

Schottky Barrier Diode

RB085B-90

●Application

General rectification

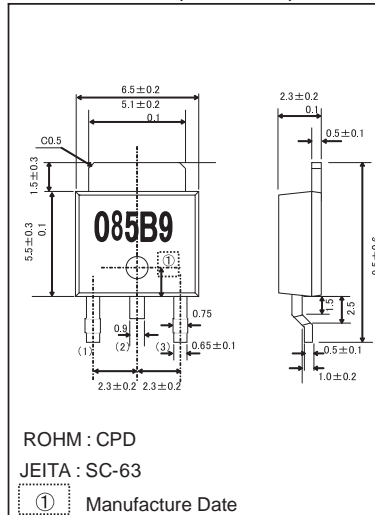
●Features

- 1) Power mold type.(CPD)
- 2) Low V_F
- 3) High reliability

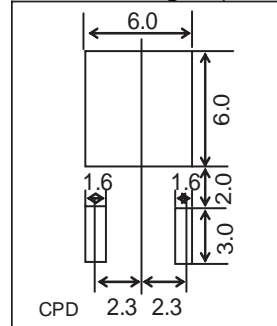
●Construction

Silicon epitaxial planar

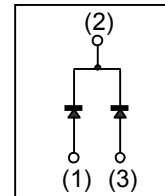
●Dimensions(Unit : mm)



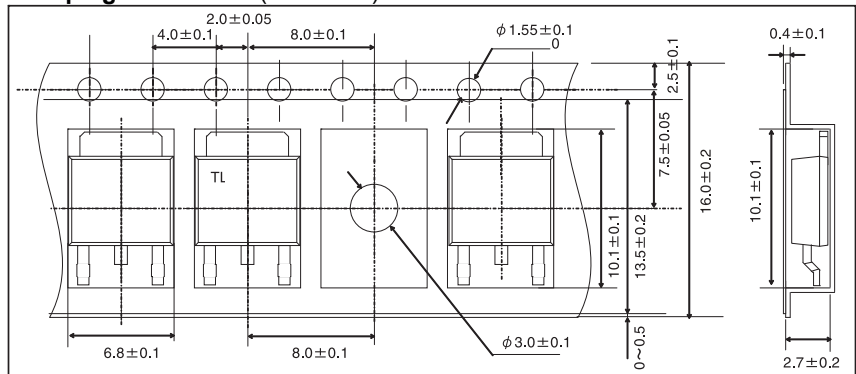
●Land size figure(Unit : mm)



●Structure



●Taping dimensions(Unit : mm)



●Absolute maximum ratings(Ta=25°C)

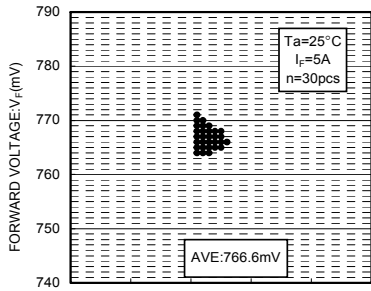
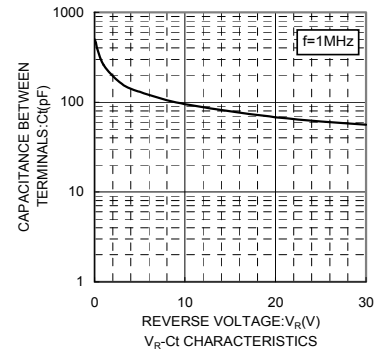
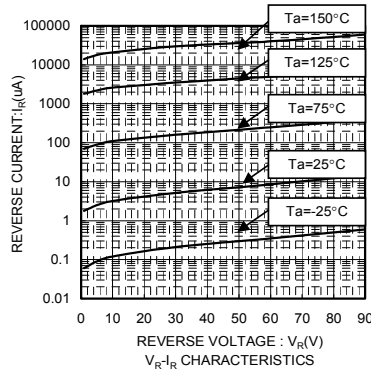
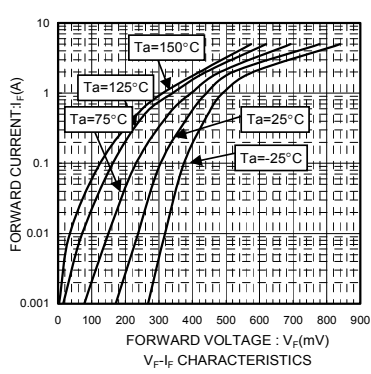
| Parameter | Symbol | Limits | Unit |
|---|-----------|-------------|------|
| Reverse voltage (repetitive peak) | V_{RM} | 90 | V |
| Reverse voltage (DC) | V_R | 90 | V |
| Average rectified forward current(*1) | I_o | 10 | A |
| Forward current surge peak(60Hz / 1cyc)(*1) | I_{FSM} | 45 | A |
| Junction temperature | T_j | 150 | °C |
| Storage temperature | T_{stg} | -40 to +150 | °C |

(*1)Business frequencies, Rating of R-load, $T_c=85^\circ\text{C}$ Max.

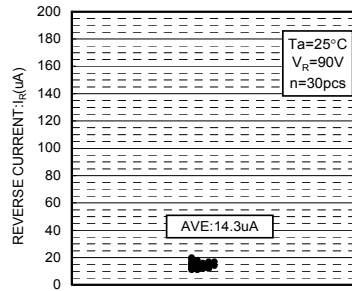
●Electrical characteristic(Ta=25°C)

| Parameter | Symbol | Min. | Typ. | Max. | Unit | Conditions |
|-------------------|---------------|------|------|------|---------------|-------------------|
| Forward voltage | V_F | - | - | 0.83 | V | $I_F=5.0\text{A}$ |
| Reverse current | I_R | - | - | 150 | μA | $V_R=90\text{V}$ |
| Thermal impedance | θ_{jc} | - | - | 6.0 | °C/W | junction to case |

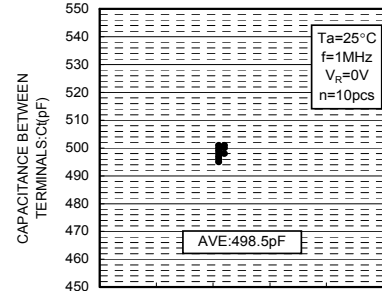
● Electrical characteristic curves



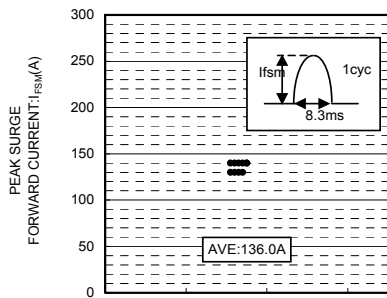
V_F DISPERSION MAP



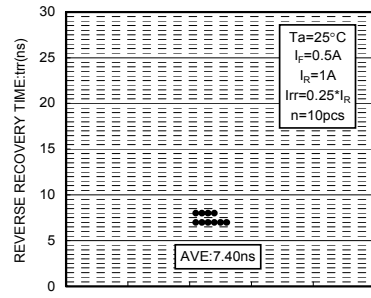
I_R DISPERSION MAP



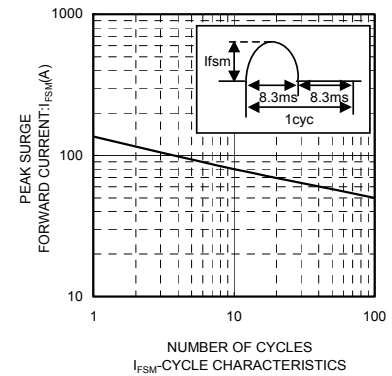
C_t DISPERSION MAP

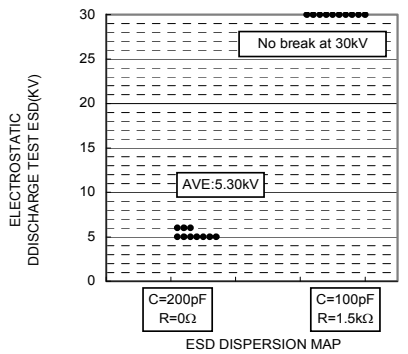
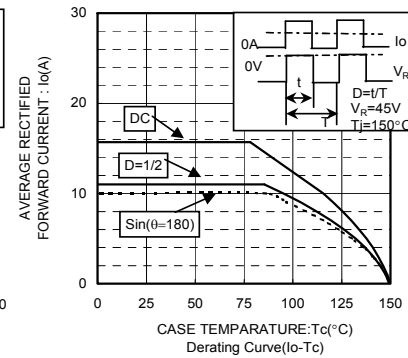
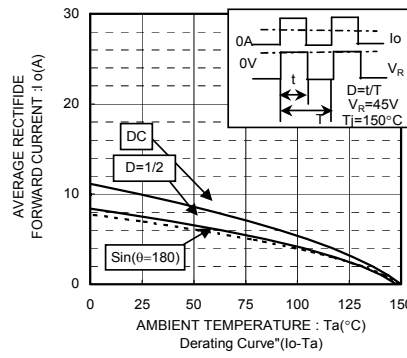
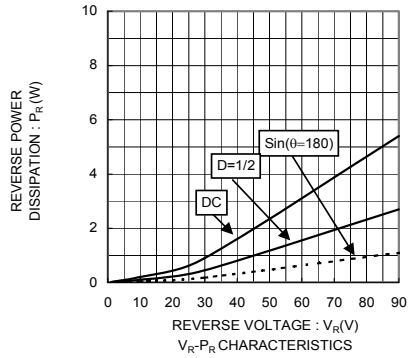
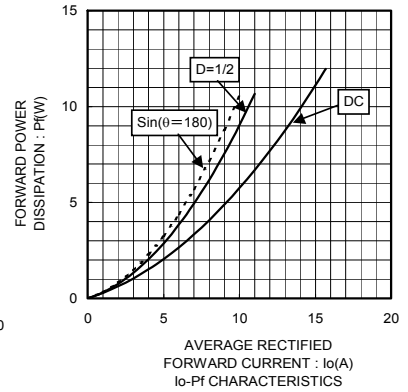
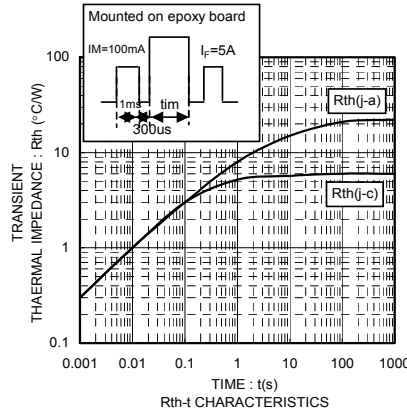
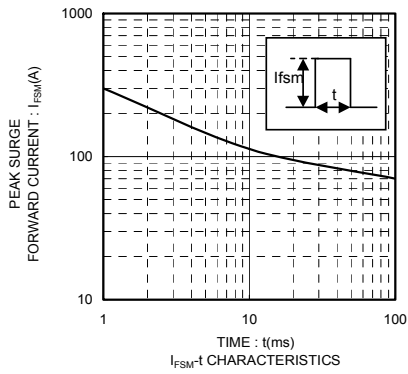


I_{FSM} DISPERSION MAP



t_{rr} DISPERSION MAP





Notes

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