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Tx 270318 ANSUSE I -**FAST RECOVERY DIODE****ARF526**

Repetitive voltage up to	<b>1600 V</b>
Mean forward current	<b>1345 A</b>
Surge current	<b>20 kA</b>

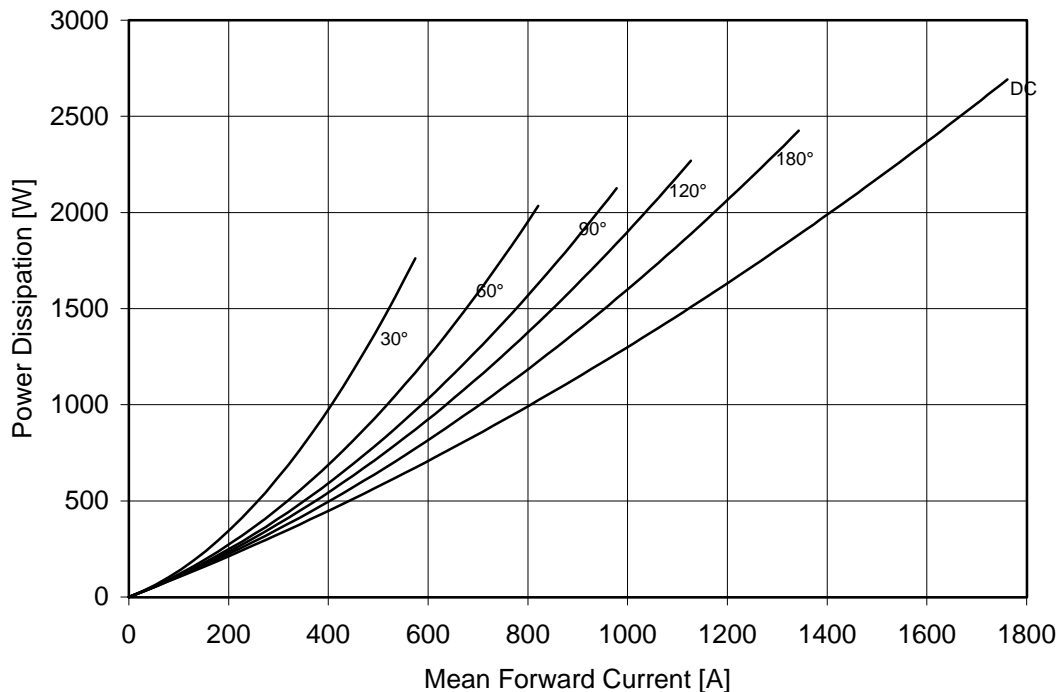
**TARGET SPECIFICATION**

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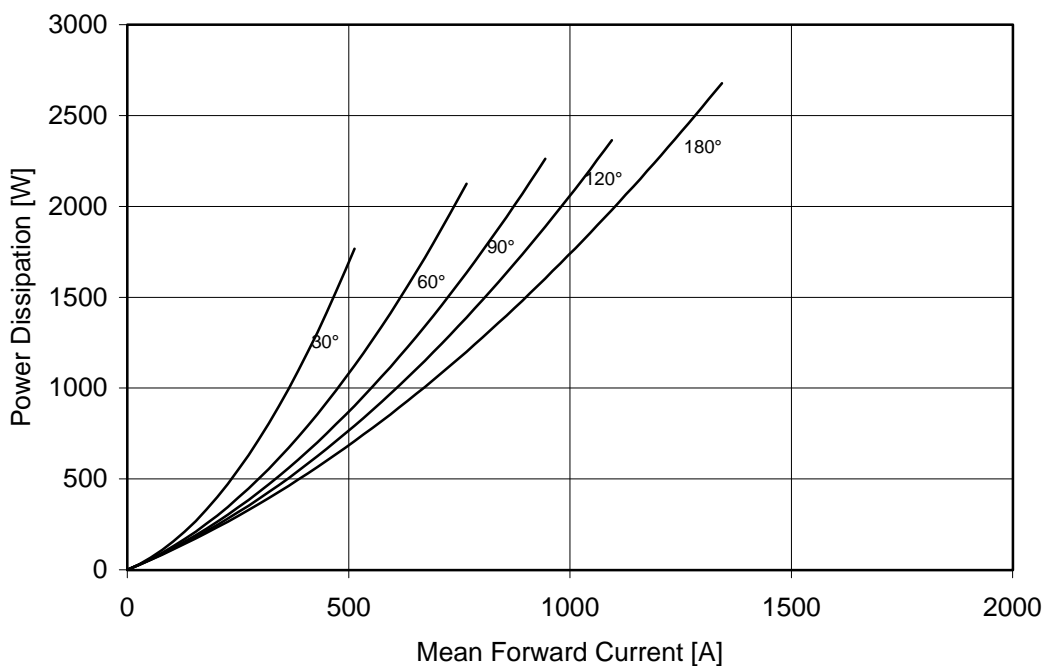
Symbol	Characteristic	Conditions	T <sub>j</sub> [°C]	Value	Unit
<b>BLOCKING</b>					
V <sub>RRM</sub>	Repetitive peak reverse voltage		125	1600	V
V <sub>RSM</sub>	Non-repetitive peak reverse voltage		125	1700	V
I <sub>RRM</sub>	Repetitive peak reverse current	V=VRRM	125	50	mA
<b>CONDUCTING</b>					
I <sub>F(AV)</sub>	Mean forward current	180° sin ,50 Hz, Th=55°C, double side cooled		1345	A
I <sub>F(AV)</sub>	Mean forward current	180° square,50 Hz,Th=55°C,double side cooled		1350	A
I <sub>FSM</sub>	Surge forward current	Sine wave, 10 ms	125	20	kA
I <sup>2</sup> t	I <sup>2</sup> t	reapplied reverse voltage up to 50% VRSM		2000 x1E3	A <sup>2</sup> s
V <sub>FM</sub>	Forward voltage	Forward current : 2000 A	125	1.6	V
V <sub>F(TO)</sub>	Threshold voltage		125	1.00	V
r <sub>F</sub>	Forward slope resistance		125	0.300	mohm
<b>SWITCHING</b>					
t <sub>rr</sub>	Reverse recovery time	I <sub>F</sub> = 1000 A di/dt= 100 A/μs VR = 50 V	125	3.5	μs
Q <sub>rr</sub>	Reverse recovery charge			250	μC
I <sub>rr</sub>	Peak reverse recovery current			145	A
s	Softness (s-factor), min			0.5	
V <sub>FR</sub>	Peak forward recovery	di/dt= 100 A/μs	125	15	V
<b>MOUNTING</b>					
R <sub>th(j-h)</sub>	Thermal impedance	Junction to heatsink, double side cooled		26	°C/kW
T <sub>j</sub>	Operating junction temperature			-30 / 125	°C
F	Mounting force			18.0 / 20.0	kN
	Mass			500	g
<b>ORDERING INFORMATION : ARF526 S 16</b>					
standard specification <input type="checkbox"/> <input type="checkbox"/> VRRM/100					

DISSIPATION CHARACTERISTICS

SQUARE WAVE

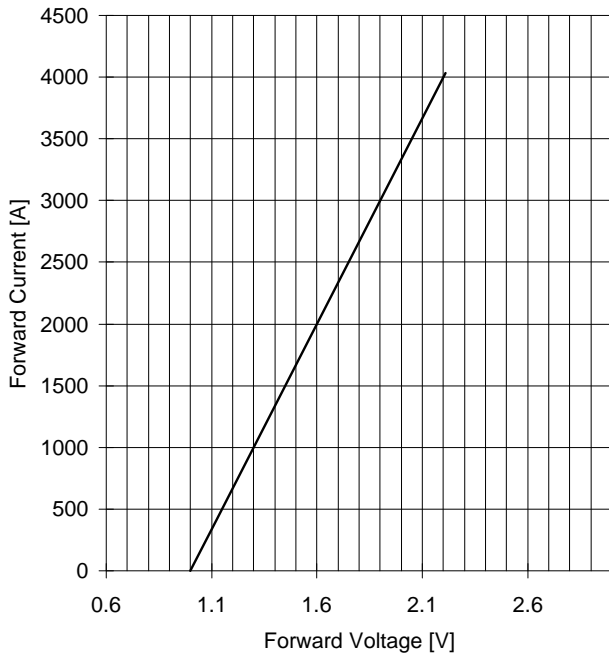


SINE WAVE

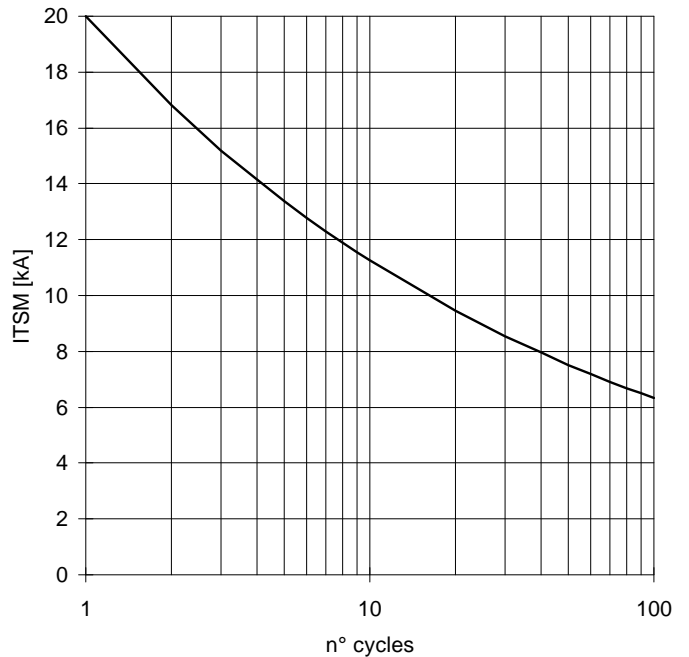


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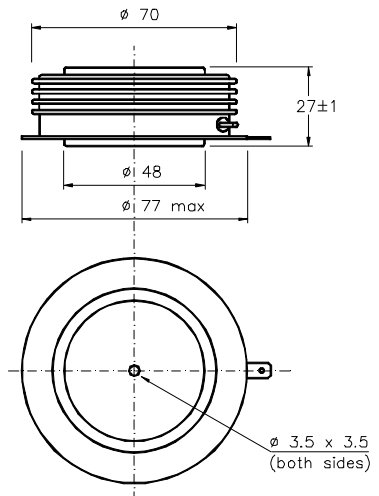
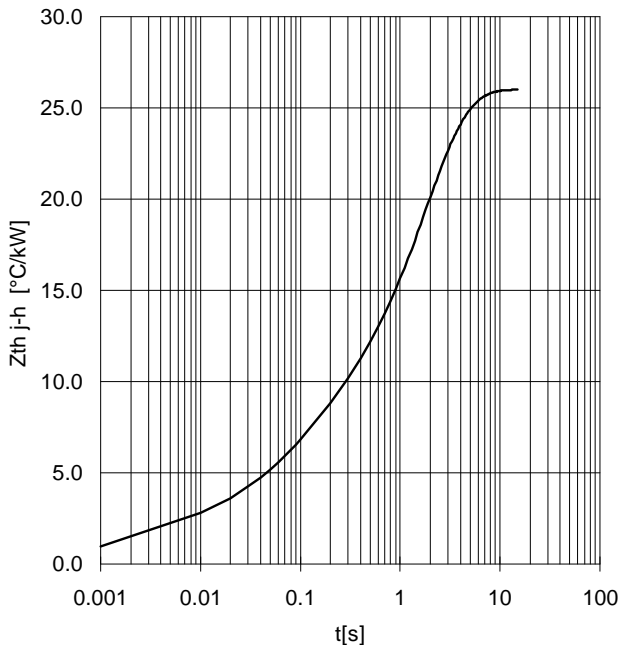
FORWARD CHARACTERISTIC  
T<sub>j</sub> = 125 °C



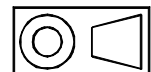
SURGE CHARACTERISTIC  
T<sub>j</sub> = 125 °C



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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