

Schottky barrier diode

RB705D

●Applications

General purpose detection
High speed switching

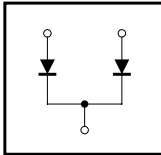
●Features

- 1) Small surface mounting type. (SMD3)
- 2) Low reverse current and low forward voltage.
- 3) Multiple diodes with common cathode configuration.

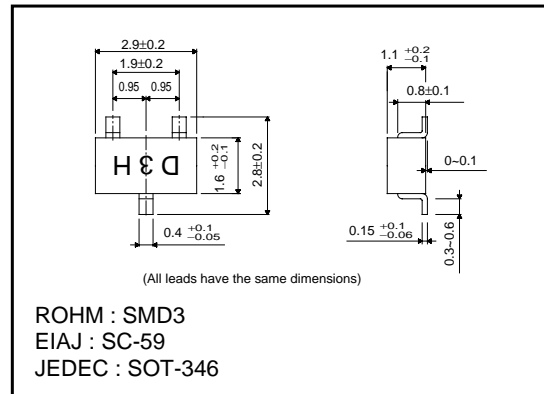
●Construction

Silicon epitaxial planar

●Circuit



●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	30	mA
Peak forward surge current*	I_{FSM}	200	mA
Junction temperature	T_j	125	°C
Storage temperature	T_{stg}	-40~+125	°C

*60 Hz for 1

●Electrical characteristics (Ta = 25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	–	–	0.37	V	$I_F=1\text{mA}$
Reverse current	I_R	–	–	1	μA	$V_R=10\text{V}$
Capacitance between terminals	C_T	–	2.0	–	pF	$V_R=1\text{V}, f=1\text{MHz}$

Note) ESD sensitive product handling required.

Diodes

●Electrical characteristic curves (Ta = 25°C)

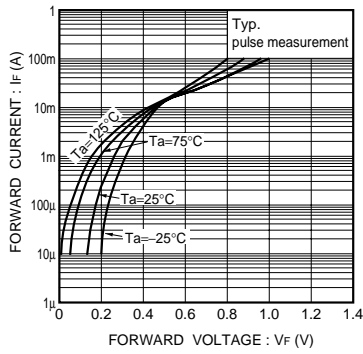


Fig. 1 Forward characteristics

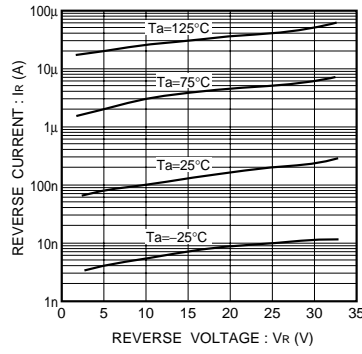


Fig. 2 Reverse characteristics

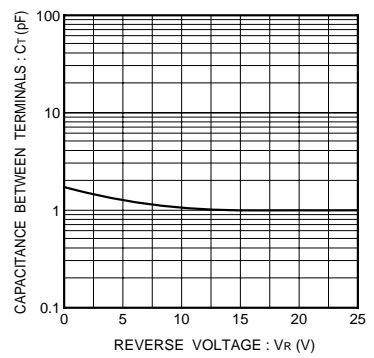


Fig. 3 Capacitance between terminals characteristics

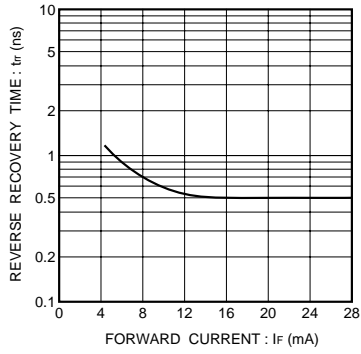


Fig. 4 Reverse recovery time characteristics

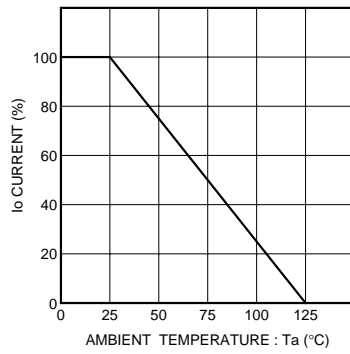


Fig. 5 Derating curve (mounting on glass epoxy PCBs)