

Schottky barrier diode

RB491D

●Applications

Low-power rectification

For switching power supply

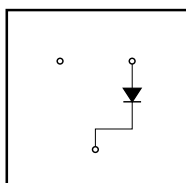
●Features

- 1) Small surface mounting type. (SMD3)
- 2) Ultra low V_F . ($V_F=0.40V$ Typ. at 1A)
- 3) $I_F=1.0A$ guaranteed despite the size.

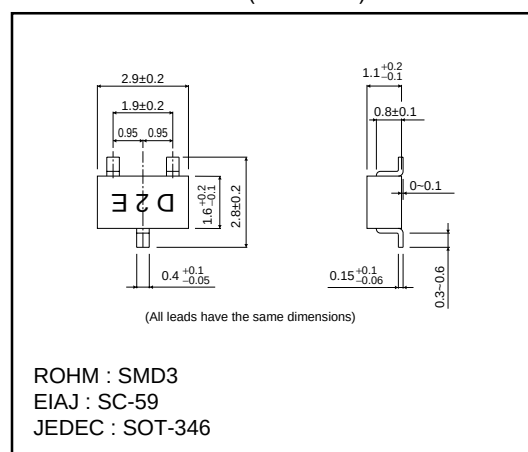
●Construction

Silicon epitaxial planar

●Circuit



●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
DC forward current	I_F	1.0	A
Peak forward surge current *	I_{FSM}	3	A
Junction temperature	T_J	125	$^\circ C$
Storage temperature	T_{stg}	-40~+125	$^\circ C$

* 60Hz for 1 μs

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	—	—	0.45	V	$I_F=1.0A$
Reverse current	I_R	—	—	200	μA	$V_R=20V$

Note) ESD sensitive product handling required.

Diodes

●Electrical characteristic curves (Ta=25°C)

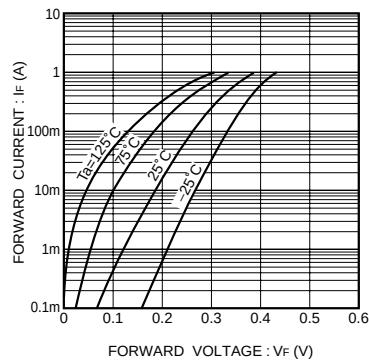


Fig.1 Forward characteristics

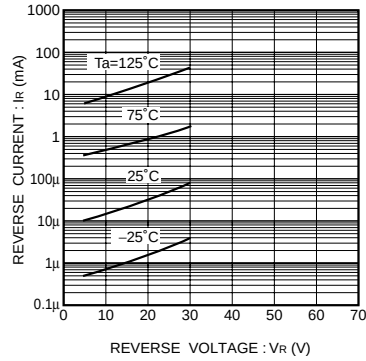


Fig.2 Reverse characteristics

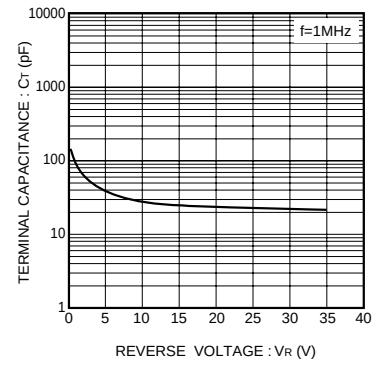


Fig.3 Capacitance between terminals characteristics

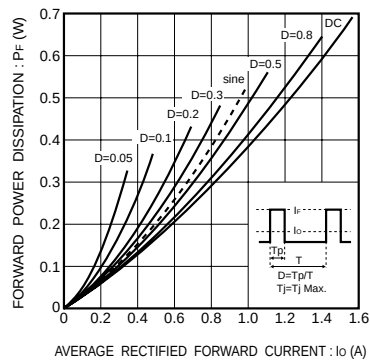


Fig.4 Forward power dissipation characteristics

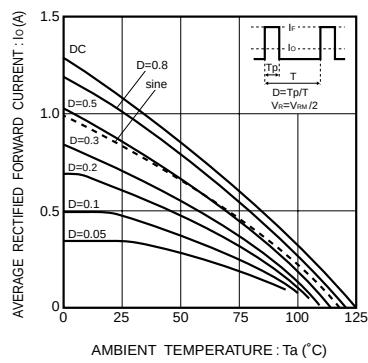


Fig.5 Derating curve (Io - Ta)