

# Fast recovery diode

## RF601T2D

●Applications

General rectification

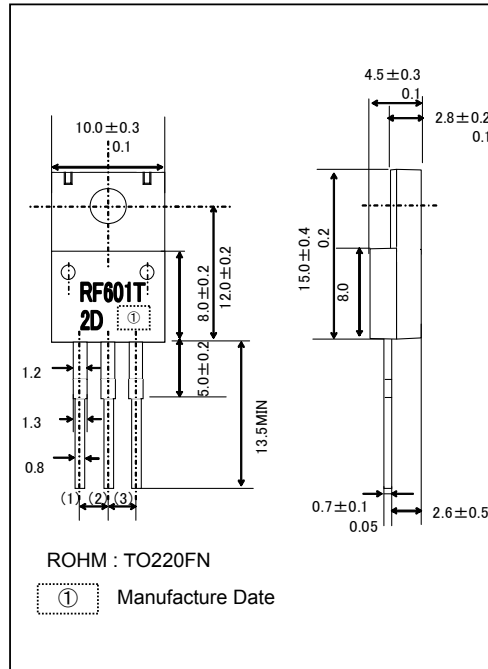
●Features

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

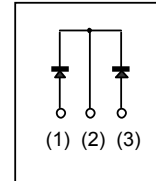
●Construction

Silicon epitaxial planar

●Dimensions (Unit : mm)



●Structure



●Absolute maximum ratings (Ta=25°C)

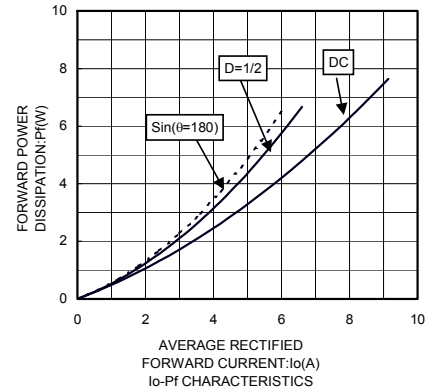
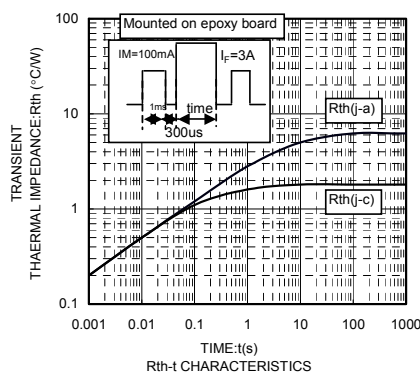
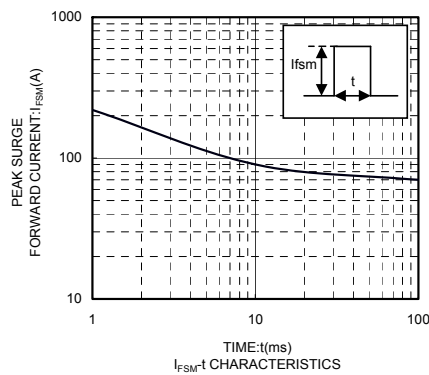
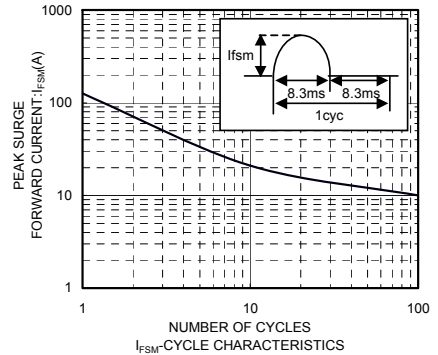
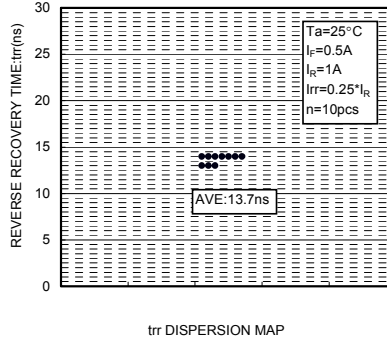
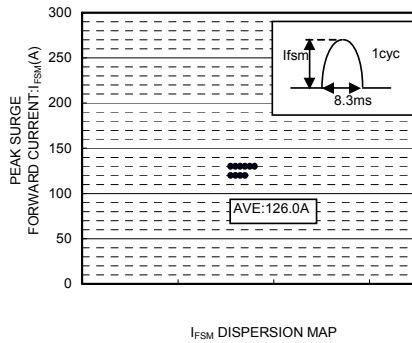
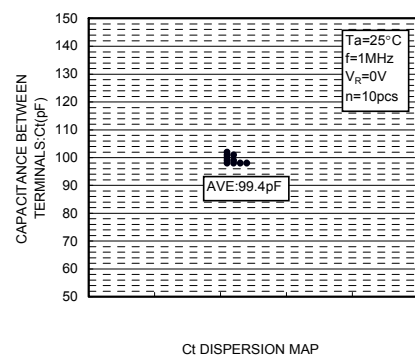
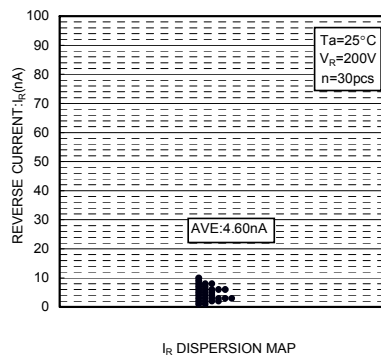
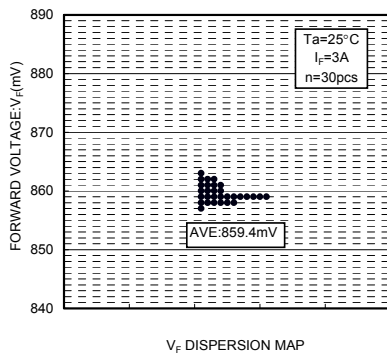
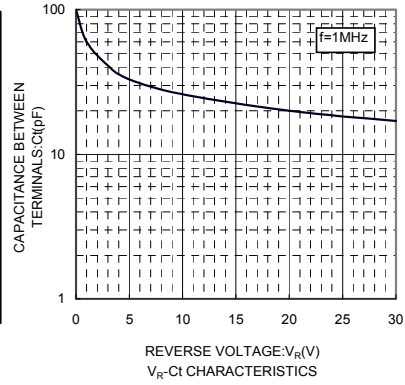
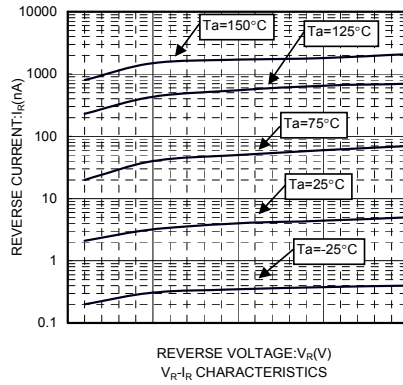
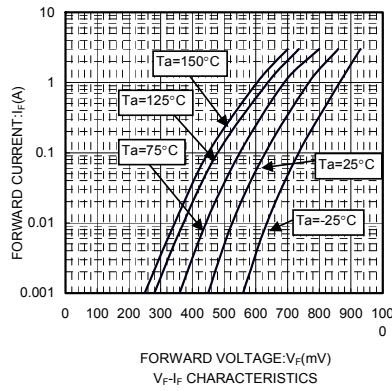
Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive peak)	$V_{RM}$	200	V
Reverse voltage (DC)	$V_R$	200	V
Average rectified forward current (*1)	$I_o$	6	A
Forward current surge peak (60Hz/1cyc)	$I_{FSM}$	60	A
Junction temperature	$T_j$	150	°C
Storage temperature	$T_{stg}$	-55 to +150	°C

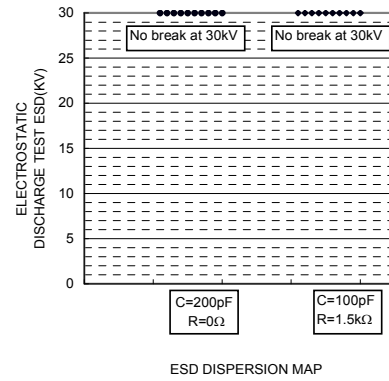
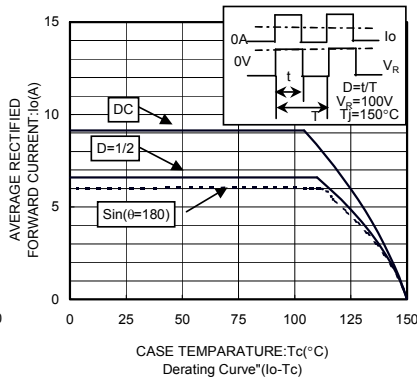
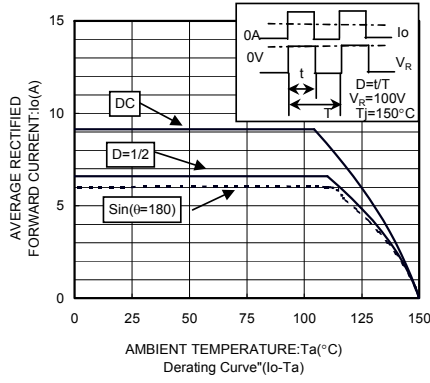
(\*1)Business frequency, Rating of R-load,  $T_c=132^{\circ}C_{MAX}$ . 1/2  $I_o$  per diode

●Electrical characteristic (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	$V_F$	-	0.87	0.93	V	$I_F=3A$
Reverse current	$I_R$	-	0.01	10	$\mu A$	$V_R=200V$
Reverse recovery time	$t_{rr}$	-	18	25	ns	$I_F=0.5A, I_R=1A, I_{rr}=0.25 \cdot I_R$

●Electrical characteristics curves





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