

Shottky barrier diode

RB451F

●Application

Low current rectification

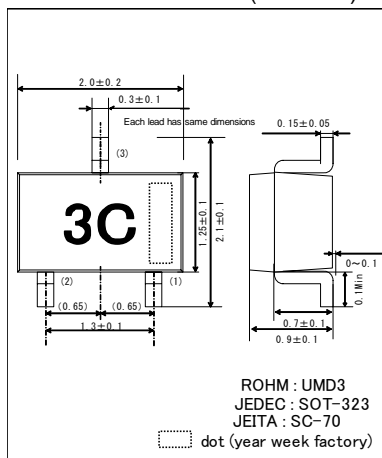
●Features

- 1) Small mold type. (UMD3)
- 2) Low V_F
- 3) High reliability.

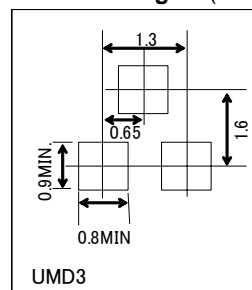
●Construction

Silicon epitaxial planer

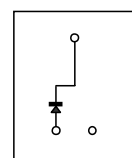
●External dimensions (Unit : mm)



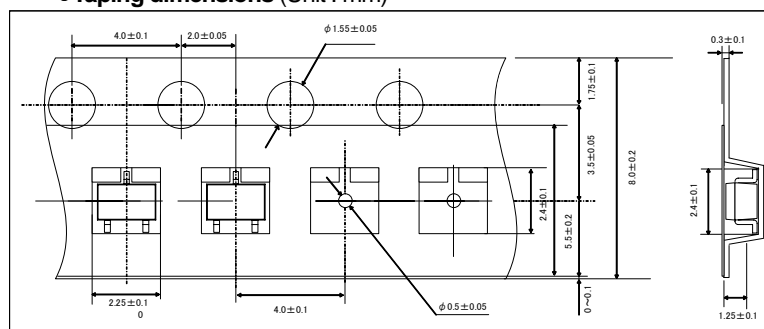
●Lead size figure (Unit : mm)



●Structure



●Taping dimensions (Unit : mm)



●Absolute maximum ratings (Ta=25°C)

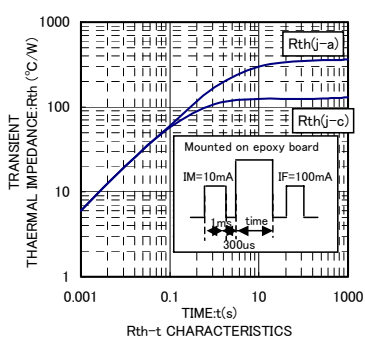
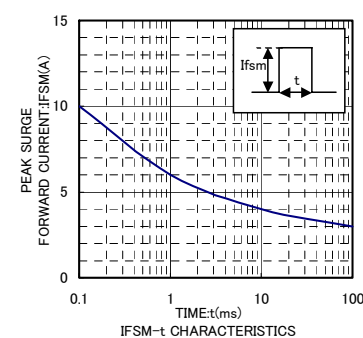
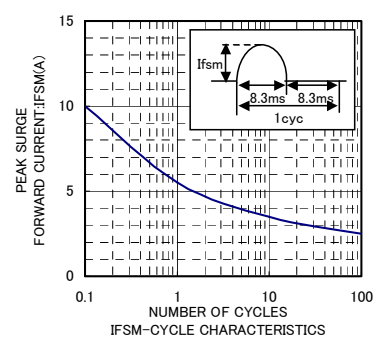
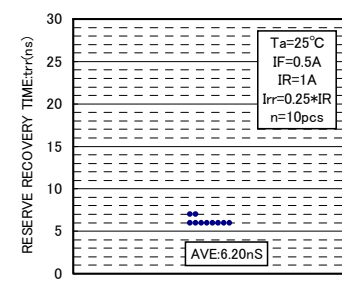
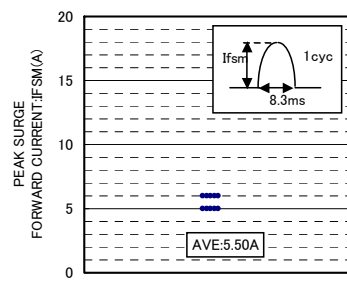
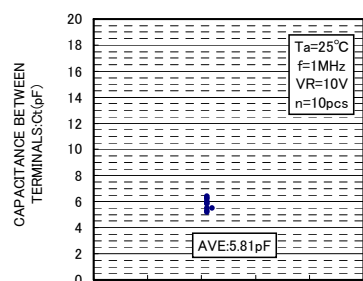
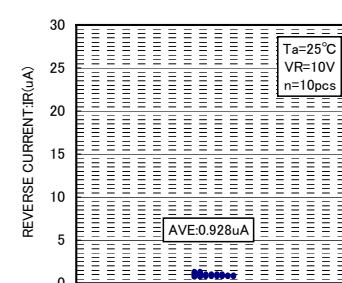
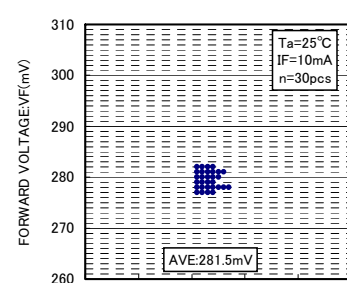
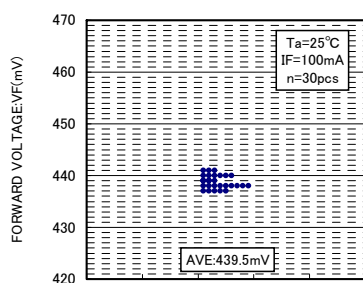
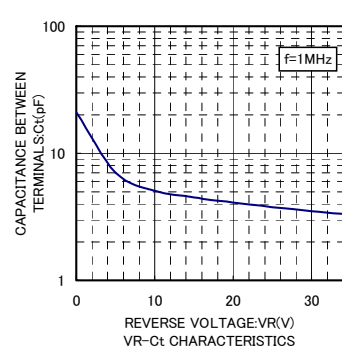
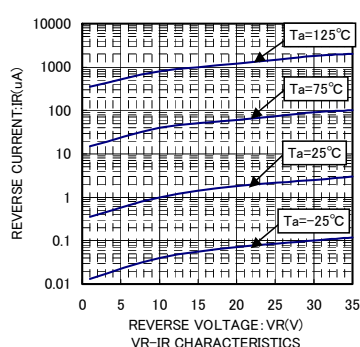
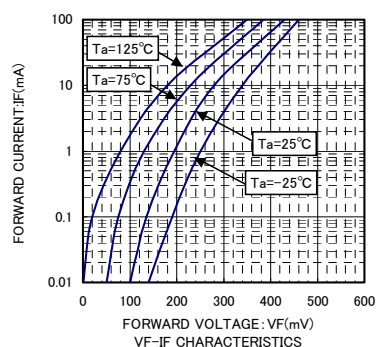
| Parameter | Symbol | Limits | Unit |
|--|-----------|-------------|------|
| Reverse voltage (repetitive peak) | V_{RM} | 40 | V |
| Reverse voltage (DC) | V_R | 40 | V |
| Average rectified forward current | I_o | 100 | mA |
| Forward current surge peak (60Hz·1cyc) | I_{FSM} | 1 | A |
| Junction temperature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

●Electrical characteristics (Ta=25°C)

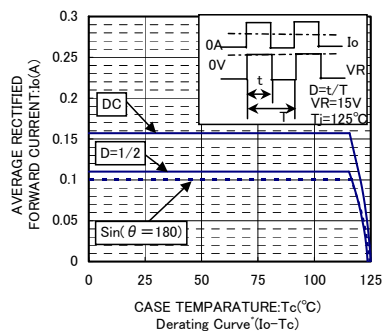
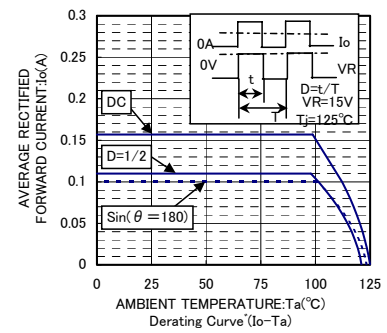
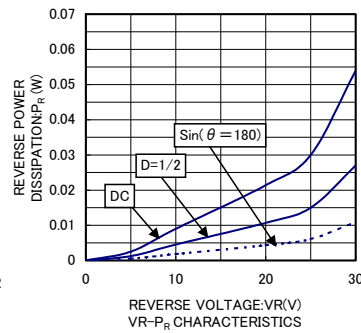
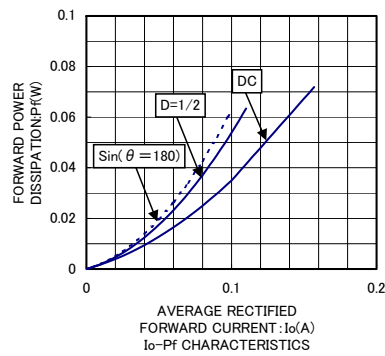
| Parameter | Symbol | Min. | Typ. | Max. | Unit | Conditions |
|-------------------------------|----------|------|------|------|------|-------------------|
| Forward voltage | V_{F1} | - | - | 0.55 | V | $I_F=100mA$ |
| | V_{F2} | - | - | 0.34 | V | $I_F=10mA$ |
| Reverse current | I_R | - | - | 30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

Diodes

●Electrical characteristic curves (Ta=25°C)



Diodes



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