

Schottky barrier diode

RB420D

●Applications

Low power rectification

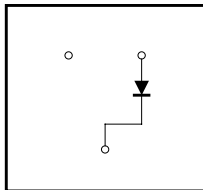
●Features

- 1) Small surface mounting type. (SMD3)
- 2) Low I_R . ($I_R=50\text{nA Typ.}$)
- 3) High reliability

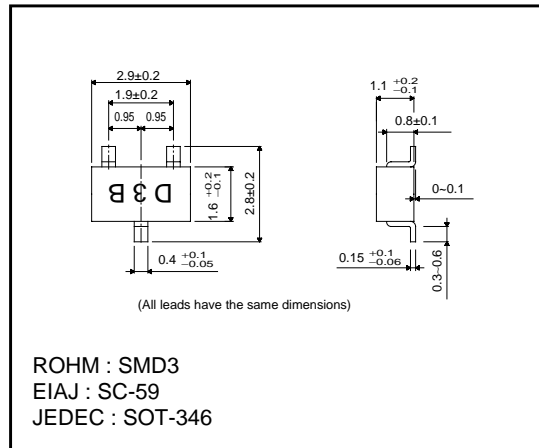
●Construction

Silicon epitaxial planar

●Circuit



●External dimensions (Units : mm)



●Absolute maximum ratings ($T_a=25^\circ\text{C}$)

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	$^\circ\text{C}$
Storage temperature	T_{stg}	-40~+125	$^\circ\text{C}$

* 60Hz for 1 μs

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

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

Note) ESD sensitive product handling required.

Diodes

● Electrical characteristic curves (Ta=25°C)

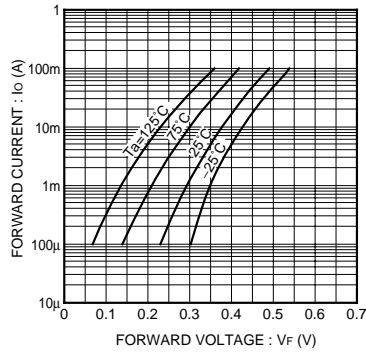


Fig.1 Forward characteristics

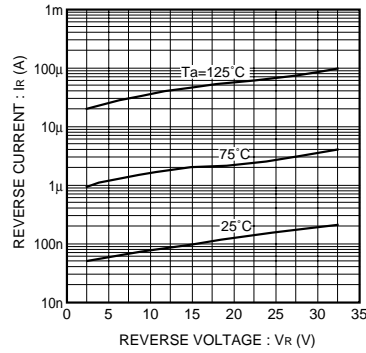


Fig.2 Reverse characteristics

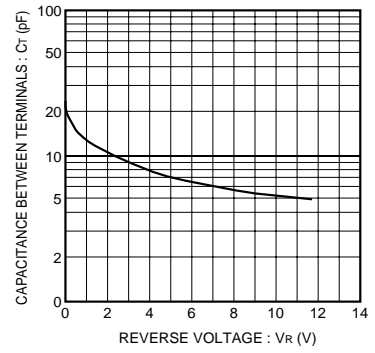


Fig.3 Capacitance between terminals characteristics

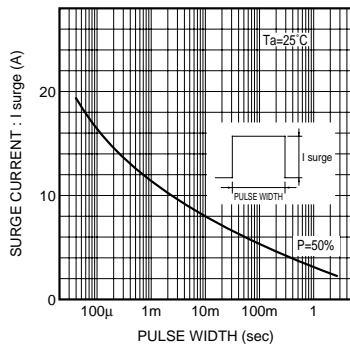


Fig.4 Surge current characteristics

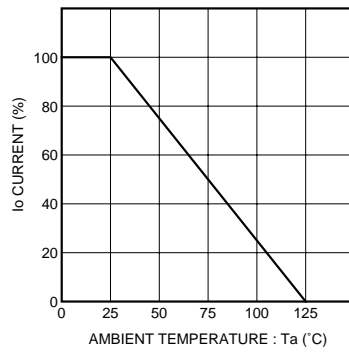


Fig.5 Derating curve (mounting on glass epoxy PCBs)