High frequency rectifier schottky barrier diode

RB400D

●Applications

High frequency rectification
Switching power supply

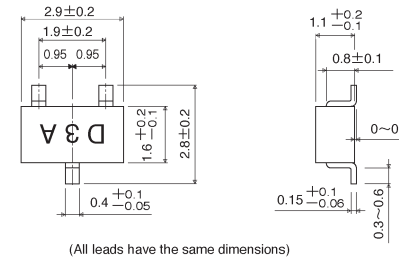
●Features

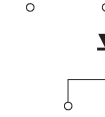
1) Small surface mounting type. (SMD3)
2) High reliability.
3) Low reverse current. (typical capability : 1μA)

●Construction

Silicon epitaxial

●External dimensions (Units: mm)





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

●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	Tj	125	℃
Storage temperature	Tstg	−40～+125	℃

●Electrical characteristics (Ta = 25°C)

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

∗ ESD Sensitive product handling required.

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

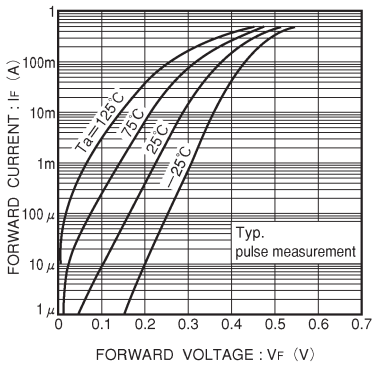


Fig. 1 Forward characteristics

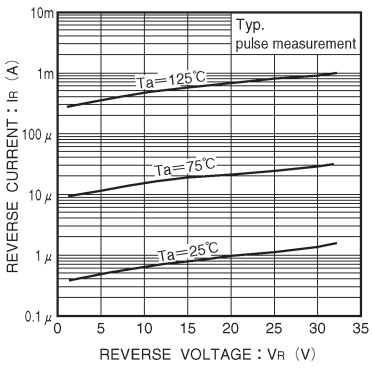


Fig. 2 Reverse characteristics

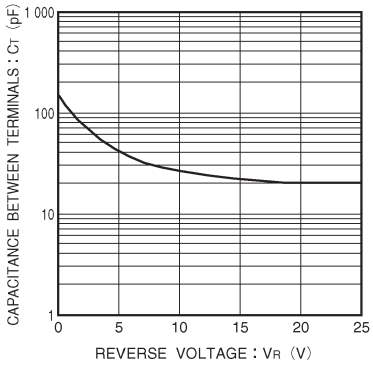


Fig. 3 Capacitance between terminals characteristics

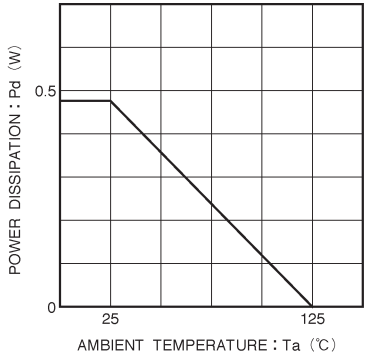


Fig. 4 Derating curve