

●Application

Switching power supply

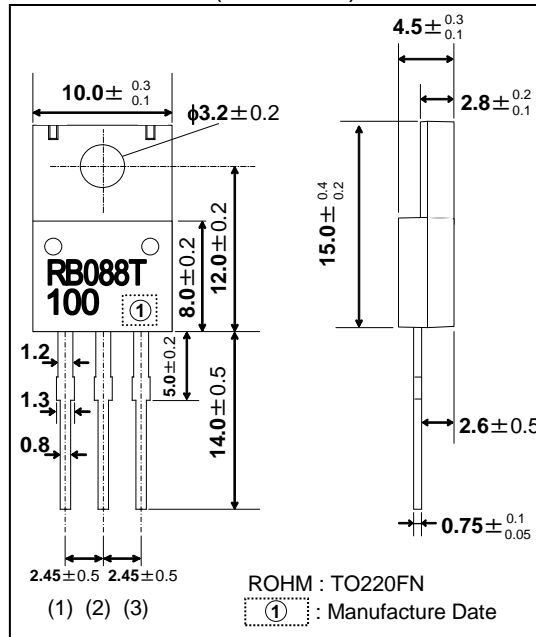
●Features

- 1) Cathode common type
- 2) High reliability
- 3) Super low I_R

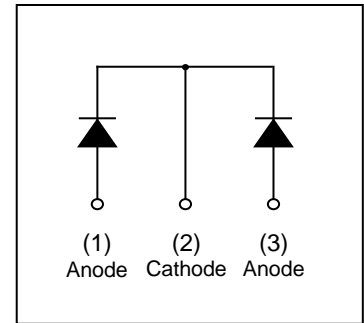
●Construction

Silicon epitaxial planar type

●Dimensions (Unit : mm)



●Structure



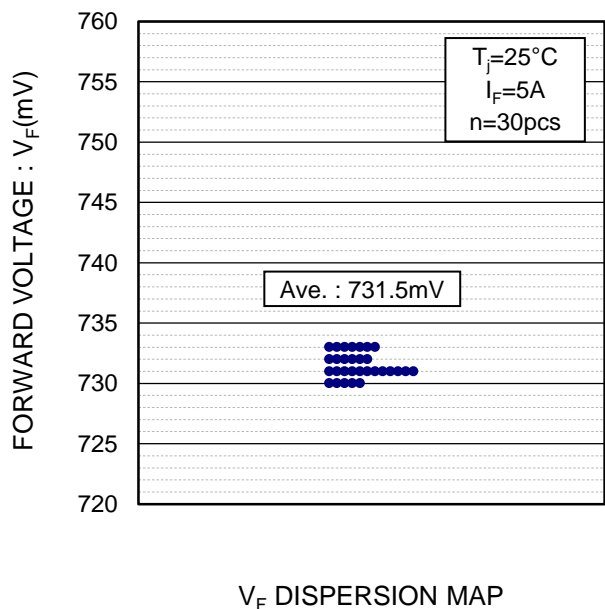
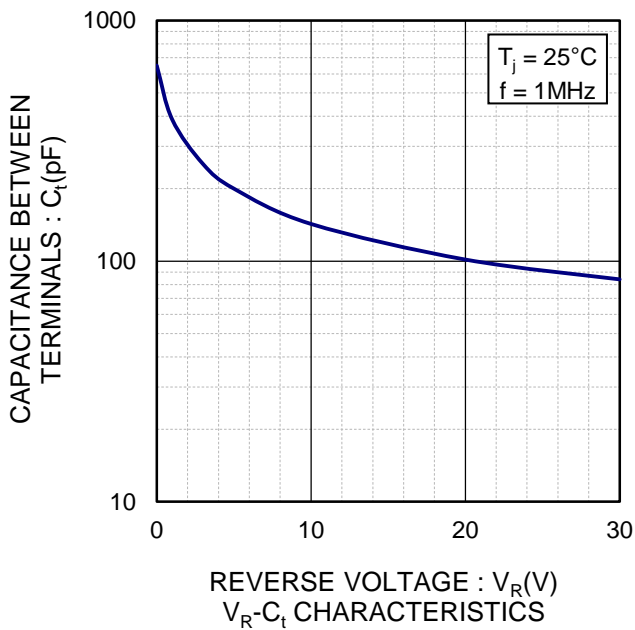
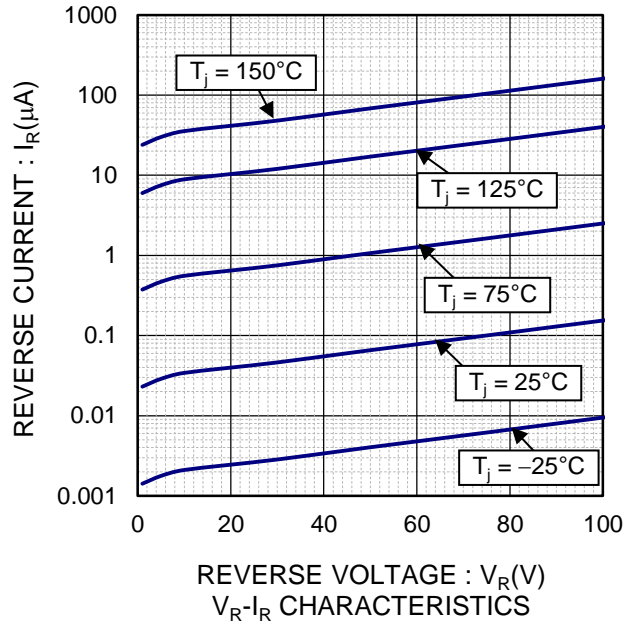
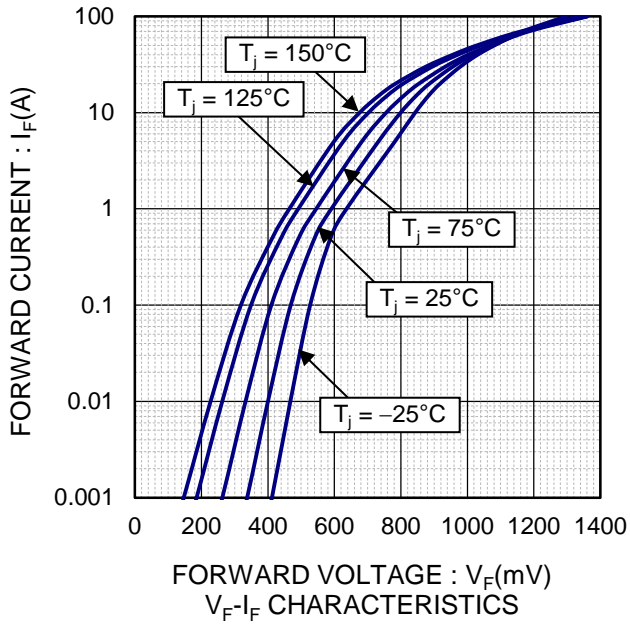
●Absolute Maximum Ratings ($T_c=25^\circ\text{C}$)

| Parameter | Symbol | Conditions | Limits | Unit |
|---|-----------|--|-------------|------------------|
| Repetitive peak reverse voltage | V_{RM} | Duty ≤ 0.5 | 110 | V |
| Reverse voltage | V_R | Direct reverse voltage | 100 | V |
| Average forward rectified current | I_o | Glass epoxy board mounted, 60Hz half sin wave, resistive load, $I_o/2$ per diode, $T_c=137^\circ\text{C}$ Max. | 10 | A |
| Non-repetitive forward current surge peak | I_{FSM} | 60Hz half sin wave, Non-repetitive at $T_a=25^\circ\text{C}$, 1 cycle, per diode | 100 | A |
| Operating junction temperature | T_j | - | 150 | $^\circ\text{C}$ |
| Storage temperature | T_{stg} | - | -55 to +150 | $^\circ\text{C}$ |

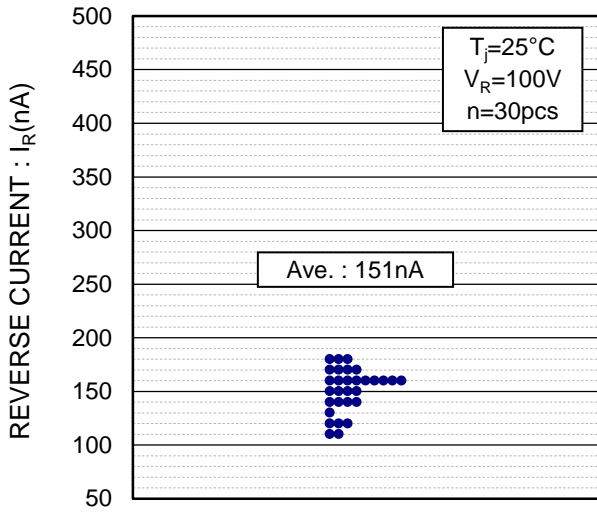
●Electrical and Thermal Characteristics ($T_j=25^\circ\text{C}$)

| Parameter | Symbol | Conditions | Min. | Typ. | Max. | Unit |
|--------------------|---------------|-------------------|------|------|------|-----------------------------|
| Forward voltage | V_F | $I_F=5\text{A}$ | - | - | 0.87 | V |
| Reverse current | I_R | $V_R=100\text{V}$ | - | - | 5 | μA |
| Thermal resistance | $R_{th(j-c)}$ | Junction to case | - | - | 2 | $^\circ\text{C} / \text{W}$ |

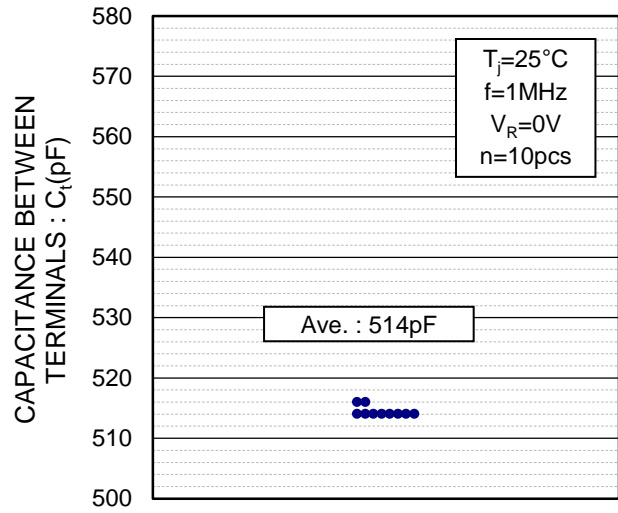
●Electrical Characteristic Curves



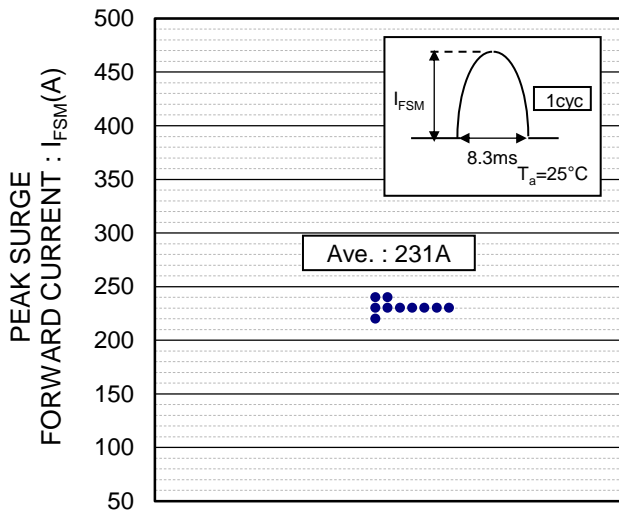
●Electrical Characteristic Curves



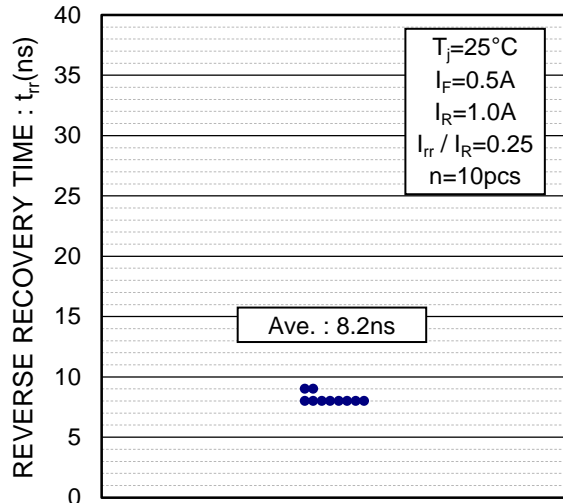
I_R DISPERSION MAP



C_t DISPERSION MAP

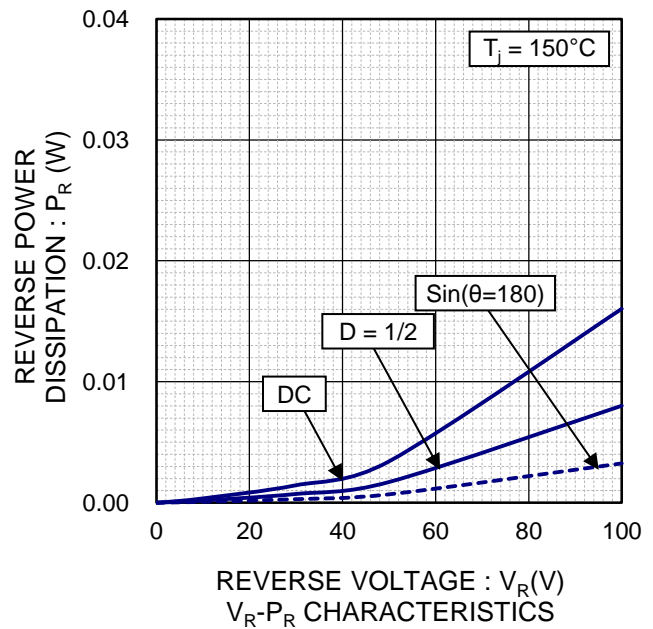
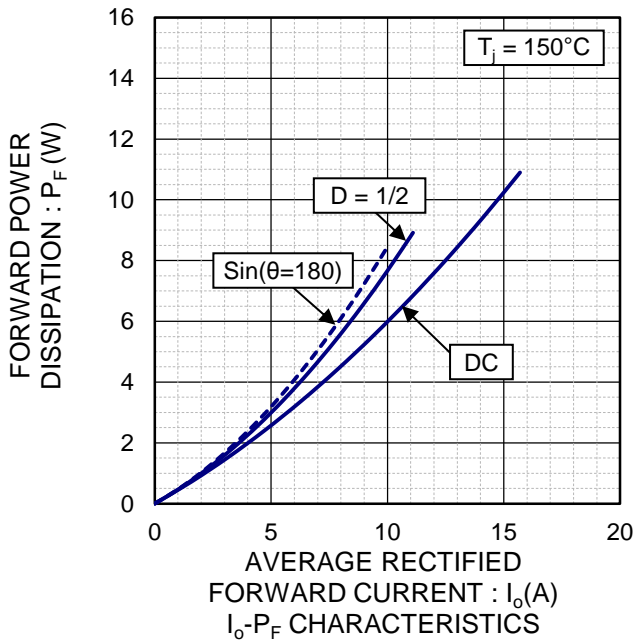
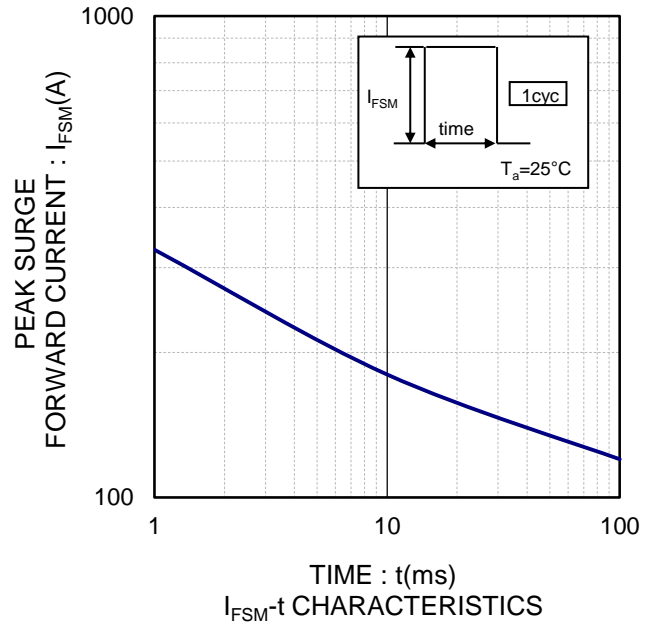
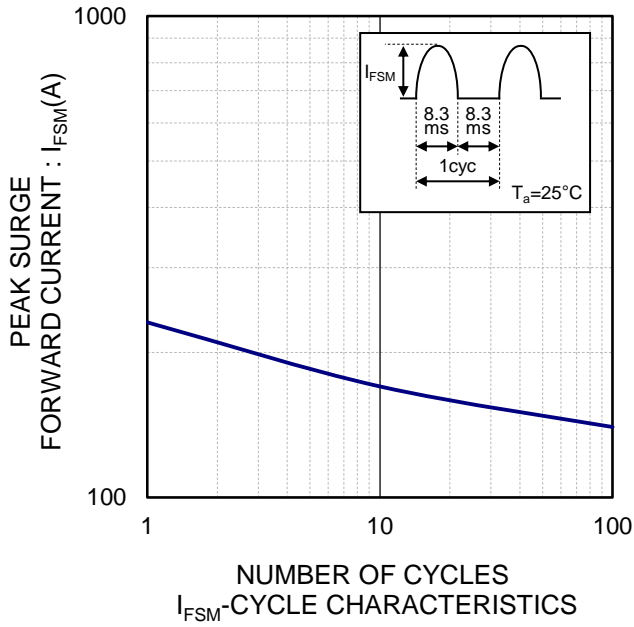


I_{FSM} DISPERSION MAP

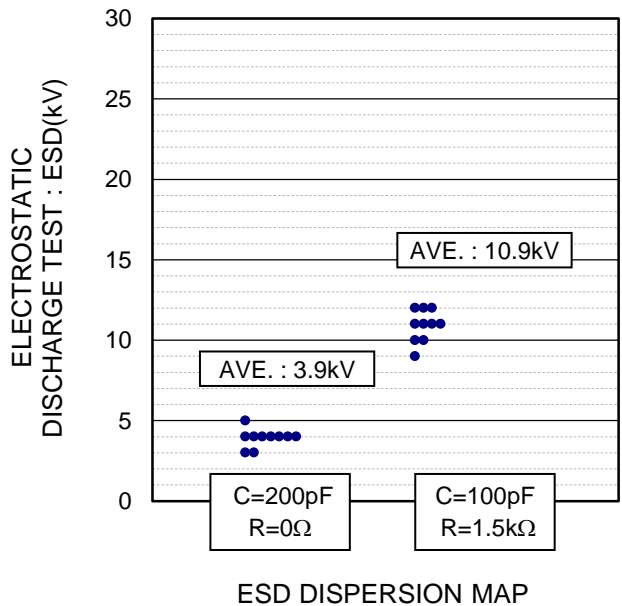
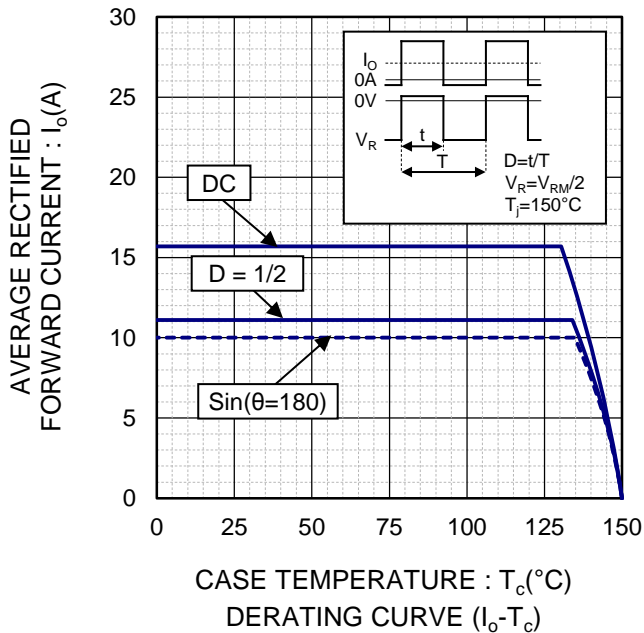
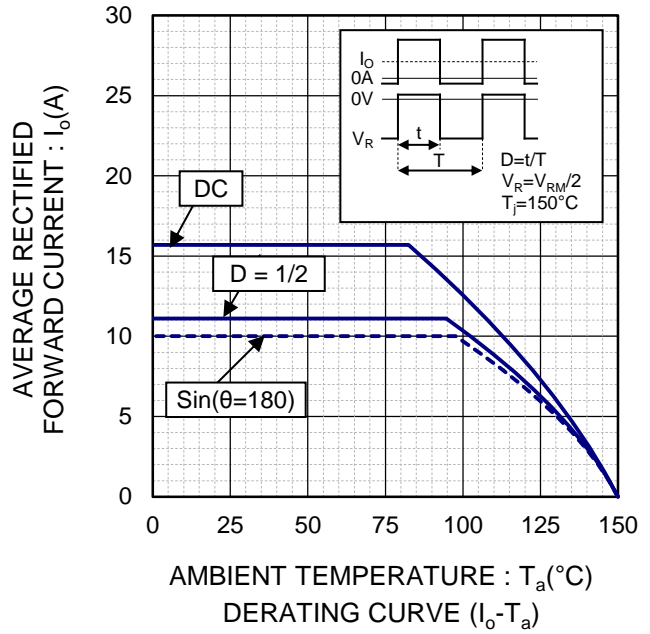
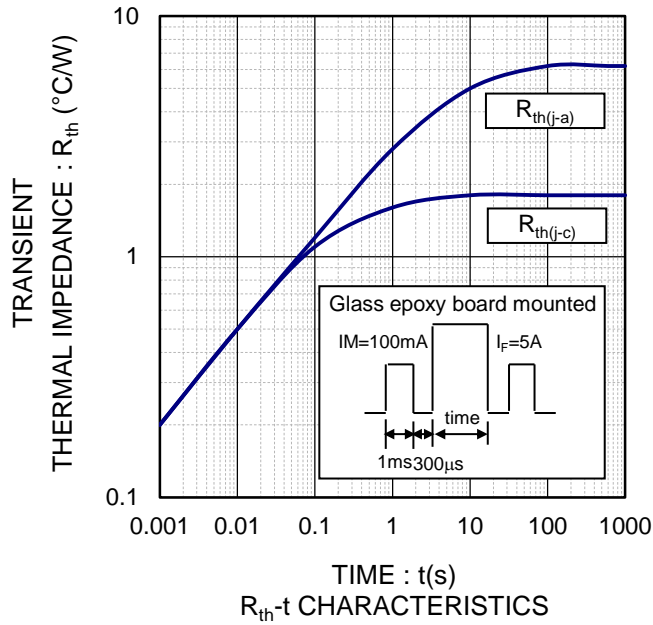


t_{rr} DISPERSION MAP

●Electrical Characteristic Curves



●Electrical Characteristic Curves



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