ANSALDO

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Tx 270318 ANSUSE I -

FAST RECOVERY DIODE

ARF340

Repetitive voltage up to **2600 V**
Mean forward current **775 A**
Surge current **6.4 kA**

FINAL SPECIFICATION

lug 98 - ISSUE : 01

Symbol	Characteristic	Conditions	Tj [°C]	Value	Unit
BLOCKING					
V_{RRM}	Repetitive peak reverse voltage		150	2600	V
V_{RSM}	Non-repetitive peak reverse voltage		150	2700	V
I_{RRM}	Repetitive peak reverse current	V=VRRM	150	50	mA
CONDUCTING					
$I_{F(AV)}$	Mean forward current	180° sin ,50 Hz, Th=55°C, double side cooled		775	A
$I_{F(AV)}$	Mean forward current	180° square,50 Hz,Th=55°C,double side cooled		780	A
I_{FSM}	Surge forward current	Sine wave, 10 ms reapplied reverse voltage up to 50% VRSM	150	6,4	kA
I^2t	I^2t			205 x1E3	A^2s
V_{FM}	Forward voltage	Forward current 1200 A	25	2,3	V
$V_{F(TO)}$	Threshold voltage		150	1,15	V
r_F	Forward slope resistance		150	0,685	mohm
SWITCHING					
t_{rr}	Reverse recovery time	I F = 350 A di/dt= 80 A/µs VR = 100 V	150	4	µs
Q_{rr}	Reverse recovery charge			260	µC
I_{rr}	Peak reverse recovery current			140	A
s	Softness (s-factor), min			0,4	
V_{FR}	Peak forward recovery	di/dt= 400 A/µs	150	20	V
MOUNTING					
$R_{th(j-h)}$	Thermal impedance	Junction to heatsink, double side cooled		50	°C/kW
T_j	Operating junction temperature			-30 / 150	°C
F	Mounting force			8.0 / 9.0	kN
	Mass			85	g

ORDERING INFORMATION : ARF340 S 26

standard specification — VRRM/100

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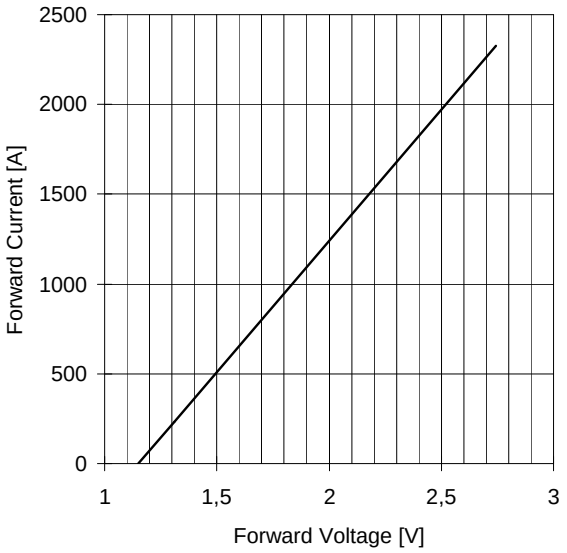
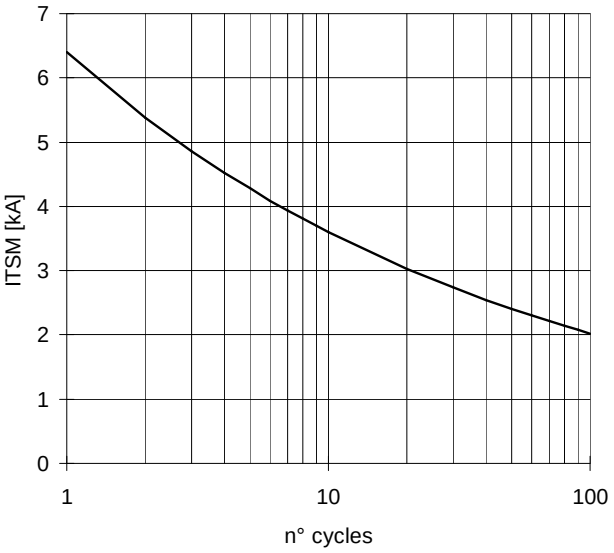
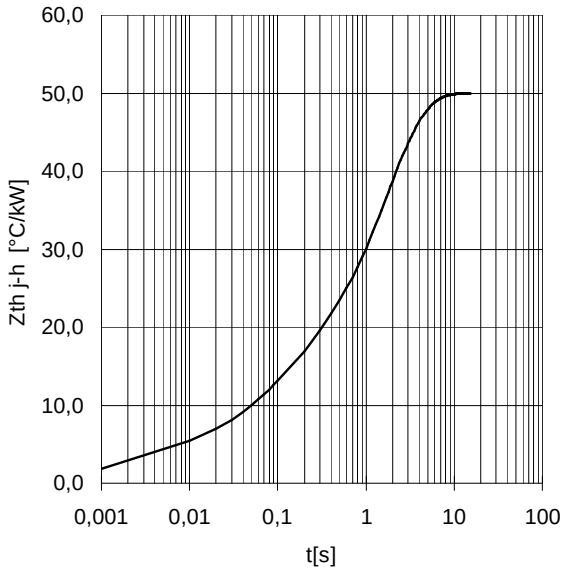
FORWARD CHARACTERISTIC
Tj = 150 °C

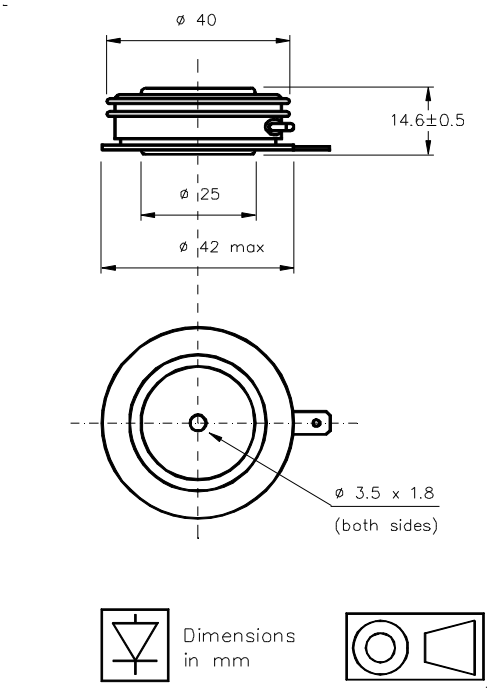


SURGE CHARACTERISTIC
Tj = 150 °C



TRANSIENT THERMAL IMPEDANCE
DOUBLE SIDE COOLED



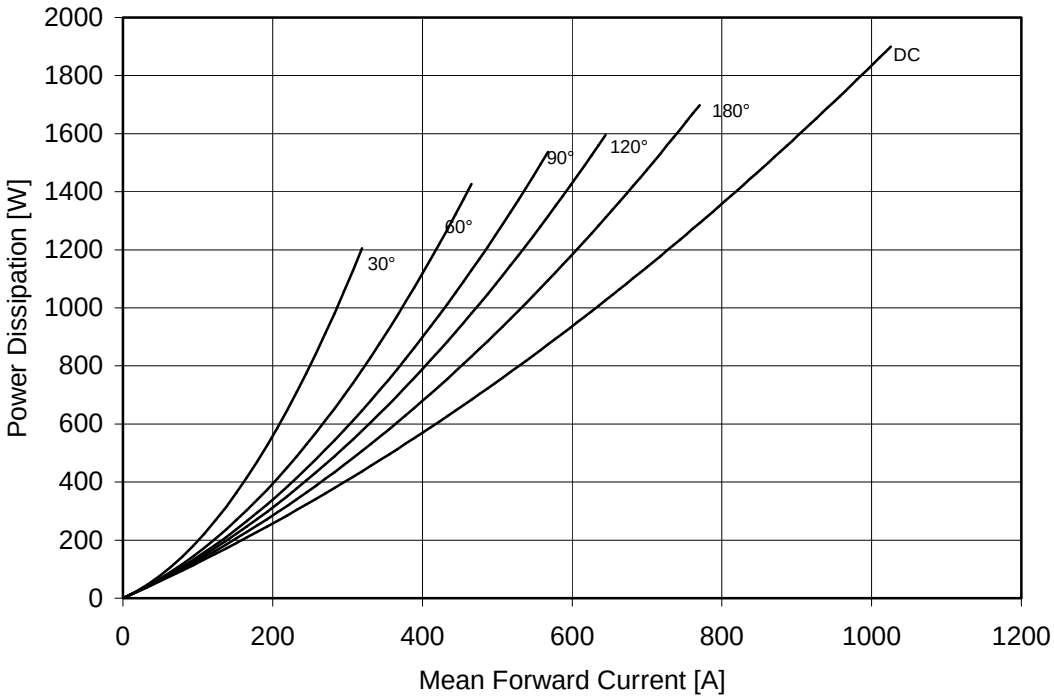


All the characteristics given in this data sheet are guaranteed only with uniform clamping force, cleaned and lubricated heatsink, surfaces with flatness < .03 mm and roughness < 2 µm.
In the interest of product improvement ANSALDO reserves the right to change any data given in this data sheet at any time without previous notice.
If not stated otherwise the maximum value of ratings (simbols over shaded background) and characteristics is reported.

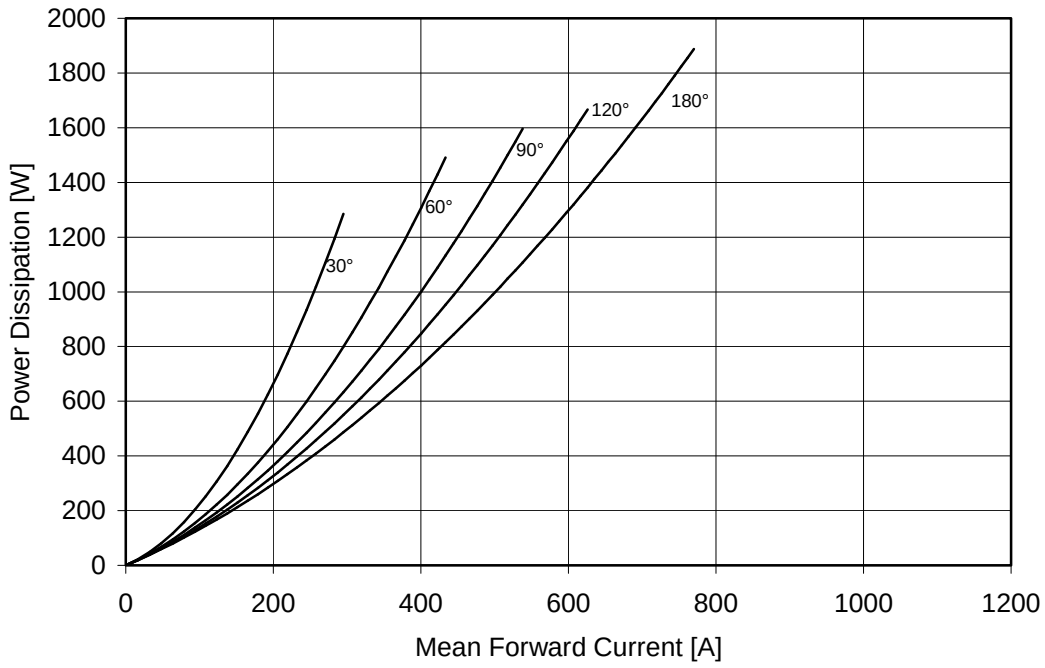
Distributed by

DISSIPATION CHARACTERISTICS

SQUARE WAVE

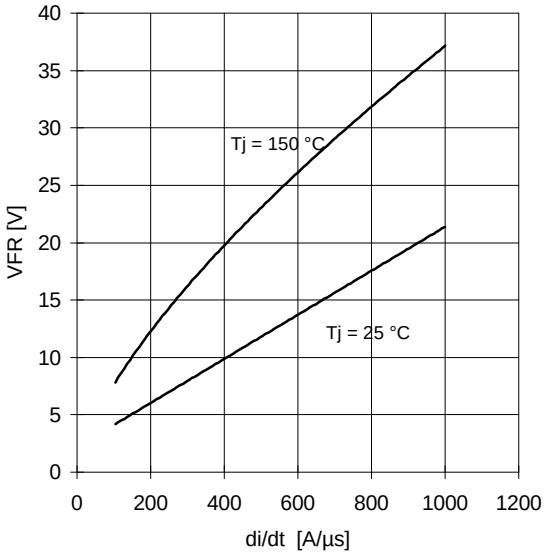


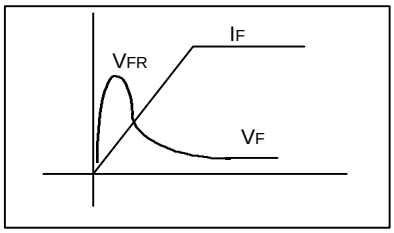
SINE WAVE



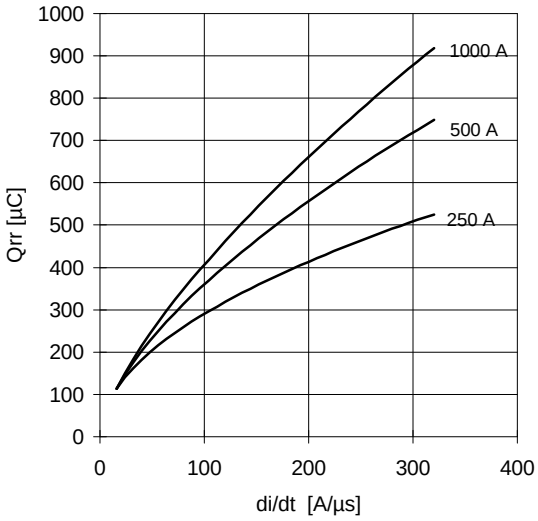
SWITCHING CHARACTERISTICS

FORWARD RECOVERY VOLTAGE

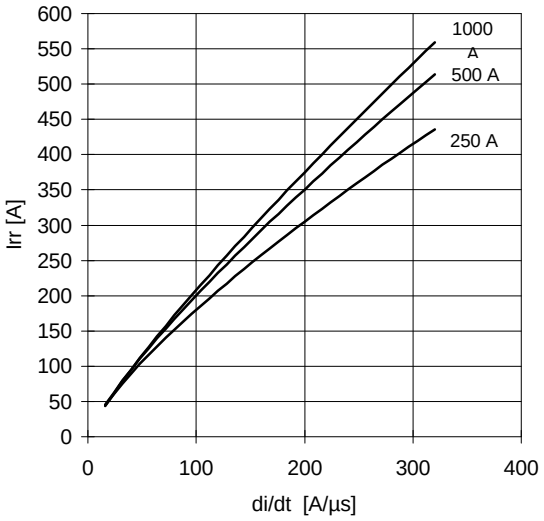




REVERSE RECOVERY CHARGE
Tj = 150 °C



REVERSE RECOVERY CURRENT
Tj = 150 °C



ta = Irr / (di/dt) tb = trr - ta

Softness (s factor) s = tb / ta

Energy dissipation during recovery Er = Vr (Qrr - Irr ta /