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RECTIFIER DIODES MODULE

AZD610HVI

Repetitive voltage up to **5600 V**
Mean forward current **611 A**
Surge current **20 kA**

FINAL SPECIFICATION
Apr. 17 - Issue: 1

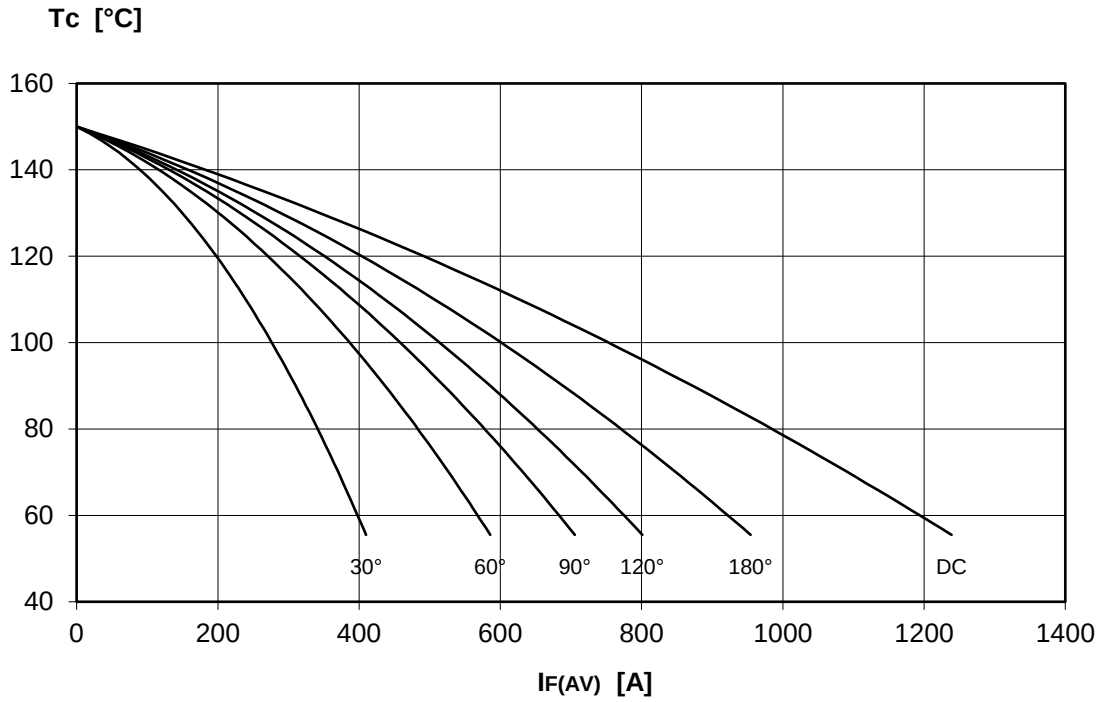
Symbol	Characteristic	Conditions	Tj [°C]	Value	Unit
BLOCKING					
V_{RRM}	Repetitive peak reverse voltage		150	5600	V
V_{RSM}	Non-repetitive peak reverse voltage		150	5700	V
I_{RRM}	Repetitive peak reverse current		150	100	mA
CONDUCTING					
$I_{F(AV)}$	Mean forward current	180° sin, 50 Hz, Tc=100°C, single side cooled		611	A
$I_{F(AV)}$	Mean forward current	180° sin, 50 Hz, Tc=55°C, single side cooled		958	A
I_{FSM}	Surge forward current	Sine wave, 10 ms without reverse voltage	150	20	kA
I^2t	I^2t			2000 x 10^3	A^2s
V_{FM}	Forward voltage	Forward current = 1800 A	150	1,72	V
$V_{F(TO)}$	Threshold voltage		150	1,00	V
r_F	Forward slope resistance		150	0,400	mohm
SWITCHING					
t_{rr}	Reverse recovery time		150		µs
Q_{rr}	Reverse recovery charge				µC
I_{rr}	Peak reverse recovery current				A
MOUNTING					
$R_{th(j-c)}$	Thermal impedance, DC	Junction to case		51,0	°C/kW
$R_{th(c-h)}$	Thermal impedance	Case to heatsink		15,0	°C/kW
T_j	Operating junction temperature			-30 / 150	°C
V_{ins}	RMS insulation voltage	50Hz, circuit to base,all terminal shorted	25	4500	V
T	Mounting torque	Case to heatsink		4 to 6	Nm
		Busbars to terminals		12 to 18	Nm
	Mass			2800	g

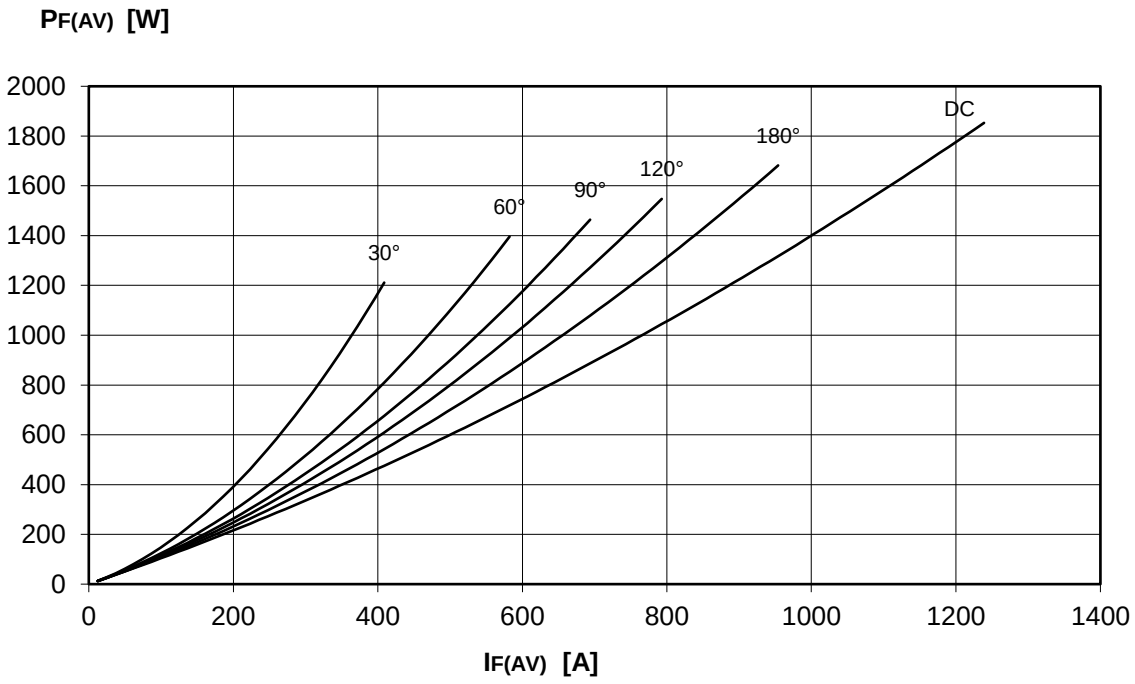
ORDERING INFORMATION : AZD610HVI S 56

standard specification — VRRM/100

DISSIPATION CHARACTERISTICS

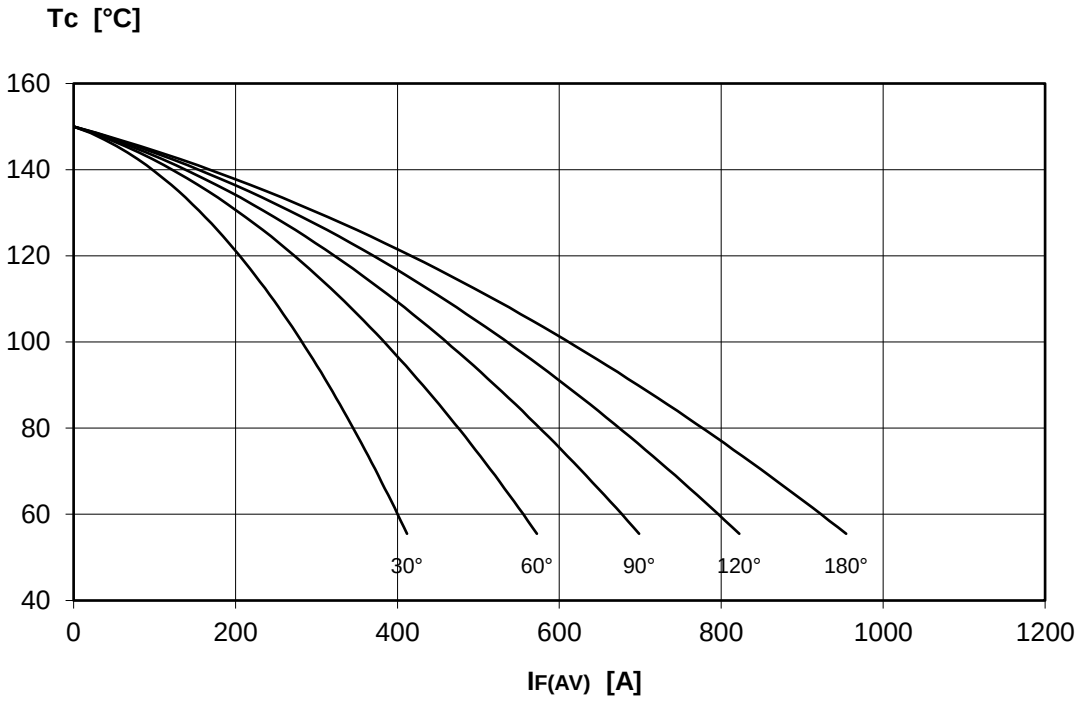
SQUARE WAVE

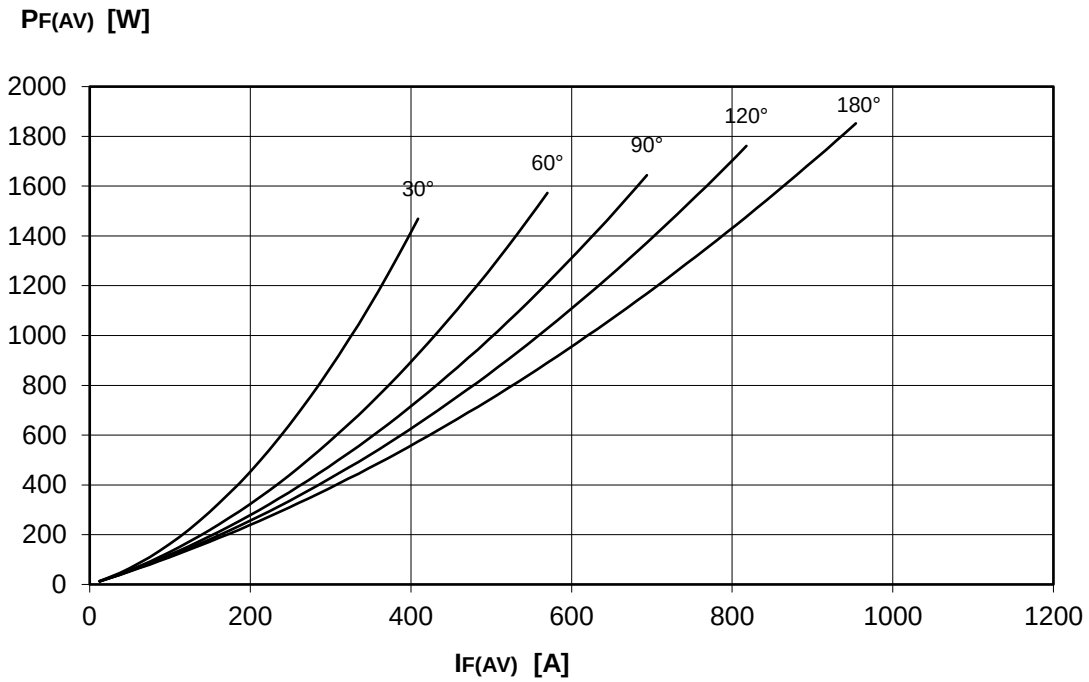




DISSIPATION CHARACTERISTICS

SINE WAVE

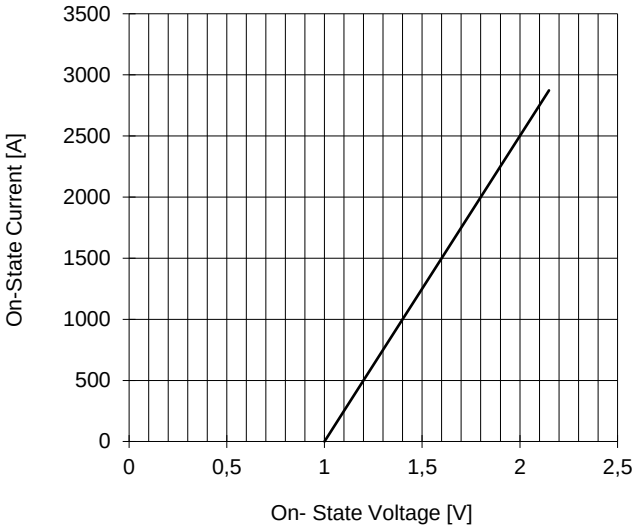




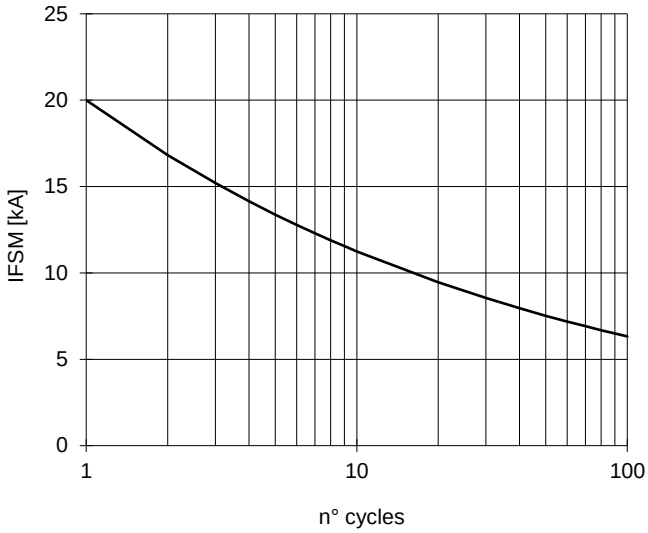
AZD610HVI RECTIFIER DIODES MODULE

FINAL SPECIFICATION Apr. 17 - Issue: 1

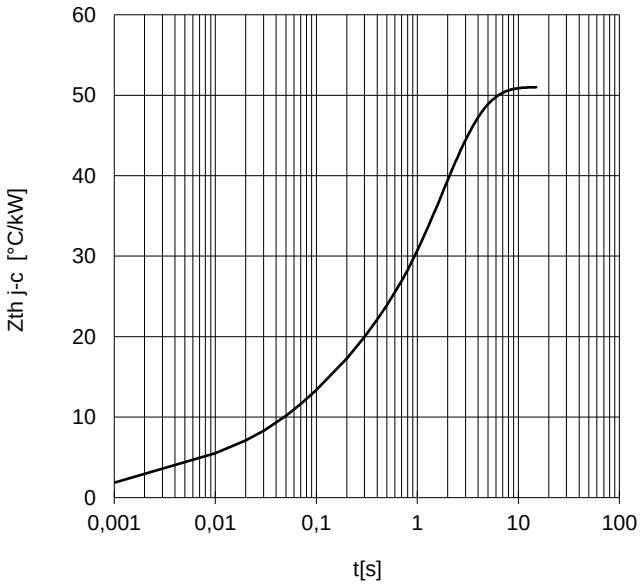
ON-STATE CHARACTERISTIC
Tj = 150 °C

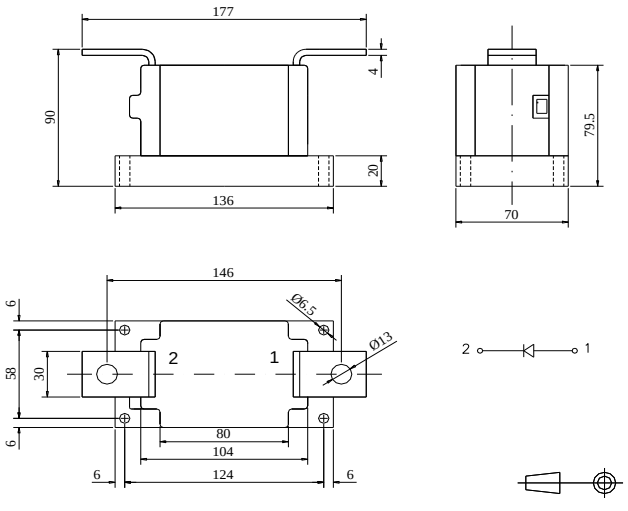


SURGE CHARACTERISTIC
Tj = 150 °C



TRANSIENT THERMAL IMPEDANCE





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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