



POSEICO SPA  
POwer SEmiconductors Italian COrporation

POSEICO SPA  
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

# AR340

Repetitive voltage up to **2900 V**  
Mean forward current **1265 A**  
Surge current **10.1 kA**

### FINAL SPECIFICATION

nov 02 - ISSUE : 02

Symbol	Characteristic	Conditions	T <sub>j</sub> [°C]	Value	Unit
<b>BLOCKING</b>					
V <sub>RRM</sub>	Repetitive peak reverse voltage		175	2900	V
V <sub>RSM</sub>	Non-repetitive peak reverse voltage		175	3000	V
I <sub>RRM</sub>	Repetitive peak reverse current	V=VRRM	175	50	mA
<b>CONDUCTING</b>					
I <sub>F(AV)</sub>	Mean forward current	180° sin ,50 Hz, Th=55°C, double side cooled		1265	A
I <sub>F(AV)</sub>	Mean forward current	180° sin ,50 Hz, Tc=85°C, double side cooled		1320	A
I <sub>FSM</sub>	Surge forward current	Sine wave, 10 ms without reverse voltage	175	10.1	kA
I <sup>2</sup> t	I <sup>2</sup> t			510 x 1E3	A <sup>2</sup> s
V <sub>FM</sub>	Forward voltage	Forward current = 1200 A	25	1.30	V
V <sub>F(TO)</sub>	Threshold voltage		175	0.87	V
r <sub>F</sub>	Forward slope resistance		175	0.330	mohm
<b>SWITCHING</b>					
t <sub>rr</sub>	Reverse recovery time				µs
Q <sub>rr</sub>	Reverse recovery charge		175		µC
I <sub>rr</sub>	Peak reverse recovery current				A
<b>MOUNTING</b>					
R <sub>th(j-h)</sub>	Thermal impedance, DC	Junction to heatsink, double side cooled		50	°C/kW
R <sub>th(c-h)</sub>	Thermal impedance	Case to heatsink, double side cooled		15	°C/kW
T <sub>j</sub>	Operating junction temperature			-30 / 175	°C
F	Mounting force			8.0 / 9.0	kN
	Mass			280	g

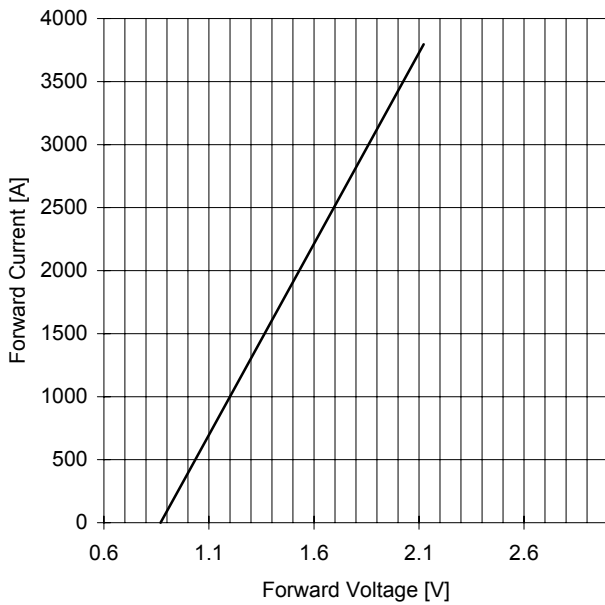
### ORDERING INFORMATION : AR340 S 29

standard specification   VRRM/100

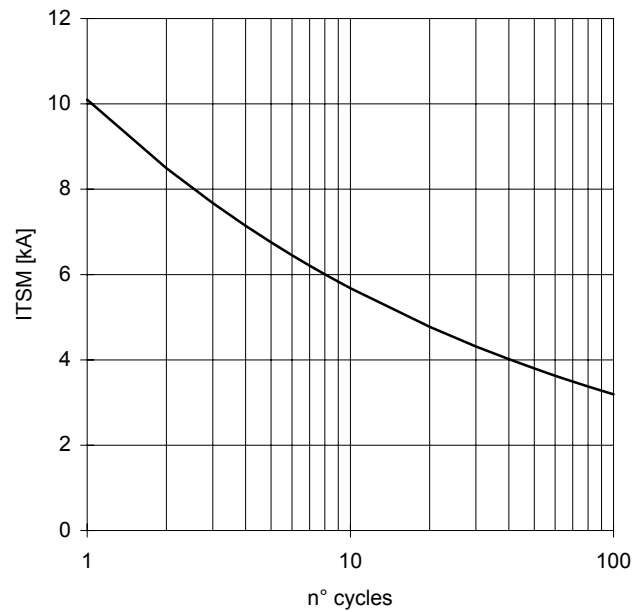
# AR340 RECTIFIER DIODE

FINAL SPECIFICATION nov 02 - ISSUE : 02

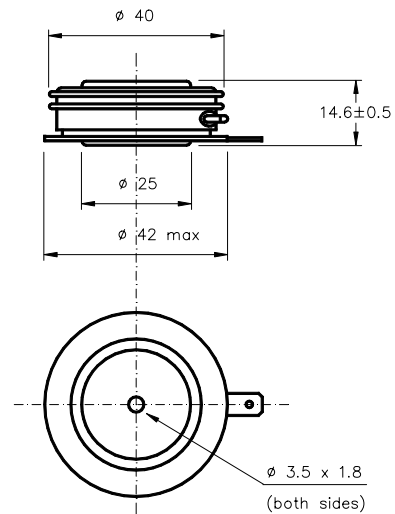
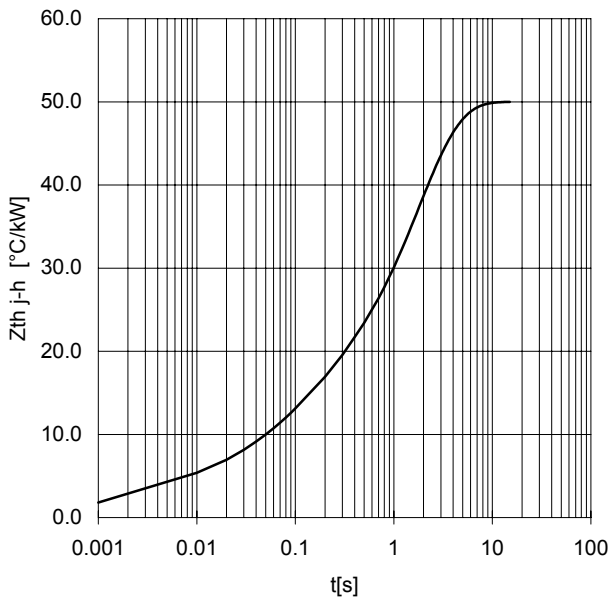
FORWARD CHARACTERISTIC  
T<sub>J</sub> = 175 °C



SURGE CHARACTERISTIC  
T<sub>J</sub> = 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  $\mu\text{m}$ .

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.

Distributed by

