



Key Parameters

V_{RRM}	= 5400V
$I_{F(AV)}$	= 2315A
I_{FSM}	= 24000A
$V_{F(TO)}$	= 0.96V
r_F	= 0.207m Ω

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

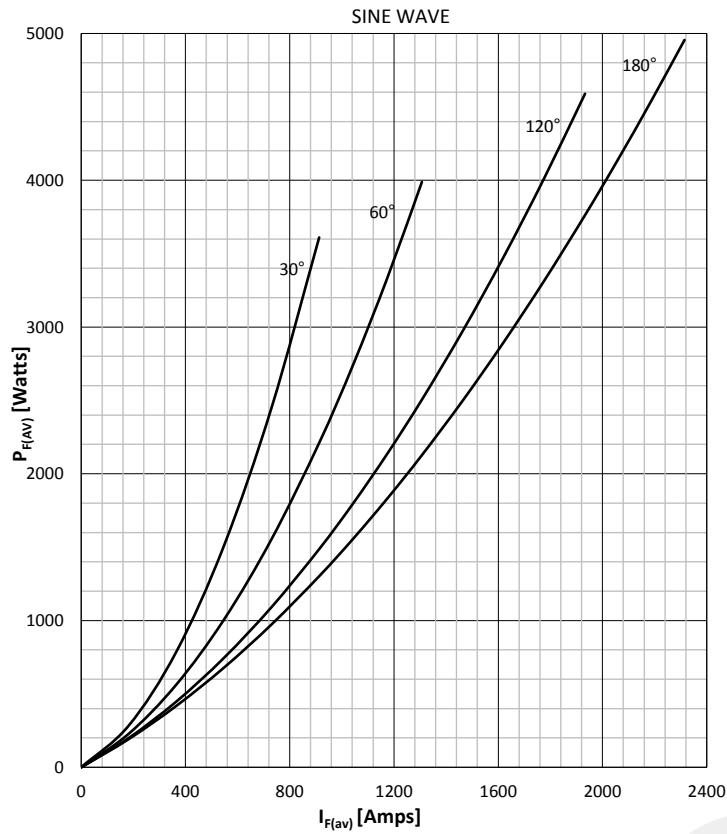
Ordering Information

MS D	2315	C	X X
Rectifier Diode	Current code	C - Capsule package with Alloyed silicon technology	Voltage Code Code X 100 = V_{RRM}
Order Code MS D2315C54 : 5400V V_{RRM} , Capsule Diode			

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Symbol	Characteristic	Conditions	T _j [°C]	Value	Unit
BLOCKING					
V _{RRM}	Repetitive peak reverse voltage		150	4600 - 5400	V
V _{RSM}	Non-repetitive peak reverse voltage		150	4800 - 5600	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 =85°C , double side cooled 180° sin,50 Hz, T _c =99°C , double side cooled		2315 2000	A
I _{FRMS}	RMS current	T _c =85°C , double side cooled		3634	A
I _{FSM}	Surge forward current	Sine wave, 10 ms Without reverse voltage	25	24000	A
			150	21800	A
I ² t	I ² t	Sine wave, 10 ms Without reverse voltage	25	2880 x 10 ³	A ² s
			150	2376 x 10 ³	A ² s
V _F	Forward voltage	On-state current = 5000A	150	2.0	V
V _{F(TO)}	Threshold voltage		150	0.96	V
r _F	Forward slope resistance		150	0.207	mΩ
MOUNTING					
R _{th(j-c)}	Thermal impedance, sin 180°	Junction to case, double side cooled		0.013	°C/W
R _{th(c-h)}	Thermal impedance	Case to heatsink, double side cooled		0.007	°C/W
T _j	Max. junction temperature			150	°C
T _{stg}	Storage temperature			-40 150	°C
M	Clamping force			40 - 50	KN
W	Weight (Approx.)			820	gm
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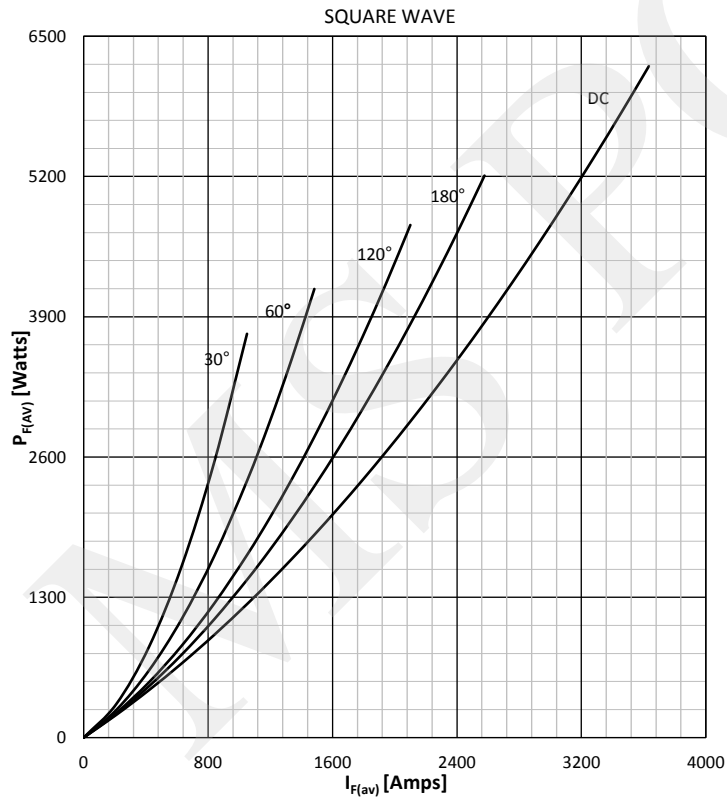
DISSIPATION CHARACTERISTICS



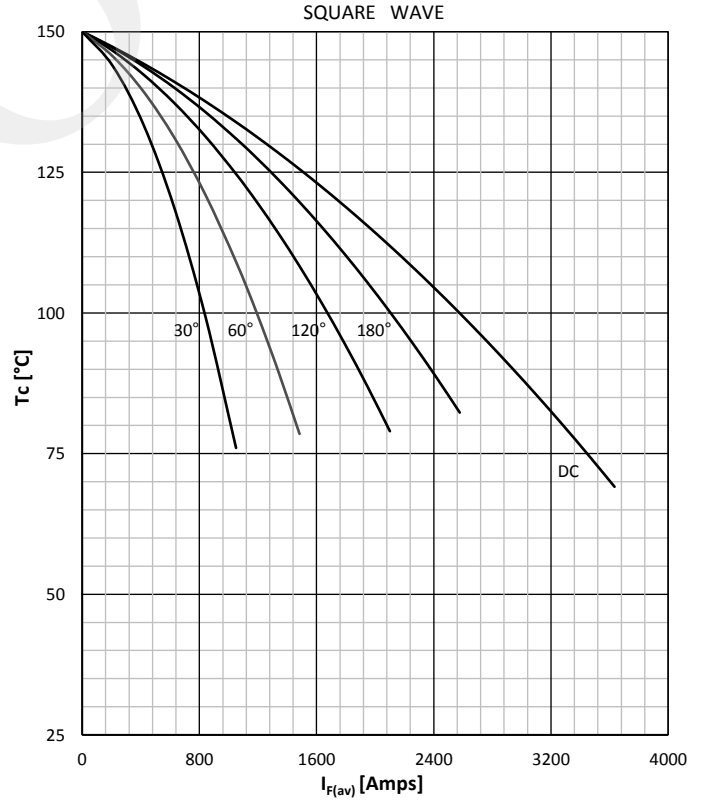
FORWARD CURRENT DERATING CURVE



DISSIPATION CHARACTERISTICS



FORWARD CURRENT DERATING CURVE



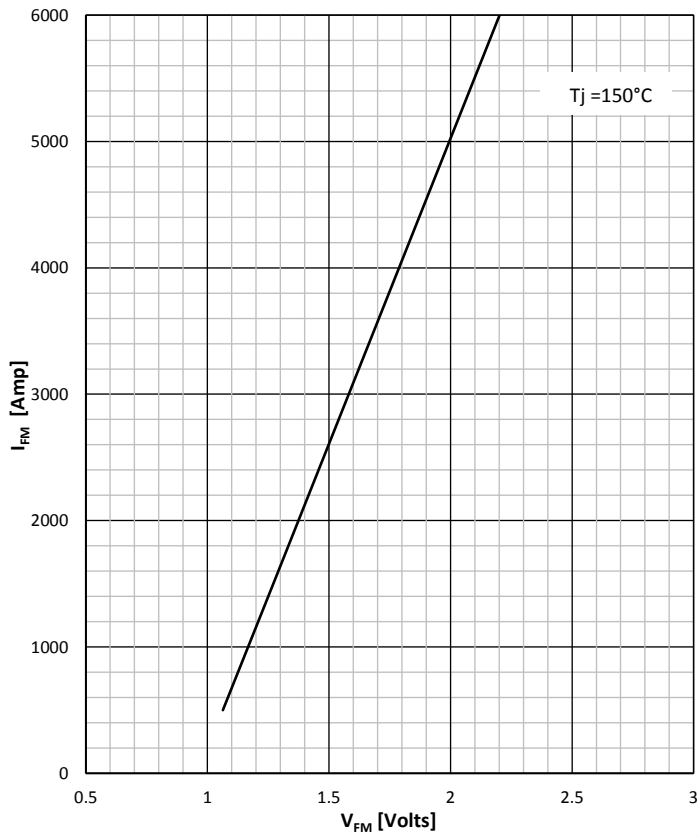
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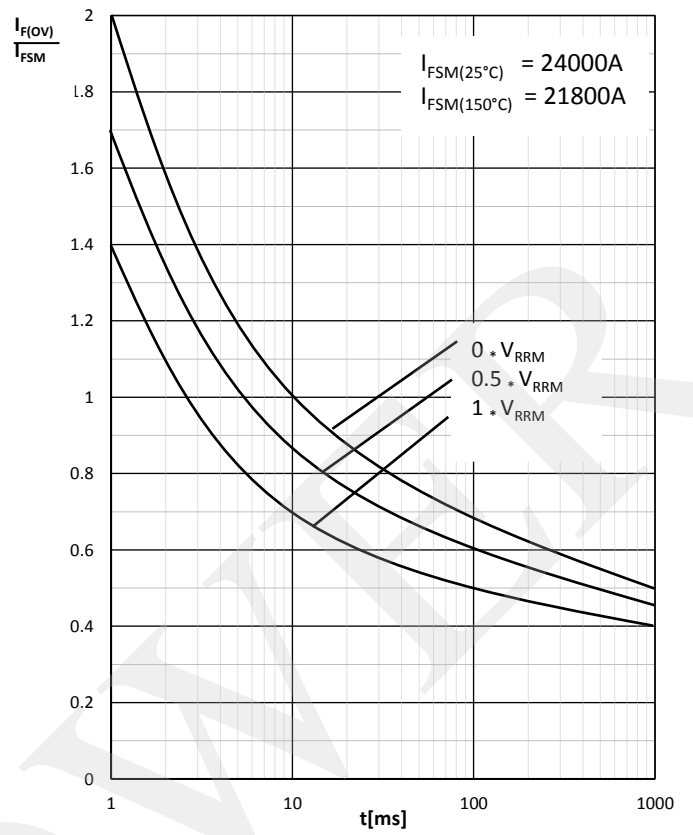
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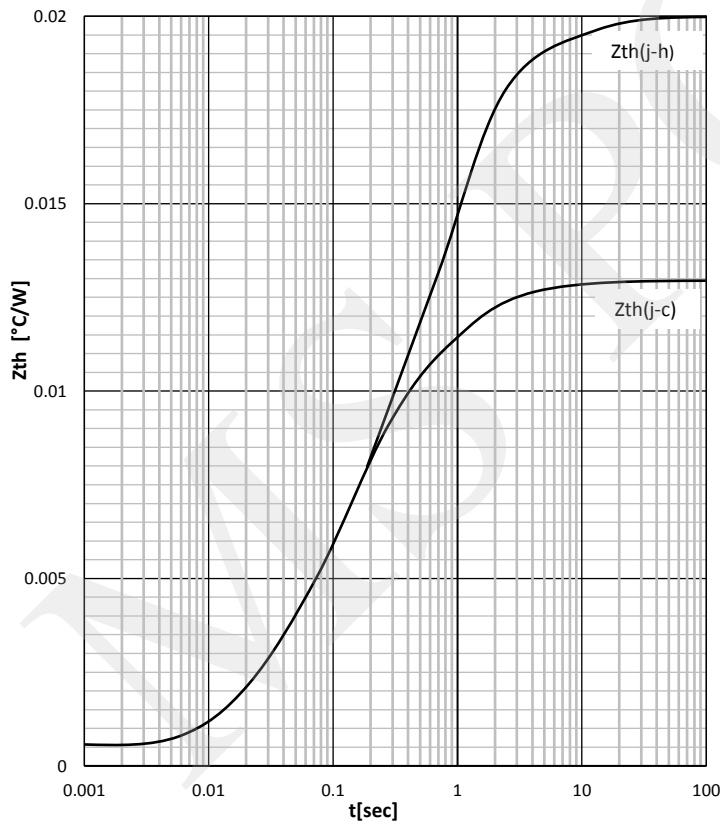
FORWARD CHARACTERISTIC



SURGE CHARACTERISTICS



TRANSIENT THERMAL IMPEDANCE



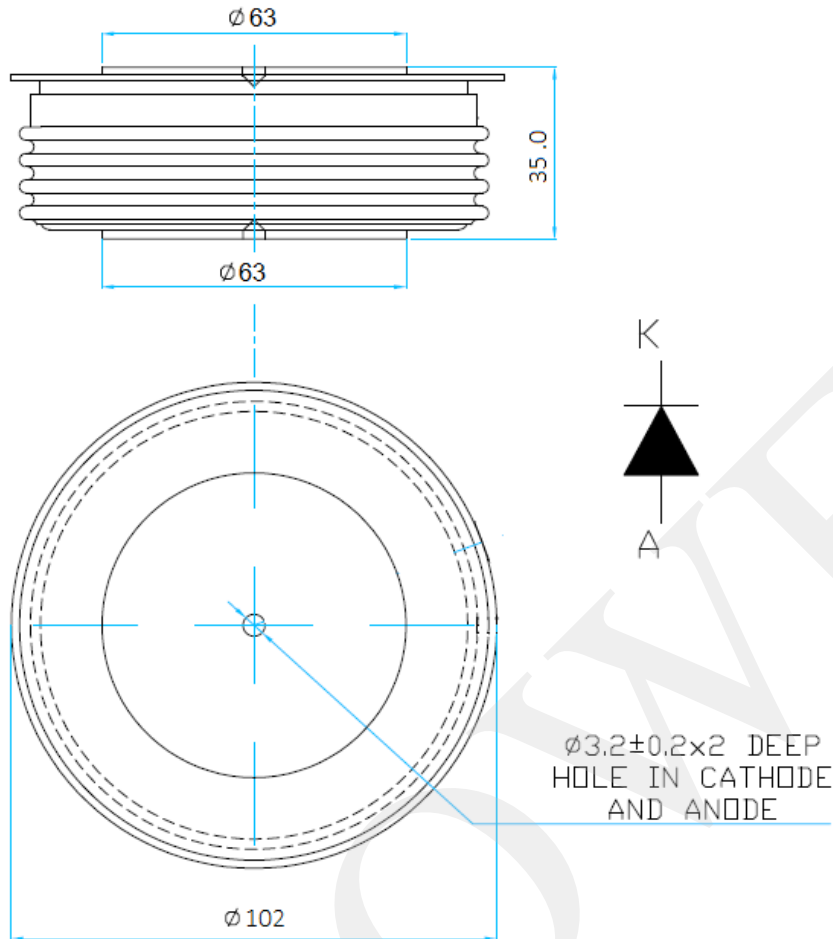
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Outline



MS Power GmbH

Mergenthalerallee 79-81
65760 Eschborn, Germany
Web: www.mspowergroup.com
Mail: info@mspowergroup.de

Sales & Enquiry:

sales@mspowergroup.de

Technical Support:

solution@mspowergroup.de

After sales Service:

service@mspowergroup.de

Phone: +49 (0) 6196/7768 666

Fax: +49 (0) 6196/7757 888



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