

Schottky Barrier Diode

RB500V-40

● Applications

Low current rectification

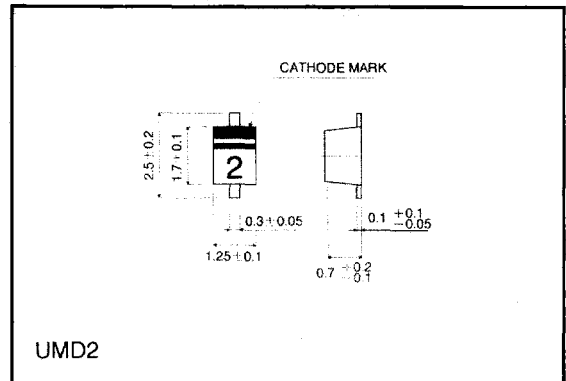
● Features

- 1) Designed for mounting on small surface areas (UMD2)
- 2) High reliability

● Construction

Silicon epitaxial

● External dimensions (Units: mm)



● Absolute maximum ratings (Ta=25°C)

| Parameter | Symbol | Limits | Unit |
|-----------------------------|-----------|---------|------|
| Peak reverse voltage | V_{RM} | 45 | V |
| DC reverse voltage | V_R | 40 | V |
| Mean rectifying current | I_o | 0.1 | A |
| Peak forward surge current* | I_{FSM} | 1 | A |
| Junction temperature | T_j | 125 | °C |
| Storage temperature | T_{stg} | -40~125 | °C |

* 60 Hz for 1 μ s

● Electrical characteristics (Ta=25°C)

| Parameter | Symbol | Min. | Typ. | Max. | Unit | Conditions |
|-------------------------------|--------|------|------|------|---------------|-------------------------------------|
| Forward voltage | V_F | — | 0.37 | 0.45 | V | $I_F = 10\text{mA}$ |
| Reverse current | I_R | — | 0.07 | 1 | μA | $V_R = 10\text{V}$ |
| Capacitance between terminals | C_T | — | 6.0 | — | pF | $V_R = 10\text{V}, f = 1\text{MHz}$ |

* Special precautions required concerning static electricity when being handled.

●Electrical characteristic curves (Ta=25°C)

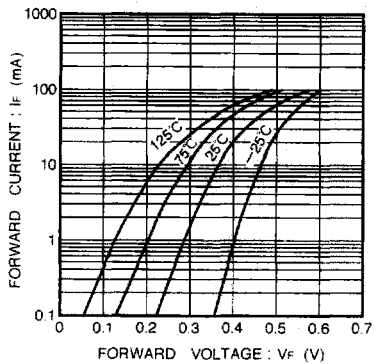


Fig. 1 Forward temperature characteristic

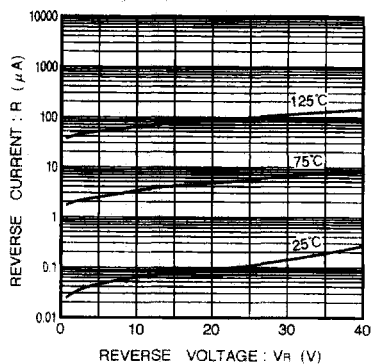


Fig. 2 Reverse temperature characteristic

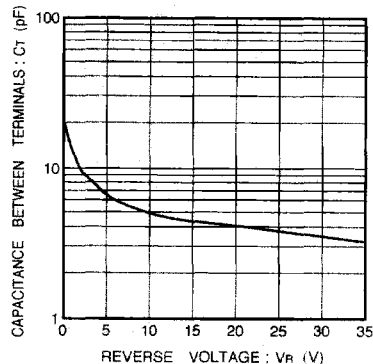


Fig. 3 Capacitance between terminals characteristic