

Schottky barrier diode

RB053L-30

●Applications

High frequency rectification
For switching power supply

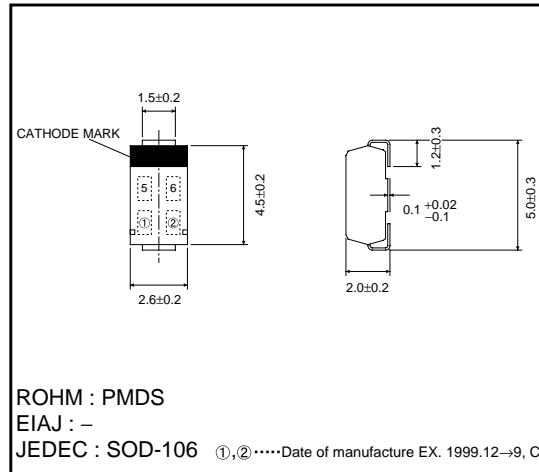
●Features

- 1) Compact power mold type. (PMDS)
- 2) Ultra low V_F / Low I_R .
- 3) $V_{RM}=30V$ guaranteed.

●Construction

Silicon epitaxial planar

●External dimensions (Units : mm)



●Absolute maximum ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Limits	Unit
Peak reverse voltage	V_{RM}	30	V
DC reverse voltage	V_R	30	V
Mean rectifying current *	I_O	3.0	A
Peak forward surge current (60Hz · 1 \sim ms)	I_{FSM}	70	A
Junction temperature	T_j	125	$^\circ\text{C}$
Storage temperature	T_{stg}	-40~+125	$^\circ\text{C}$

* T_C Max. = 90°C when mounted on alumina PCBs.

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	-	-	0.42	V	$I_F=3.0A$
Reverse current	I_{R1}	-	-	90	μA	$V_R=15V$
	I_{R2}	-	-	200	μA	$V_R=30V$

Diodes

●Electrical characteristic curves (Ta = 25°C)

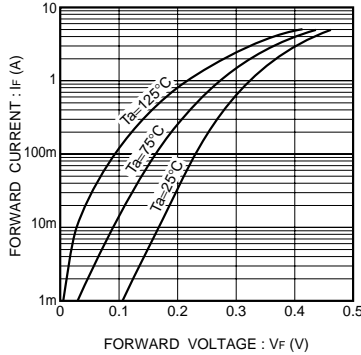


Fig.1 Forward characteristics

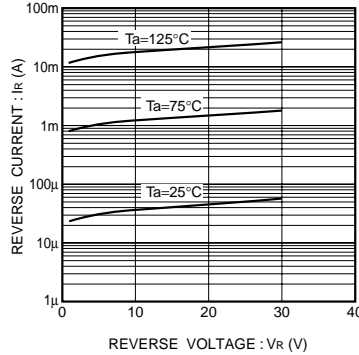


Fig.2 Reverse characteristics

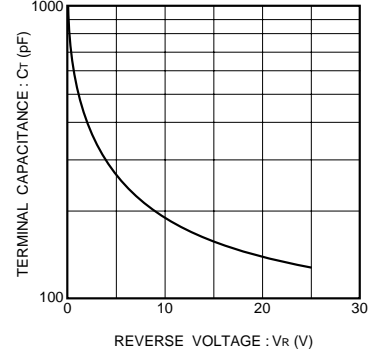


Fig.3 Capacitance between terminals characteristics

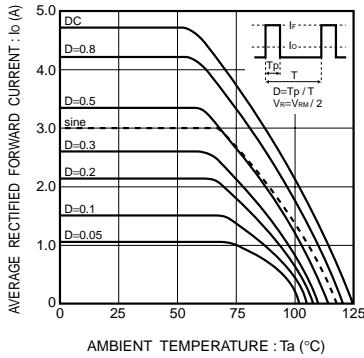


Fig.4 Derating curve (Io - Ta)
(When mounted on alumina PCBs)

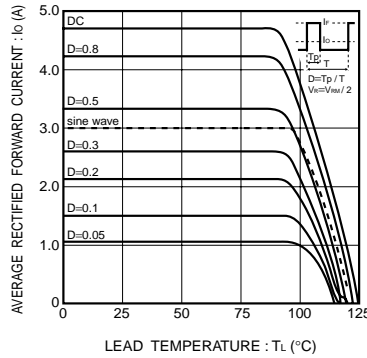


Fig.5 Derating curve (Io - Tl)
(When mounted on alumina PCBs)

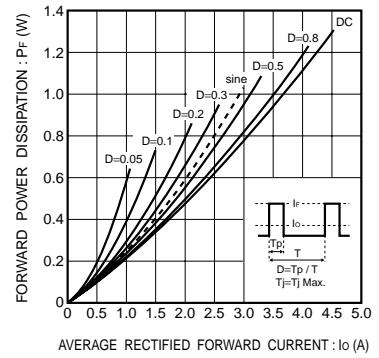


Fig.6 Forward power dissipation characteristics

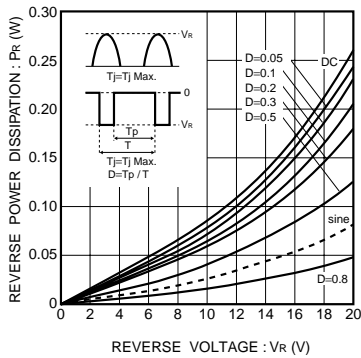


Fig.7 Reverse power dissipation characteristics

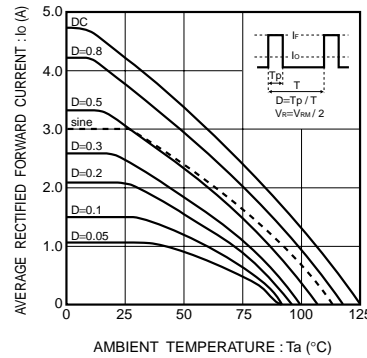


Fig.8 Derating curve (Io - Ta)
(when mounted on glass epoxy PCBs)