

Fast recovery diode

RF2001T3D

●Applications

General rectification

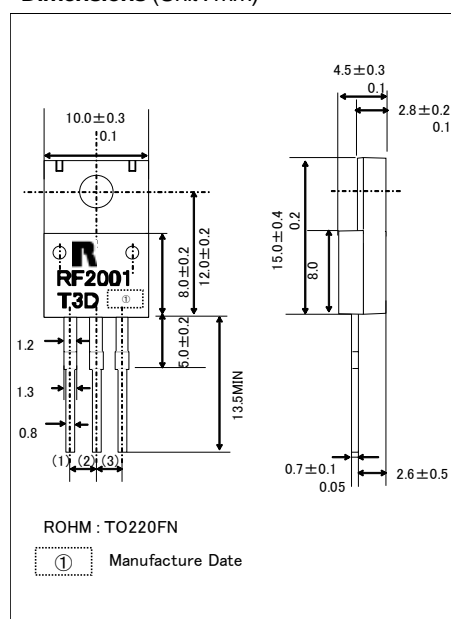
●Features

- 1) Cathode common type.
(TO-220)
- 2) Ultra Low V_F
- 3) Very fast recovery
- 4) Low switching loss

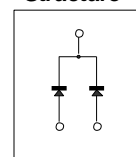
●Construction

Silicon epitaxial planar

●Dimensions (Unit : mm)



●Structure



●Absolute maximum ratings ($T_a=25^\circ\text{C}$)

Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive peak)	V_{RM}	300	V
Reverse voltage (DC)	V_R	300	V
Average rectified forward current (*1)	I_o	20	A
Forward current surge peak (60Hz·1cyc)	I_{FSM}	100	A
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

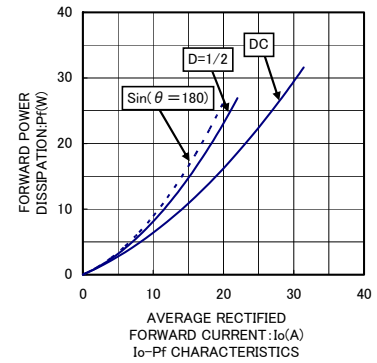
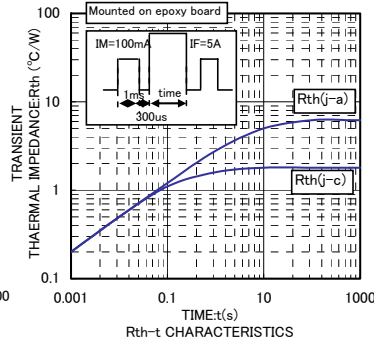
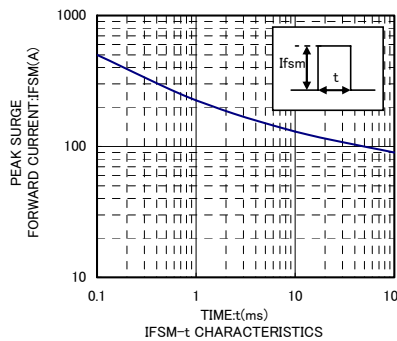
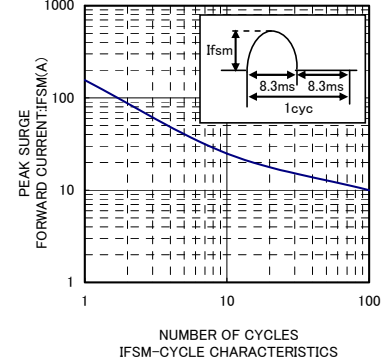
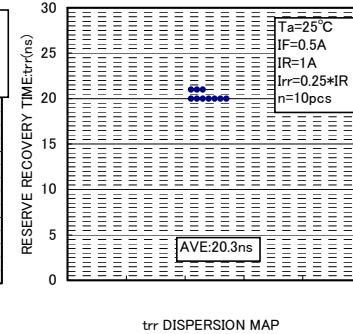
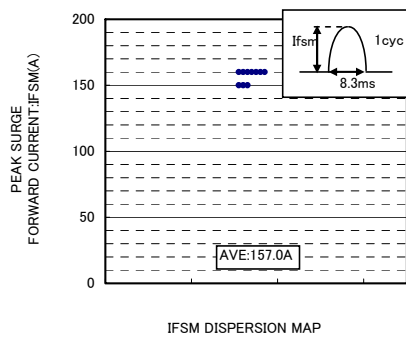
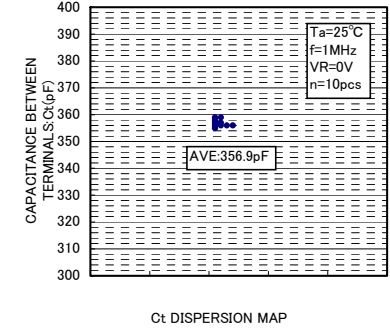
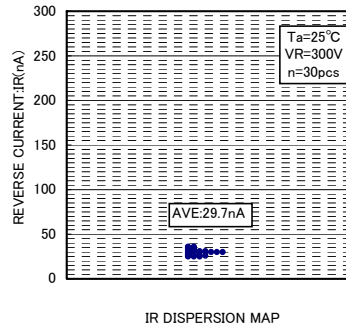
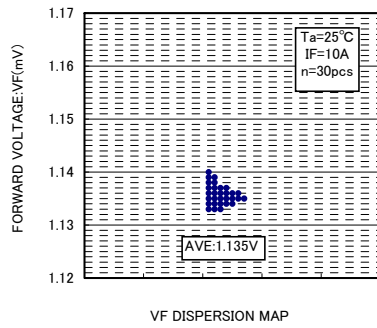
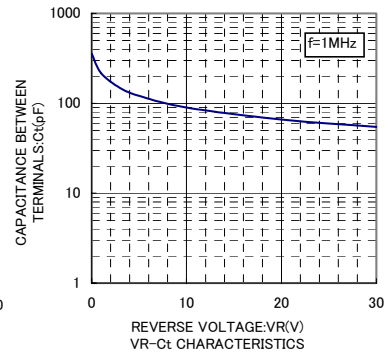
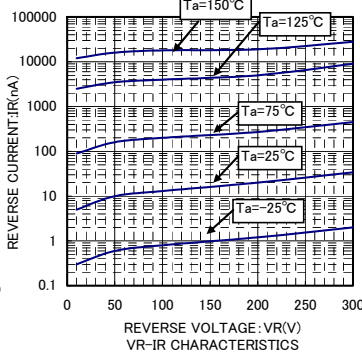
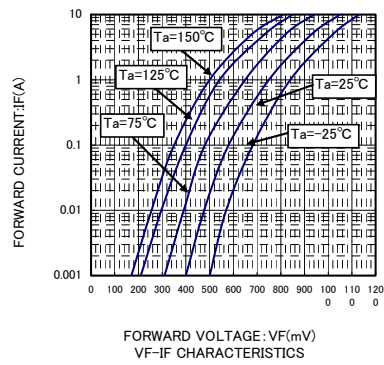
(*1)Business frequency, Rating of R-load, $T_c=113^\circ\text{C}$ 1/2 I_o per diode

●Electrical characteristic ($T_a=25^\circ\text{C}$)

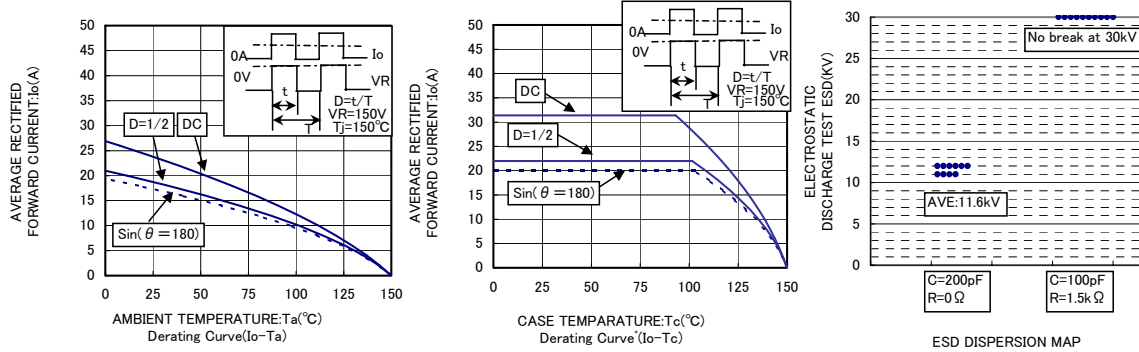
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	-	-	1.3	V	$I_F=10\text{A}$
Reverse current	I_R	-	-	10	μA	$V_R=300\text{V}$
Reverse recovery time	t_{rr}	-	-	25	ns	$I_F=0.5\text{A}, I_R=1\text{A}, t_{rr}=0.25 \cdot I_R$

Diodes

●Electrical characteristic curves



Diodes



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