

Schottky barrier diode

RB751V-40

●Applications

Low current rectification

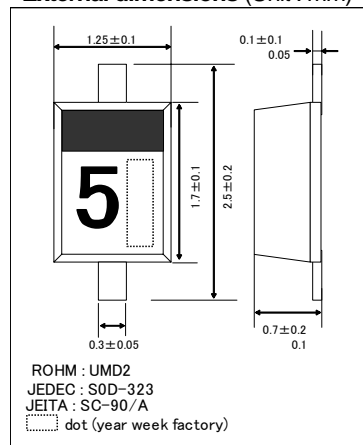
●Features

- 1) Ultra small mold type. (UMD2)
- 2) Low V_f
- 3) High reliability

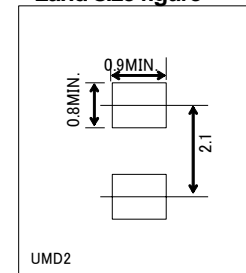
●Construction

Silicon epitaxial planar

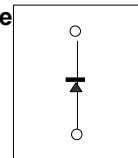
●External dimensions (Unit : mm)



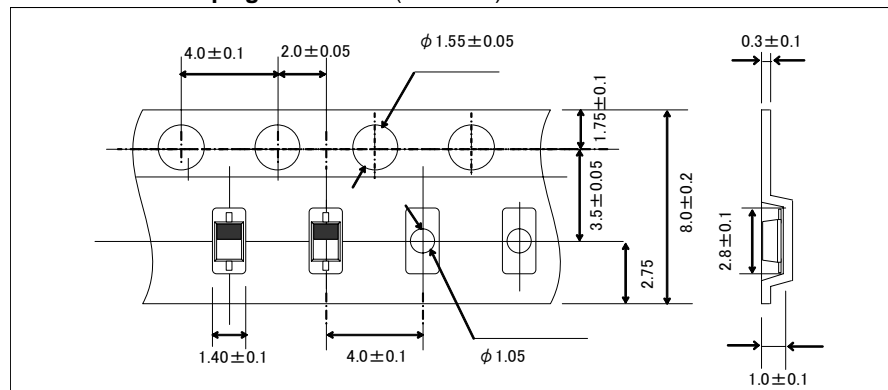
●Land size figure



●Structure



●Taping dimensions (Unit : mm)

●Absolute maximum ratings ($T_a=25^\circ\text{C}$)

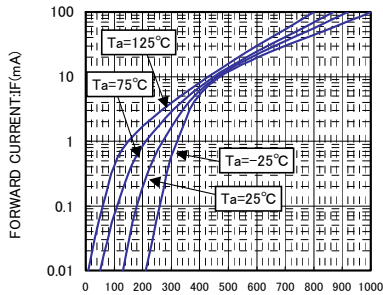
| Parameter | Symbol | Limits | Unit |
|--|-----------|-------------|------------------|
| Reverse voltage (repetitive peak) | V_{RM} | 40 | V |
| Reverse voltage (DC) | V_R | 30 | V |
| Average rectified forward current | I_o | 30 | mA |
| Forward current surge peak (60Hz·1cyc) | I_{FSM} | 200 | mA |
| Junction temperature | T_j | 125 | $^\circ\text{C}$ |
| Storage temperature | T_{stg} | -40 to +125 | $^\circ\text{C}$ |

●Electrical characteristic ($T_a=25^\circ\text{C}$)

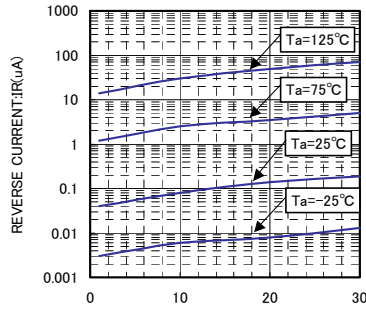
| Parameter | Symbol | Min. | Typ. | Max. | Unit | Conditions |
|------------------------------|--------|------|------|------|---------------|-----------------------------------|
| Forward voltage | V_F | - | - | 0.37 | V | $I_F=1\text{mA}$ |
| Reverse current | I_R | - | - | 0.5 | μA | $V_R=30\text{V}$ |
| Capacitance between terminal | C_t | - | 2 | - | pF | $V_R=1\text{V}$, $f=1\text{MHz}$ |

Diodes

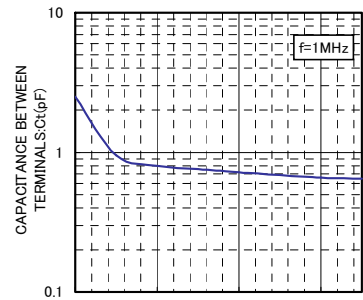
●Electrical characteristic curves



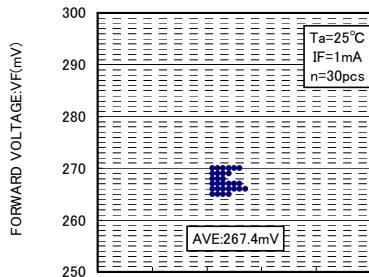
VF-IF CHARACTERISTICS
VF分布



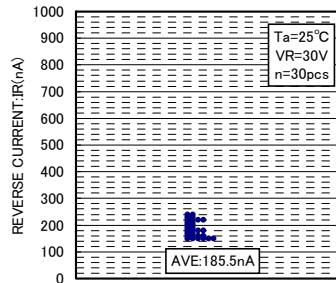
VR-IR CHARACTERISTICS



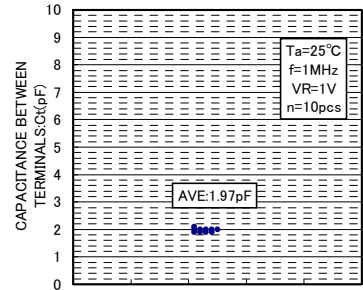
VR-Ct CHARACTERISTICS



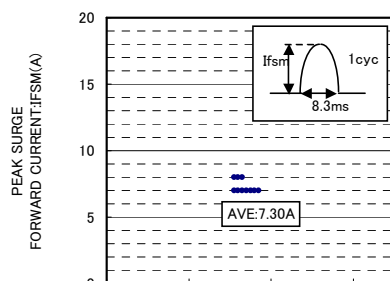
VF DISPERSION MAP



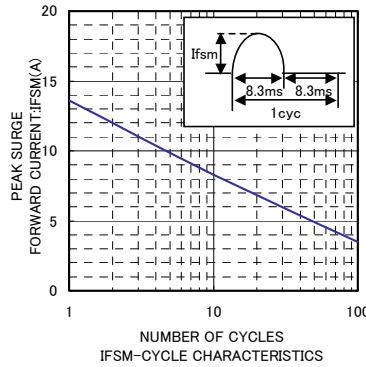
IR DISPERSION MAP



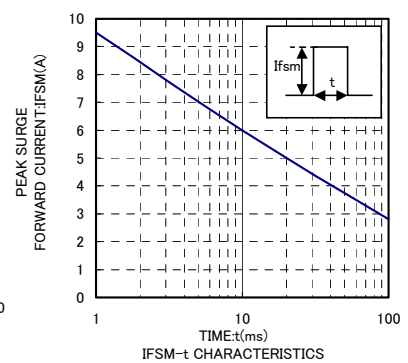
Ct DISPERSION MAP



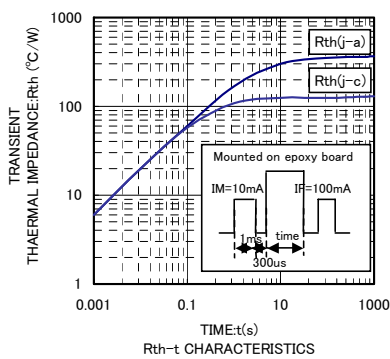
IFSM DISPERSION MAP



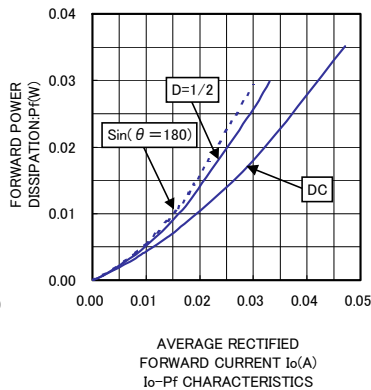
IFSM-CYCLE CHARACTERISTICS



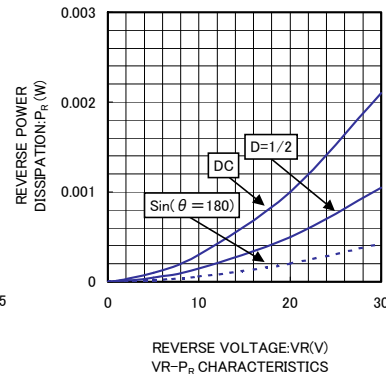
IFSM-t CHARACTERISTICS



Rth-t CHARACTERISTICS

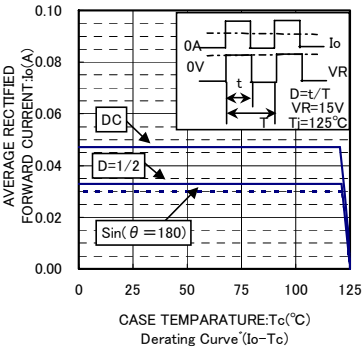
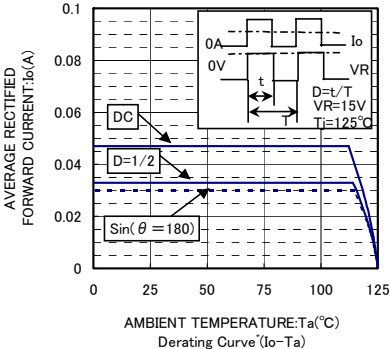


Io-Pf CHARACTERISTICS



VR-Pr CHARACTERISTICS

Diodes



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