

High frequency rectifier schottky barrier diode

RB400D

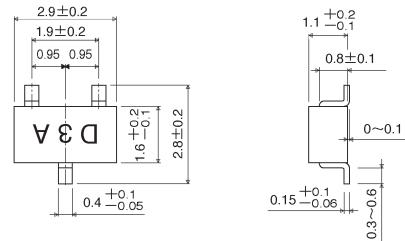
● Applications

High frequency rectification
Switching power supply

● Features

- 1) Small surface mounting type. (SMD3)
- 2) High reliability.
- 3) Low reverse current. (typical capability : 1μA)

● External dimensions (Units: mm)



(All leads have the same dimensions)

ROHM : SMD3
EIAJ : SC-59
JEDEC : SOT-23 similar



● Construction

Silicon epitaxial

● 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	0.5	A
Peak forward surge current	I _{FSM}	3	A
Junction temperature	T _j	125	°C
Storage temperature	T _{stg}	-40~+125	°C

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	—	0.49	0.55	V	$I_F=0.5\text{A}$
Reverse current	I_{R1}	—	1	50	μA	$V_R=25\text{V}$
	I_{R2}	—	—	30	μA	$V_R=10\text{V}$
Capacitance between terminals	C_t	—	125	—	pF	$V_R=0\text{V} f=1\text{MHz}$
	C_t	—	20	—	pF	$V_R=10\text{V} f=1\text{MHz}$

* ESD Sensitive product handling required.

● Electrical characteristic curves ($T_a = 25^\circ\text{C}$ unless specified otherwise)

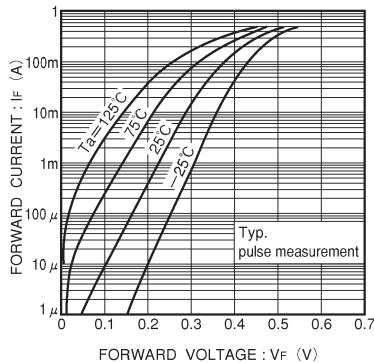


Fig. 1 Forward characteristics

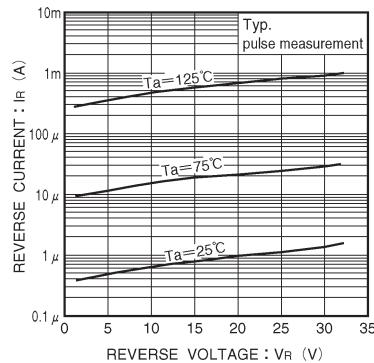


Fig. 2 Reverse characteristics

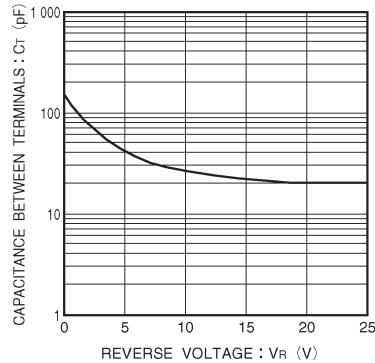


Fig. 3 Capacitance between terminals characteristics

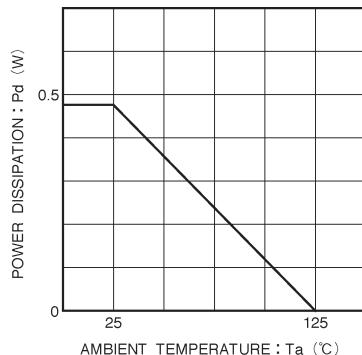


Fig. 4 Derating curve