

# Schottky barrier diode

## RB751S-40 / RB751V-40

### ●Applications

High speed switching  
For Detection

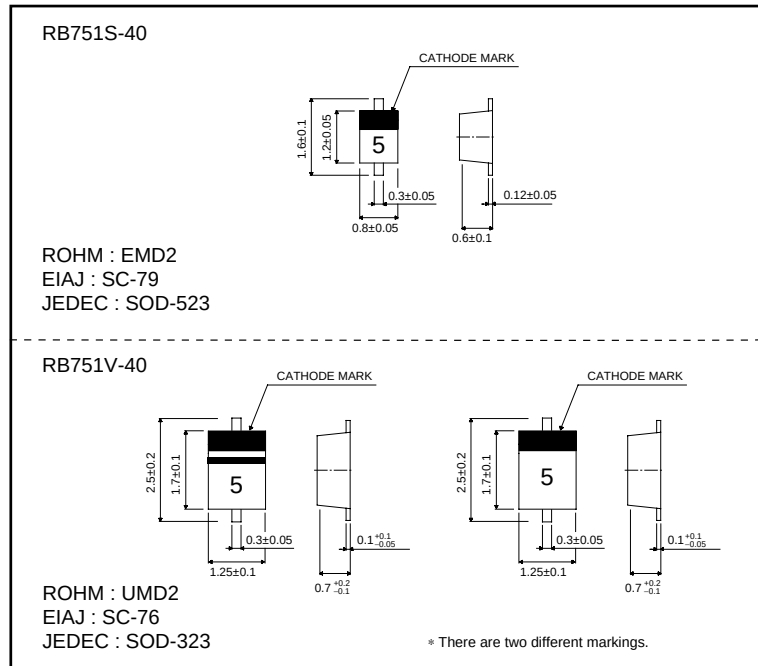
### ●Features

- 1) Small surface mounting type.  
(EMD2, UMD2)
- 2) Low reverse current and low forward voltage.
- 3) High reliability.

### ●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          | $V_R$     | 30       | 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  $\varnothing$

### ●Electrical characteristics (Ta = 25°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  | $\mu\text{A}$ | $V_R = 30\text{V}$                 |
| Capacitance between terminals | $C_T$  | —    | 2.0  | —    | pF            | $V_R = 1\text{V}, f = 1\text{MHz}$ |

(Note) ESD sensitive product handling required.

## Diodes

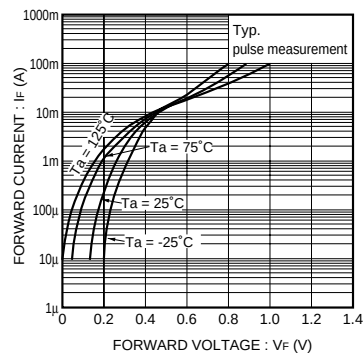
●Electrical characteristic curves ( $T_a = 25^\circ\text{C}$ )

Fig. 1 Forward characteristics

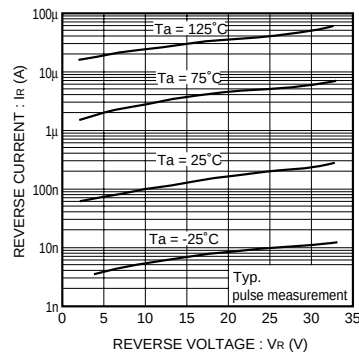


Fig. 2 Reverse characteristics

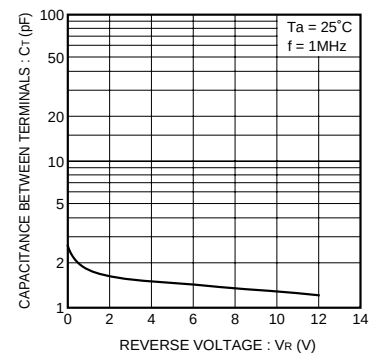


Fig. 3 Capacitance between terminals characteristics