

# High frequency rectifier schottky barrier diode

## RB491D

**New**

### ●Applications

Low power rectification  
For switching power supply

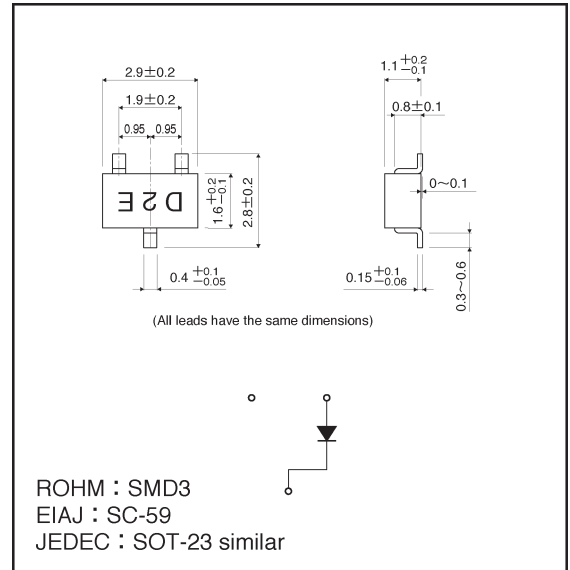
### ●Features

- 1) Small surface mounting type. (SMD3 (SC-59))
- 2) Extreme low forward voltage.  
(typical capability of 0.45V at 1A)
- 3)  $I_F = 1.0A$  achieved despite the size.

### ●Construction

Silicon epitaxial

### ●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	$T_{stg}$	$-40 \sim +125$	$^\circ C$

\* 60 Hz for 1  $\mu s$

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	$V_F$	—	0.40	0.45	V	$I_F = 1.0A$
Reverse current	$I_R$	—	—	200	$\mu A$	$V_R = 20V$

\* ESD sensitive product handling required.

●Electrical characteristic curves (Ta = 25°C unless specified otherwise)

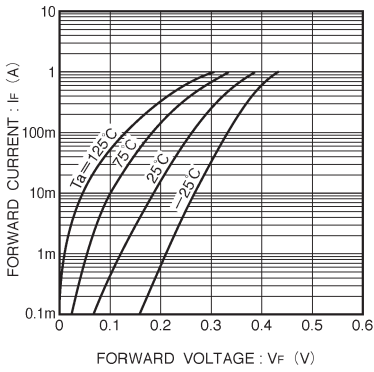


Fig. 1 Forward characteristics

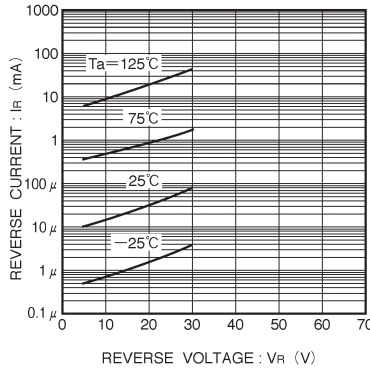


Fig. 2 Reverse characteristics

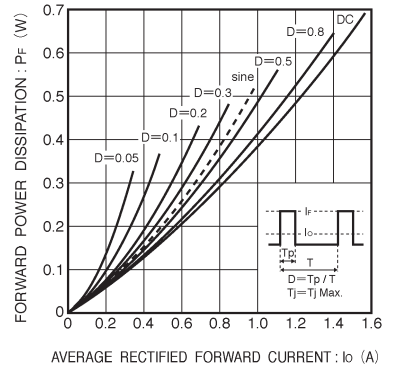


Fig. 3 Forward power dissipation characteristics

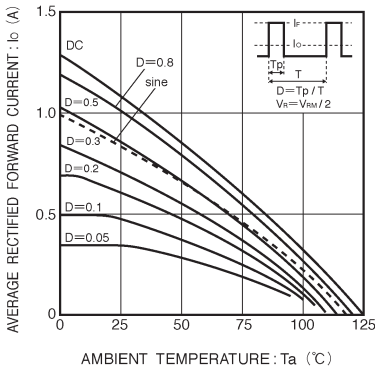


Fig. 4 Derating curve (Io - Ta)