

# Schottky barrier diode

## RB721Q-40

### ●Applications

High speed switching

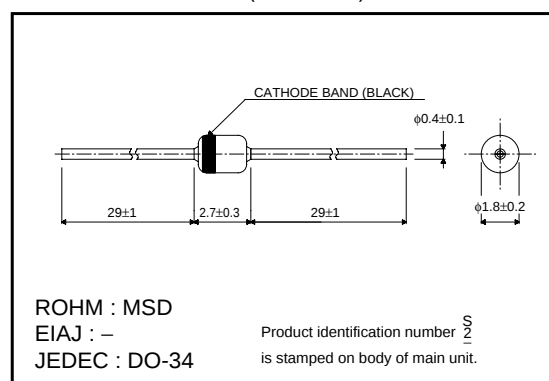
### ●Features

- 1) Glass-sealed envelope for high reliability. (MSD)
- 2) Small pitch enables insertion on PCBs.
- 3) Low  $V_F$  and low  $I_R$ .

### ●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     | $I_o$     | 30       | mA   |
| Peak forward surge current* | $I_{FSM}$ | 200      | mA   |
| Junction temperature        | $T_j$     | 125      | °C   |
| Storage temperature         | $T_{stg}$ | -40~+125 | °C   |

\* 60 Hz for 1 ms

### ●Electrical characteristics (Ta=25°C)

| Parameter                     | Symbol | Min. | Typ. | Max. | Unit    | Conditions       |
|-------------------------------|--------|------|------|------|---------|------------------|
| Forward voltage               | $V_F$  | —    | —    | 0.37 | V       | $I_F=1mA$        |
| Reverse current               | $I_R$  | —    | —    | 0.5  | $\mu A$ | $V_R=25V$        |
| Capacitance between terminals | $C_T$  | —    | 2.0  | —    | pF      | $V_R=1V, f=1MHz$ |

Note) ESD sensitive product handling required.

## Diodes

## ●Electrical characteristic curves (Ta=25°C)

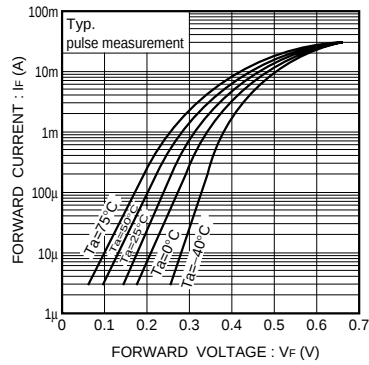


Fig.1 Forward characteristics

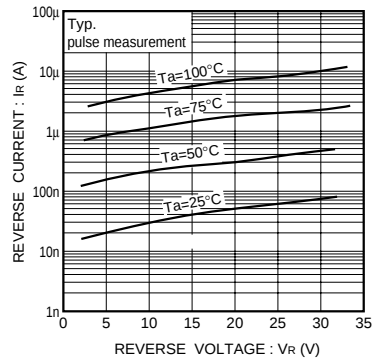


Fig.2 Reverse characteristics

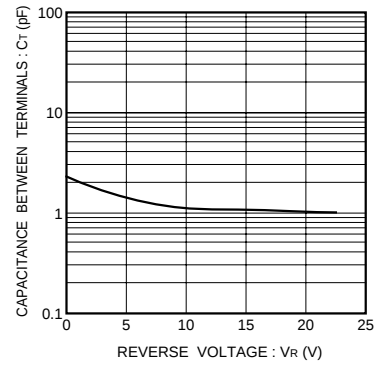


Fig.3 Capacitance between terminals characteristics

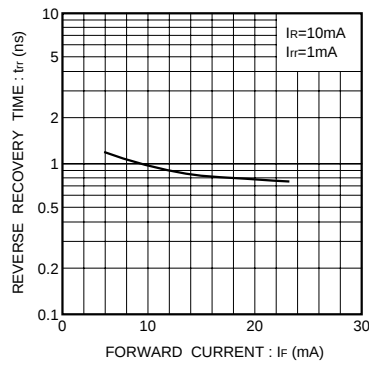
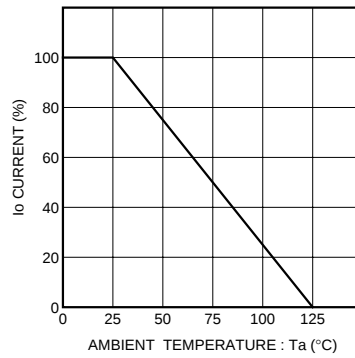


Fig.4 Reverse recovery time characteristics

Fig.5 Derating curve  
(mounting on glass epoxy PCBs)

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