

# Schottky barrier diode

## RB081L-20

### ●Applications

High frequency rectification  
For switching power supply

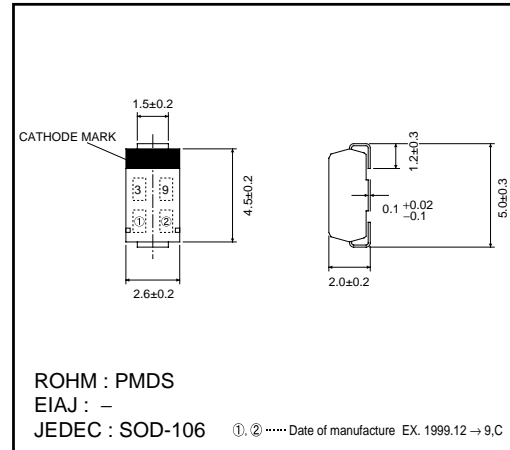
### ●Features

- 1) Compact power mold type. (PMDS)
- 2) Ultra low  $V_F$ . ( $V_F=0.27V$  Typ. at 1A)
- 3)  $I_o=5A$  guaranteed despite the size.

### ●Construction

Silicon epitaxial planar

### ●External dimensions (Units : mm)



### ●Absolute maximum ratings ( $T_a=25^\circ C$ )

Parameter	Symbol	Limits	Unit
Peak reverse voltage	$V_{RM}$	25	V
DC reverse voltage	$V_R$	20	V
Mean rectifying current	$I_{O1} *1$	5	A
	$I_{O2} *2$	4	A
Peak forward surge current (60Hz $\sin$ )	$I_{FSM}$	70	A
Junction temperature	$T_j$	125	$^\circ C$
Storage temperature	$T_{stg}$	-40~+125	$^\circ C$

\*1 When mounted on an alumina substrates (82×30×1.0mm),  $T_c$  Max.=90 $^\circ C$

\*2 When mounted on an alumina substrates (82×30×1.0mm),  $T_a=25^\circ C$

### ●Electrical characteristics ( $T_a=25^\circ C$ )

Parameter	Symbol	Typ.	Max.	Unit	Conditions
Forward voltage	$V_F$	-	0.45	V	$I_F=5.0A$
Reverse current	$I_R$	-	0.7	mA	$V_R=20V$

Diodes

● Electrical characteristics curves (Ta=25°C)

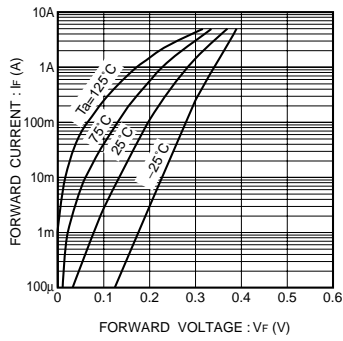


Fig.1 Forward characteristics

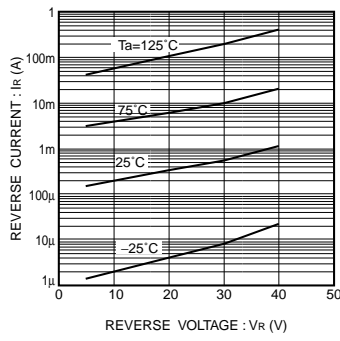


Fig.2 Reverse characteristics

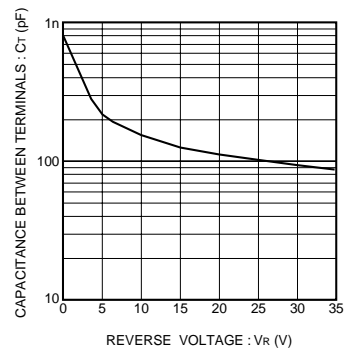


Fig.3 Capacitance between terminals characteristics

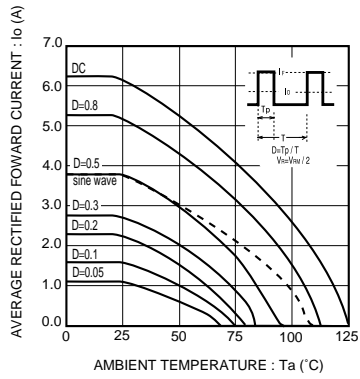


Fig.4 Derating curve (Io-Ta)

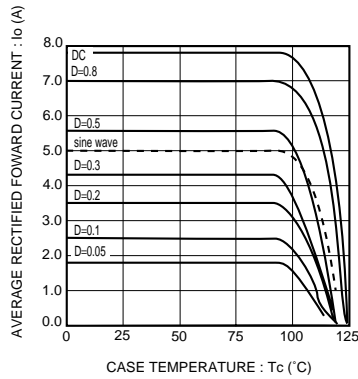


Fig.5 Derating curve (Io-Tc)