

Schottky barrier diode

RB160VA-40

● Applications

General rectification

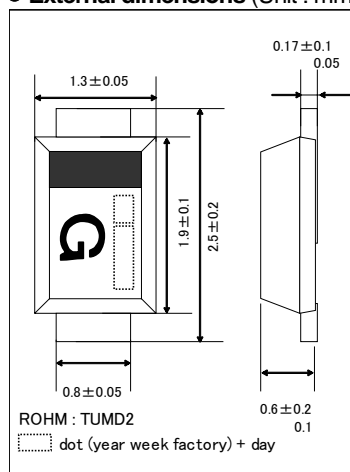
● Features

- 1) Small mold type. (TUMD2)
- 2) Low I_F , Low I_R .
- 3) High reliability.

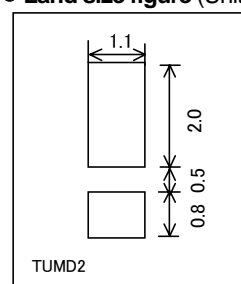
● Construction

Silicon epitaxial planar

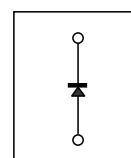
● External dimensions (Unit : mm)



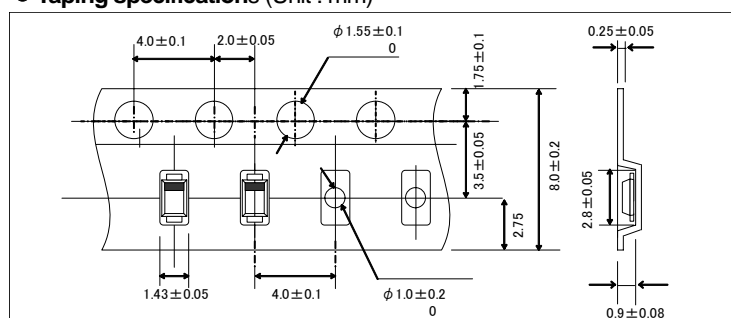
● Land size figure (Unit : mm)



● Structure



● Taping specifications (Unit : mm)

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

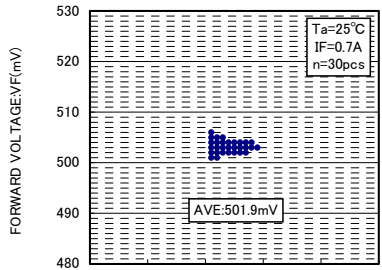
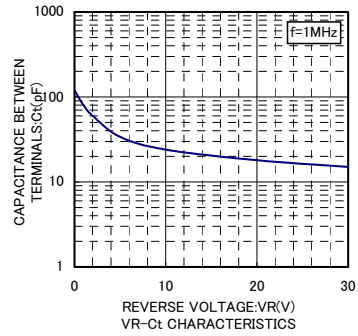
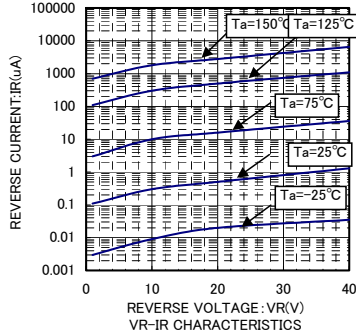
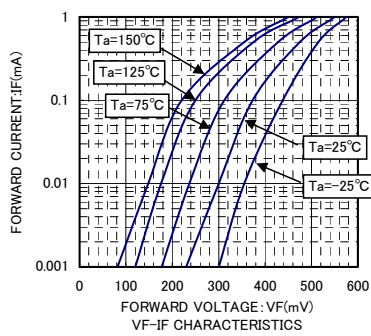
| Parameter | Symbol | Limits | Unit |
|--|-----------|-------------|------------------|
| Reverse voltage (repetitive peak) | V_{RM} | 40 | V |
| Reverse voltage (DC) | V_R | 40 | V |
| Average rectified forward current | I_O | 1 | A |
| Forward peak surge current (60Hz·1cyc) | I_{FSM} | 5 | A |
| Junction temperature | T_j | 150 | $^\circ\text{C}$ |
| Storage temperature | T_{stg} | -40 to +150 | $^\circ\text{C}$ |

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

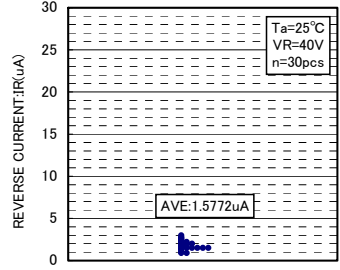
| Parameter | Symbol | Min. | Typ. | Max. | Unit | Conditions |
|-----------------|--------|------|------|------|---------------|--------------------|
| Forward voltage | V_F | - | 0.50 | 0.55 | V | $I_F=700\text{mA}$ |
| Reverse current | I_R | - | 1.5 | 50 | μA | $V_R=40\text{V}$ |

Diodes

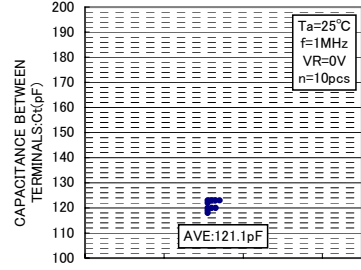
●Electrical characteristic curves (Ta=25°C)



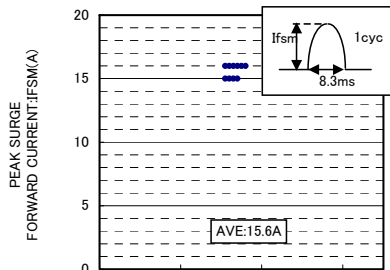
VF DISPERSION MAP



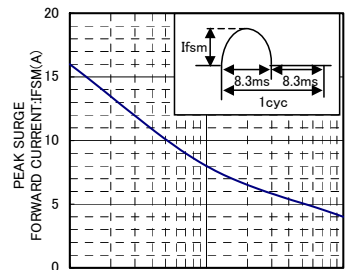
IR DISPERSION MAP



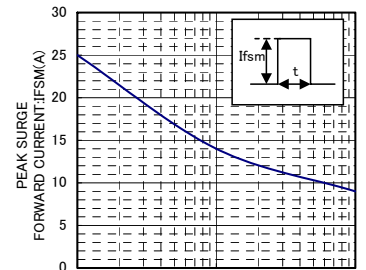
Ct DISPERSION MAP



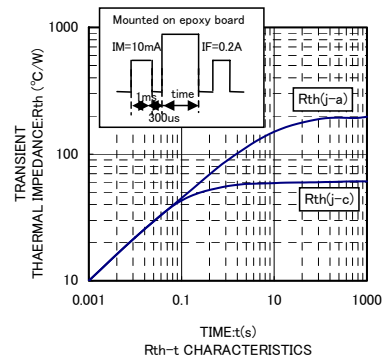
IFSM DISERSION MAP



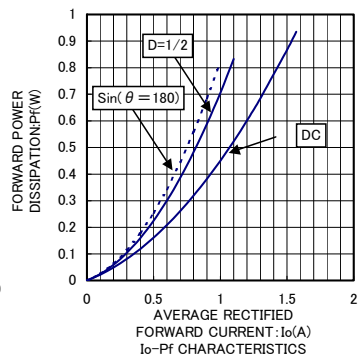
IFSM-CYCLE CHARACTERISTICS



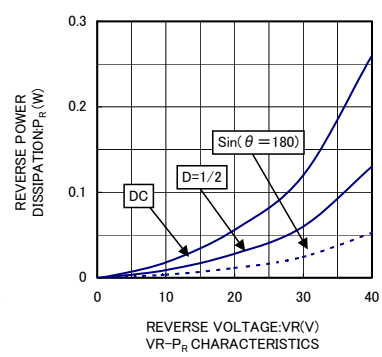
IFSM-t CHARACTERISTICS



Rth-t CHARACTERISTICS

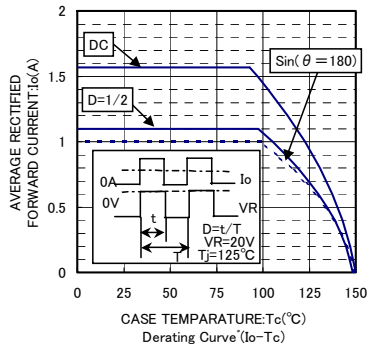
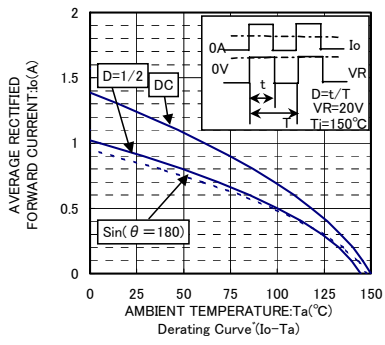


Io-Pf CHARACTERISTICS



VR-Pr CHARACTERISTICS

Diodes



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