

# Schottky barrier diode

## RB731U

### ●Applications

High speed switching.

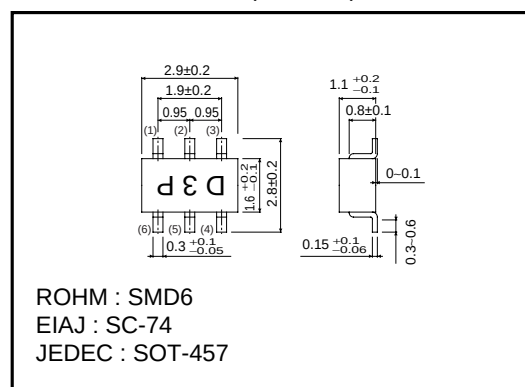
### ●Features

- 1) Small surface mounting type. (SMD6)
- 2) Low  $V_F$  and low  $I_R$ .
- 3) Three diodes in parallel for easy installation.

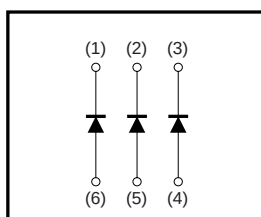
### ●Construction

Silicon epitaxial planar

### ●External dimensions (Unit : mm)



### ●Circuit



### ●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 to +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               | $I_R$  | —    | —    | 1    | μA   | $V_R=10V$        |
| Capacitance between terminals | $C_T$  | —    | 2.0  | —    | pF   | $V_R=1V, f=1MHz$ |

Note) ESD sensitive product handling required.

## Diodes

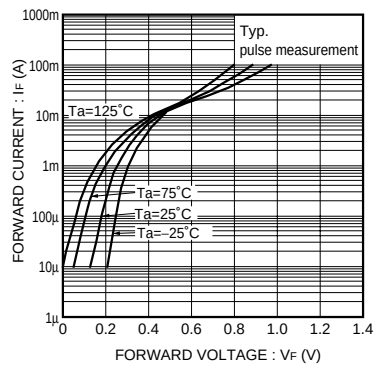
●Electrical characteristic curves ( $T_a=25^\circ\text{C}$ )

Fig.1 Forward characteristics

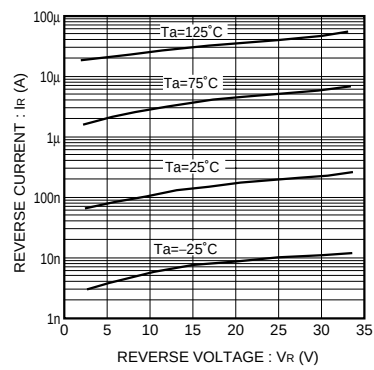


Fig.2 Reverse characteristics

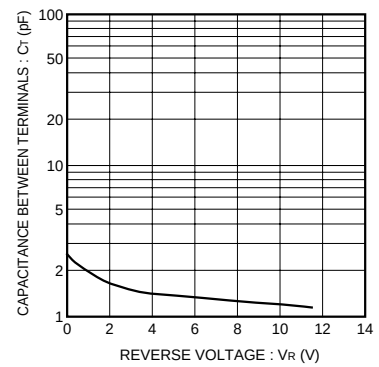
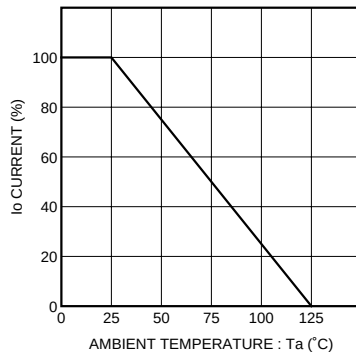


Fig.3 Capacitance between terminals characteristics

Fig.4 Derating curve  
(mounting on glass epoxy PCBs)