Schottky barrier diode

RB491D

●**Applications**

Low-power rectification
For switching power supply

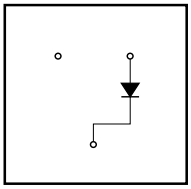
●**Features**

1) Small surface mounting type. (SMD3)
2) Ultra low V_F. (V_F=0.40V Typ. at 1A)
3) I_F=1.0A guaranteed despite the size.

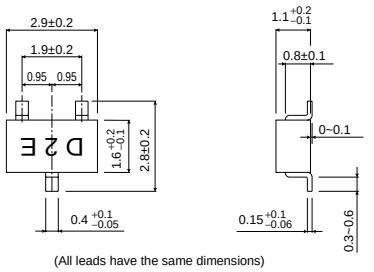
●**Construction**

Silicon epitaxial planar

●**Circuit**



●**External dimensions** (Units : mm)



(All leads have the same dimensions)

ROHM : SMD3
EIAJ : SC-59
JEDEC : SOT-346

●**Absolute maximum ratings** (Ta=25°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	Tj	125	˚C
Storage temperature	Tstg	−40~+125	˚C

* 60Hz for 1 cycle

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	–	–	0.45	V	I_F=1.0A
Reverse current	I_R	–	–	200	μA	V_R=20V

Note) ESD sensitive product handling required.

●**Electrical characteristic curves** (Ta=25°C)

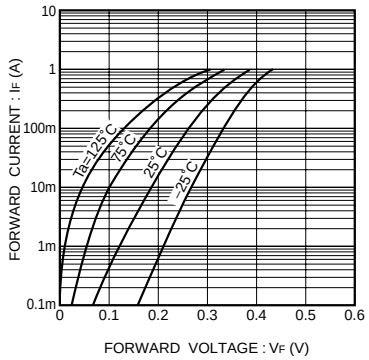


Fig.1 Forward characteristics

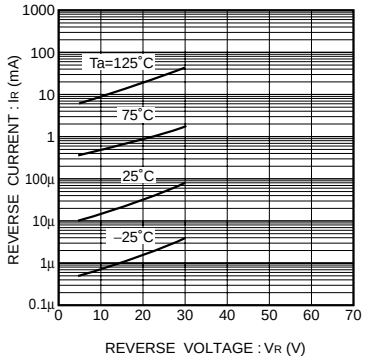


Fig.2 Reversecharacteristics

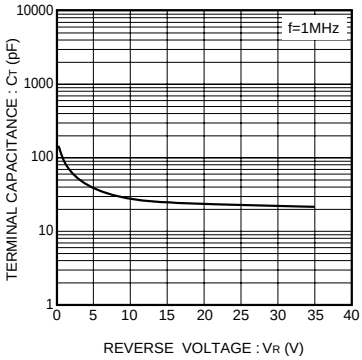


Fig.3 Capacitance between terminals characteristics

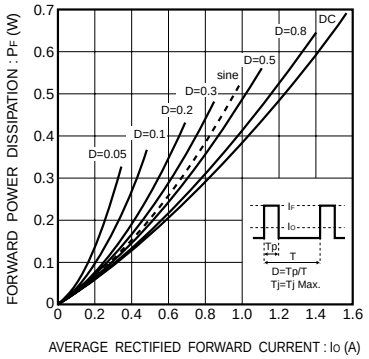


Fig.4 Forward power dissipation characteristics

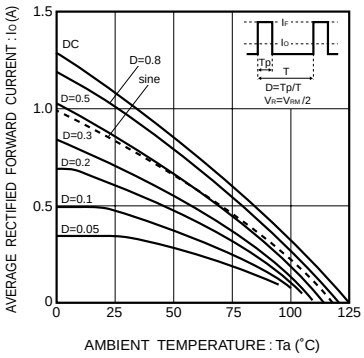


Fig.5 Derating curve (Io - Ta)