

查询ARF675供应商

捷多邦, 专业PCB打样工厂, 24小时加急出货

ANSALDO

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FAST RECOVERY DIODE

ARF675

Repetitive voltage up to **4500 V**
Mean forward current **1085 A**
Surge current **15 kA**

FINAL SPECIFICATION

feb 97 - ISSUE : 03

Symbol	Characteristic	Conditions	T _j [°C]	Value	Unit
BLOCKING					
V _{RRM}	Repetitive peak reverse voltage		125	4500	V
V _{RSM}	Non-repetitive peak reverse voltage		125	4600	V
I _{RRM}	Repetitive peak reverse current	V=VRRM	125	80	mA
CONDUCTING					
I _{F(AV)}	Mean forward current	180° sin ,50 Hz, Th=55°C, double side cooled		1085	A
I _{F(AV)}	Mean forward current	180° square,50 Hz,Th=55°C,double side cooled		1090	A
I _{FSM}	Surge forward current	Sine wave, 10 ms	125	15	kA
I ² t	I ² t	reapplied reverse voltage up to 50% VRSM		1125 x1E3	A²s
V _{FM}	Forward voltage	Forward current 1570 A	25	3.4	V
V _{F(TO)}	Threshold voltage		125	1.70	V
r _F	Forward slope resistance		125	0.700	mohm
SWITCHING					
t _{rr}	Reverse recovery time	I _F = 1000 A di/dt= 250 A/μs VR = 100 V	125	5.6	μs
Q _{rr}	Reverse recovery charge			1700	μC
I _{rr}	Peak reverse recovery current			600	A
s	Softness (s-factor), min			0.5	
V _{FR}	Peak forward recovery	di/dt= 400 A/μs	125	38	V
MOUNTING					
R _{th(j-h)}	Thermal impedance	Junction to heatsink, double side cooled		18	°C/kW
T _j	Operating junction temperature			-30 / 125	°C
F	Mounting force			22.0 / 24.5	kN
	Mass			300	g

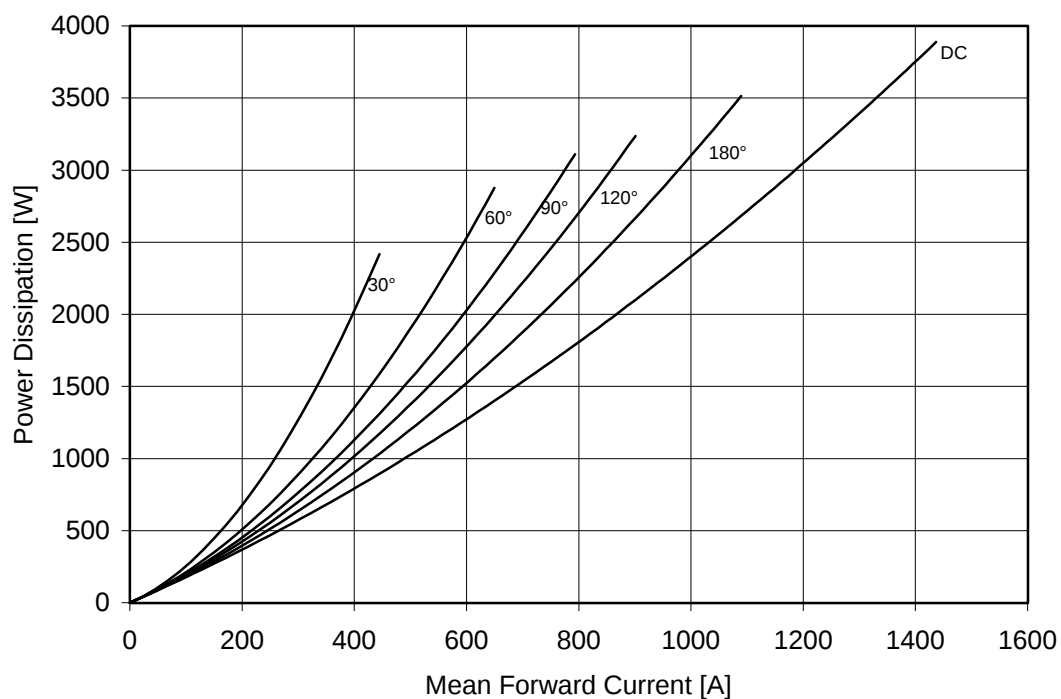
ORDERING INFORMATION : ARF675 S 45

standard specification ☐ VRRM/100 ☐

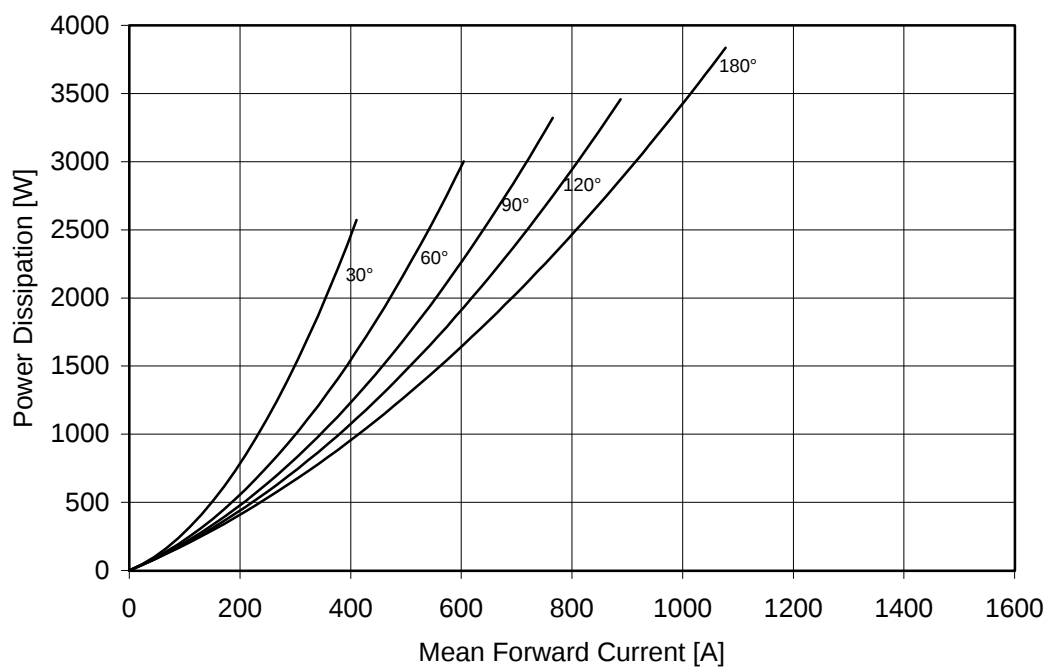


DISSIPATION CHARACTERISTICS

SQUARE WAVE

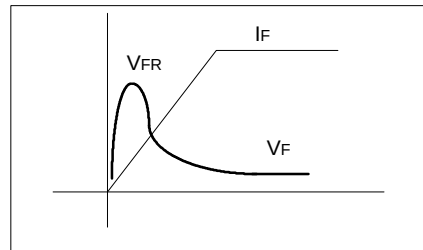
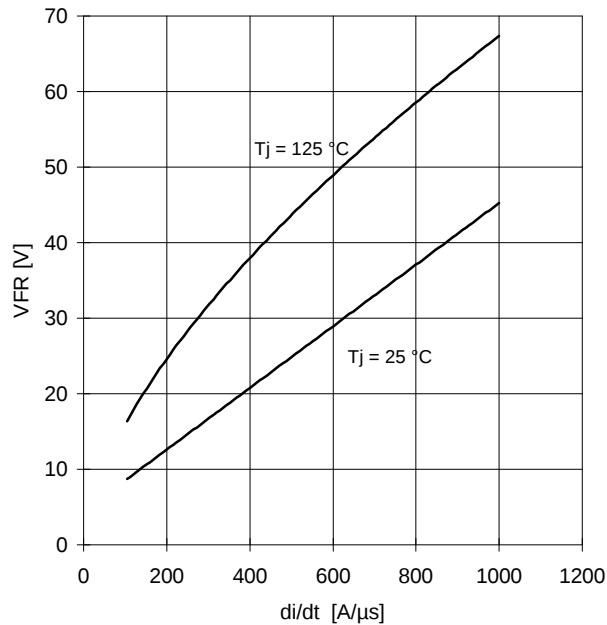


SINE WAVE

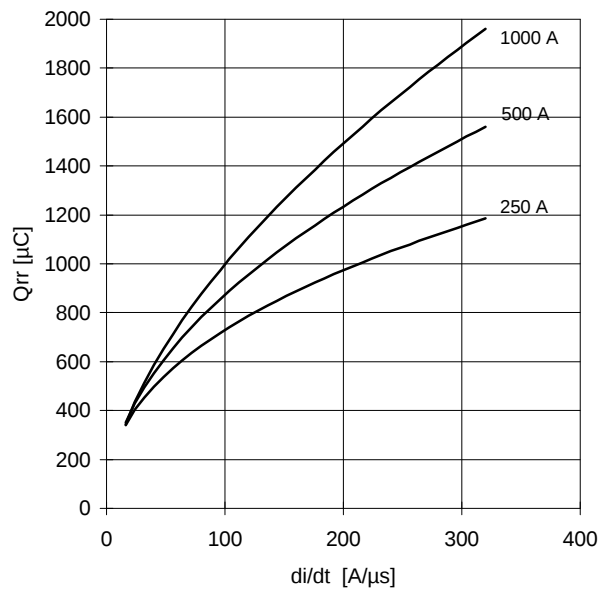


SWITCHING CHARACTERISTICS

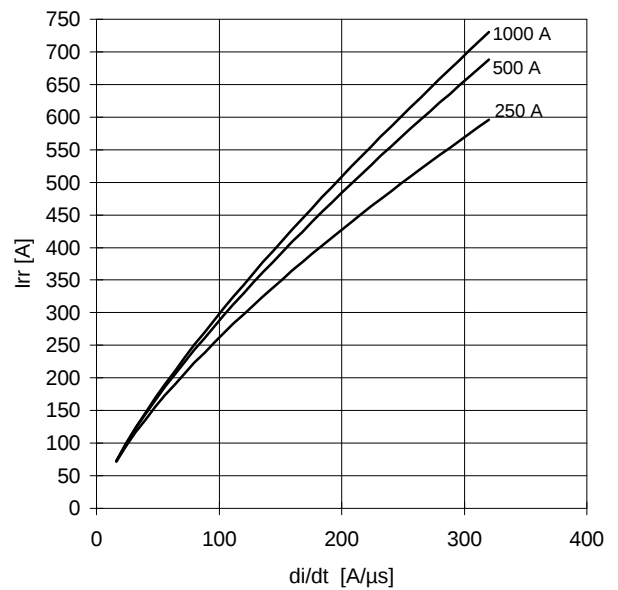
FORWARD RECOVERY VOLTAGE



REVERSE RECOVERY CHARGE $T_j = 125\text{ }^{\circ}\text{C}$



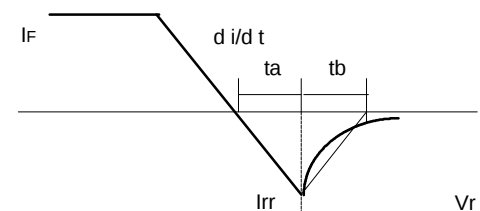
REVERSE RECOVERY CURRENT $T_j = 125\text{ }^{\circ}\text{C}$



$$t_a = I_{rr} / (di/dt) \quad t_b = t_{rr} - t_a$$

$$\text{Softness (s factor)} \quad s = t_b / t_a$$

$$\text{Energy dissipation during recovery } E_r = V_r \cdot (Q_{rr} - I_{rr} \cdot t_a / 2)$$

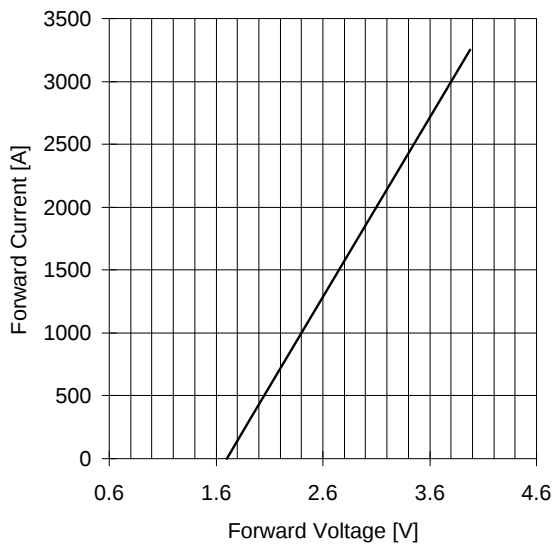


ARF675 FAST RECOVERY DIODE

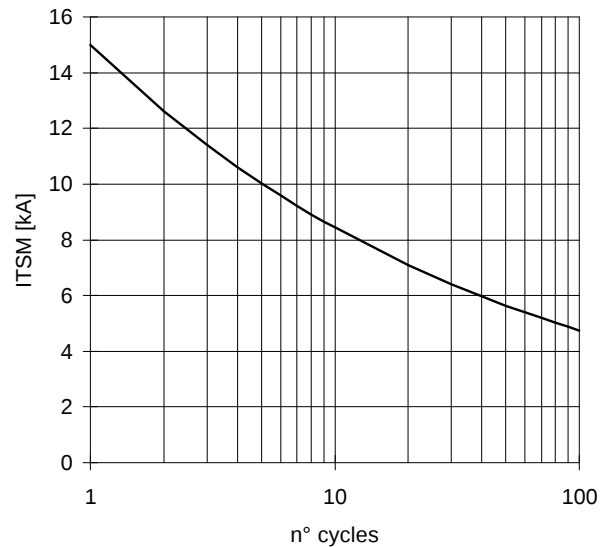
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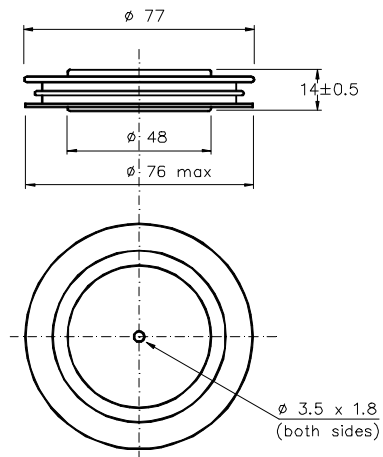
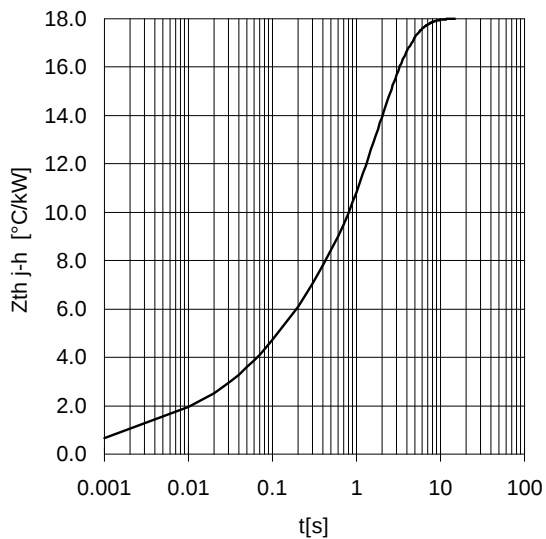
FORWARD CHARACTERISTIC
 $T_j = 125^\circ\text{C}$



SURGE CHARACTERISTIC
 $T_j = 125^\circ\text{C}$



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 $< 2 \mu\text{m}$.

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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