

High frequency rectifier schottky barrier diode

RB060L-40

●Applications

High frequency rectification
For switching power supply

●Features

- 1) Compact power mold type. (PMDS)
- 2) High output of $I_o = 2A$ at this size.
- 3) Low reverse current and low forward voltage.
(typical capability: $10\mu A$)

●Construction

Silicon epitaxial planar

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

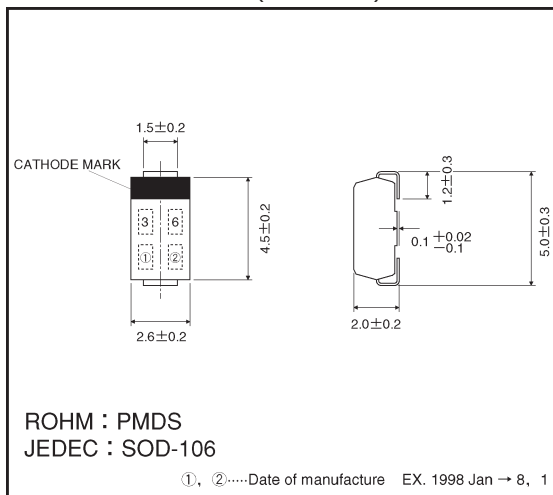
*1 When mounted on an alumina PCBs ($82 \times 30 \times 1.0$ mm board),
180° half sine wave.

*2 60Hz, ϕ

●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

●External dimensions (Units: mm)



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

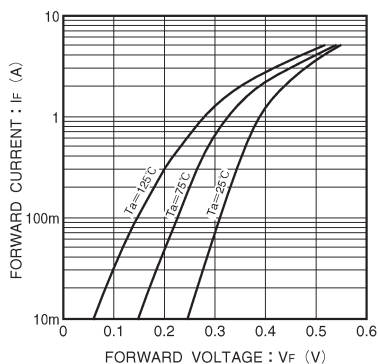


Fig. 1 Forward characteristics

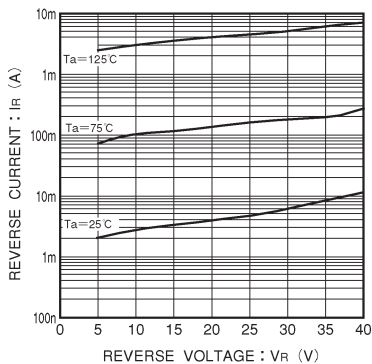


Fig. 2 Reverse characteristics

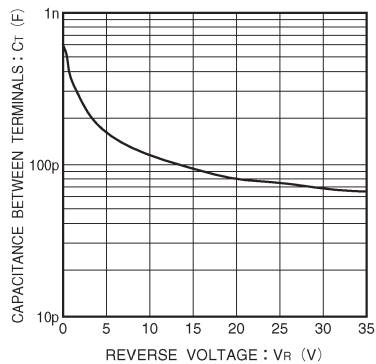


Fig. 3 Capacitance between terminals characteristics

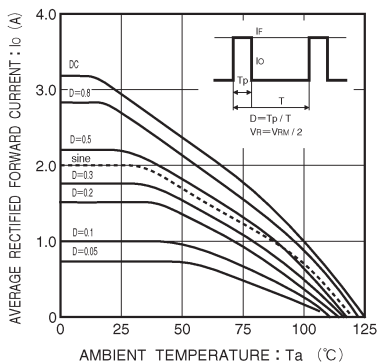
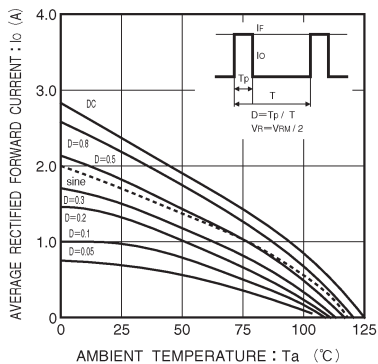
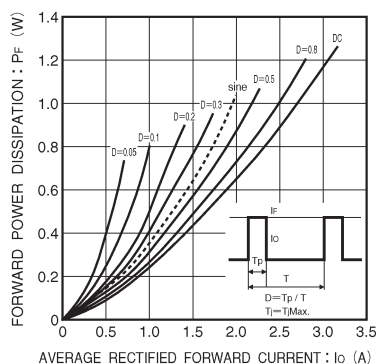
Fig. 4 Derating curve
(when mounted on an alumina PCBs)Fig. 5 Derating curve
(when mounted on a glass epoxy PCBs)

Fig. 6 Forward power dissipation

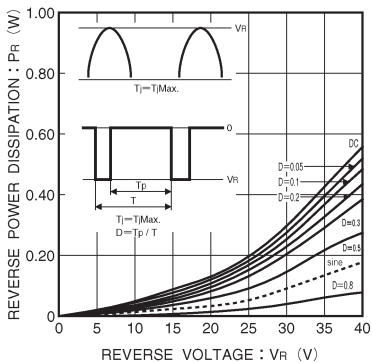


Fig. 7 Reverse power dissipation