

Schottky barrier diode

RB060L-40

●Applications

High frequency rectification
For switching power supply

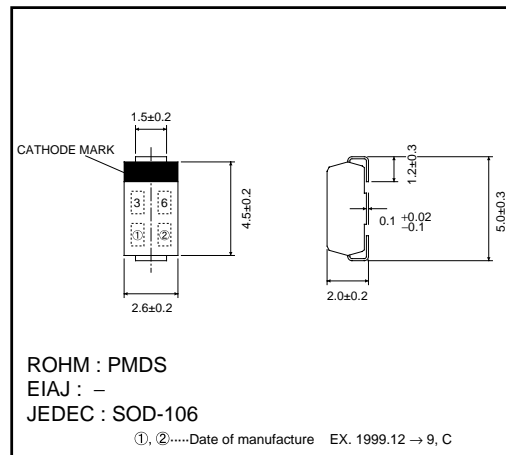
●Features

- 1) Compact power mold type. (PMDS)
- 2) $I_o=2A$ guaranteed despite the size.
- 3) Low I_R . ($I_R=10\mu A$ Typ.)

●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*1 | I_o | 2.0 | A |
| Peak forward surge current*2 (60Hz, 1 \varnothing) | I_{FSM} | 70 | A |
| Junction temperature | T_j | 125 | °C |
| Storage temperature | T_{stg} | -40~+125 | °C |

*1 When mounted on an alumina PCBs (82×30×1.0 mm board),
180° half sine wave.

*2 60Hz, \varnothing

●Electrical characteristics (Ta=25°C)

| Parameter | Symbol | Max. | Unit | Conditions |
|--------------------|----------------|------|--------|-----------------------------------|
| Forward voltage | V_{F1} | 0.50 | V | $I_F=2.0A$ |
| | V_{F2} | 0.45 | V | $I_F=1.0A$ |
| Reverse current | I_R | 1.0 | mA | $V_R=40V$ |
| Thermal resistance | θ_{j-a} | 90 | °C / W | When mounting on alumina PCBs |
| | θ_{j-a} | 120 | °C / W | When mounting on glass epoxy PCBs |

Diodes

● Electrical characteristics curves (Ta=25°C)

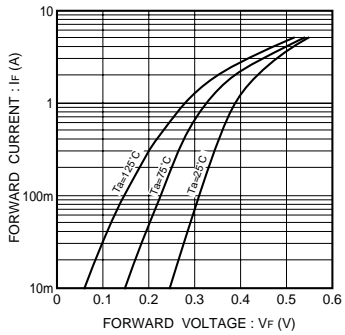


Fig.1 Forward characteristics

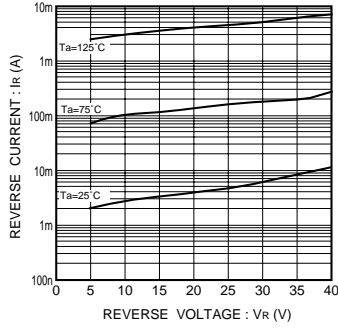


Fig.2 Reverse characteristics

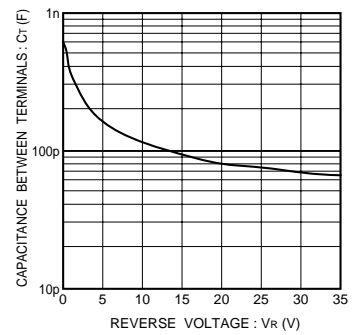


Fig.3 Capacitance between terminals characteristics

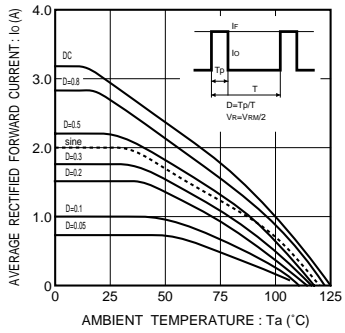


Fig.4 Derating curve (when mounted on an alumina PCBs)

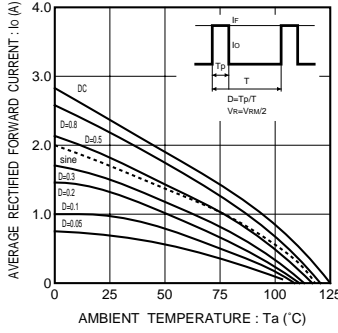


Fig.5 Derating curve (when mounted on a glass epoxy PCBs)

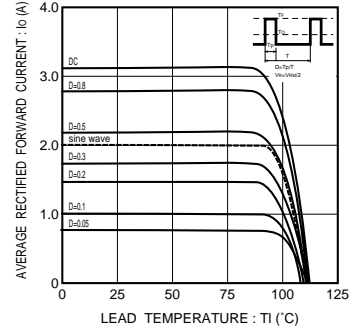


Fig.6 Derating curve (when mounted on a glass epoxy PCBs)

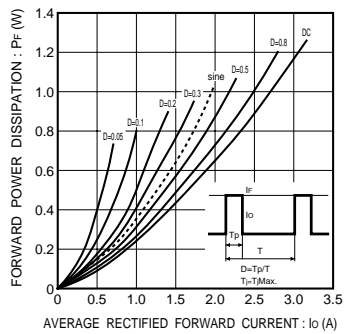


Fig.7 Forward power dissipation

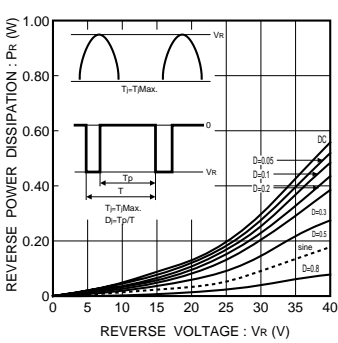


Fig.8 Reverse power dissipation