

# Schottky barrier diode

## RB420D

### ●Applications

Low power rectification

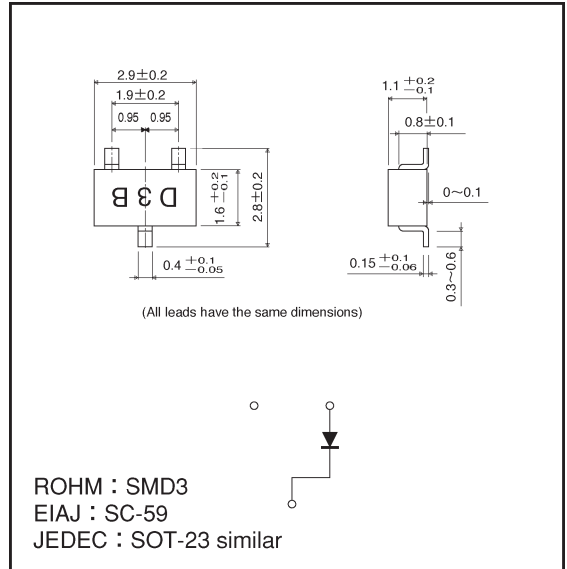
### ●Features

- 1) Dual element common cathode configuration in compact SMD3 package.
- 2) High reliability.
- 3) Low reverse current and low forward voltage.

### ●Construction

Silicon epitaxial planar

### ●External dimensions (Units: mm)



### ●Absolute maximum ratings (Ta = 25°C)

Parameter	Symbol	Limits	Unit
Peak reverse voltage	$V_{RM}$	40	V
DC reverse voltage	$V_R$	40	V
Mean rectifying current	$I_o$	0.1	A
Peak forward surge current*	$I_{FSM}$	1	A
Junction temperature	$T_j$	125	°C
Storage temperature	$T_{stg}$	-40~+125	°C

\* 60 Hz for 1  $\mu$ s

### ●Electrical characteristics (Ta = 25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	$V_F$	—	0.36	0.45	V	$I_F=10\text{mA}$
Reverse current	$I_R$	—	0.05	1	$\mu$ A	$V_R=10\text{V}$
Capacitance between terminals	$C_T$	—	6.0	—	pF	$V_R=10\text{V}$ , $f=1\text{MHz}$

\* ESD sensitive product handling required.

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

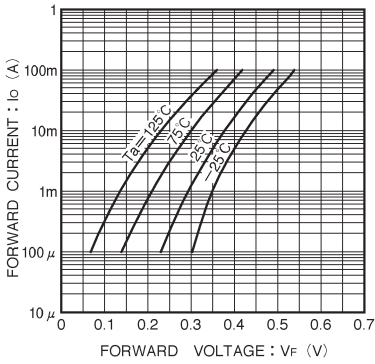


Fig. 1 Forward characteristics

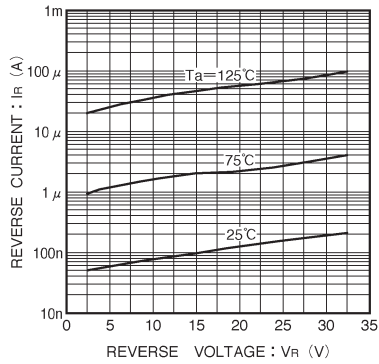


Fig. 2 Reverse characteristics

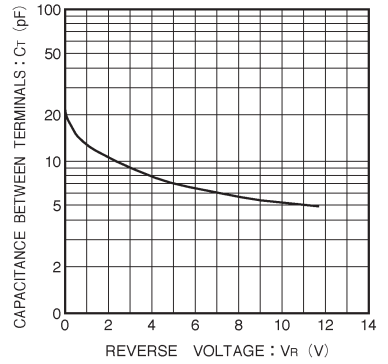


Fig. 3 Capacitance between terminals characteristics

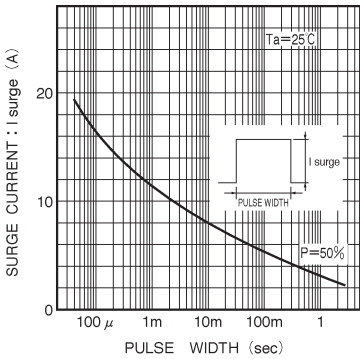


Fig. 4 Surge current characteristics

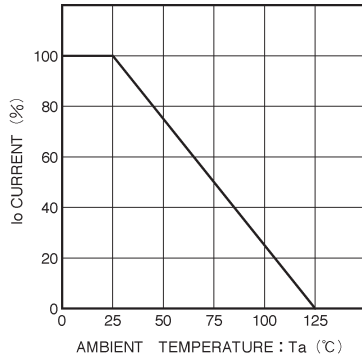


Fig. 5 Derating curve (mounting on glass epoxy PCBs)