

## RECTIFIER DIODES MODULE

# AZD1080

Repetitive voltage up to **2800 V**  
Mean forward current **1087 A**  
Surge current **30,0 kA**

### FINAL SPECIFICATION

Apr. 17 - Issue: 1

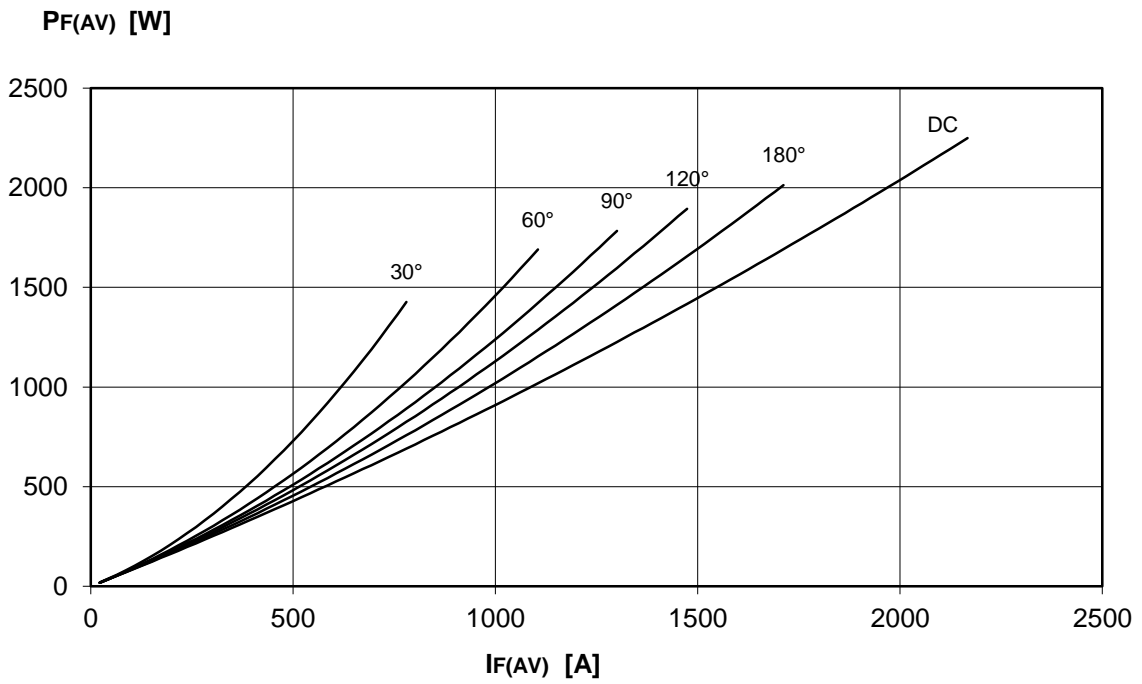
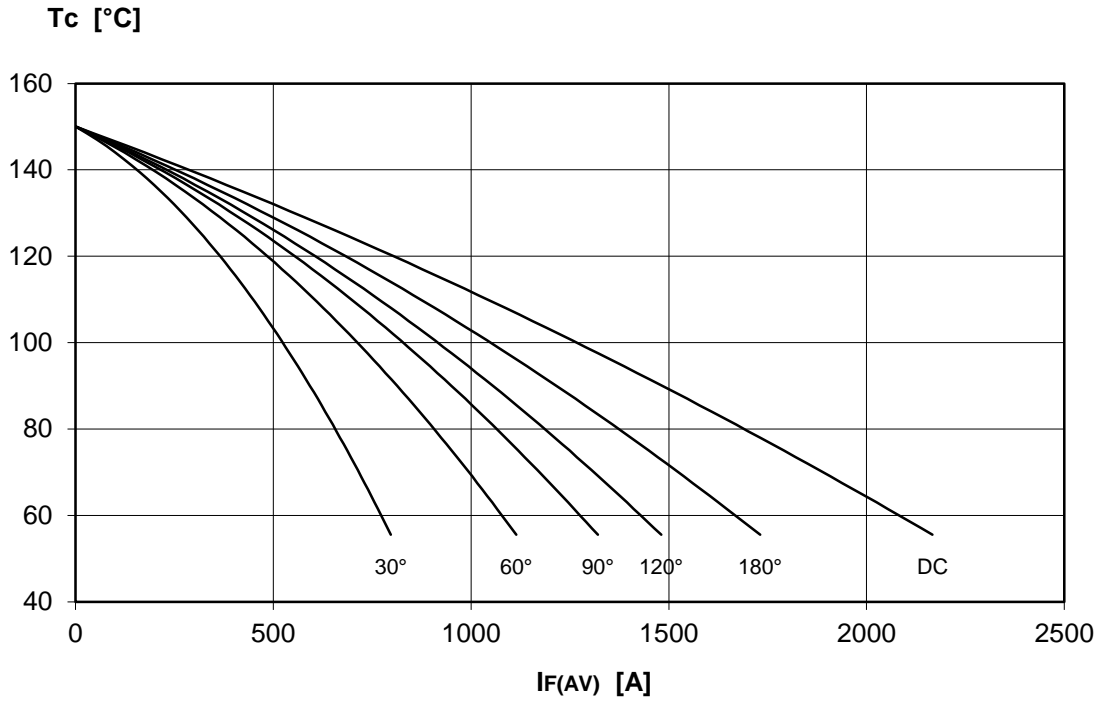
Symbol	Characteristic	Conditions	T <sub>j</sub> [°C]	Value	Unit
<b>BLOCKING</b>					
V <sub>RRM</sub>	Repetitive peak reverse voltage		150	2800	V
V <sub>RSM</sub>	Non-repetitive peak reverse voltage		150	2900	V
I <sub>RRM</sub>	Repetitive peak reverse current		150	75	mA
<b>CONDUCTING</b>					
I <sub>F(AV)</sub>	Mean forward current	180° sin, 50 Hz, T <sub>c</sub> =100°C, single side cooled		1087	A
I <sub>F(AV)</sub>	Mean forward current	180° sin, 50 Hz, T <sub>c</sub> =55°C, single side cooled		1767	A
I <sub>FSM</sub>	Surge forward current	Sine wave, 10 ms without reverse voltage	150	30	kA
I <sup>2</sup> t	I <sup>2</sup> t			4500 x 10 <sup>3</sup>	A <sup>2</sup> s
V <sub>FM</sub>	Forward voltage	Forward current = 1800 A	25	1,20	V
V <sub>F(TO)</sub>	Threshold voltage		150	0,80	V
r <sub>F</sub>	Forward slope resistance		150	0,110	mohm
<b>SWITCHING</b>					
t <sub>rr</sub>	Reverse recovery time		150		μs
Q <sub>rr</sub>	Reverse recovery charge				μC
I <sub>rr</sub>	Peak reverse recovery current				A
<b>MOUNTING</b>					
R <sub>th(j-c)</sub>	Thermal impedance, DC	Junction to case		42,0	°C/kW
R <sub>th(c-h)</sub>	Thermal impedance	Case to heatsink		15,0	°C/kW
T <sub>j</sub>	Operating junction temperature			-30 / 150	°C
V <sub>ins</sub>	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 : AZD1080 S 28

standard specification   VRRM/100

**DISSIPATION CHARACTERISTICS**

**SQUARE WAVE**



**DISSIPATION CHARACTERISTICS**

SINE WAVE

