

[查询AR1109供应商](#)POSEICO SPA
Power SEmiconductors Italian COporation

POSEICO SPA 专业PCB打样工厂, 24小时加急出货

Via N. Lorenzi 8, 16152 Genova - ITALY

Tel. ++ 39 010 6556234 - Fax ++ 39 010 6557519

Sales Office:

Tel. ++ 39 010 6556775 - Fax ++ 39 010 6442510

RECTIFIER DIODE

AR1109

Repetitive voltage up to **4400 V**
Mean forward current **1000 A**
Surge current **10.3 kA**

FINAL SPECIFICATION

nov 02 - ISSUE : 05

Symbol	Characteristic	Conditions	T _j [°C]	Value	Unit
BLOCKING					
V _{RRM}	Repetitive peak reverse voltage		150	4400	V
V _{RSM}	Non-repetitive peak reverse voltage		150	4500	V
I _{RRM}	Repetitive peak reverse current	V=VRRM	150	50	mA
CONDUCTING					
I _{F(AV)}	Mean forward current	180° sin ,50 Hz, Th=55°C, double side cooled		1000	A
I _{F(AV)}	Mean forward current	180° sin ,50 Hz, Tc=85°C, double side cooled		905	A
I _{FSM}	Surge forward current	Sine wave, 10 ms without reverse voltage	150	10.3	kA
I ² t	I ² t			530 x 1E3	A²s
V _{FM}	Forward voltage	Forward current = 1800 A	25	1.80	V
V _{F(TO)}	Threshold voltage		150	0.89	V
r _F	Forward slope resistance		150	0.675	mohm
SWITCHING					
t _{rr}	Reverse recovery time		150		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		37	°C/kW
R _{th(c-h)}	Thermal impedance	Case to heatsink, double side cooled		7	°C/kW
T _j	Operating junction temperature			-30 / 150	°C
F	Mounting force			11.8 / 13.2	kN
	Mass			300	g

ORDERING INFORMATION : AR1109 S 44

standard specification

VRRM/100



AR1109 RECTIFIER DIODE

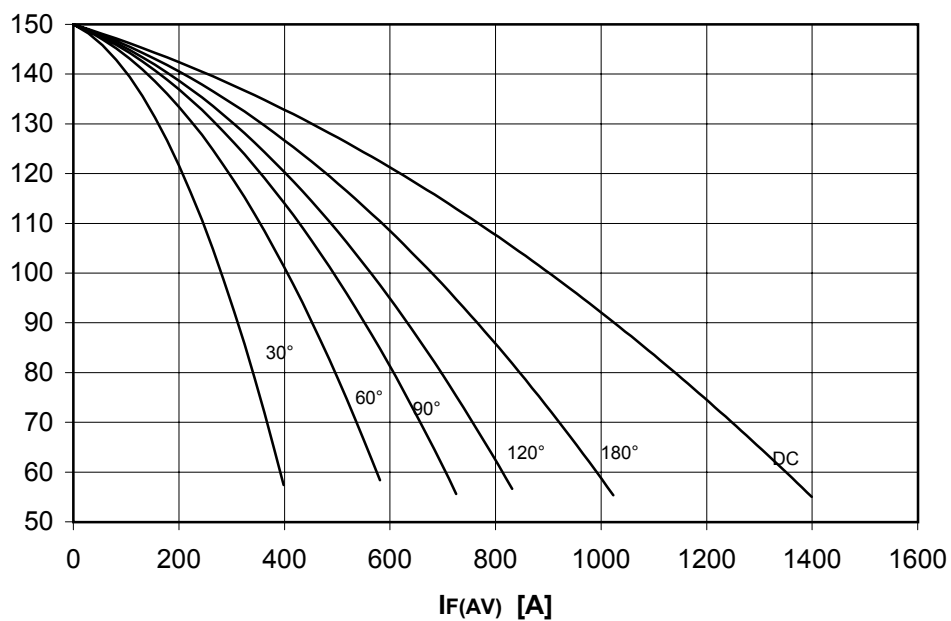


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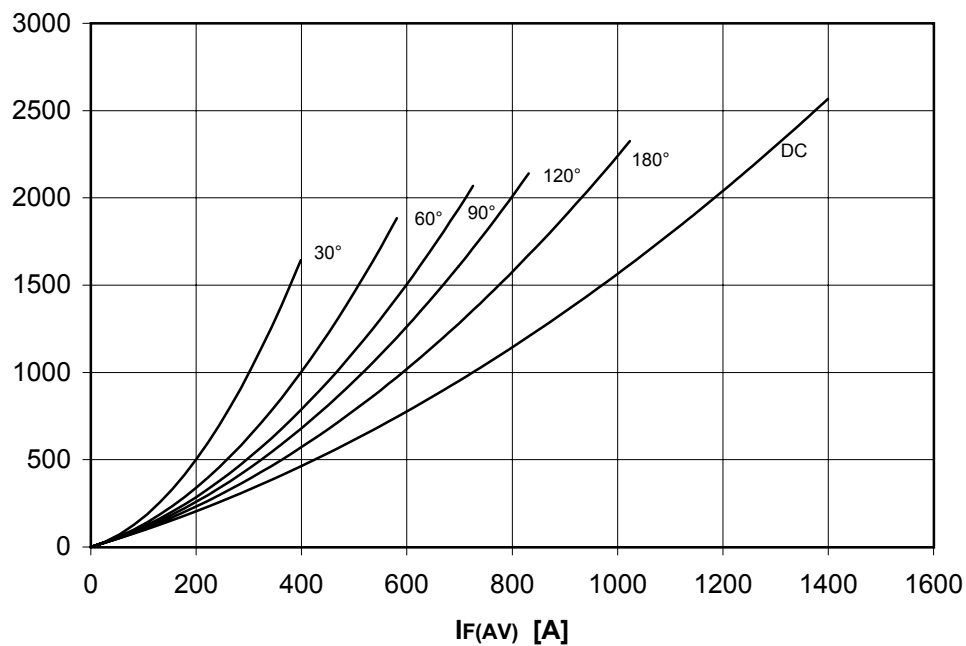
DISSIPATION CHARACTERISTICS

SQUARE WAVE

T_h [°C]



$P_F(AV)$ [W]



AR1109 RECTIFIER DIODE

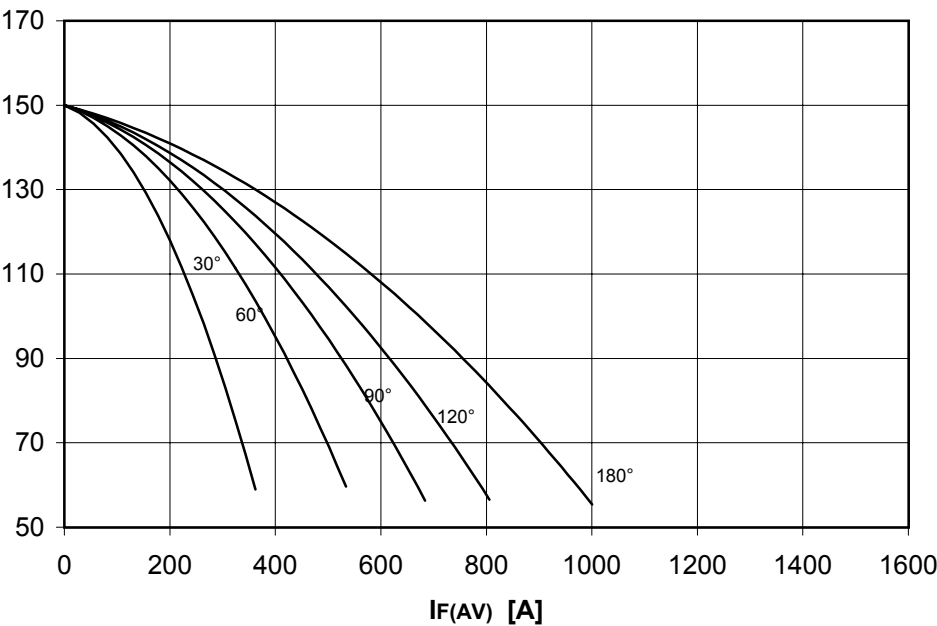


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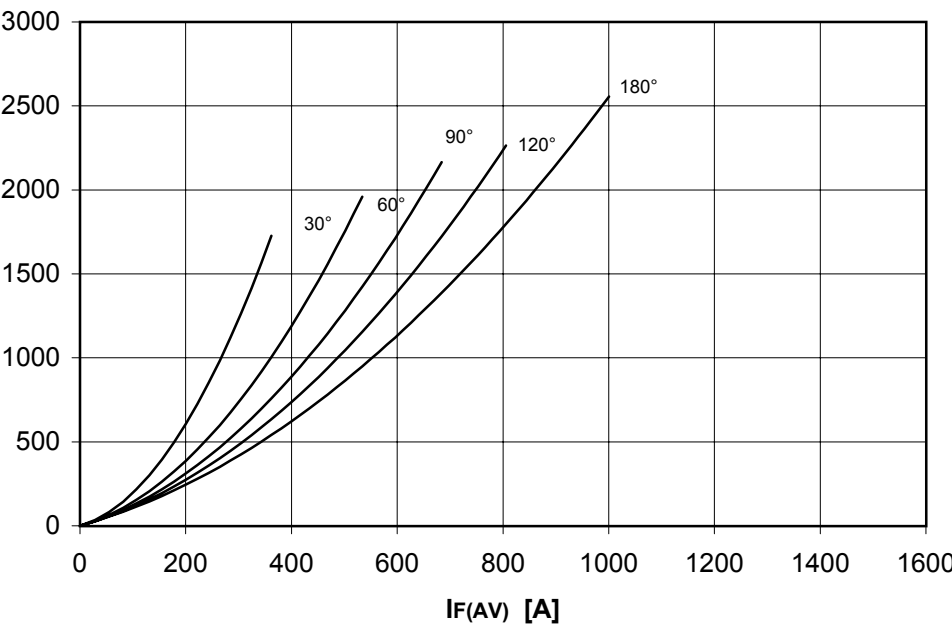
DISSIPATION CHARACTERISTICS

SINE WAVE

Th [°C]



PF(AV) [W]

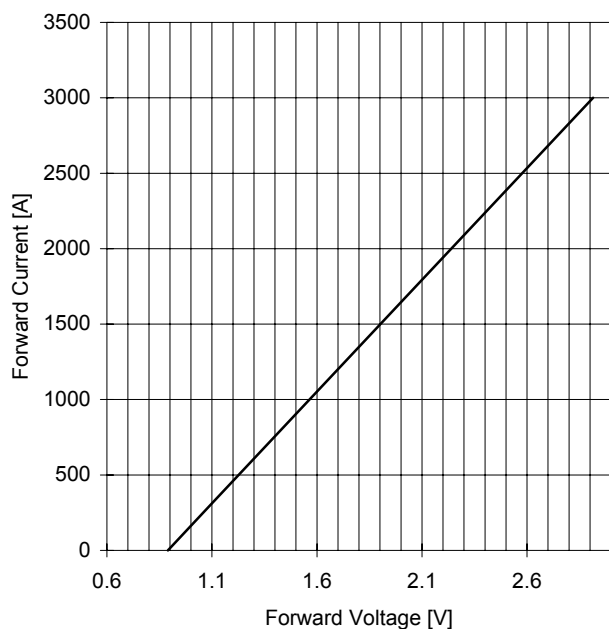


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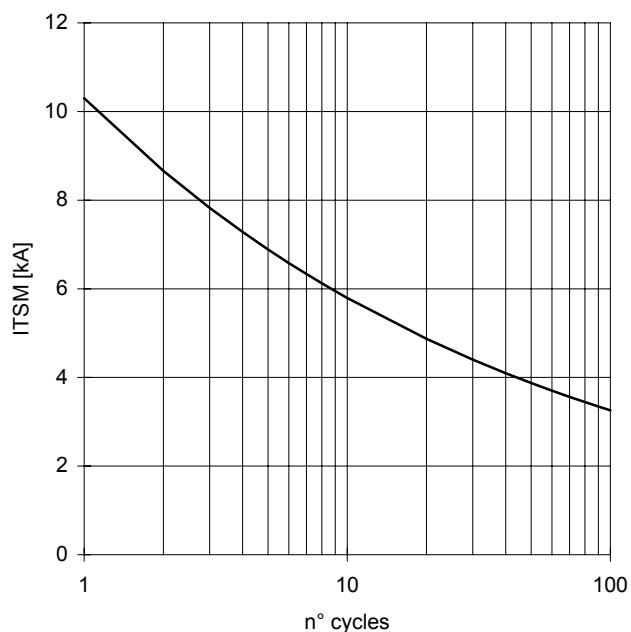


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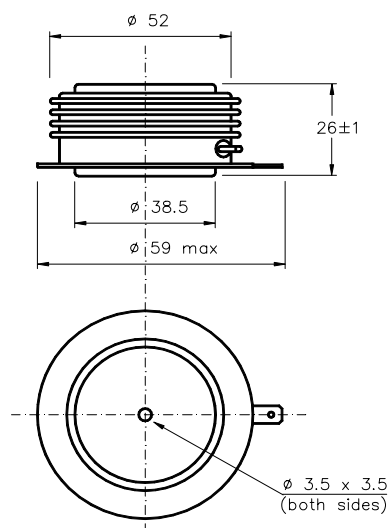
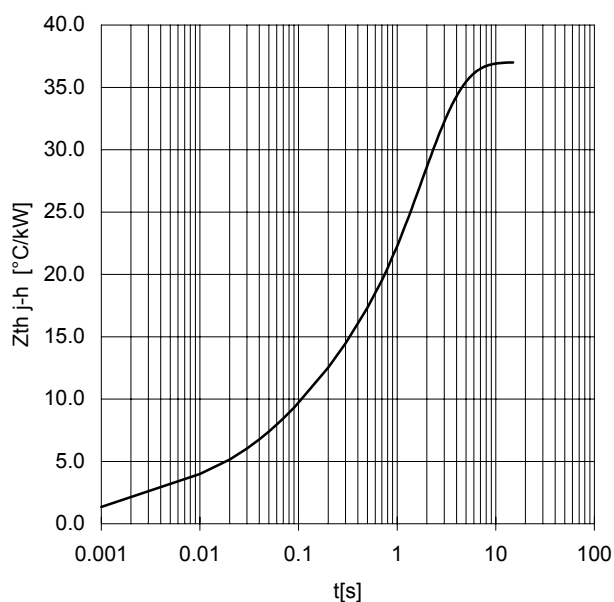
FORWARD CHARACTERISTIC
 $T_j = 150\text{ }^{\circ}\text{C}$



SURGE CHARACTERISTIC
 $T_j = 150\text{ }^{\circ}\text{C}$



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 (symbols over shaded background) and characteristics is reported.

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