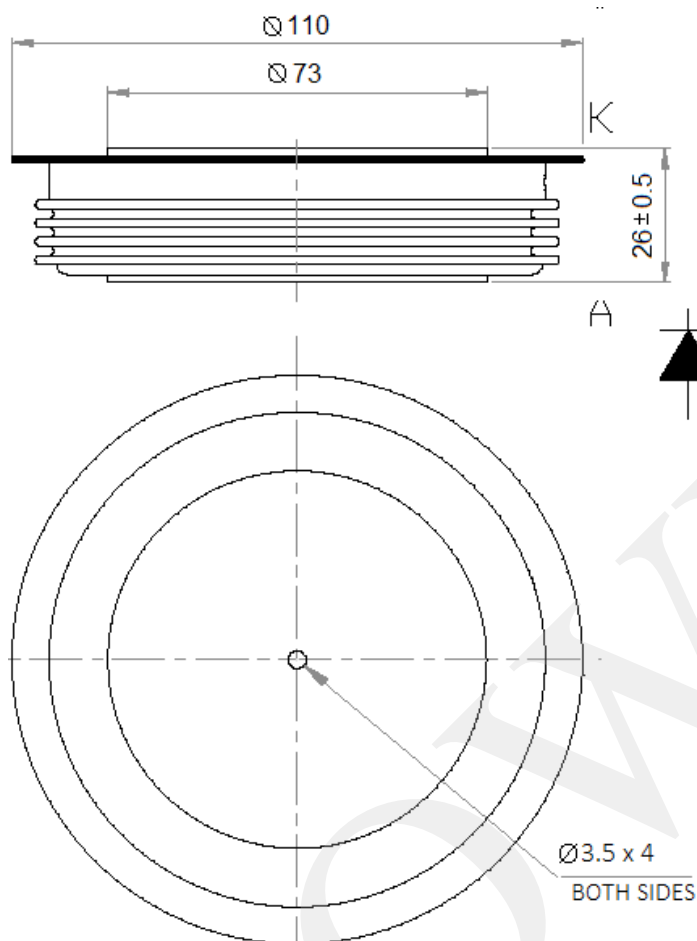


TRANSIENT THERMAL IMPEDANCE



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