

Schottky barrier diode

RB083L-20

●Applications

High frequency rectification
For switching power supply

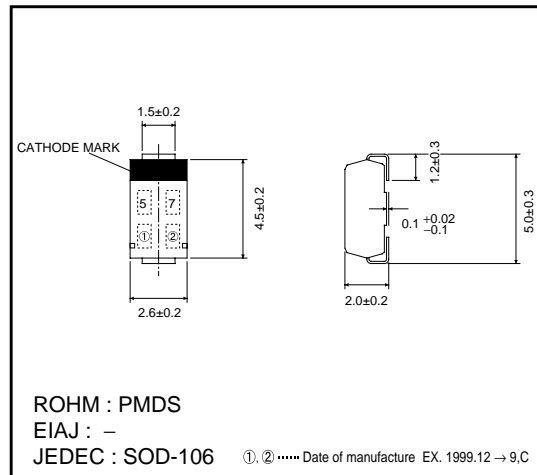
●Features

- 1) Compact power mold type. (PMDS)
- 2) Ultra low V_F / Low I_R .
- 3) $I_o=5A$ guaranteed despite the size.

●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}	25	V
DC reverse voltage	V_R	20	V
Mean rectifying current *	I_o	5	A
Peak forward surge current (60Hz 1 μ s)	I_{FSM}	70	A
Junction temperature	T_j	125	$^\circ\text{C}$
Storage temperature	T_{stg}	-40~+125	$^\circ\text{C}$

* When mounted on alumina PCBs (82×30×1.0mm), $T_c \text{ Max.}=90^\circ\text{C}$

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	-	-	0.39	V	$I_F=3.0A$
Reverse current	I_R	-	-	500	μA	$V_R=20V$

Diodes

● Electrical characteristic curves (Ta=25°C)

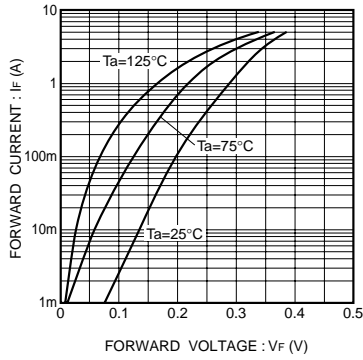


Fig.1 Forward characteristics

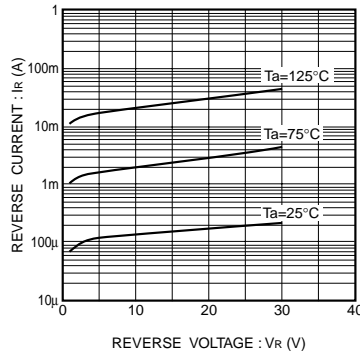


Fig.2 Reverse characteristics

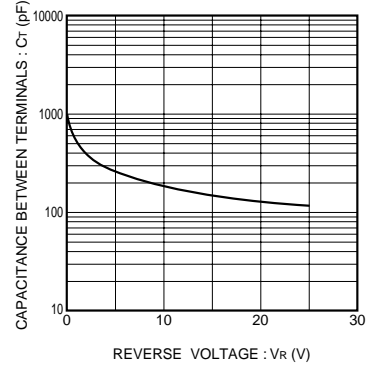


Fig.3 Capacitance between terminals characteristics

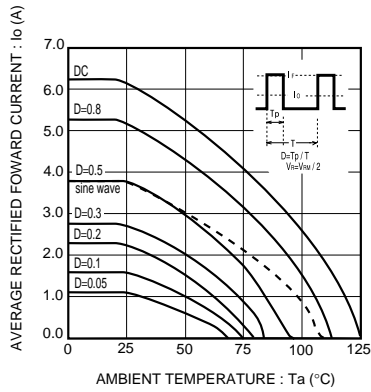


Fig.4 Derating curve (I_o - T_a)
(When mounted on alumina PCBs)

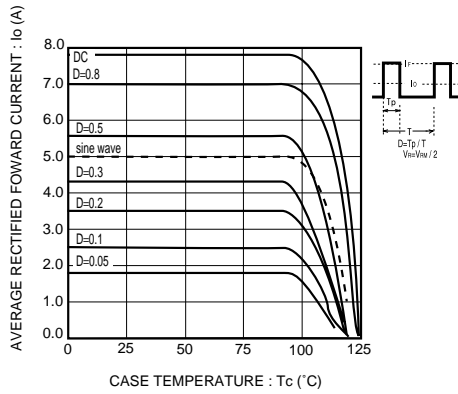


Fig.5 Derating curve (I_o - T_c)
(When mounted on alumina PCBs)