

RECTIFIER DIODE

AR1107

Repetitive voltage up to	3600 V
Mean forward current	1213 A
Surge current	13,4 kA

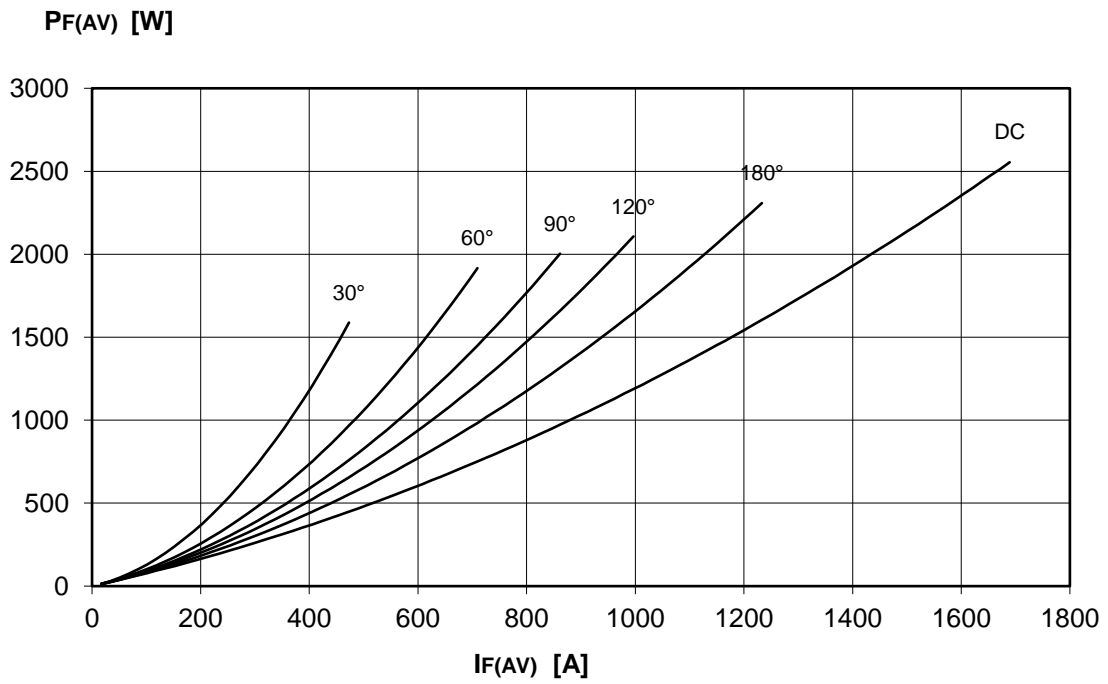
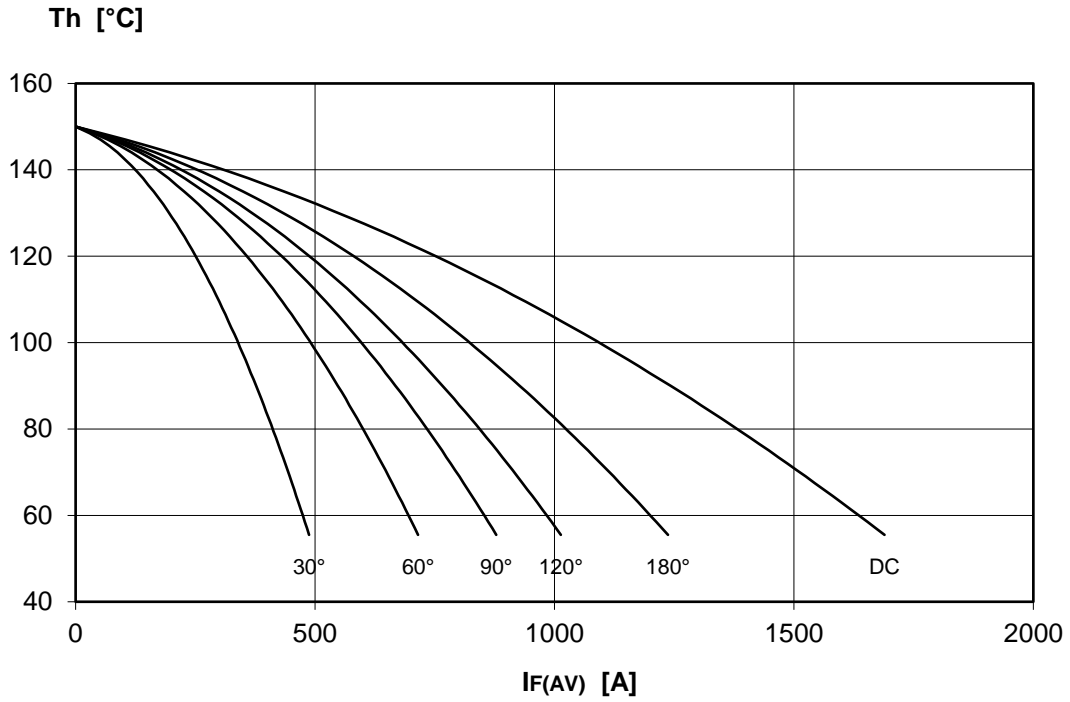
FINAL SPECIFICATION

Mar. 17 - Issue: 6

Symbol	Characteristic	Conditions	T _j [°C]	Value	Unit
BLOCKING					
V _{RRM}	Repetitive peak reverse voltage		150	3600	V
V _{RSM}	Non-repetitive peak reverse voltage		150	3700	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		1213	A
I _{F(AV)}	Mean forward current	180° sin, 50 Hz, Tc=85°C, double side cooled		1094	A
I _{FSM}	Surge forward current	Sine wave, 10 ms without reverse voltage	150	13,4	kA
I ² t	I ² t			898 x 10 ³	A ² s
V _{FM}	Forward voltage	Forward current = 1800 A	25	1,60	V
V _{F(TO)}	Threshold voltage		150	0,73	V
r _F	Forward slope resistance		150	0,463	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		37,0	°C/kW
R _{th(c-h)}	Thermal impedance	Case to heatsink, double side cooled		7,0	°C/kW
T _j	Operating junction temperature			-30 / 150	°C
F	Mounting force			11.8 / 13.2	kN
	Mass			300	g
ORDERING INFORMATION : AR1107 S 36 standard specification <input type="checkbox"/> <input type="checkbox"/> VRRM/100					

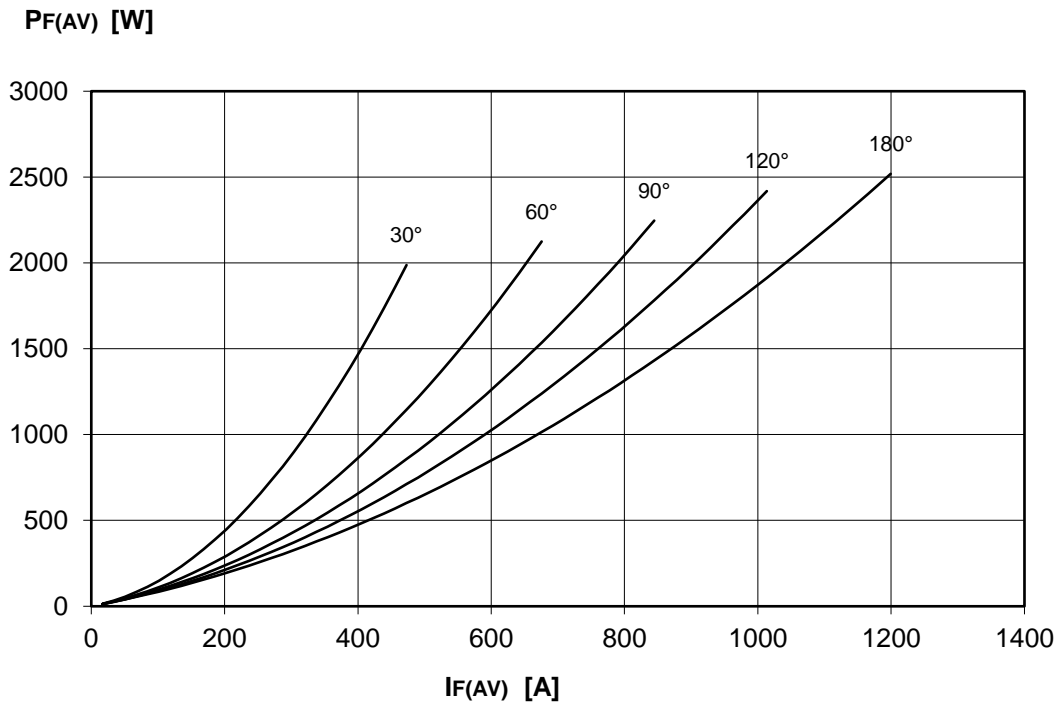
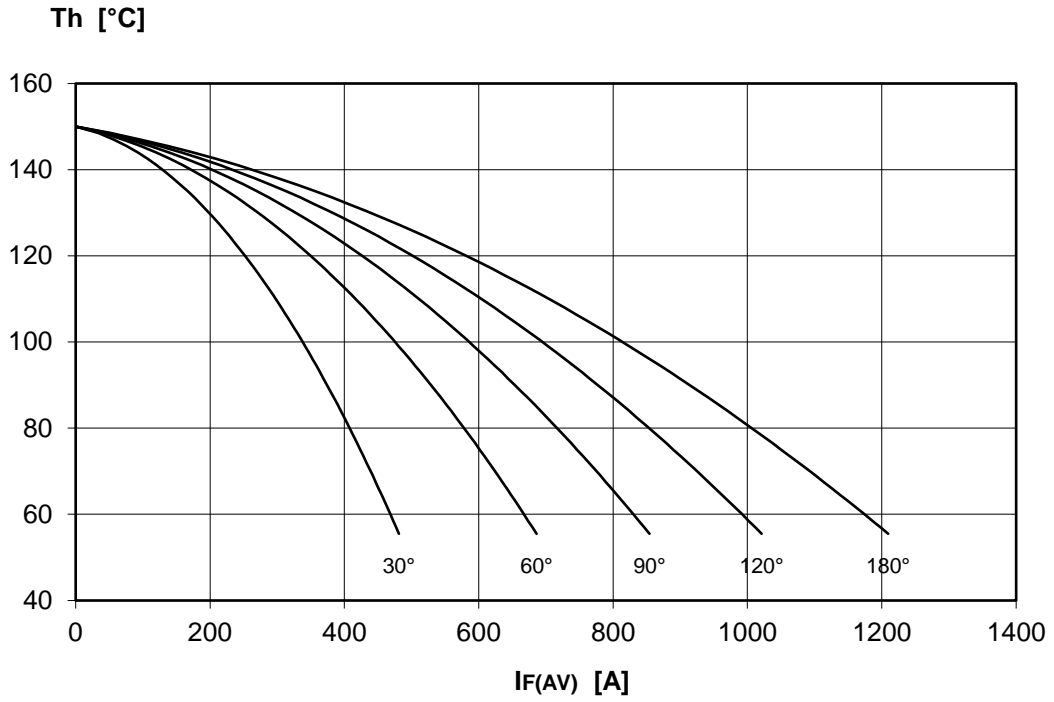
DISSIPATION CHARACTERISTICS

SQUARE WAVE



DISSIPATION CHARACTERISTICS

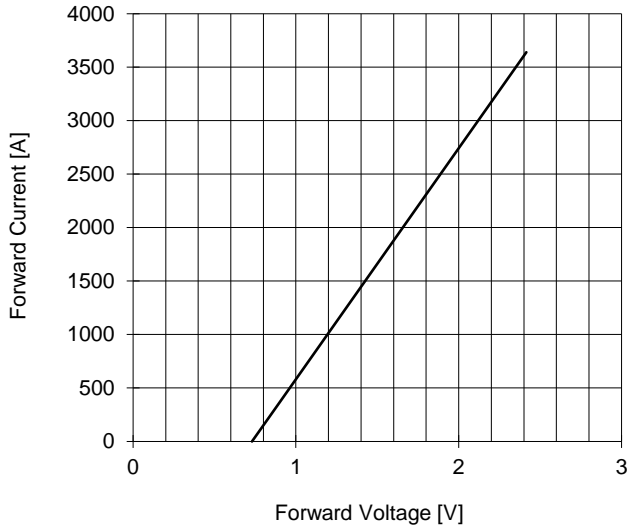
SINE WAVE



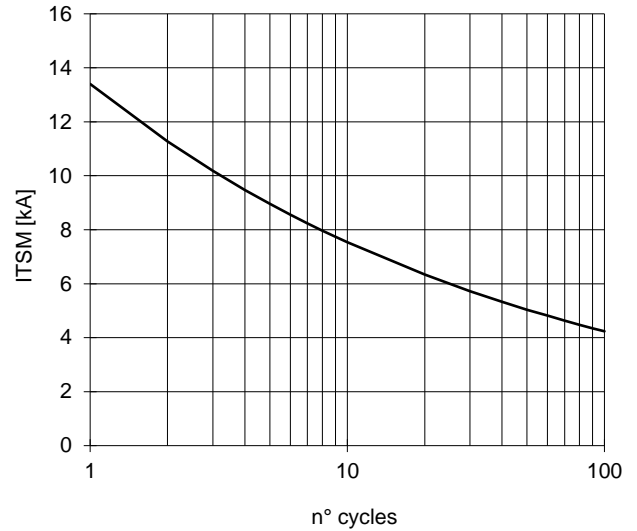
AR1107 RECTIFIER DIODE

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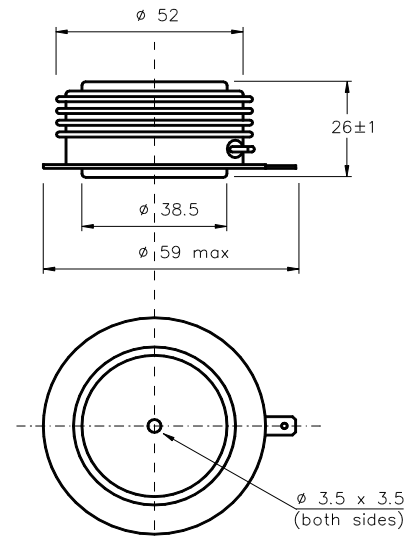
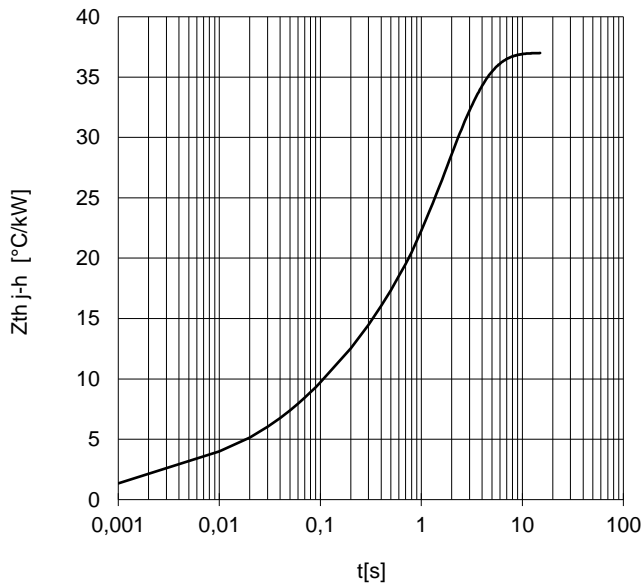
FORWARD CHARACTERISTIC
T_j = 150 °C



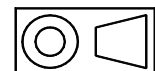
SURGE CHARACTERISTIC
T_j = 150 °C



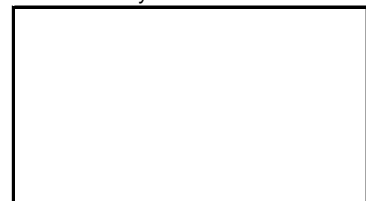
TRANSIENT THERMAL IMPEDANCE
DOUBLE SIDE COOLED



Dimensions
in mm



Distributed by



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.