

# Schottky barrier diode

## RB441Q-40

### ●Applications

Low current rectification

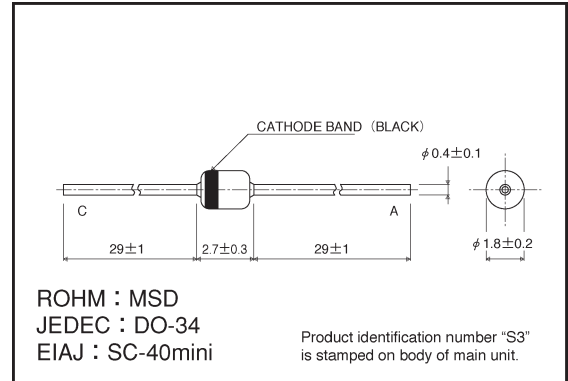
### ●Features

- 1) Glass sealed envelope for high reliability. (MSD)
- 2) Small pitch enables insertion on PCBs.
- 3) Low forward voltage.  
(actual capability : 0.45V at 100mA)

### ●Construction

Silicon epitaxial

### ●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	$I_o$	0.1	A
Peak forward surge current	$I_{FSM}$	1	A
Junction temperature	$T_j$	125	°C
Storage temperature	$T_{stg}$	-40~+125	°C

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	$V_{F1}$	—	0.28	0.34	V	$I_F=10\text{mA}$
Forward voltage	$V_{F2}$	—	0.45	0.55	V	$I_F=100\text{mA}$
Reverse current	$I_R$	—	9	100	$\mu\text{A}$	$V_R=40\text{V}$
Capacitance between terminals	$C_T$	—	6.0	—	pF	$V_R=10\text{V}$ , $f=1\text{MHz}$

\* ESD sensitive product handling required.

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

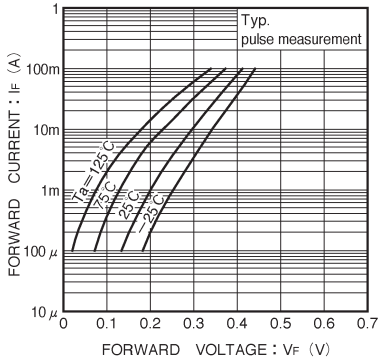


Fig. 1 Forward characteristics

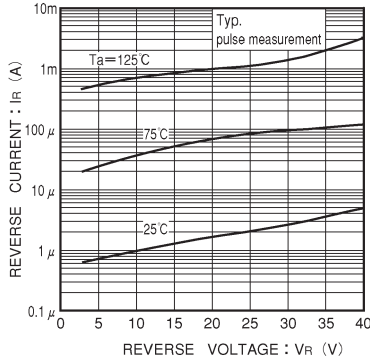


Fig. 2 Reverse characteristics

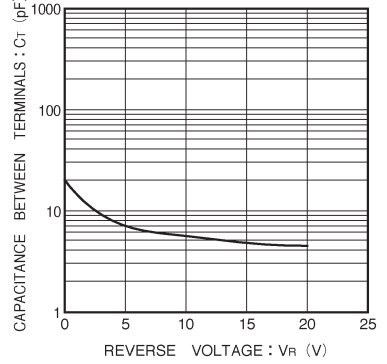


Fig. 3 Capacitance between terminals characteristics

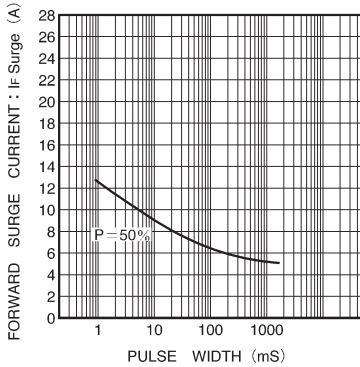


Fig. 4 Forward surge current characteristics

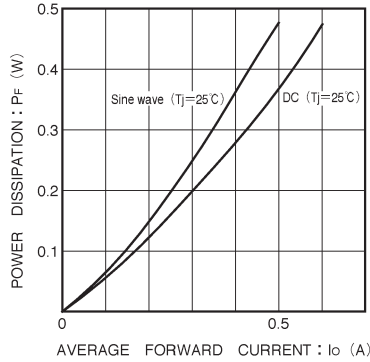


Fig. 5 Mean rectifying current characteristics

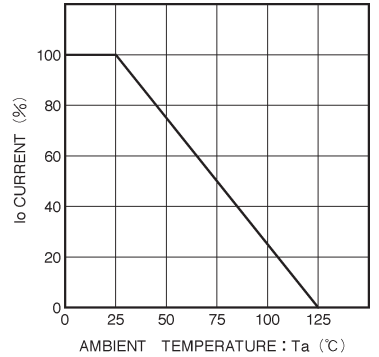


Fig. 6 Derating curve (mounting on glass epoxy PCBs)