High frequency rectifier schottky barrier diode

RB060L–40

●Applications

High frequency rectification
For switching power supply

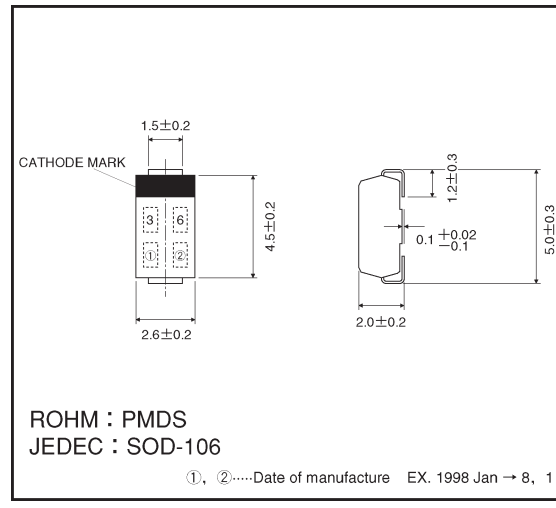
●Features

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

●Construction

Silicon epitaxial planar

●External dimensions (Units: mm)



ROHM：PMDS
JEDEC：SOD-106

①, ②·····Date of manufacture EX. 1998 Jan → 8, 1

●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∿)	I_{FSM}	70	A
Junction temperature	Tj	125	℃
Storage temperature	Tstg	−40～+125	℃

*1 When mounted on an alumina PCBs (82 × 30 × 1.0 mm board), 180° half sine wave.
*2 60Hz, ∿

●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	℃ / W	When mounting on alumina PCBs
	θ j-a	120	℃ / W	When mounting on glass epoxy PCBs

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

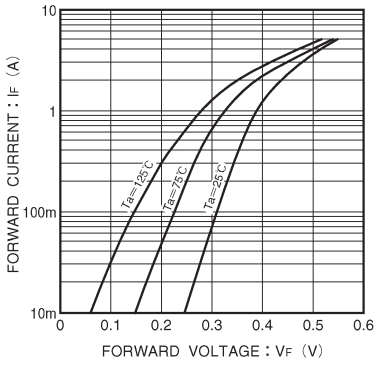


Fig. 1 Forward characteristics

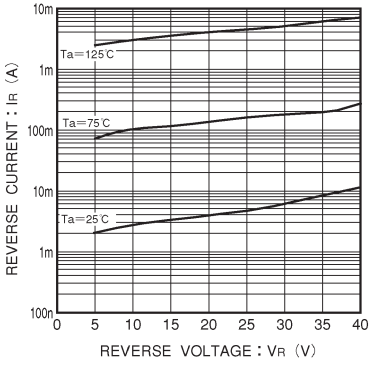


Fig. 2 Reverse characteristics

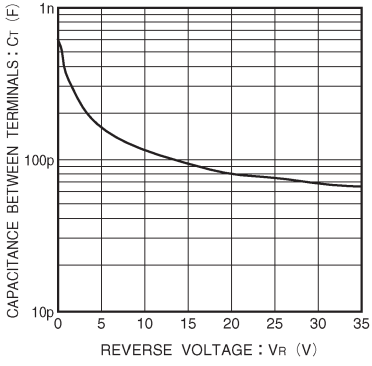


Fig. 3 Capacitance between terminals characteristics

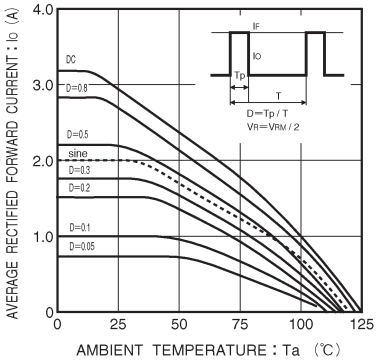


Fig. 4 Derating curve (when mounted on an alumina PCBs)

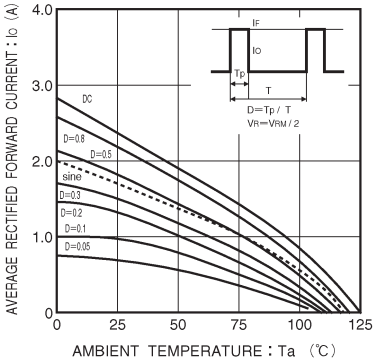


Fig. 5 Derating curve (when mounted on a glass epoxy PCBs)

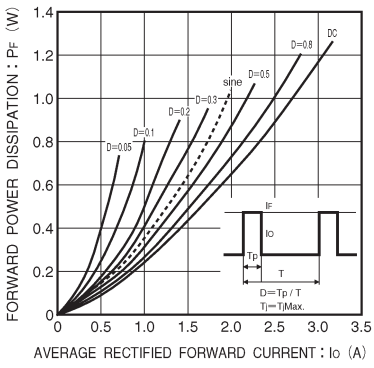


Fig. 6 Forward power dissipation

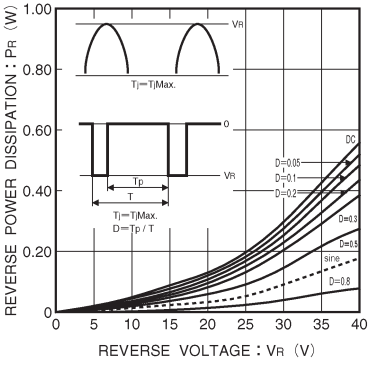


Fig. 7 Reverse power dissipation