

Schottky barrier diode

RB083L-20

●Applications

High frequency rectification
For switching power supply

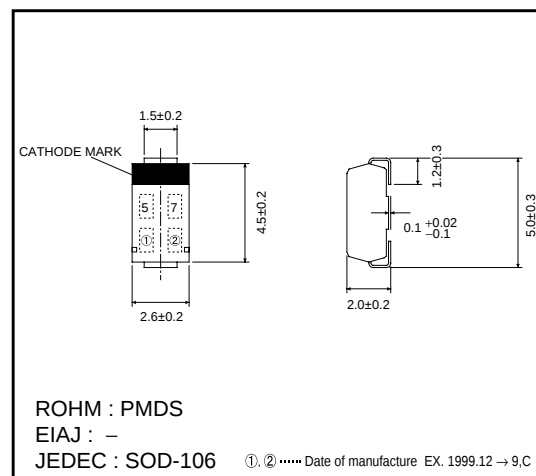
●Features

- 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 cycle)	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 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

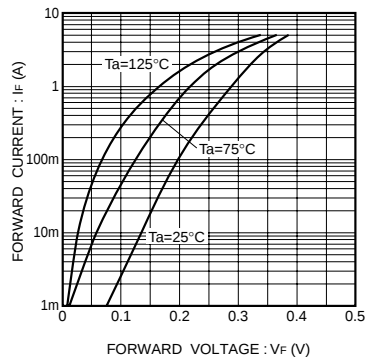
●Electrical characteristic curves ($T_a=25^\circ\text{C}$)

Fig.1 Forward characteristics

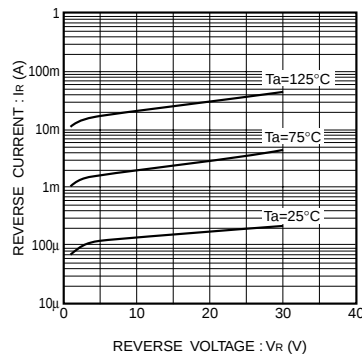


Fig.2 Reverse characteristics

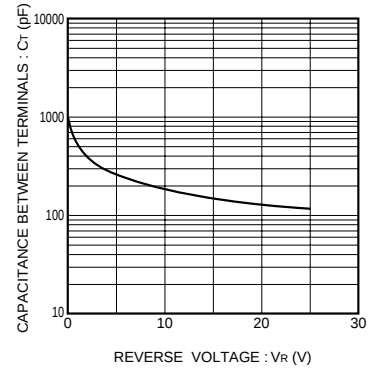
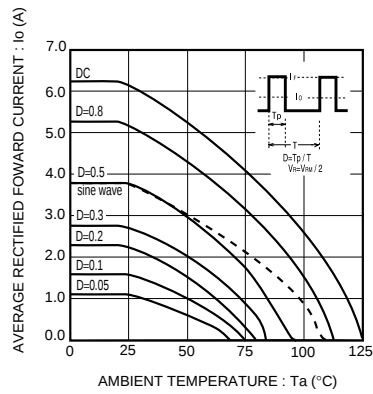
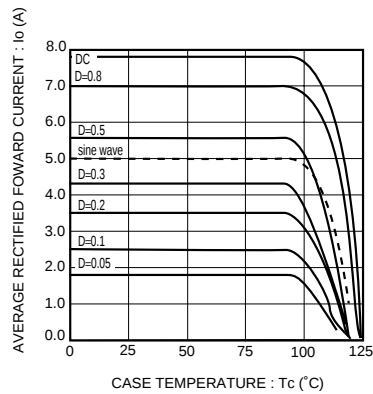


Fig.3 Capacitance between terminals characteristics

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)