

Schottky Barrier Diode

RB501VM-40

●Applications

Low current rectification

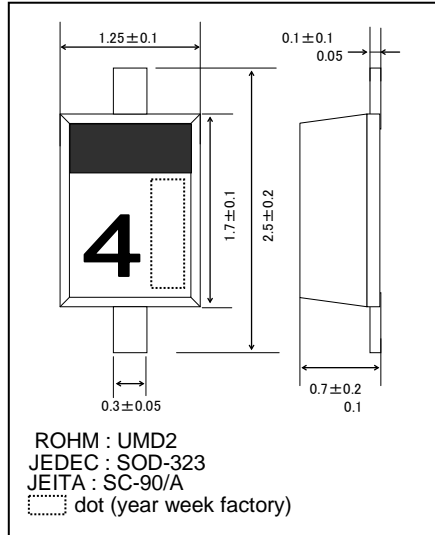
●Features

- 1) Small mold type. (UMD2)
- 2) High reliability

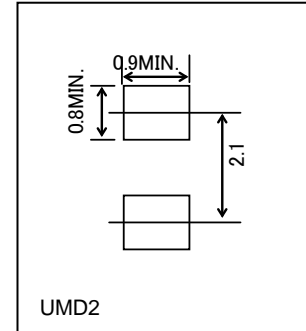
●Construction

Silicon epitaxial planer

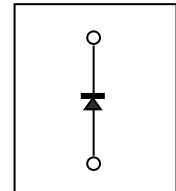
●Dimensions (Unit : mm)



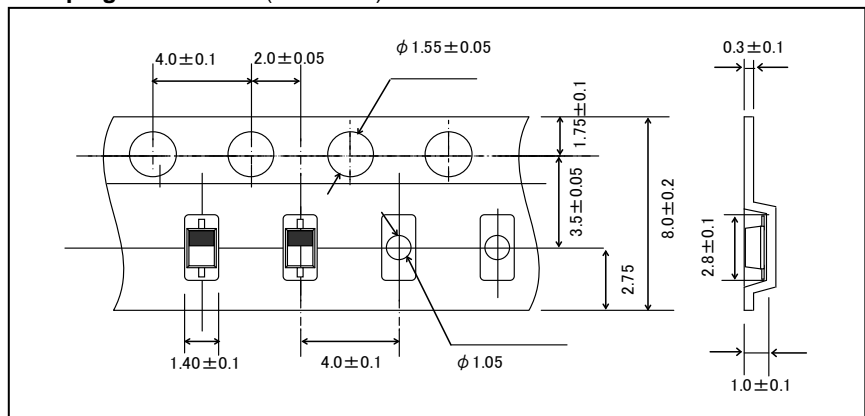
●Land size figure (Unit : mm)



●Structure



●Taping dimensions (Unit : mm)

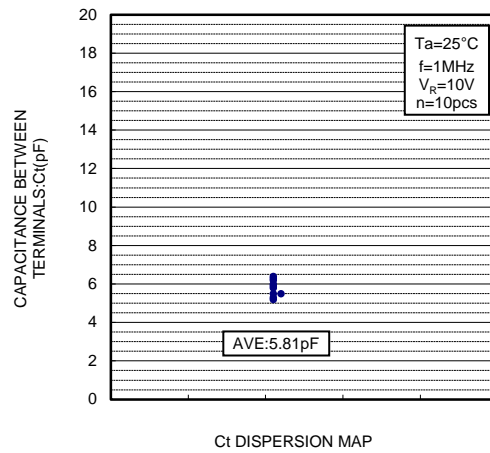
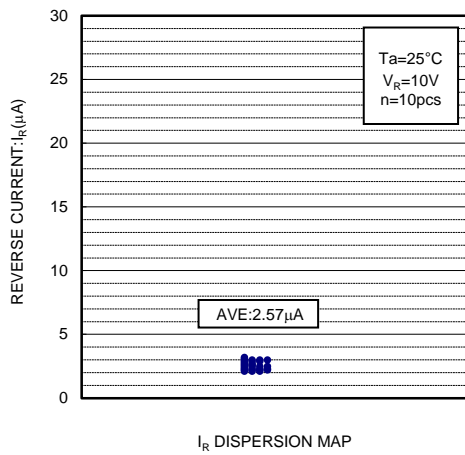
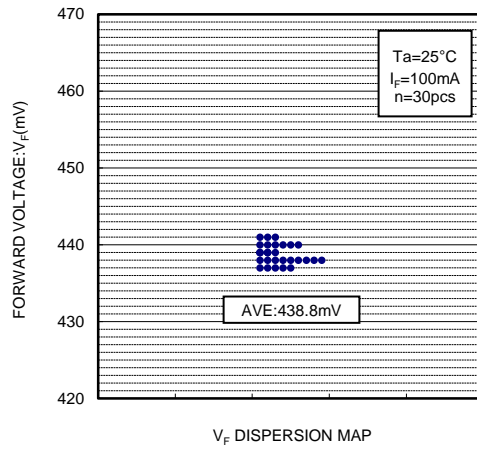
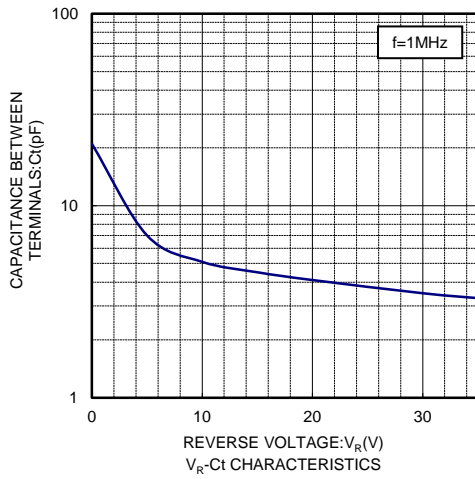
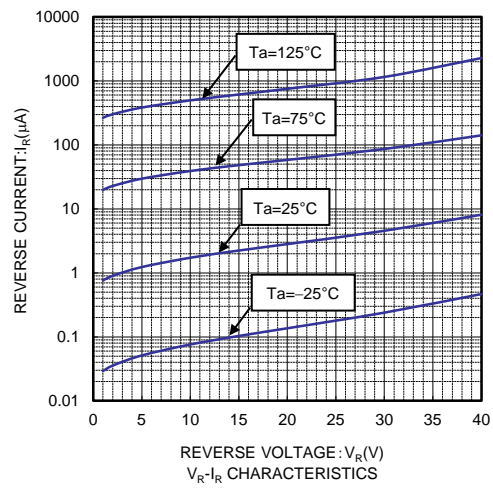
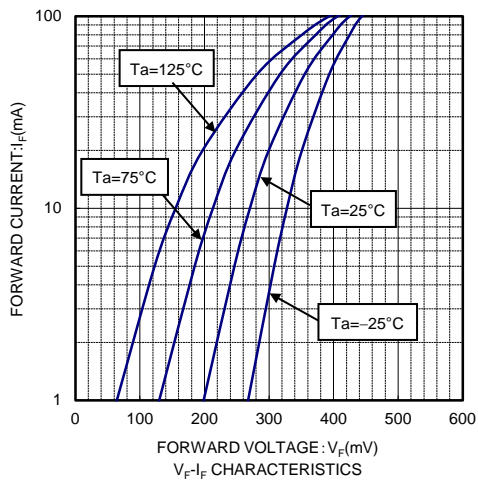


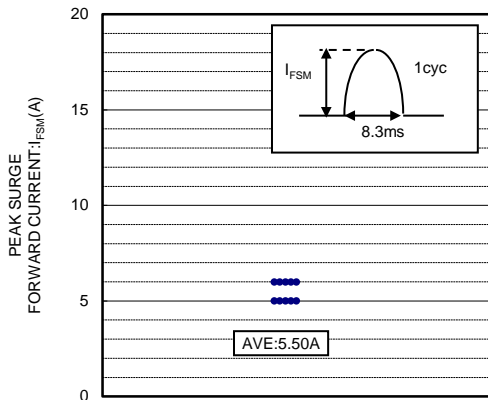
●Absolute maximum ratings (Ta=25°C)

| Parameter | Symbol | Limits | Unit |
|--|-----------|--------------|------|
| Reverse voltage (repetitive) | V_{RM} | 45 | V |
| Reverse voltage (DC) | V_R | 40 | V |
| Average rectified forward current | I_o | 100 | mA |
| Forward current surge peak (60Hz · 1cyc) | I_{FSM} | 1 | A |
| Junction temperature | T_j | 125 | °C |
| Storage temperature | T_{stg} | - 40 to +125 | °C |

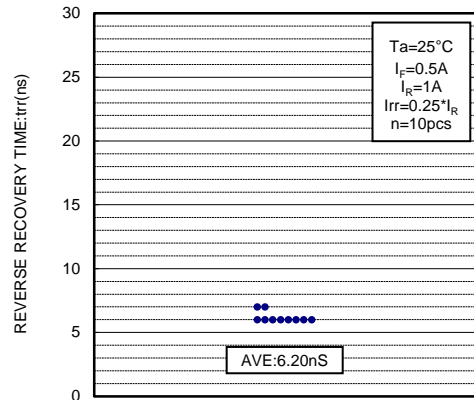
●Electrical characteristics (Ta=25°C)

| Parameter | Symbol | Min. | Typ. | Max. | Unit | Conditions |
|-------------------------------|----------|------|------|------|------|-------------------|
| Forward voltage | V_{F1} | - | - | 0.55 | V | $I_F=100mA$ |
| | V_{F2} | - | - | 0.34 | V | $I_F=10mA$ |
| Reverse current | I_R | - | - | 30 | μA | $V_R=10V$ |
| Capacitance between terminals | C_t | - | 6.0 | - | pF | $V_R=10V, f=1MHz$ |

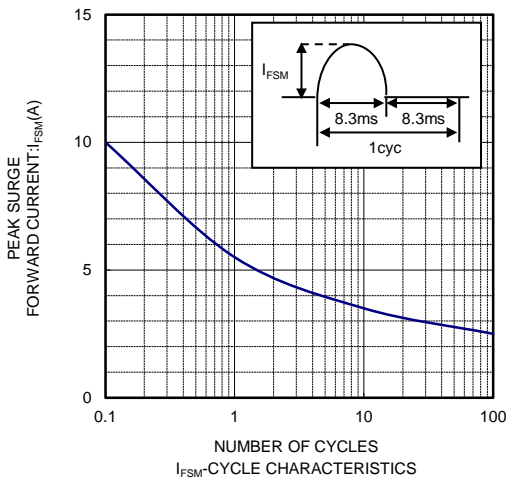




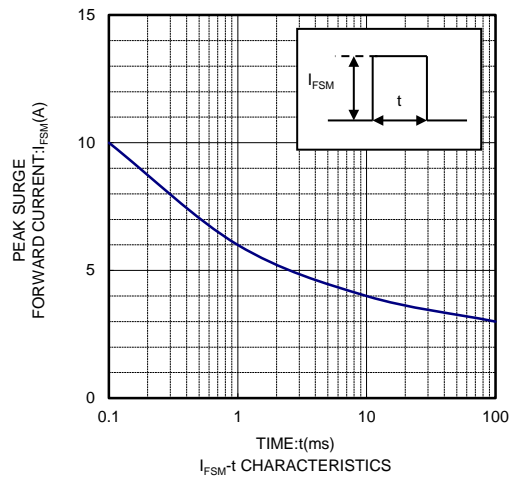
I_{FSM} DISPERSION MAP



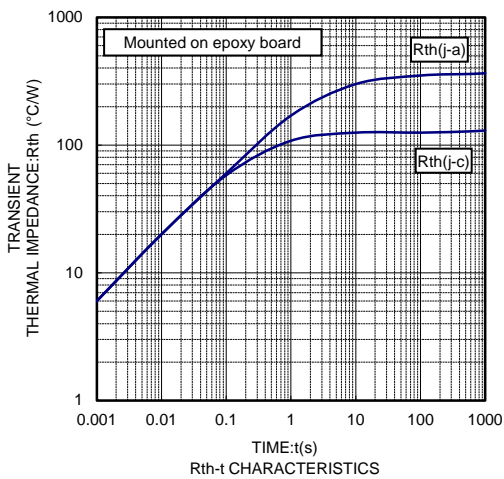
trr DISPERSION MAP



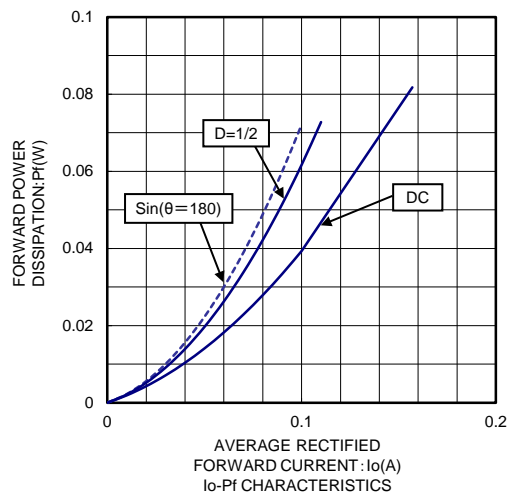
I_{FSM} -CYCLE CHARACTERISTICS



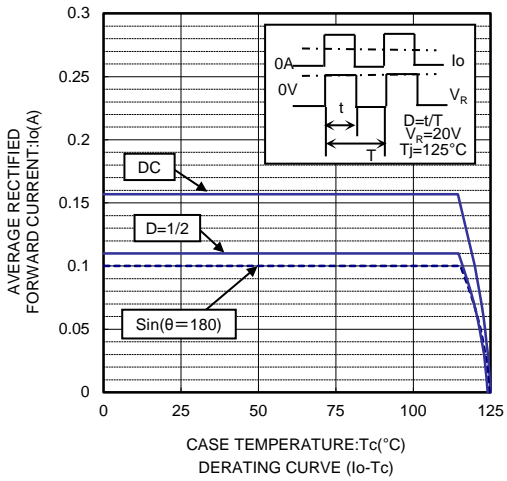
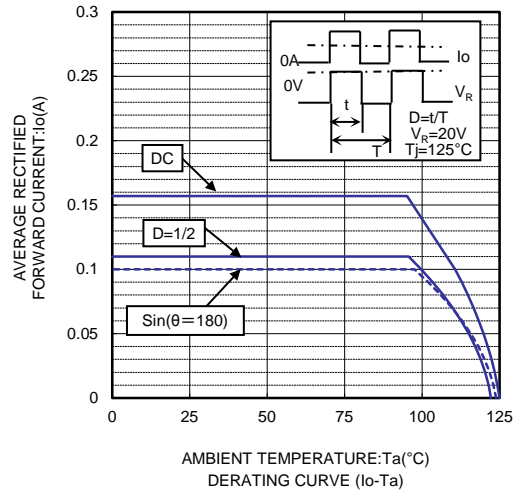
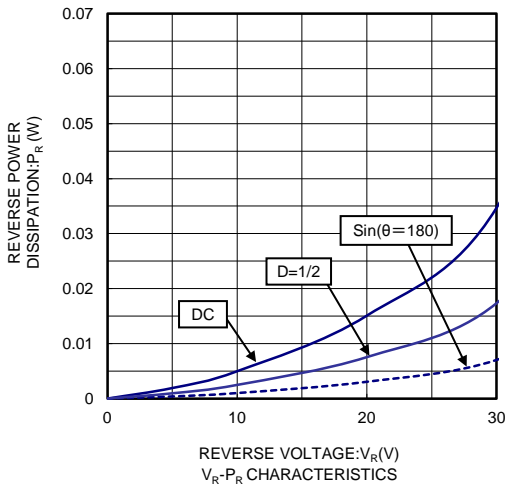
I_{FSM} -t CHARACTERISTICS



R_{th} -t CHARACTERISTICS



I_o -Pf CHARACTERISTICS



Notes

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