

# Schottky barrier diode

## RB721Q-40

### ● Applications

High speed switching

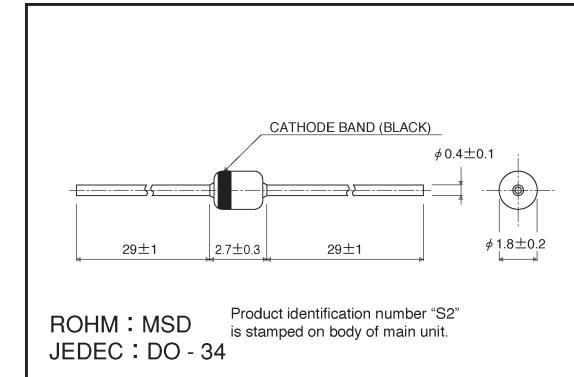
### ● Features

- 1) Glass-sealed envelope for high reliability. (MSD)
- 2) Small pitch enables insertion on PCBs.
- 3) Low reverse current and low forward voltage.

### ● Construction

Silicon epitaxial

### ● External dimensions (Units: mm)



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

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  $\text{ms}$

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	$V_F$	—	0.31	0.37	V	$I_F=1\text{mA}$
Reverse current	$I_R$	—	0.06	0.5	$\mu\text{A}$	$V_R=25\text{V}$
Capacitance between terminals	$C_T$	—	2.0	—	pF	$V_R=1\text{V}$ , $f=1\text{MHz}$

\* ESD sensitive product handling required.

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

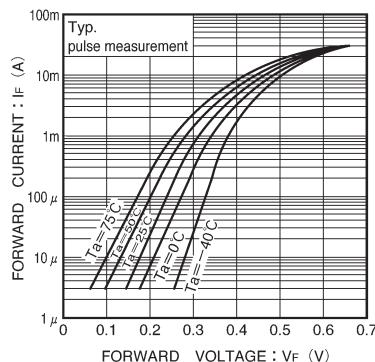


Fig. 1 Forward characteristics

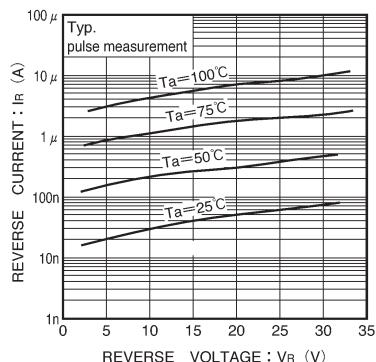


Fig. 2 Reverse characteristics

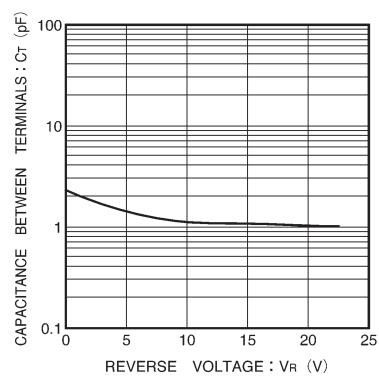


Fig. 3 Capacitance between terminals characteristics

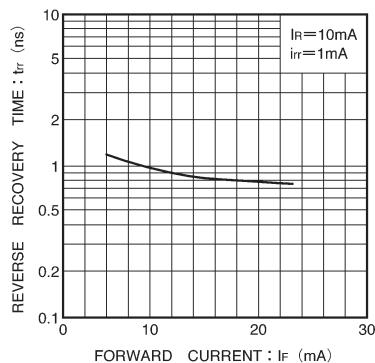


Fig. 4 Reverse recovery time characteristics

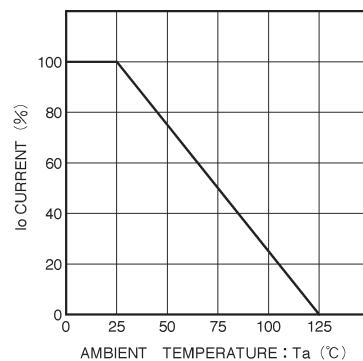


Fig. 5 Derating curve  
(mounting on glass epoxy PCBs)