

Schottky barrier diode

RB706F-40 / RB706D-40

● Applications

General purpose detection
High speed switching

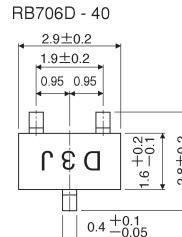
● Features

- 1) Compact dual element linear type. (SMD3 / UMD3)
- 2) High reliability.
- 3) Low reverse current and low forward voltage.

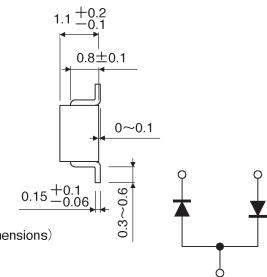
● Construction

Silicon epitaxial planar

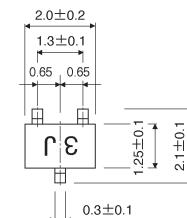
● External dimensions (Units: mm)



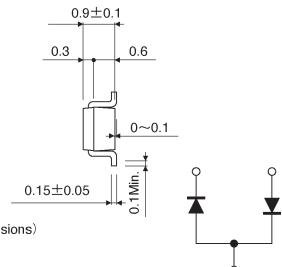
ROHM : SMD3
EIAJ : SC-59
JEDEC : SOT-23 similar



RB706F - 40



ROHM : UMD3
EIAJ : SC-70
JEDEC : SOT-323



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

Parameter	Symbol	Limits	Unit
Peak reverse voltage	V_{RM}	45	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 $\cap \cup$

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	—	0.26	0.37	V	$I_F=1\text{mA}$
Reverse current	I_R	—	0.05	1	μA	$V_R=10\text{V}$
Capacitance between terminals	C_T	—	2.0	—	pF	$V_R=1\text{V}$, $f=1\text{MHz}$

* ESD sensitive product handling required.

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

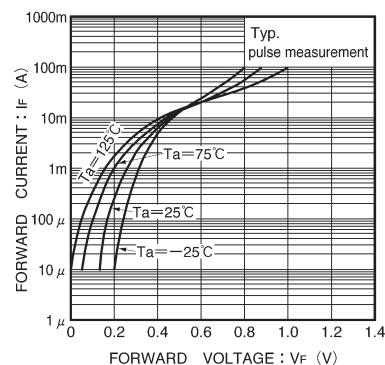


Fig. 1 Forward characteristics

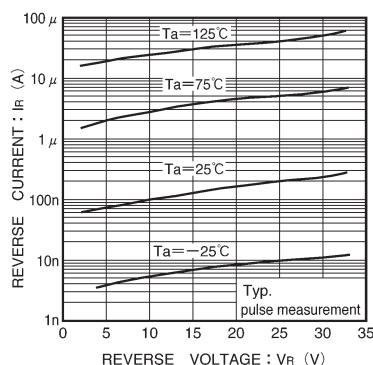


Fig. 2 Reverse characteristics

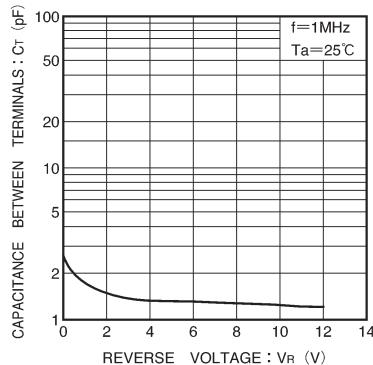


Fig. 3 Capacitance between terminals characteristics

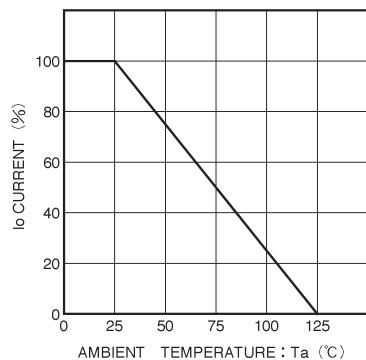


Fig. 4. Derating curve
(mounting on glass epoxy PCBs)