

●Applications

General rectification

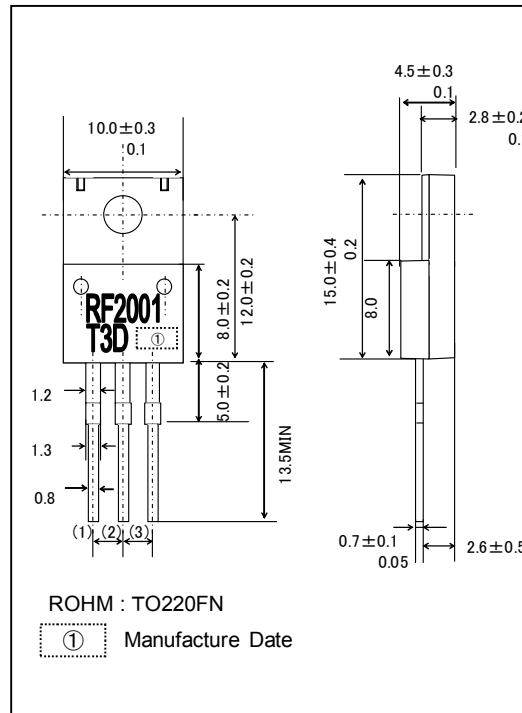
●Features

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

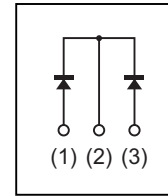
●Construction

Silicon epitaxial planar

●Dimensions (Unit : mm)



●Structure



●Absolute maximum ratings (Ta=25°C)

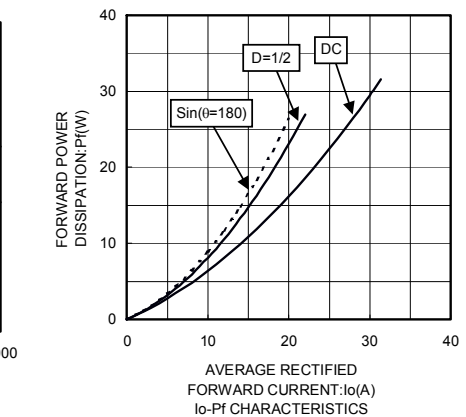
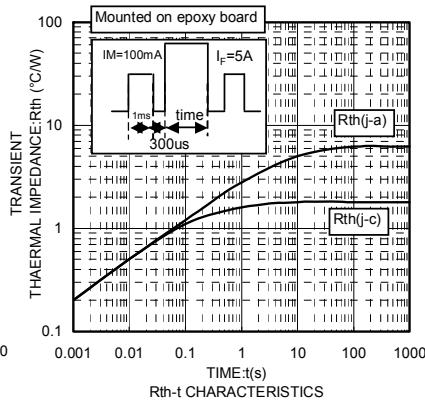
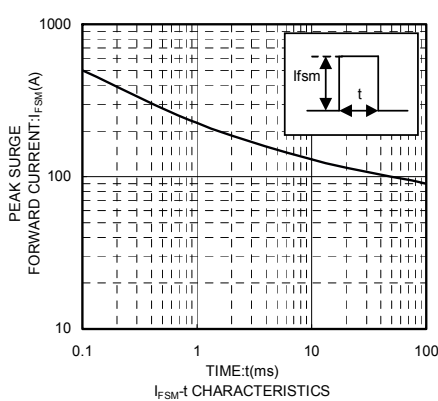
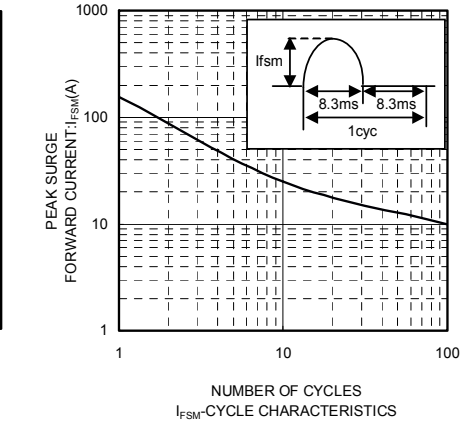
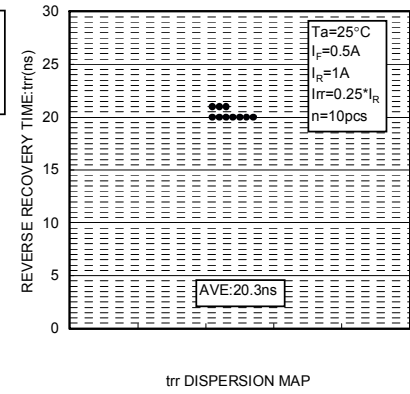
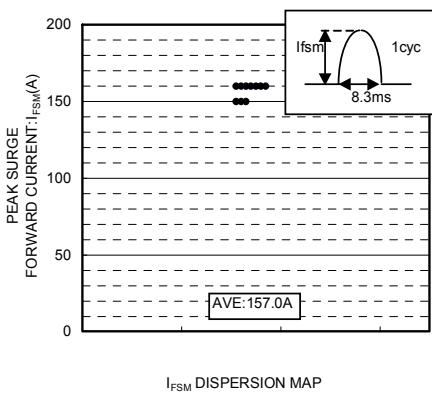
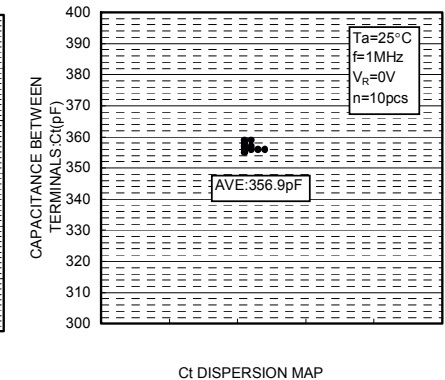
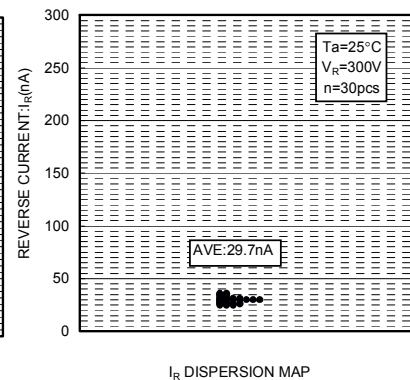
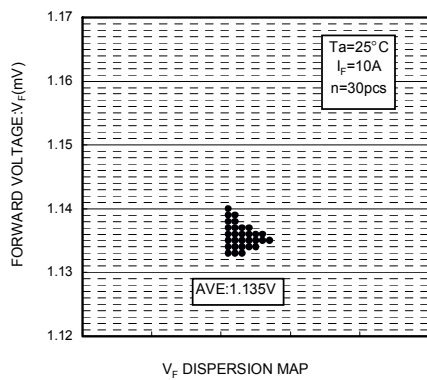
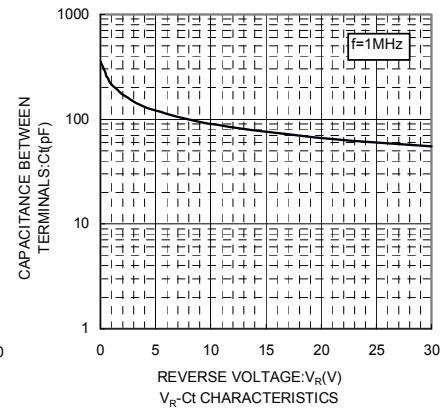
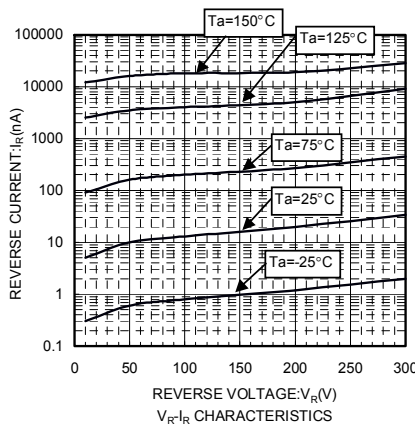
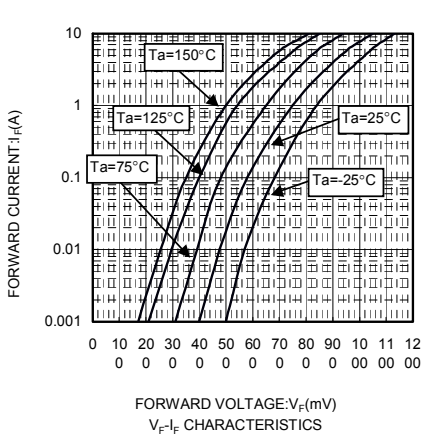
| Parameter | Symbol | Limits | Unit |
|--|-----------|-------------|------|
| Reverse voltage (repetitive peak) | V_{RM} | 350 | V |
| Reverse voltage (DC) | V_R | 300 | V |
| Average rectified forward current (*1) | I_o | 20 | A |
| Forward current surge peak (60Hz/1cyc) | I_{FSM} | 100 | A |
| Junction temperature | T_j | 150 | °C |
| Storage temperature | T_{stg} | -55 to +150 | °C |

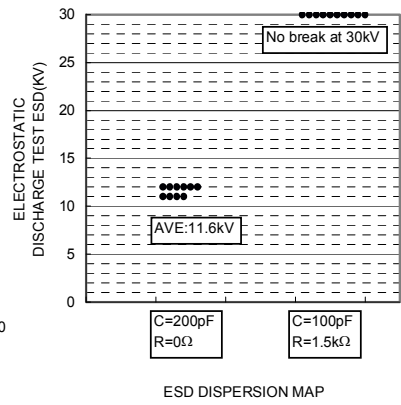
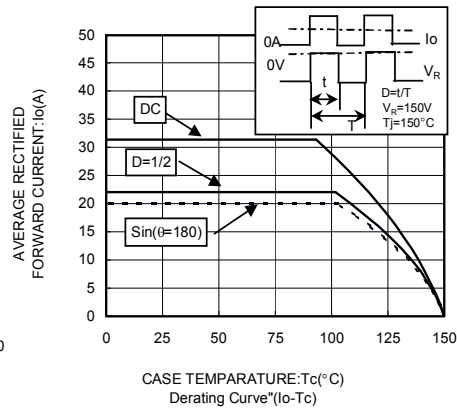
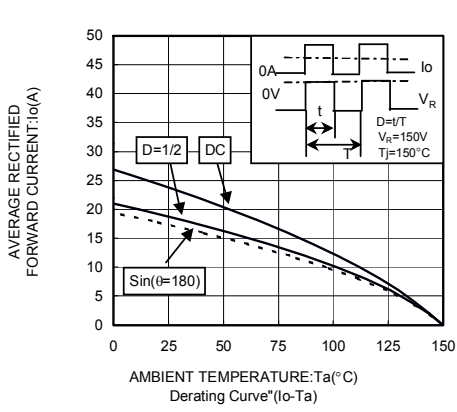
(*1)Business frequency, Rating of R-load, $T_c=113^\circ\text{C}$ 1/2 I_o per diode

●Electrical characteristic (Ta=25°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 | $I_F=0.5\text{A}, I_R=1\text{A}, I_{rr}=0.25*I_R$ |

●Electrical characteristics curves





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