

# Fast recovery diode

## RF2001T2D

### ●Applications

General rectification

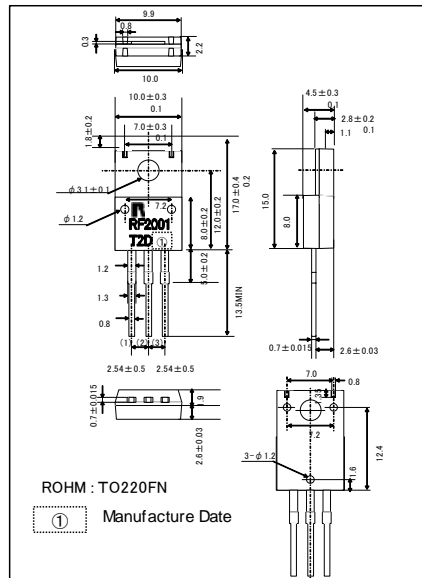
### ●Features

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

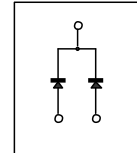
### ●Construction

Silicon epitaxial planar

### ●External dimensions (Unit : mm)



### ●Structure



### ●Absolute maximum ratings (Ta=25°C)

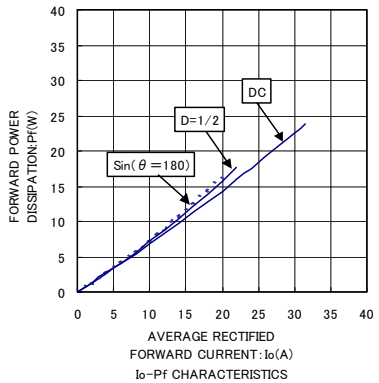
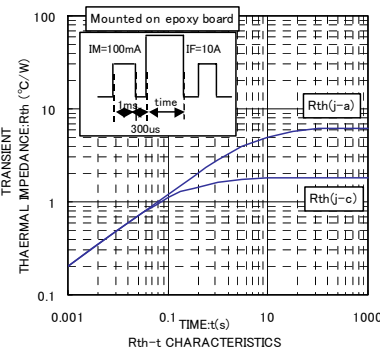
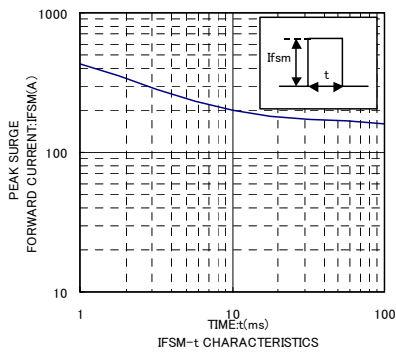
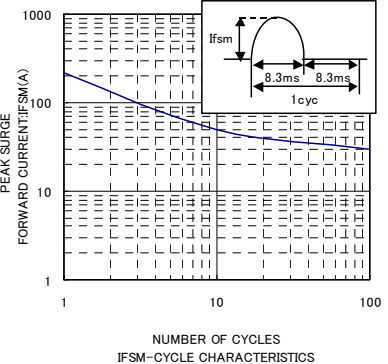
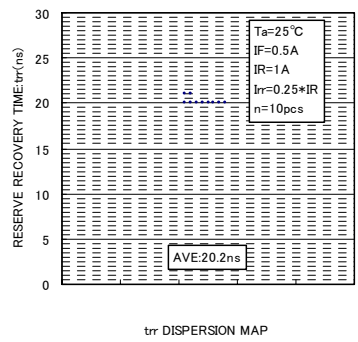
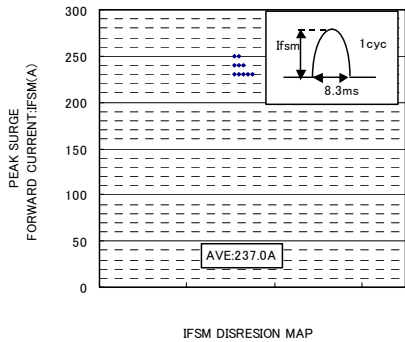
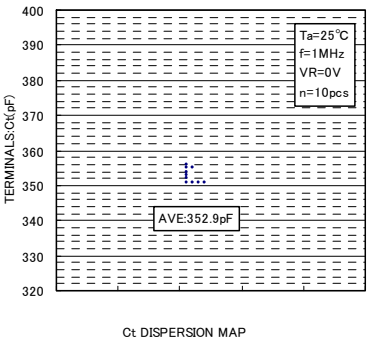
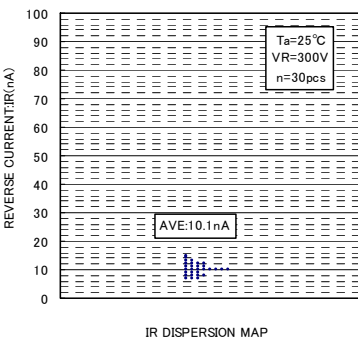
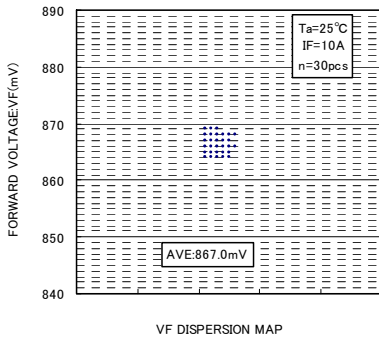
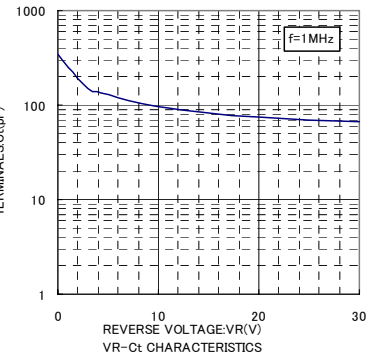
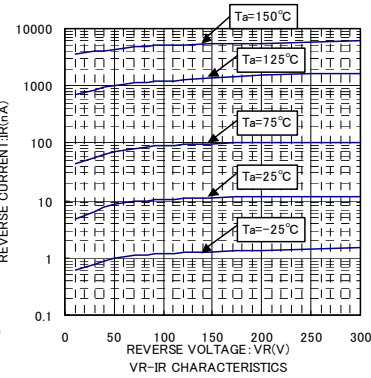
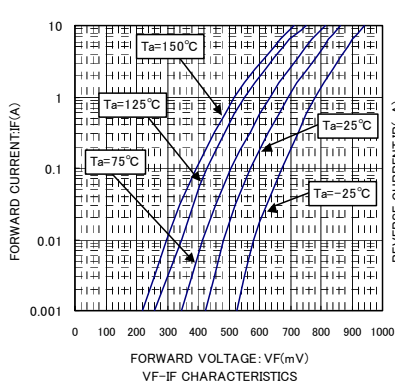
| Parameter                              | Symbol    | Limits      | Unit |
|--|-----------|-------------|------|
| Reverse voltage (repetitive peak)      | $V_{RM}$  | 200         | V    |
| Reverse voltage (DC)                   | $V_R$     | 200         | V    |
| Average rectified forward current (*1) | $I_o$     | 20          | A    |
| Forward current surge peak (60Hz·1cyc) | $I_{FSM}$ | 100         | A    |
| Junction temperature                   | $T_J$     | 150         | °C   |
| Storage temperature                    | $T_{stg}$ | -55 to +150 | °C   |

(\*1) Per chip :  $I_o/2$

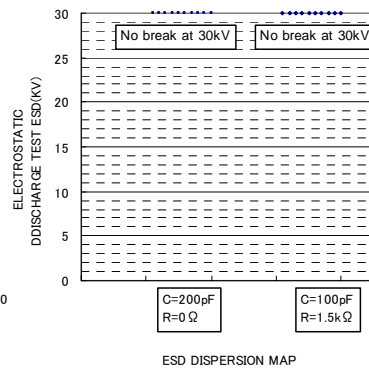
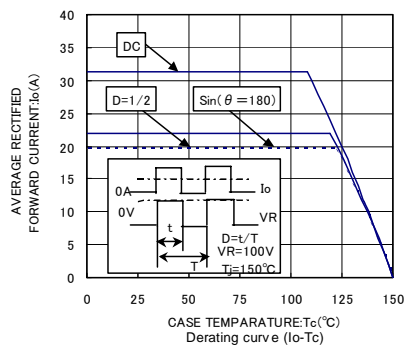
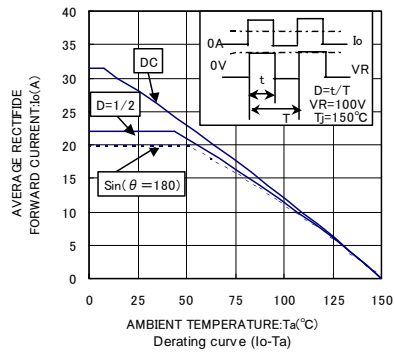
### ●Electrical characteristic (Ta=25°C)

| Parameter             | Symbol   | Min. | Typ. | Max. | Unit    | Conditions                                |
|-----------------------|----------|------|------|------|---------|---|
| Forward voltage       | $V_F$    | -    | -    | 0.93 | V       | $I_F=10A$                                 |
| Reverse current       | $I_R$    | -    | -    | 10   | $\mu A$ | $V_R=200V$                                |
| Reverse recovery time | $t_{rr}$ | -    | -    | 30   | ns      | $I_F=0.5A, I_R=1A, I_{rr}=0.25 \cdot I_R$ |

●Electrical characteristic curves



Diodes



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