

ANSALDO**Ansaldo Trasporti s.p.a.
Unita' Semiconduttori**Via N. Lorenzi 8 - I 16152 GENOVA - ITALY
Tel. int. +39/(0)10 6556549 - (0)10 6556488
Fax Int. +39/(0)10 6442510
Tx 270318 ANSUSE I -**RECTIFIER DIODE****AR2009**

Repetitive voltage up to	4400 V
Mean forward current	1560 A
Surge current	18.5 kA

FINAL SPECIFICATION

feb 97 - ISSUE : 04

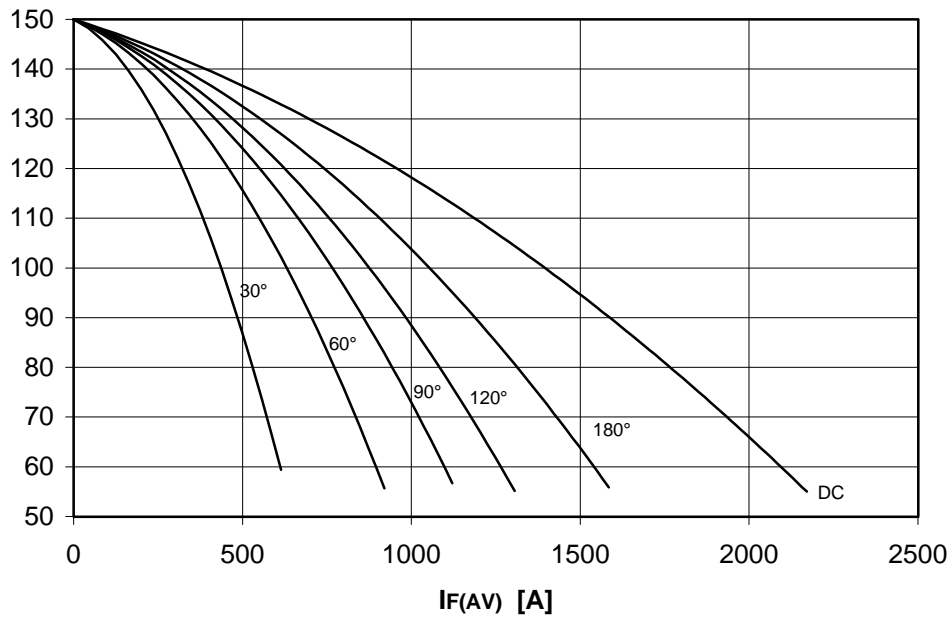
Symbol	Characteristic	Conditions	T _j [°C]	Value	Unit
BLOCKING					
V _{RRM}	Repetitive peak reverse voltage		150	4400	V
V _{RSM}	Non-repetitive peak reverse voltage		150	4500	V
I _{RRM}	Repetitive peak reverse current	V=VRRM	150	75	mA
CONDUCTING					
I _{F(AV)}	Mean forward current	180° sin ,50 Hz, Th=55°C, double side cooled		1560	A
I _{F(AV)}	Mean forward current	180° sin ,50 Hz, Tc=85°C, double side cooled		1450	A
I _{FSM}	Surge forward current	Sine wave, 10 ms without reverse voltage	150	18.5	kA
I ² t	I ² t			1711 x 1E3	A ² s
V _{FM}	Forward voltage	Forward current = 3400 A	25	1.80	V
V _{F(TO)}	Threshold voltage		150	0.83	V
r _F	Forward slope resistance		150	0.393	mohm
SWITCHING					
t _{rr}	Reverse recovery time				μs
Q _{rr}	Reverse recovery charge		150		μC
I _{rr}	Peak reverse recovery current				A
MOUNTING					
R _{th(j-h)}	Thermal impedance	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 / 150	°C
F	Mounting force			18.0 / 20.0	kN
	Mass			500	g

ORDERING INFORMATION : AR2009 S 44standard specification VRRM/100

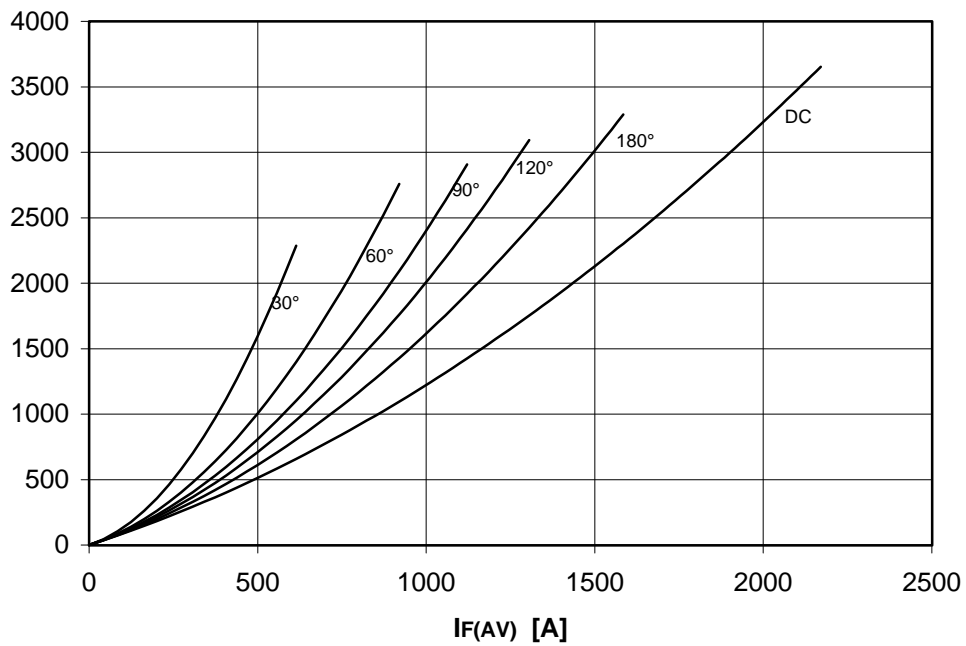
DISSIPATION CHARACTERISTICS

SQUARE WAVE

Th [°C]



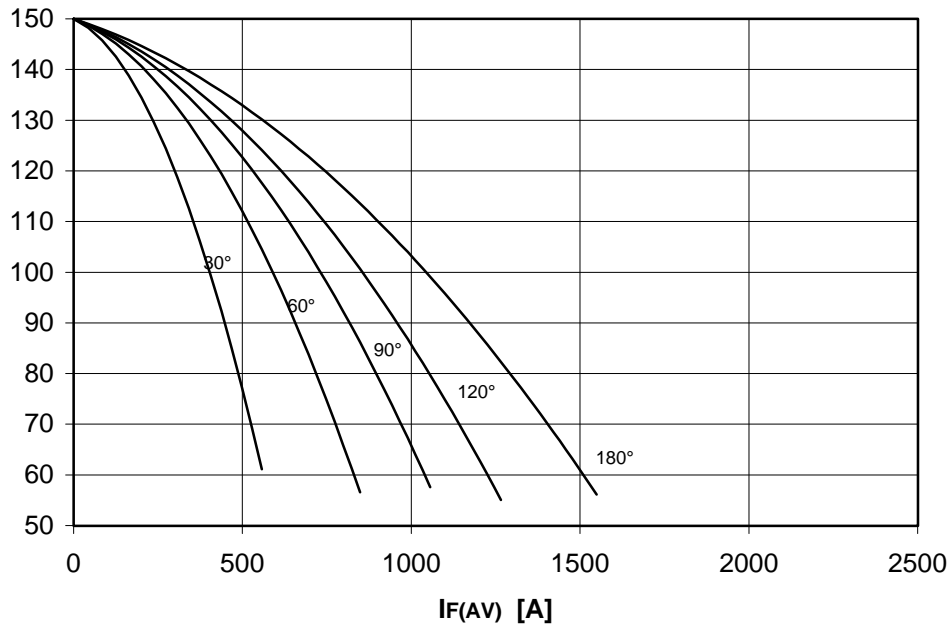
PF(AV) [W]



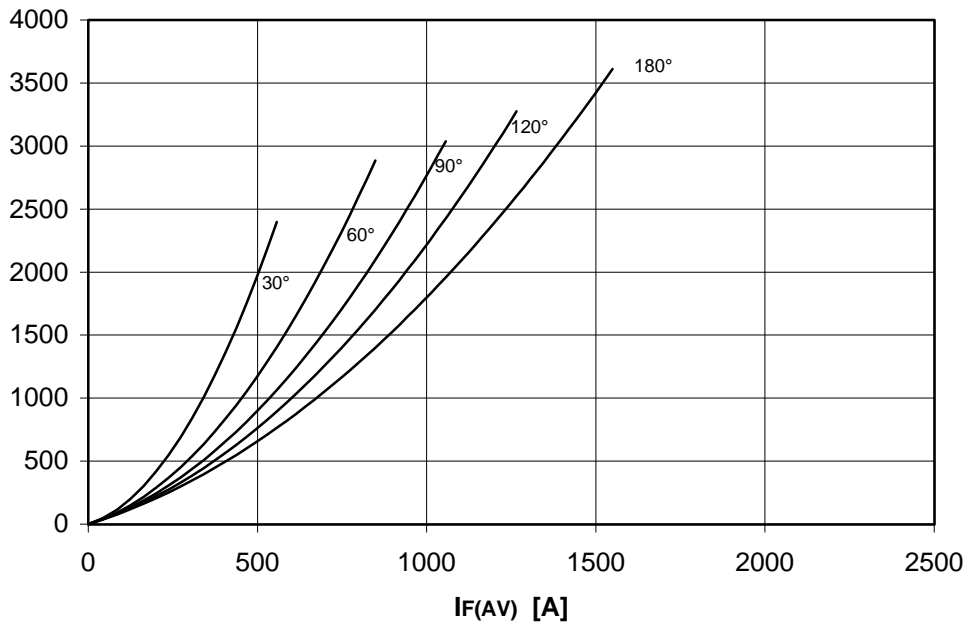
DISSIPATION CHARACTERISTICS

SINE WAVE

Th [°C]



PF(AV) [W]

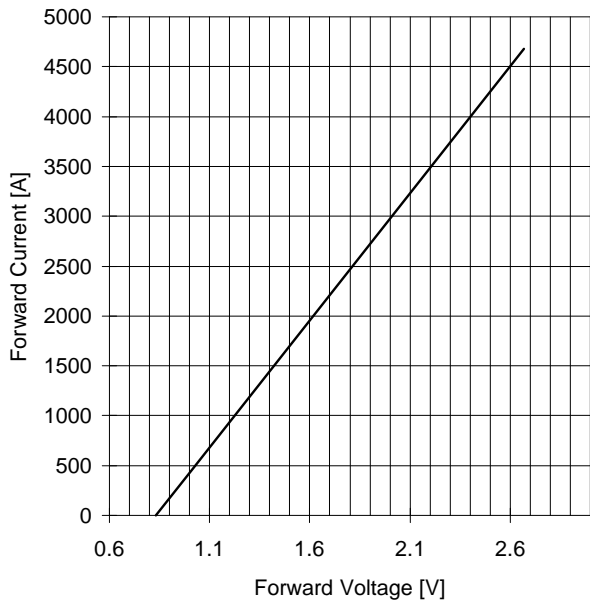


AR2009 RECTIFIER DIODE

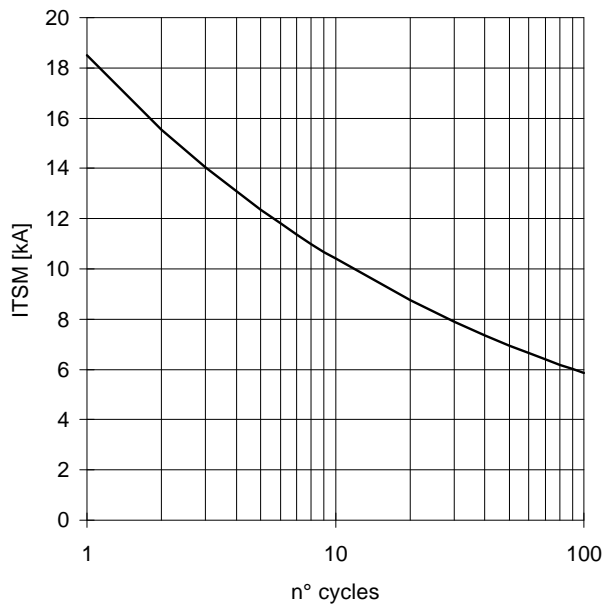
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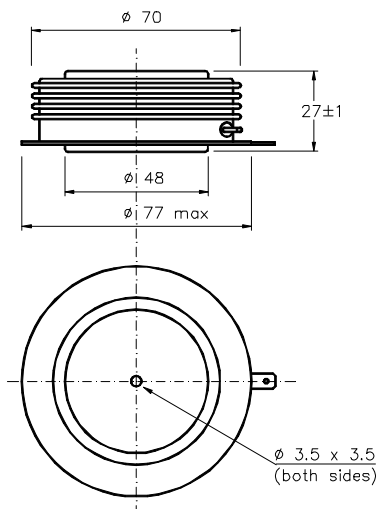
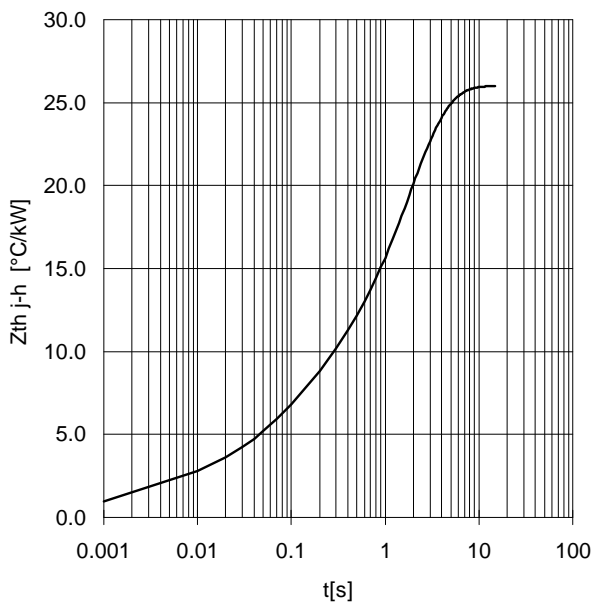
FORWARD CHARACTERISTIC
T_j = 150 °C



SURGE CHARACTERISTIC
T_j = 150 °C



TRANSIENT THERMAL IMPEDANCE
DOUBLE SIDE COOLED



Dimensions
in mm



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 ANSALDO 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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