

# Schottky barrier diode

## RB161L-40

### ●Applications

High frequency rectification  
For switching power supply

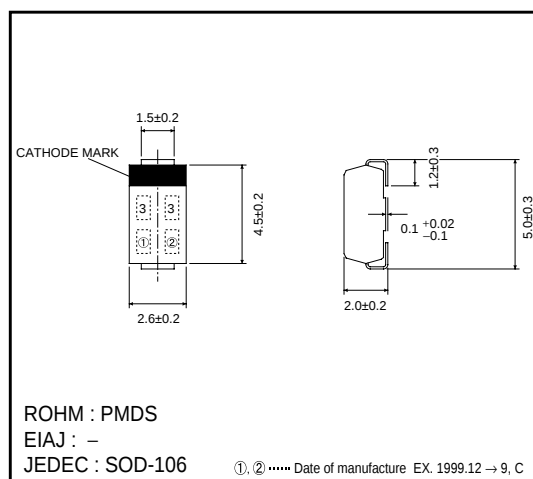
### ●Features

- 1) Compact power mold type. (PMDS)
- 2) Ultra low  $V_F$ . ( $V_F=0.35V$  Typ. at 1A)
- 3)  $V_{RM}=40V$  guaranteed.

### ●Construction

Silicon epitaxial planar

### ●External dimensions (Units : mm)



### ●Absolute maximum ratings ( $T_a=25^\circ C$ )

| Parameter                  | Symbol    | Limits   | Unit       |
|----------------------------|-----------|----------|------------|
| Peak reverse voltage       | $V_{RM}$  | 40       | V          |
| DC reverse voltage         | $V_R$     | 20       | V          |
| Mean rectifying current *  | $I_O$     | 1        | A          |
| Peak forward surge current | $I_{FSM}$ | 70       | A          |
| Junction temperature       | $T_J$     | 125      | $^\circ C$ |
| Storage temperature        | $T_{stg}$ | -40~+125 | $^\circ C$ |

\* When mounting on PCB

### ●Electrical characteristics ( $T_a=25^\circ C$ )

| Parameter       | Symbol | Min. | Typ. | Max. | Unit | Conditions |
|-----------------|--------|------|------|------|------|------------|
| Forward voltage | $V_F$  | -    | -    | 0.40 | V    | $I_F=1.0A$ |
| Reverse current | $I_R$  | -    | -    | 1    | mA   | $V_R=20V$  |

## Diodes

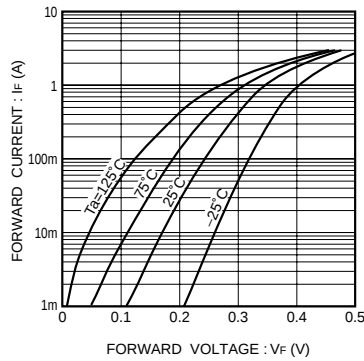
●Electrical characteristic curves ( $T_a=25^\circ\text{C}$ )

Fig.1 Forward characteristics

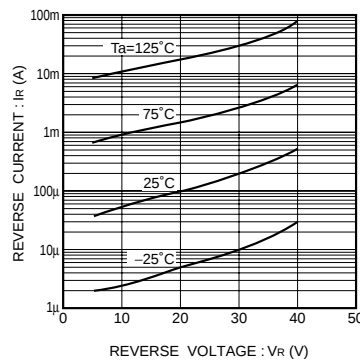


Fig.2 Reverse characteristics

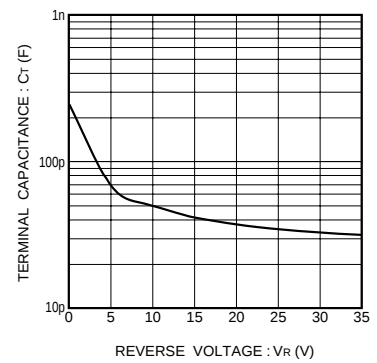


Fig.3 Capacitance between terminals characteristics

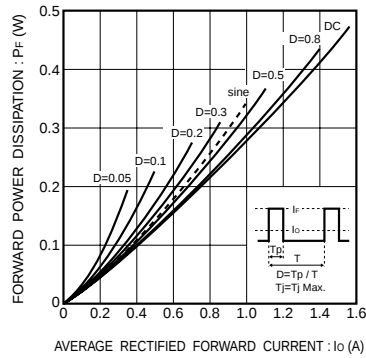


Fig.4 Forward power dissipation characteristics

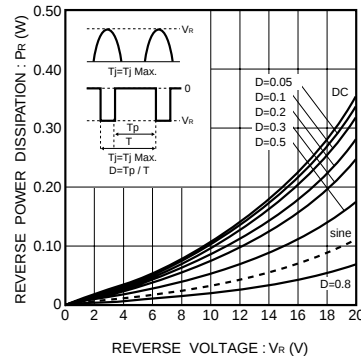


Fig.5 Reverse power dissipation characteristics

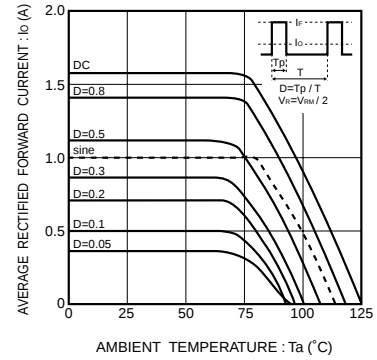


Fig.6 Derating curve (when mounting on glass epoxy PCBs)