

# Schottky barrier diode

## RB060L-40

### ●Applications

High frequency rectification  
For switching power supply

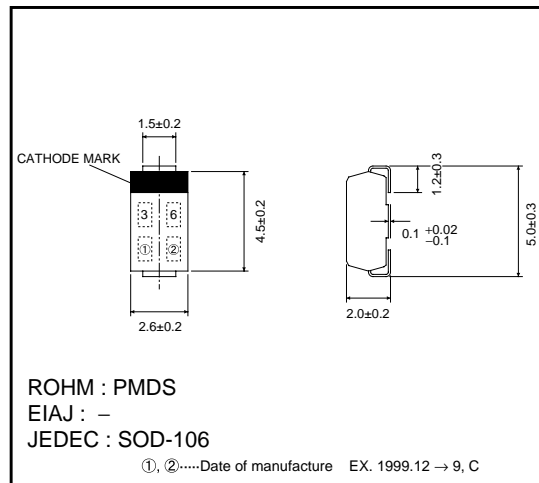
### ●Features

- 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, 1ms)	$I_{FSM}$	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, 1ms

### ●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	$\theta_{j-a}$	90	°C / W	When mounting on alumina PCBs
	$\theta_{j-a}$	120	°C / W	When mounting on glass epoxy PCBs

Diodes

●Electrical characteristics curves (Ta=25°C)

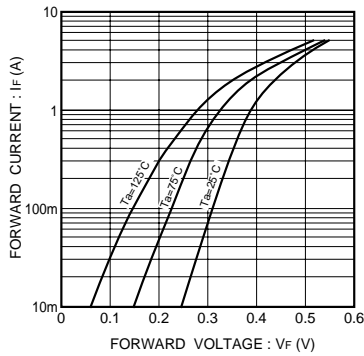


Fig.1 Forward characteristics

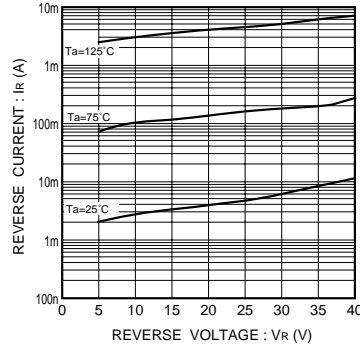


Fig.2 Reverse characteristics

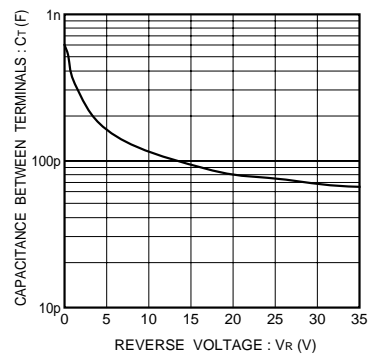


Fig.3 Capacitance between terminals characteristics

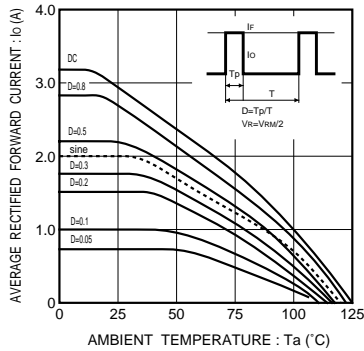


Fig.4 Derating curve (when mounted on an alumina PCBs)

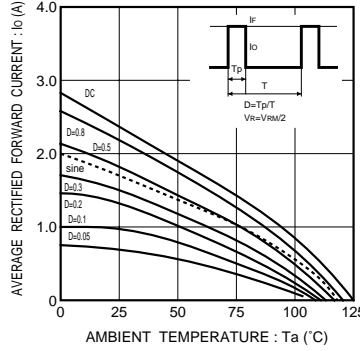


Fig.5 Derating curve (when mounted on a glass epoxy PCBs)

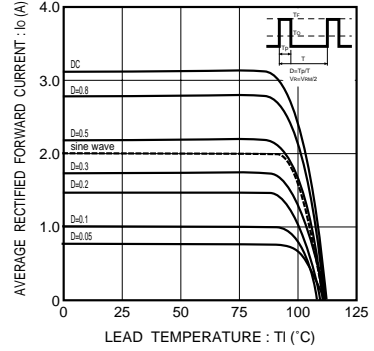


Fig.6 Derating curve (when mounted on a glass epoxy PCBs)

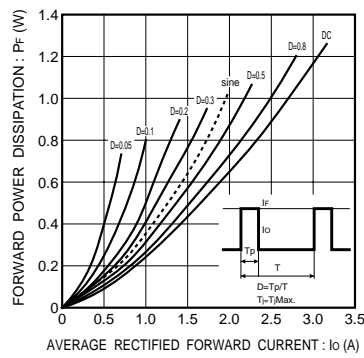


Fig.7 Forward power dissipation

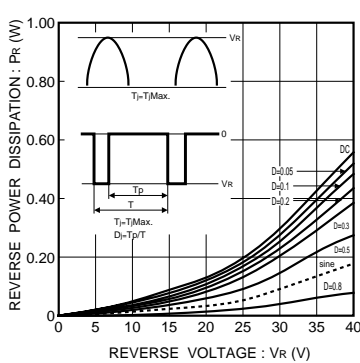


Fig.8 Reverse power dissipation