

RECTIFIER DIODES MODULE

ADD505

Repetitive voltage up to **4400 V**
Mean forward current **525 A**
Surge current **12,0 kA**

TARGET SPECIFICATION

Mar. 17 - Issue: 1

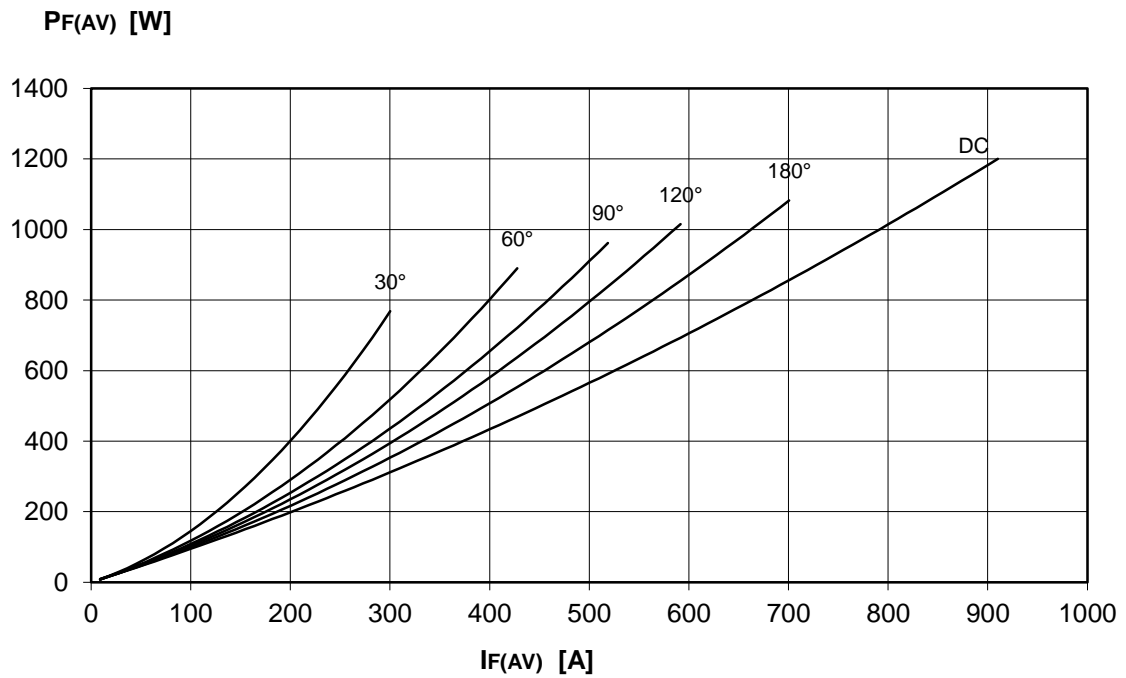
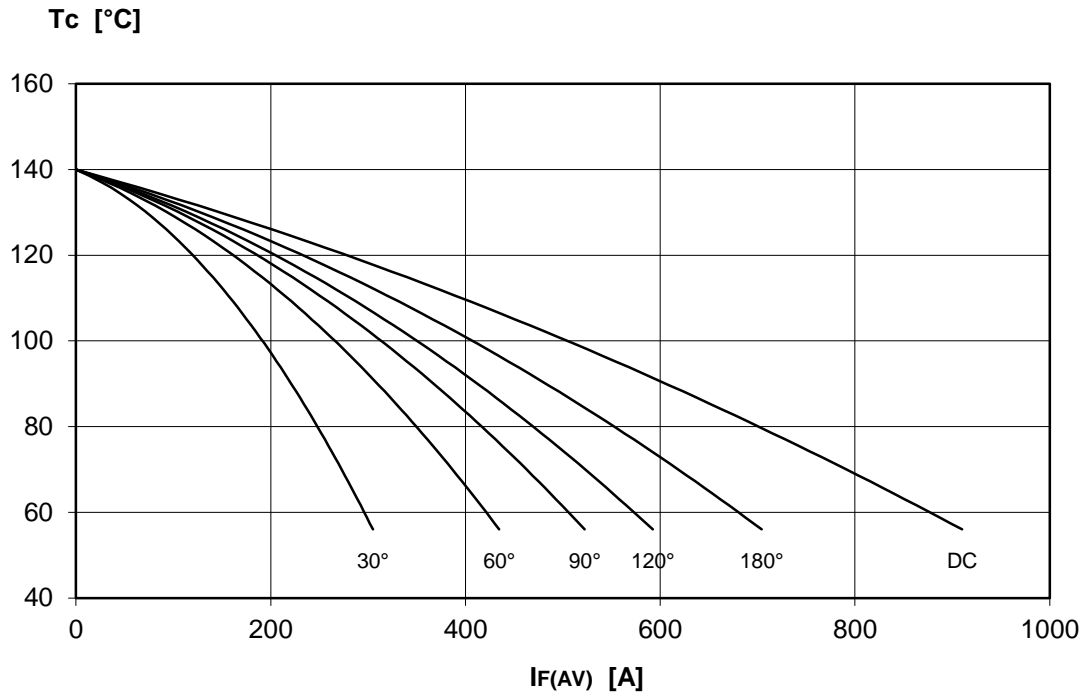
Symbol	Characteristic	Conditions	T _j [°C]	Value	Unit
BLOCKING					
V _{RRM}	Repetitive peak reverse voltage		140	4400	V
V _{RSM}	Non-repetitive peak reverse voltage		140	4500	V
I _{RRM}	Repetitive peak reverse current	V=VRRM	140	100	mA
CONDUCTING					
I _{F(AV)}	Mean forward current	180° sin, 50 Hz, T _c =100°C, single side cooled		416	A
I _{F(AV)}	Mean forward current	180° sin, 50 Hz, T _c =85°C, single side cooled		525	A
I _{FSM}	Surge forward current	Sine wave, 10 ms without reverse voltage	140	12	kA
I ² t	I ² t			720 x 10 ³	A ² s
V _{FM}	Forward voltage	Forward current = 1200 A	25	1,35	V
V _{F(TO)}	Threshold voltage		140	0,90	V
r _F	Forward slope resistance		140	0,460	mohm
SWITCHING					
t _{rr}	Reverse recovery time		140		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, per element		70,0	°C/kW
R _{th(c-h)}	Thermal impedance	Case to heatsink, per element		20,0	°C/kW
T _j	Operating junction temperature			-30 / 140	°C
V _{ins}	RMS insulation voltage	50Hz, 1min, circuit to base,all terminal shorted	25	3000	V
T	Mounting torque	Case to heatsink		4 to 6	Nm
		Busbars to terminals		9 to 11	Nm
	Mass			1500	g

ORDERING INFORMATION : ADD505 S 44

standard specification VRRM/100

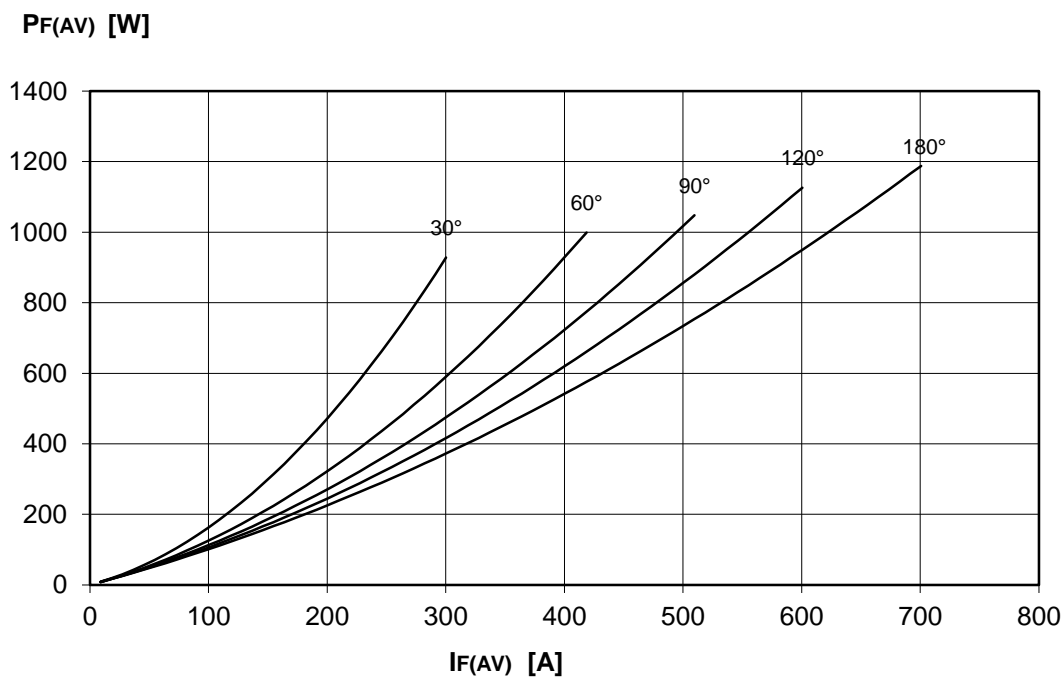
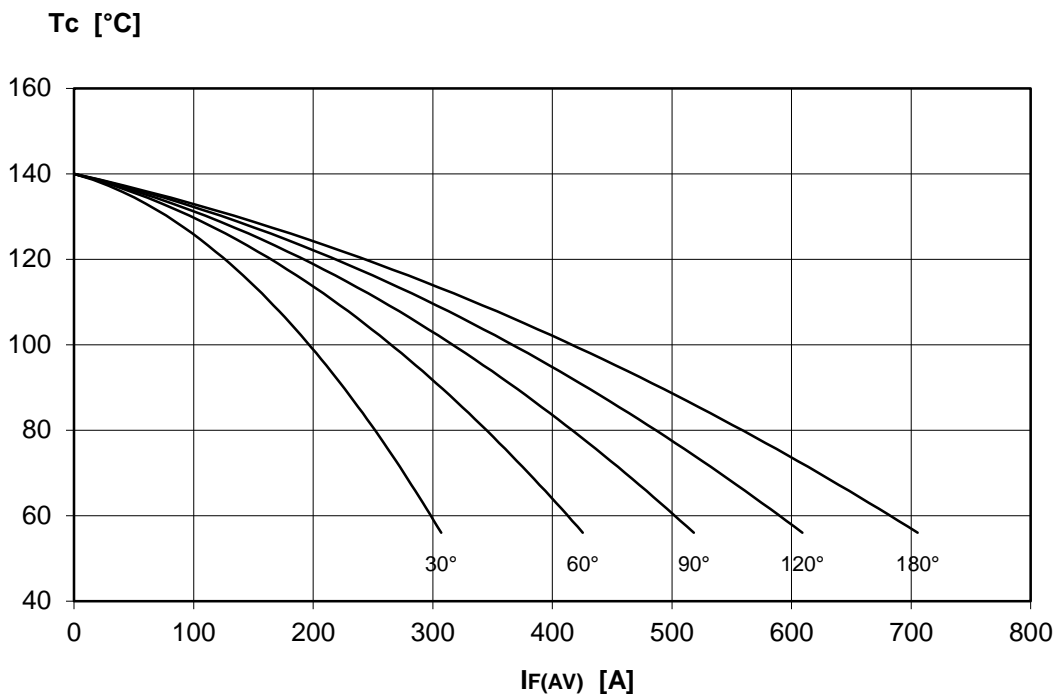
DISSIPATION CHARACTERISTICS

SQUARE WAVE



DISSIPATION CHARACTERISTICS

SINE WAVE

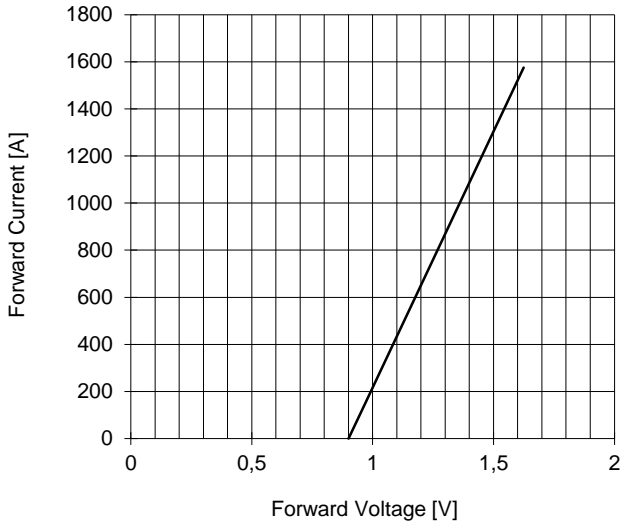


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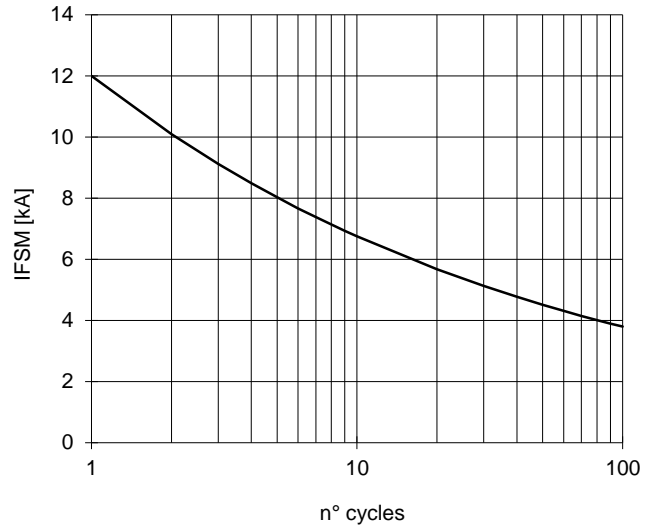


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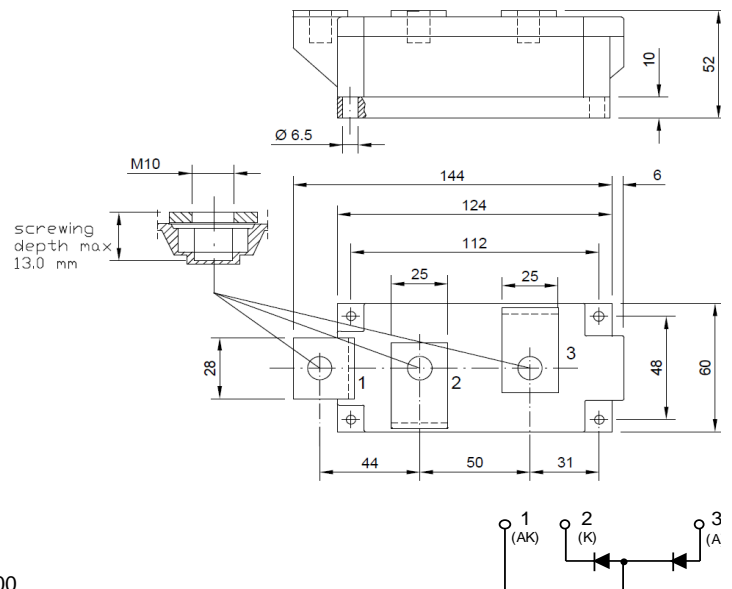
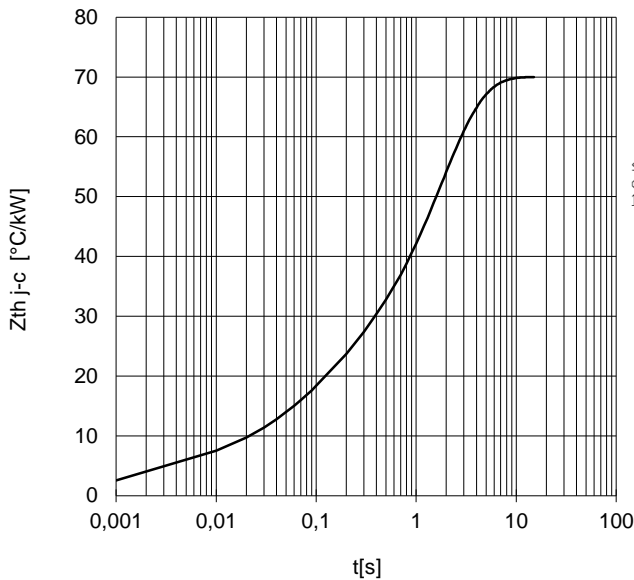
FORWARD CHARACTERISTIC
T_j = 140 °C



SURGE CHARACTERISTIC
T_j = 140 °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 (symbols over shaded background) and characteristics is reported.

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