

Schottky barrier diode

RSX1001T3

● Applications

Switching power supply

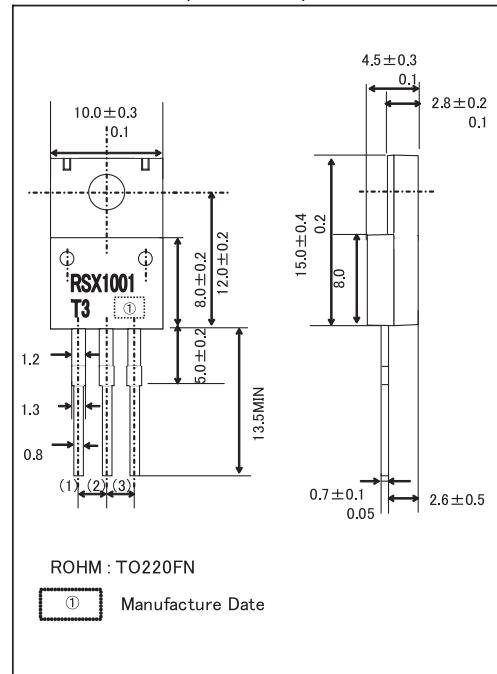
● Features

- 1) Cathode common type.
- (TO-220)
- 2) Low I_R
- 3) High reliability

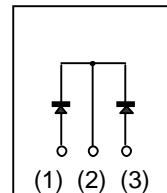
● Construction

Silicon epitaxial planer

● Dimensions (Unit : mm)



● Structure



● Absolute maximum ratings (Ta=25°C)

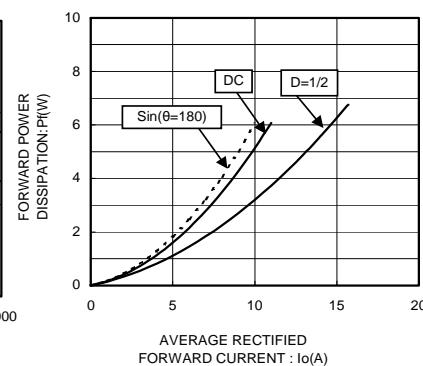
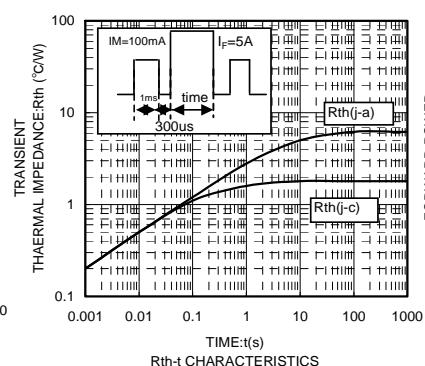
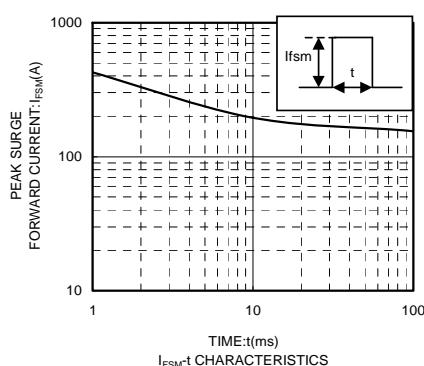
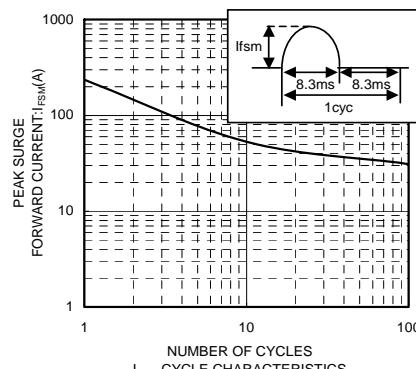
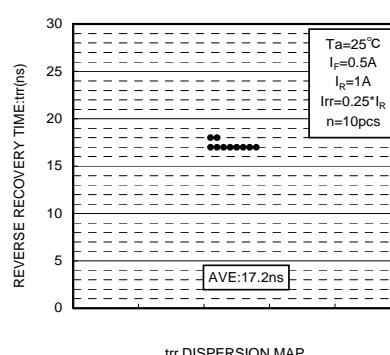
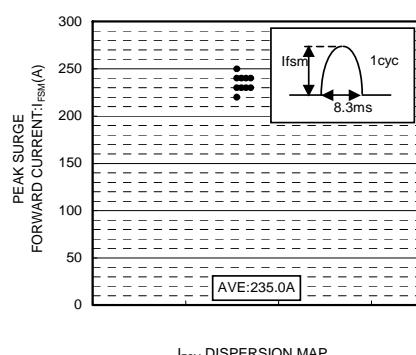
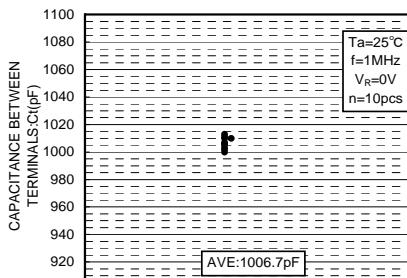
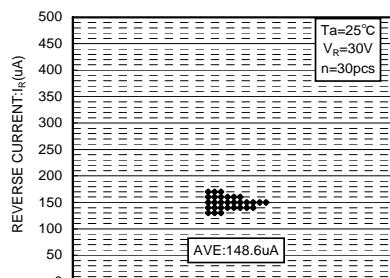
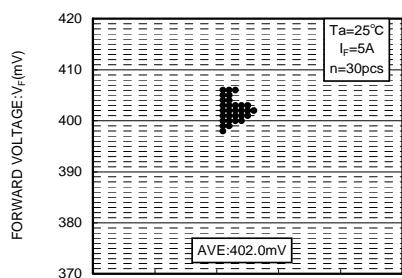
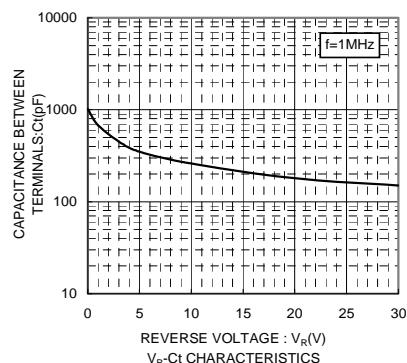
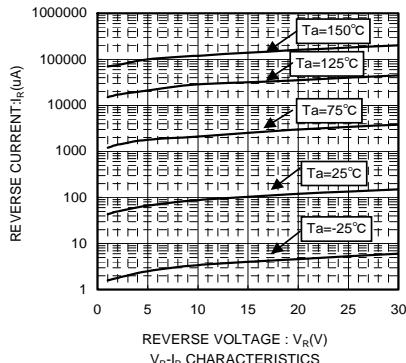
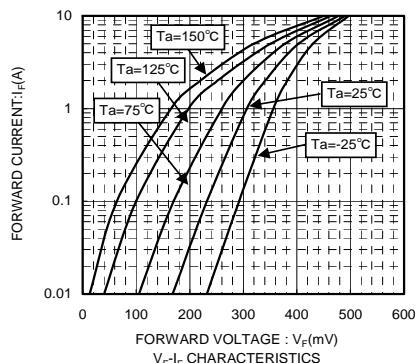
Parameter	Symbol	Limits		Unit
Reverse voltage (repetitive peak)	V_{RM}	30		V
Reverse voltage (DC)	V_R	30		V
Average rectified forward current (*1)	I_o	10		A
Forward current surge peak (60Hz / 1cyc) (*1)	I_{FSM}	150		A
Junction temperature	T_j	150		°C
Storage temperature	T_{stg}	-40 to +150		°C

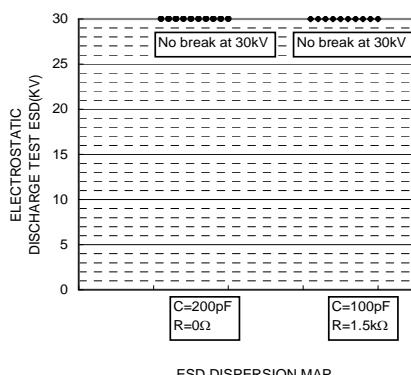
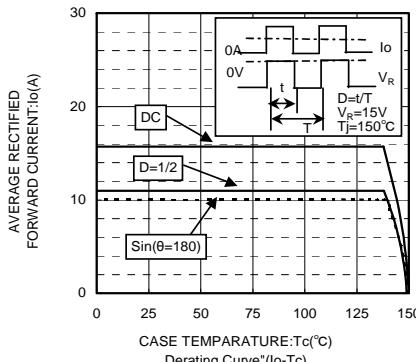
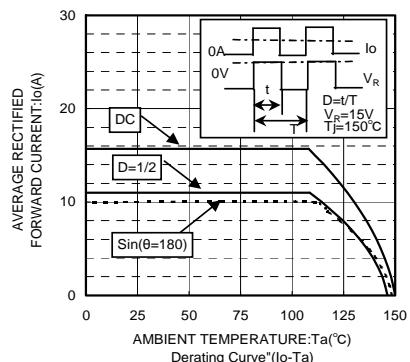
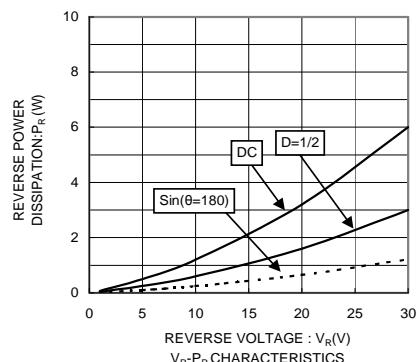
(*1)Business frequencies, Rating of R-load, 1/2 I_o per diode, $T_c=132^{\circ}\text{C}$

● Electrical characteristic (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	-	-	0.45	V	$I_F=5\text{A}$
Reverse current	I_R	-	-	500	μA	$V_R=30\text{V}$
Reverse recovery time	τ_{rc}	-	-	2.5	°C/W	junction to case

● Electrical characteristic curves





Notes

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