

Schottky barrier diode

RB060L-40

●Applications

High frequency rectification
For switching power supply

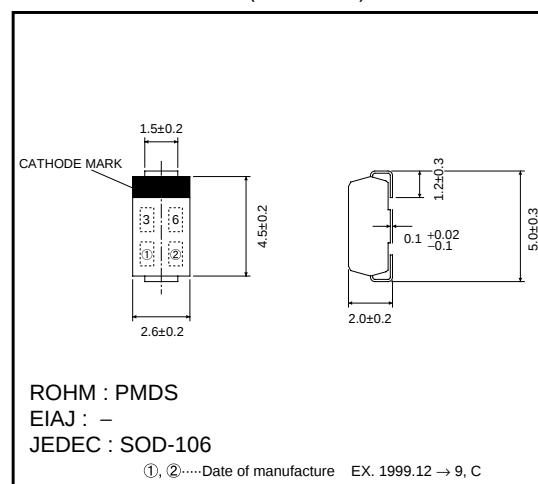
●Features

- 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 ($T_a=25^\circ C$)

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 cycle)	I_{FSM}	70	A
Junction temperature	T_j	125	$^\circ C$
Storage temperature	T_{stg}	-40~+125	$^\circ C$

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

*2 60Hz, $\sim$

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

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	$^\circ C / W$	When mounting on alumina PCBs
	θ_{j-a}	120	$^\circ C / W$	When mounting on glass epoxy PCBs

Diodes

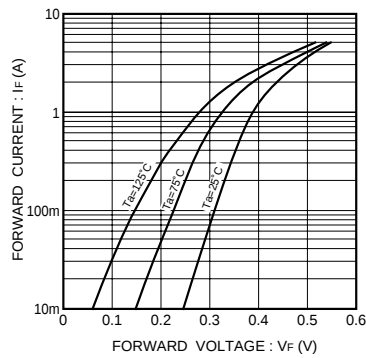
●Electrical characteristics curves ($T_a=25^\circ\text{C}$)

Fig.1 Forward characteristics

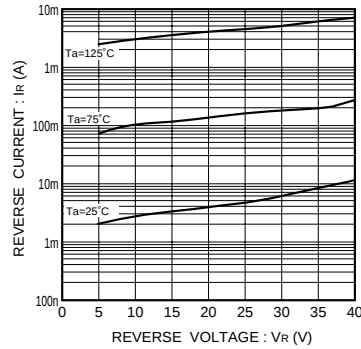


Fig.2 Reverse characteristics

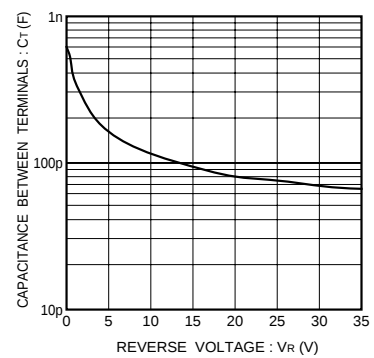


Fig.3 Capacitance between terminals characteristics

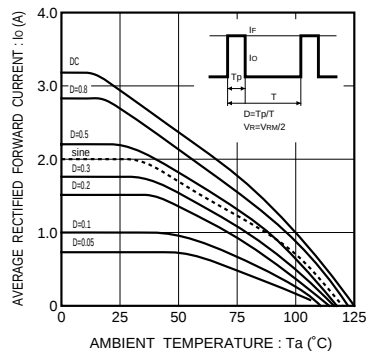
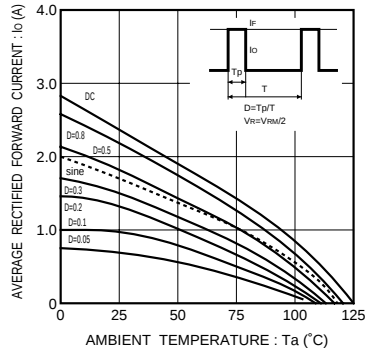
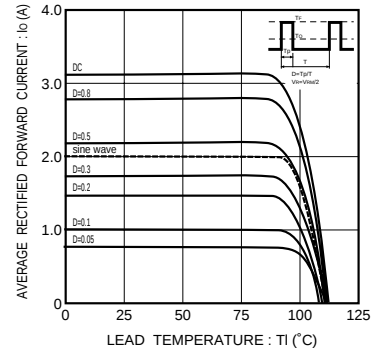
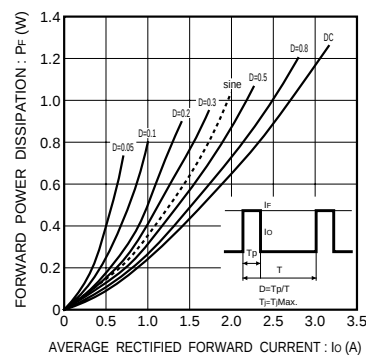
Fig.4 Derating curve
(when mounted on an
alumina PCBs)Fig.5 Derating curve
(when mounted on a glass
epoxy PCBs)Fig.6 Derating curve
(when mounted on a glass
epoxy PCBs)

Fig.7 Forward power dissipation

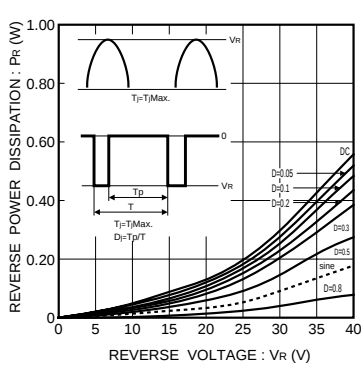


Fig.8 Reverse power dissipation