

RECTIFIER DIODE

AUS602

Repetitive voltage up to

400 V

Mean forward current

10472 A

Surge current

75 kA
FINAL SPECIFICATION

Feb. 20 - Issue: 6

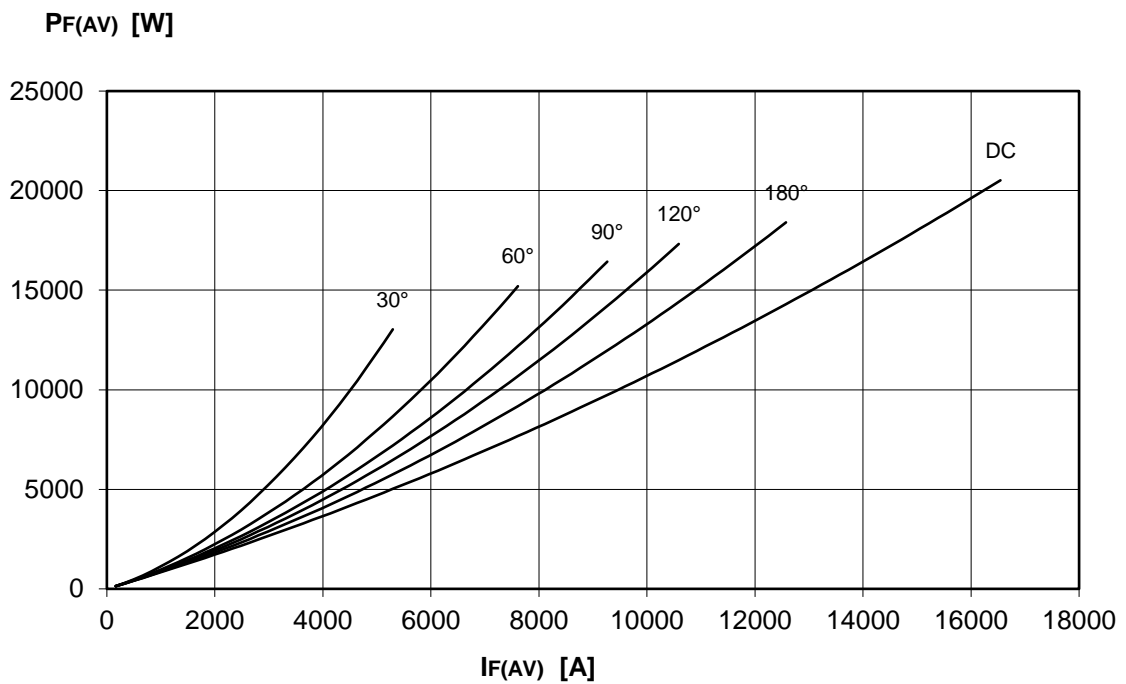
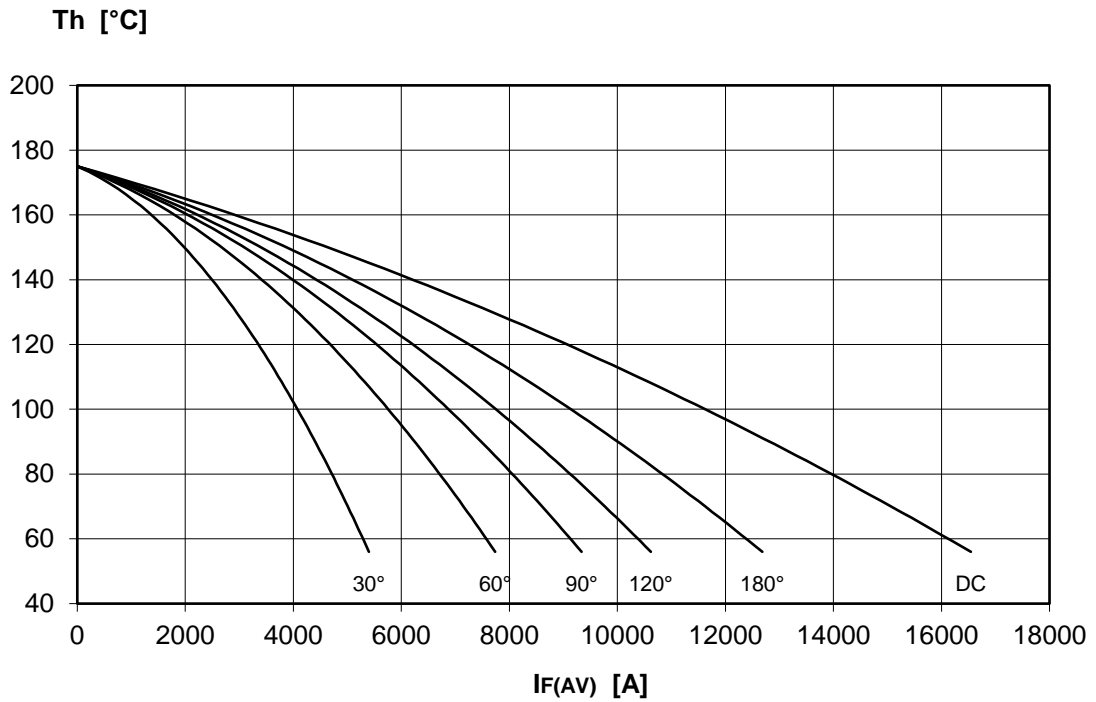
Symbol	Characteristic	Conditions	T _j [°C]	Value	Unit
BLOCKING					
V _{RRM}	Repetitive peak reverse voltage		175	400	V
V _{RSM}	Non-repetitive peak reverse voltage		175	500	V
I _{RRM}	Repetitive peak reverse current	V=VRRM	175	50	mA
CONDUCTING					
I _{F(AV)}	Mean forward current	180° sin, 50 Hz, Th=85°C, double side cooled		10472	A
I _{F(AV)}	Mean forward current	180° sin, 50 Hz, Tc=55°C, double side cooled		18318	A
I _{FSM}	Surge forward current	Sine wave, 10 ms without reverse voltage	175	75	kA
I ² t	I ² t			28125 x 10 ³	A ² s
V _{FM}	Forward voltage	Forward current = 8000 A	25	0.92	V
V _{F(TO)}	Threshold voltage		175	0.81	V
r _F	Forward slope resistance		175	0.026	mohm
SWITCHING					
t _{rr}	Reverse recovery time		175		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, double side cooled		5.8	°C/kW
R _{th(c-h)}	Thermal impedance	Case to heatsink, double side cooled		2.5	°C/kW
T _j	Operating junction temperature			-30 / 175	°C
F	Mounting force			22.0 / 24.5	kN
	Mass			110	g

ORDERING INFORMATION : AUS602 S 04

 standard specification VRRM/100

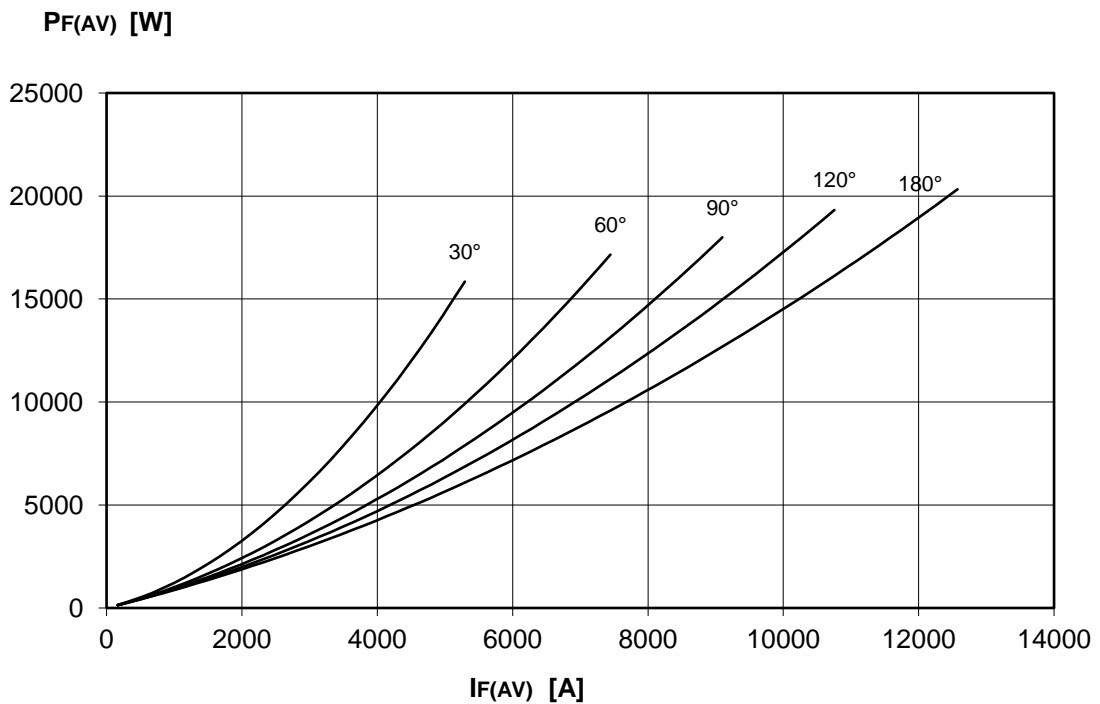
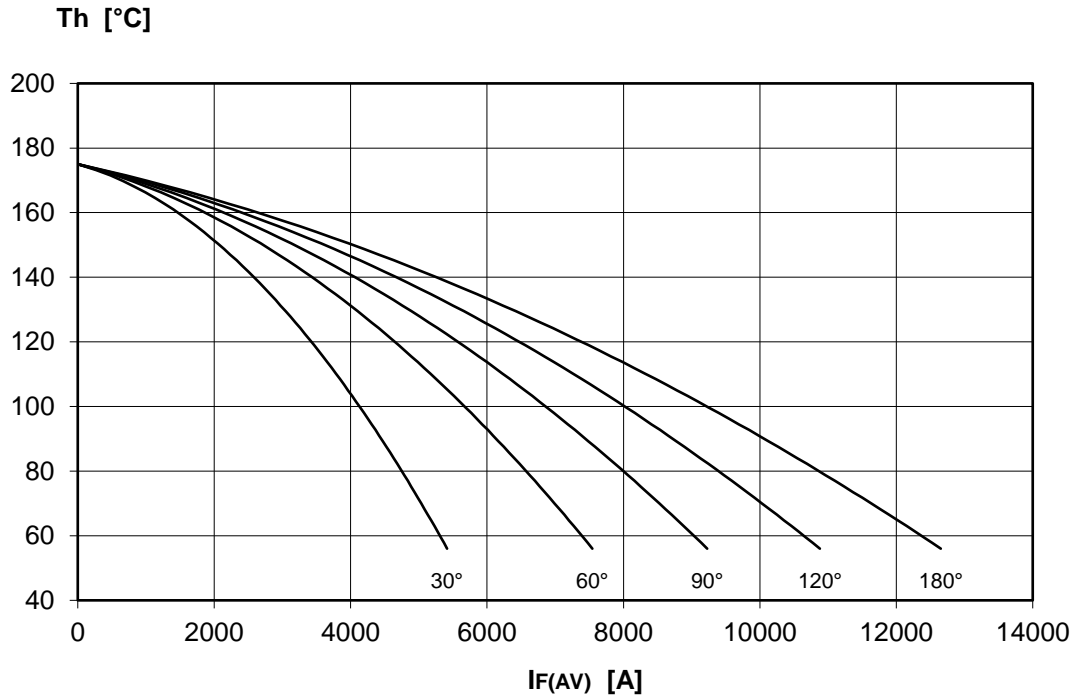
DISSIPATION CHARACTERISTICS

SQUARE WAVE



DISSIPATION CHARACTERISTICS

SINE WAVE

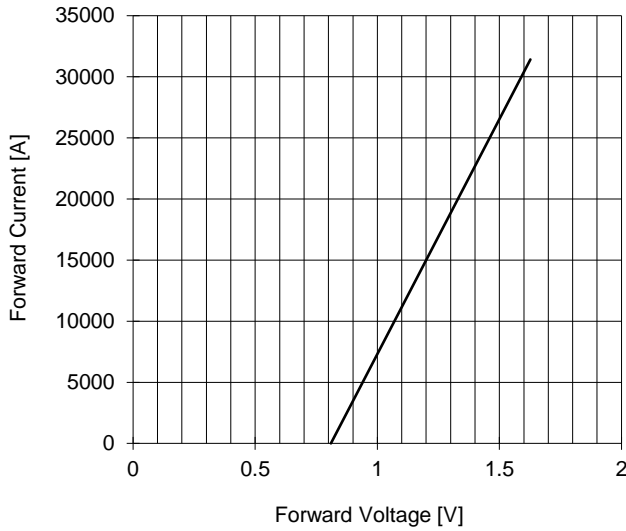


AUS602 RECTIFIER DIODE

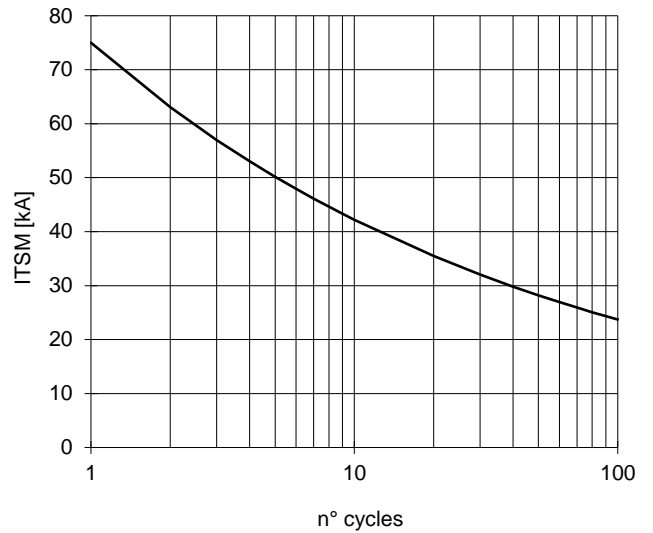


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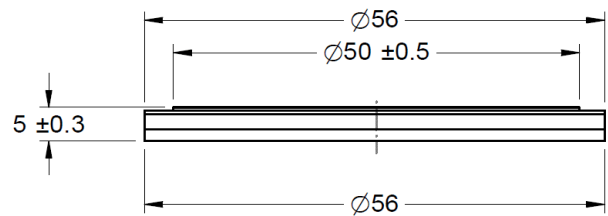
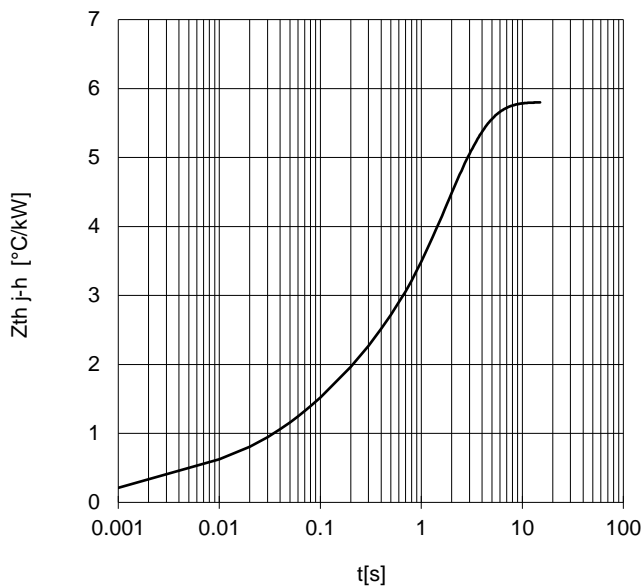
FORWARD CHARACTERISTIC
T_j = 175 °C



SURGE CHARACTERISTIC
T_j = 175 °C



TRANSIENT THERMAL IMPEDANCE
DOUBLE SIDE COOLED



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 μ 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.

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