



Key Parameters

V_{RRM}	= 2500V
$I_{F(AV)}$	= 1495A
I_{FSM}	= 22.5kA
$V_{F(TO)}$	= 1.15V
r_F	= 0.266mΩ

Features

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

Applications

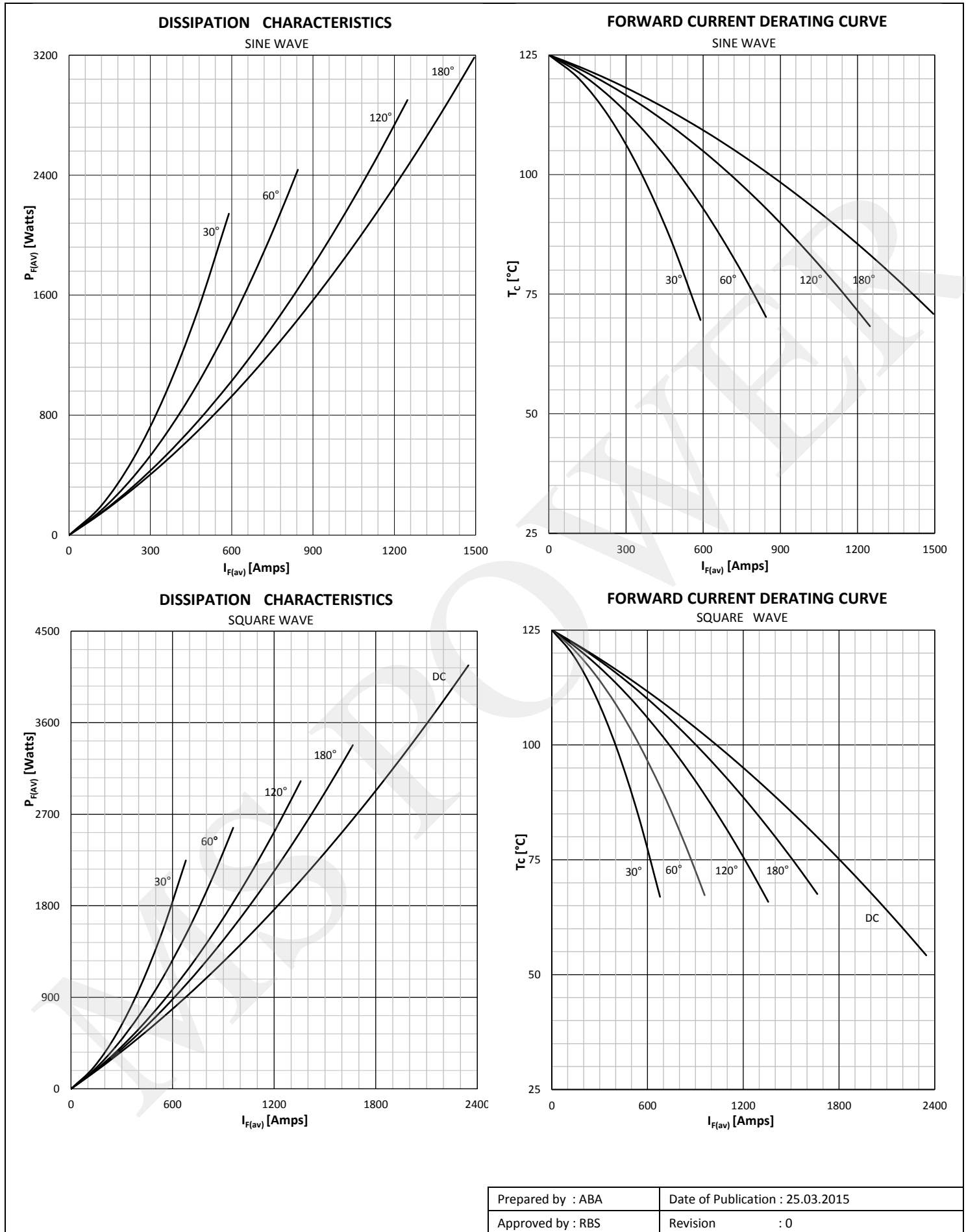
- Power Supplies
- Uncontrolled Rectifiers
- Freewheeling / Snubber
- Induction Heating / Melting

Ordering Information

MS DF	1495	C	X X
Fast Recovery Diode	Current code	C - Capsule package with Alloyed silicon technology	Voltage Code Code X 100 = V_{RRM}
Order Code MS DF1495C25 : 2500V V_{RRM} , Fast recovery capsule Diode			

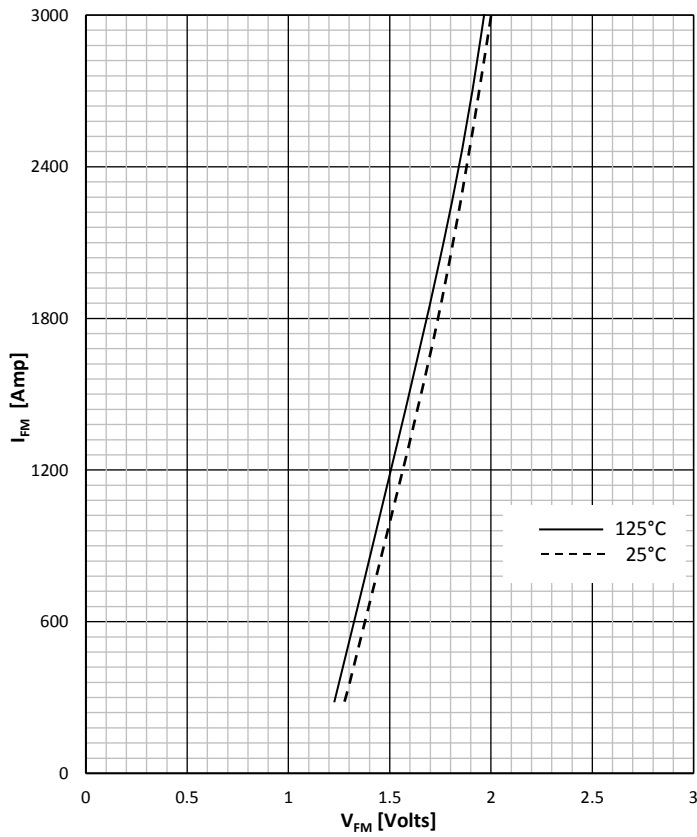
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Symbol	Characteristic	Conditions	T _j [°C]	Value	Unit
BLOCKING					
V _{RRM}	Repetitive peak reverse voltage		125	1600 - 2500	V
V _{RSM}	Non-repetitive peak reverse voltage		125	1700 - 2600	V
I _{RRM}	Repetitive peak reverse current	V = V _{RRM}	125	90	mA
CONDUCTING					
I _{F(AV)}	Mean forward current	180° sin, 50 Hz, T _c =70°C, double side cooled		1495	A
I _{FRMS}	RMS current			2347	A
I _{FSM}	Surge forward current	Sine wave, 10 ms Without reverse voltage	25	22500	A
			125	21500	A
I ² t	I ² t	Sine wave, 10 ms Without reverse voltage	25	2531 x 10 ³	A ² s
			125	2311 x 10 ³	A ² s
V _F	Forward voltage	On-state current = 3000A	125	1.95	V
V _{F(TO)}	Threshold voltage		125	1.15	V
r _F	Forward slope resistance		125	0.266	mΩ
SWITCHING					
Q _{rr}	Recovered Charge (typical)		125	815	μC
I _{rm}	Reverse recovery current (typical)	I _{FM} =1000A, -di _F /dt = 100A/μs, V _r = 50V, t _p =1000 μs, 50% chord.	125	140	A
T _{rr}	Reverse recovery time, 50% chord (typical)		125	3.9	μs
MOUNTING					
R _{th(j-c)}	Thermal impedance, sin 180°	Junction to case, double side cooled		0.017	°C/W
R _{th(c-h)}	Thermal impedance	Case to heatsink, double side cooled		0.005	°C/W
T _j	Max. junction temperature			125	°C
T _{stg}	Storage temperature			-40 125	°C
M	Clamping force			20 - 24	NM
W	Weight (Approx.)			500	gm
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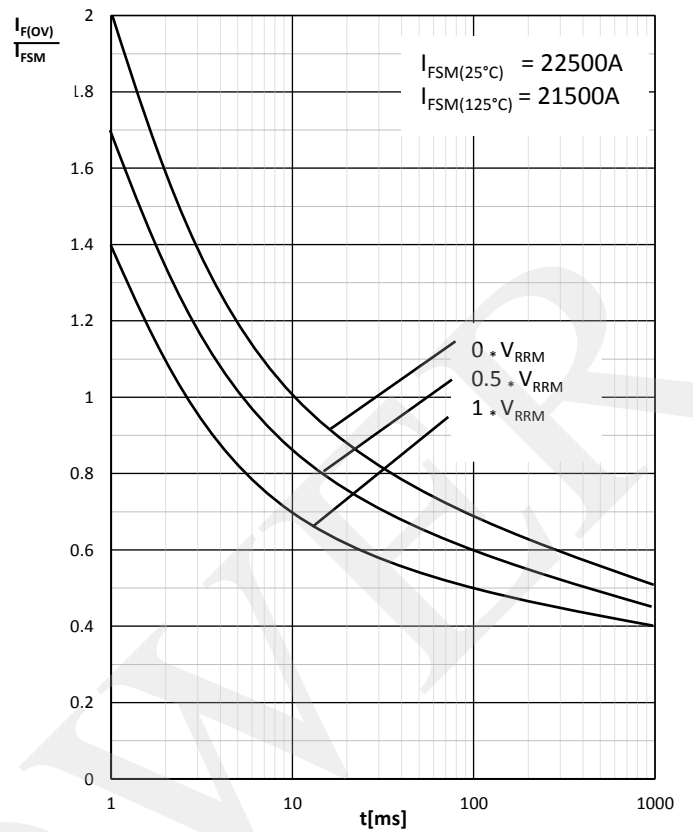


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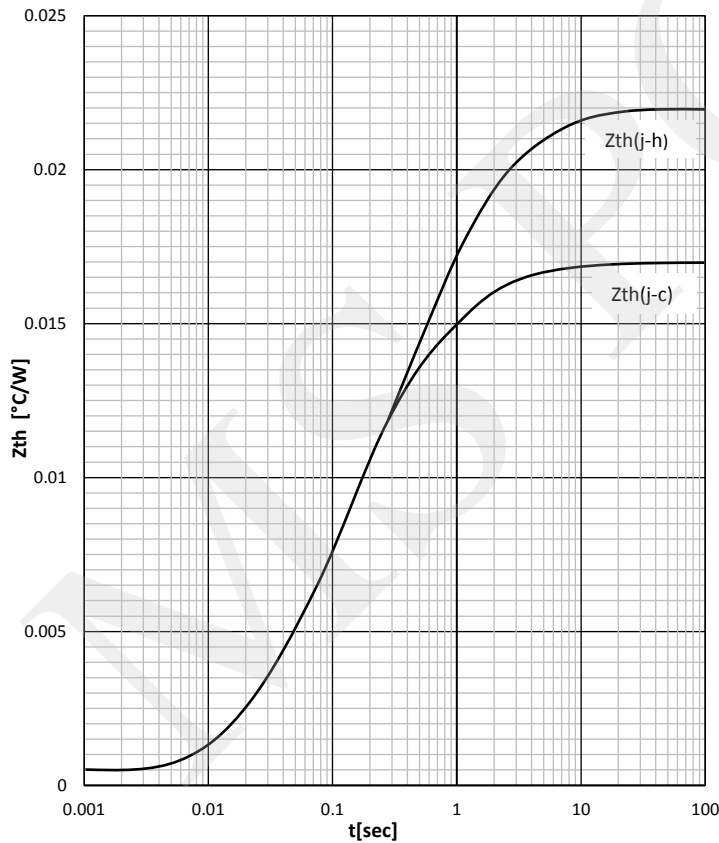
FORWARD CHARACTERISTIC



SURGE CHARACTERISTICS

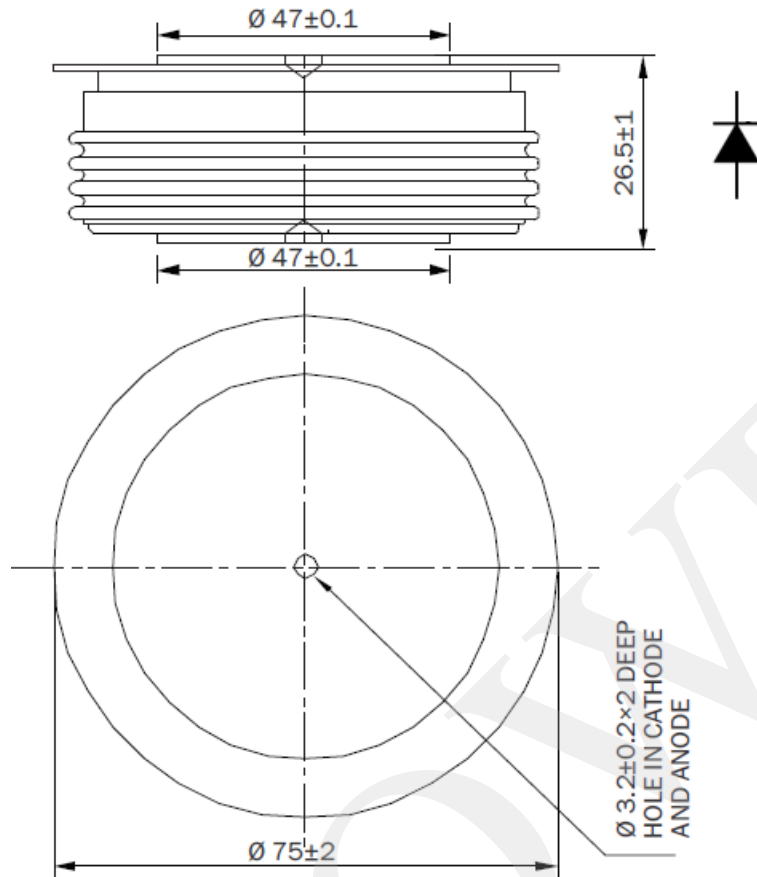


TRANSIENT THERMAL IMPEDANCE, DSC



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