

Schottky barrier diode

RB441Q-40

●Applications

Low current rectification

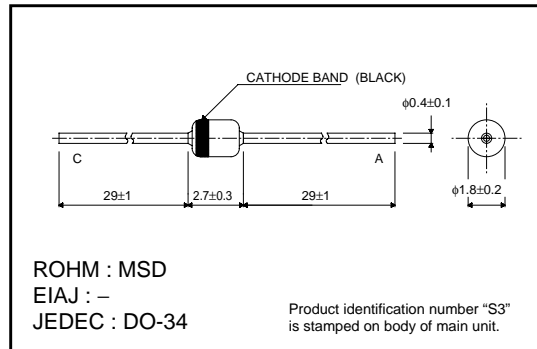
●Features

- 1) Glass sealed envelope for high reliability. (MSD)
- 2) Small pitch enables insertion on PCBs.
- 3) Low V_F . ($V_F=0.45V$ Typ. at 100mA)

●Construction

Silicon epitaxial planar

●External dimensions (Units : mm)



●Absolute maximum ratings (Ta = 25°C)

| Parameter | Symbol | Limits | Unit |
|----------------------------|-----------|----------|------|
| Peak reverse voltage | V_{RM} | 40 | 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 |

●Electrical characteristics (Ta = 25°C)

| Parameter | Symbol | Min. | Typ. | Max. | Unit | Conditions |
|-------------------------------|----------|------|------|------|---------|-------------------|
| Forward voltage | V_{F1} | - | - | 0.34 | V | $I_F=10mA$ |
| Forward voltage | V_{F2} | - | - | 0.55 | V | $I_F=100mA$ |
| Reverse current | I_R | - | - | 100 | μA | $V_R=40V$ |
| Capacitance between terminals | C_T | - | 6.0 | - | pF | $V_R=10V, f=1MHz$ |

Note) ESD sensitive product handling required.

Diodes

●Electrical characteristic curves (Ta = 25°C)

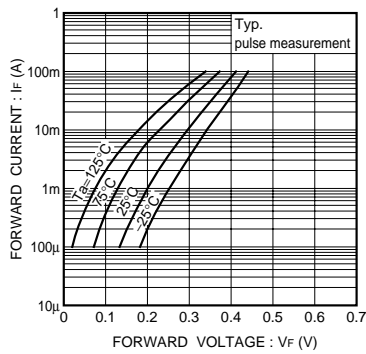


Fig. 1 Forward characteristics

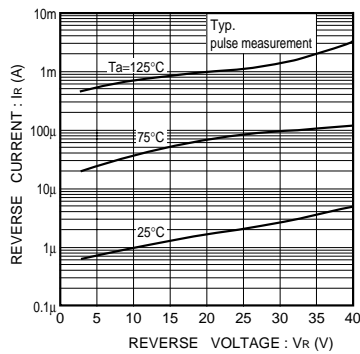


Fig. 2 Reverse characteristics

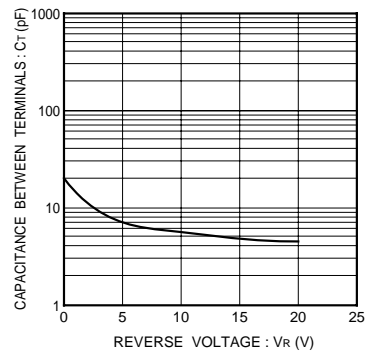


Fig. 3 Capacitance between terminals characteristics

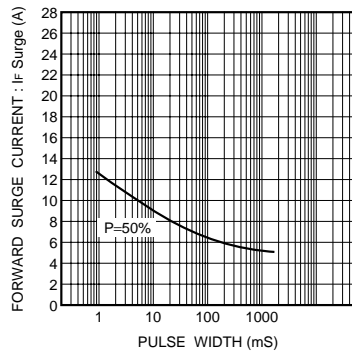


Fig. 4 Forward surge current characteristics

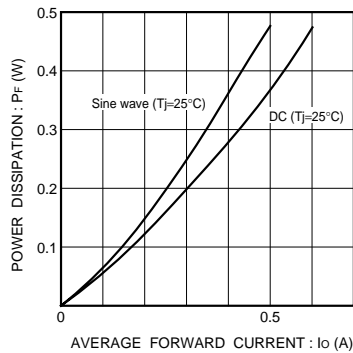


Fig. 5 Mean rectifying current characteristics

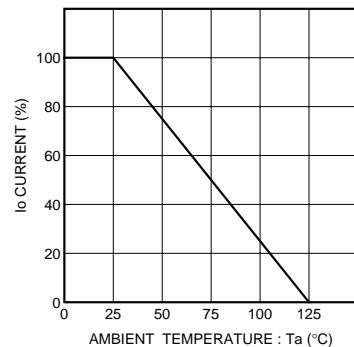


Fig. 6 Derating curve (mounting on glass epoxy PCBs)