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RECTIFIER DIODE

AR3008

Repetitive voltage up to **3000 V**
Mean forward current **2693 A**
Surge current **30,2 kA**

FINAL SPECIFICATION
Mar. 17 - Issue: 7

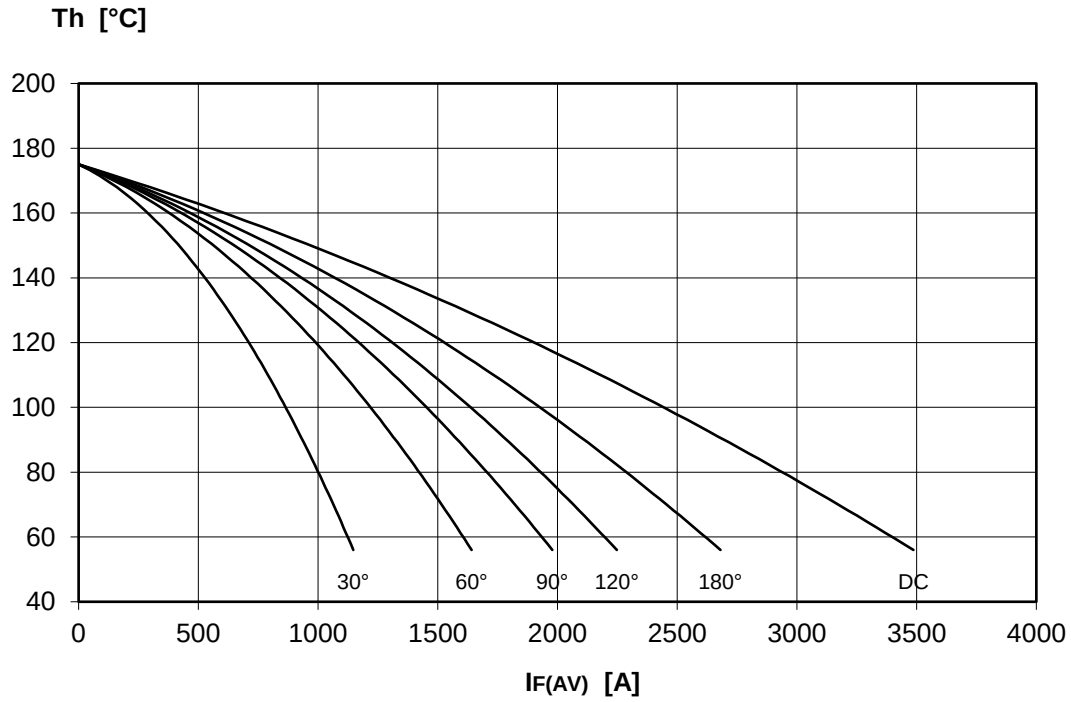
Symbol	Characteristic	Conditions	Tj [°C]	Value	Unit
BLOCKING					
V_{RRM}	Repetitive peak reverse voltage		175	3000	V
V_{RSM}	Non-repetitive peak reverse voltage		175	3100	V
I_{RRM}	Repetitive peak reverse current	V=VRRM	175	75	mA
CONDUCTING					
$I_{F(AV)}$	Mean forward current	180° sin ,50 Hz, Th=55°C, double side cooled		2693	A
$I_{F(AV)}$	Mean forward current	180° sin ,50 Hz, Tc=85°C, double side cooled		2648	A
I_{FSM}	Surge forward current	Sine wave, 10 ms without reverse voltage	175	30,2	kA
I^2t	I^2t			4560 x 10^3	A^2s
V_{FM}	Forward voltage	Forward current = 2900 A	25	1,30	V
$V_{F(TO)}$	Threshold voltage		175	0,87	V
r_F	Forward slope resistance		175	0,127	mohm
SWITCHING					
t_{rr}	Reverse recovery time		175		µs
Q_{rr}	Reverse recovery charge				µC
I_{rr}	Peak reverse recovery current				A
MOUNTING					
$R_{th(j-h)}$	Thermal impedance, DC	Junction to heatsink, double side cooled		26	°C/kW
$R_{th(c-h)}$	Thermal impedance	Case to heatsink, double side cooled		6	°C/kW
T_j	Operating junction temperature			-30 / 175	°C
F	Mounting force			18.0 / 20.0	kN
	Mass			500	g

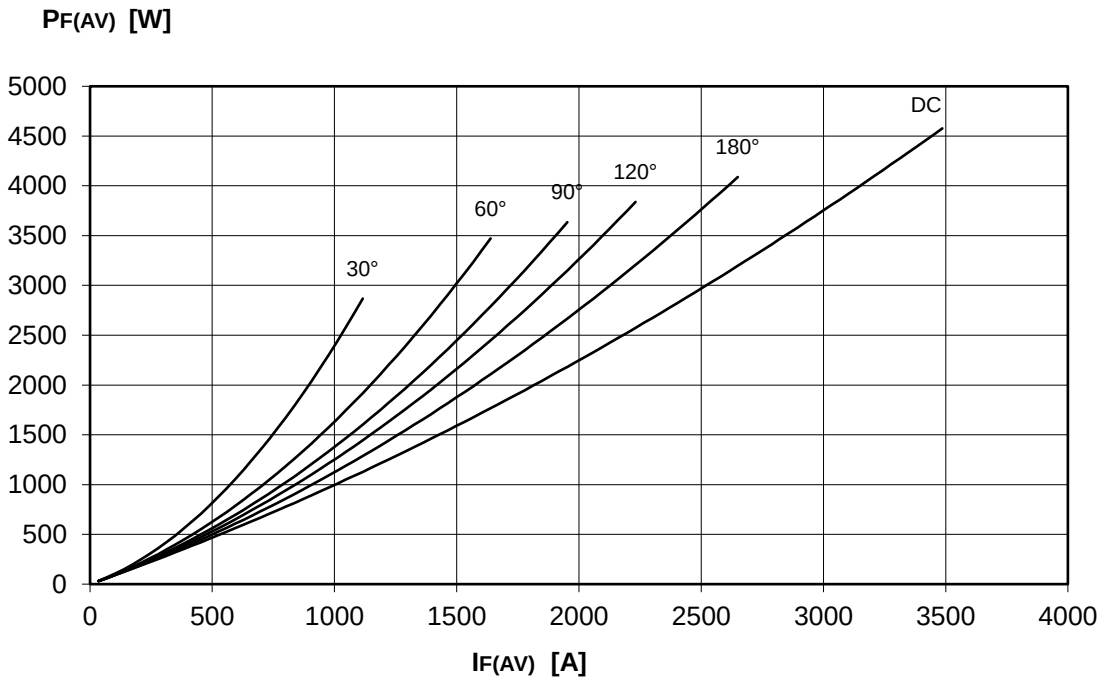
ORDERING INFORMATION : AR3008 S 30

standard specification — VRRM/100

DISSIPATION CHARACTERISTICS

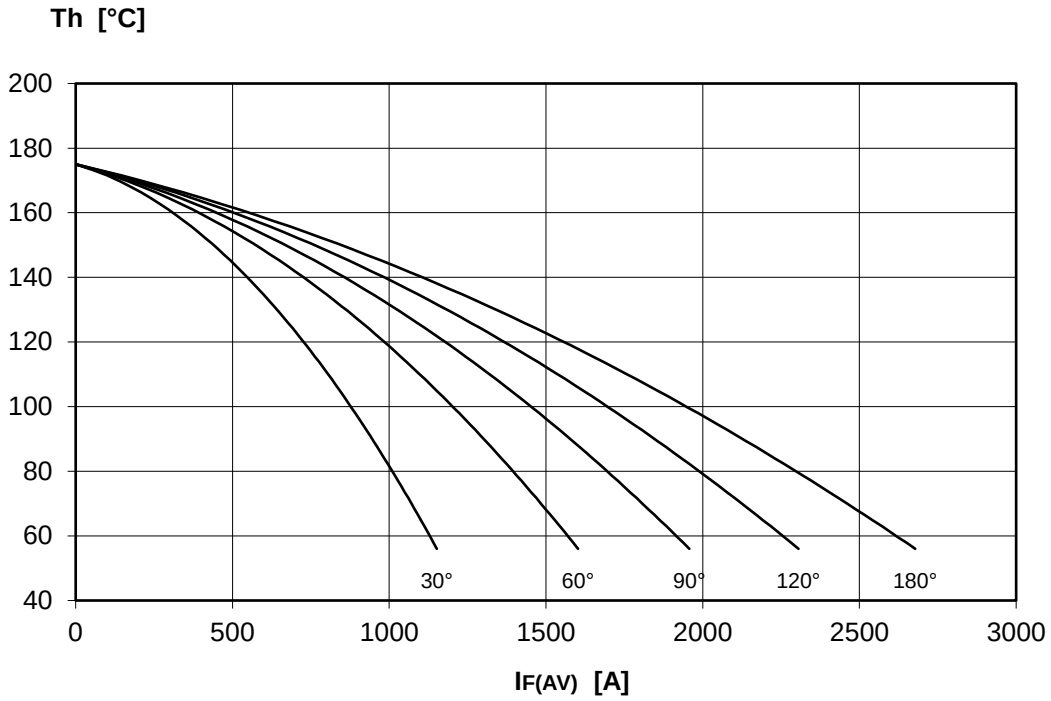
SQUARE WAVE

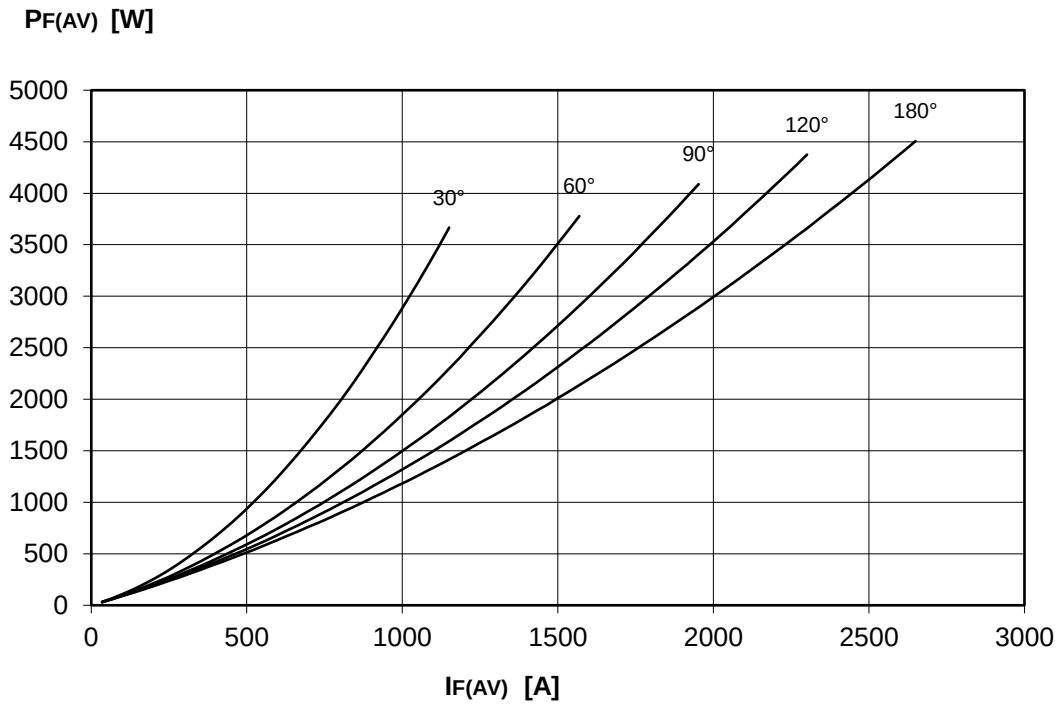




DISSIPATION CHARACTERISTICS

SINE WAVE

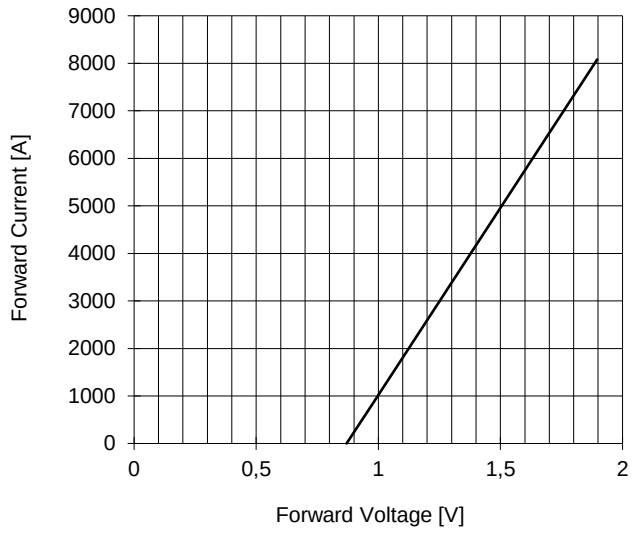




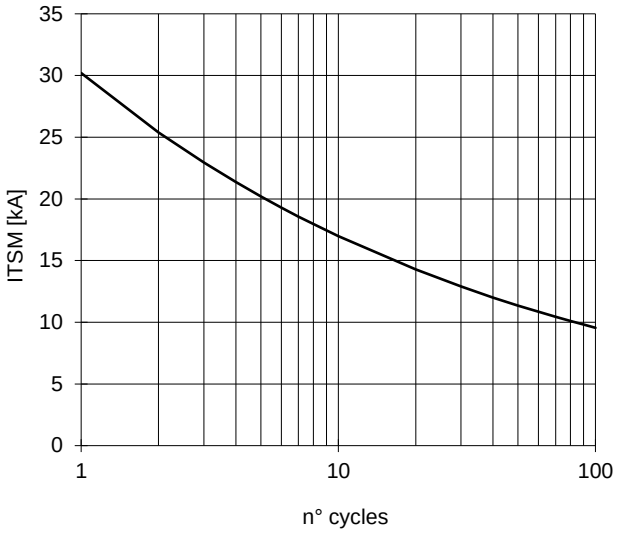
AR3008 RECTIFIER DIODE

FINAL SPECIFICATION Mar. 17 - Issue: 7

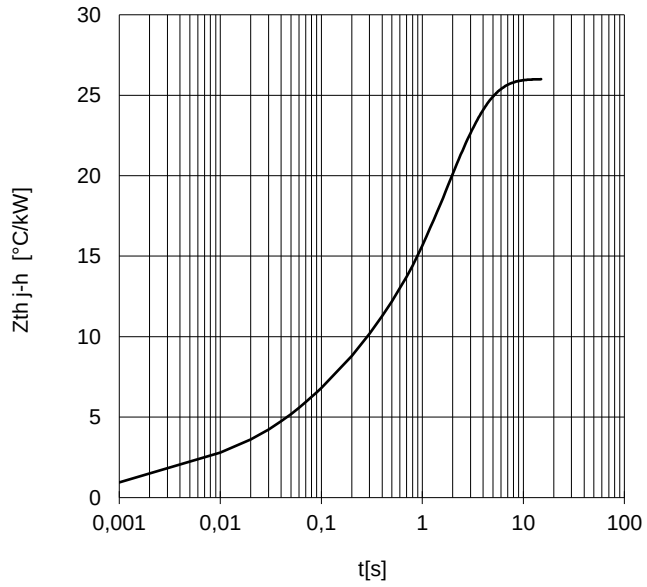
FORWARD CHARACTERISTIC
Tj = 175 °C

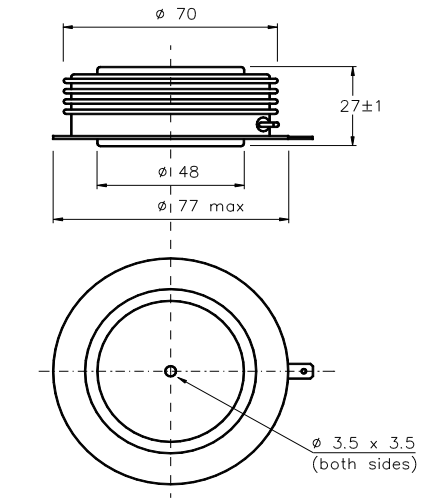


SURGE CHARCTERISTIC
Tj = 175 °C



TRANSIENT THERMAL IMPEDANCE
DOUBLE SIDE COOLED





Dimensions
in mm

All the characteristics given in this data sheet are guaranteed only with uniform clamping force, cleaned and lubricated heatsink, surfaces with flatness < .03 mm and roughness < 2 µm.
In the interest of product improvement POSEICO SpA reserves the right to change any data given in this data sheet at any time without previous notice.
If not stated otherwise the maximum value of ratings (simbols over shaded background) and characteristics is reported.

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