

# Schottky barrier diode

## RB706F-40 / RB706D-40

### ●Applications

General purpose detection  
High speed switching

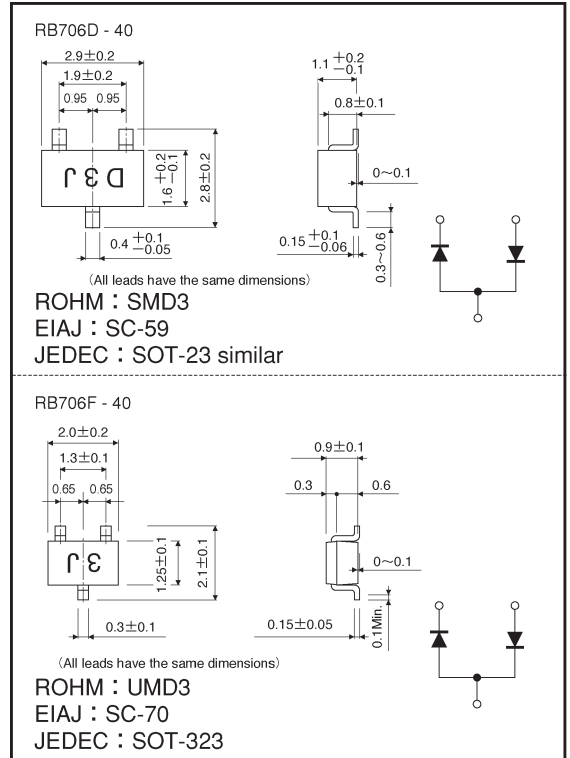
### ●Features

- 1) Compact dual element linear type. (SMD3 / UMD3)
- 2) High reliability.
- 3) Low reverse current and low forward voltage.

### ●Construction

Silicon epitaxial planar

### ●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      | $I_o$     | 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               | $V_F$  | —    | 0.26 | 0.37 | V             | $I_F=1\text{mA}$                  |
| Reverse current               | $I_R$  | —    | 0.05 | 1    | $\mu\text{A}$ | $V_R=10\text{V}$                  |
| Capacitance between terminals | $C_T$  | —    | 2.0  | —    | pF            | $V_R=1\text{V}$ , $f=1\text{MHz}$ |

\* ESD sensitive product handling required.

●Electrical characteristics curves (Ta = 25°C unless specified otherwise)

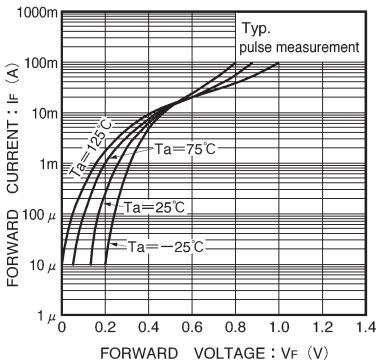


Fig. 1 Forward characteristics

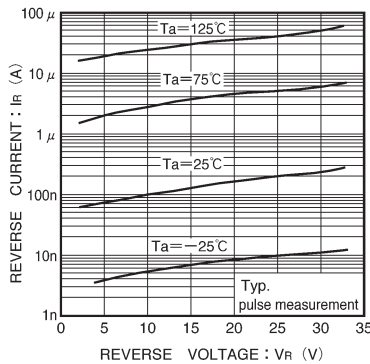


Fig. 2 Reverse characteristics

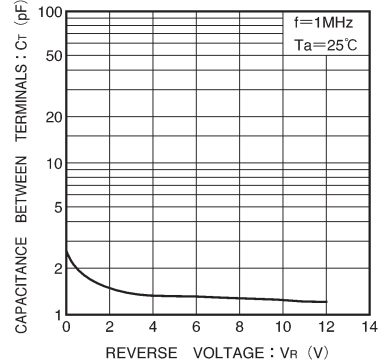


Fig. 3 Capacitance between terminals characteristics

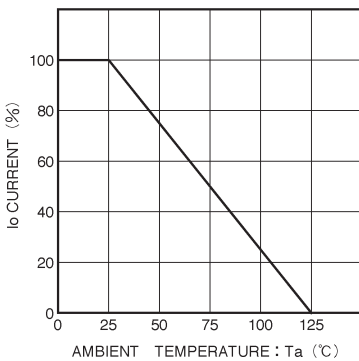


Fig. 4. Derating curve (mounting on glass epoxy PCBs)