

# Schottky barrier diode

## RB461F

### ●Applications

Low-power rectification  
For switching power supply

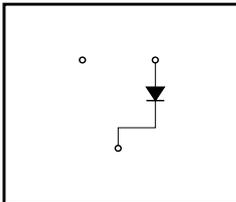
### ●Features

- 1) Small surface mounting type. (UMD3)
- 2) Ultra low  $V_F$ . ( $V_F=0.45V$  Typ. at 0.7A)
- 3)  $I_F=0.7A$  guaranteed despite the size.

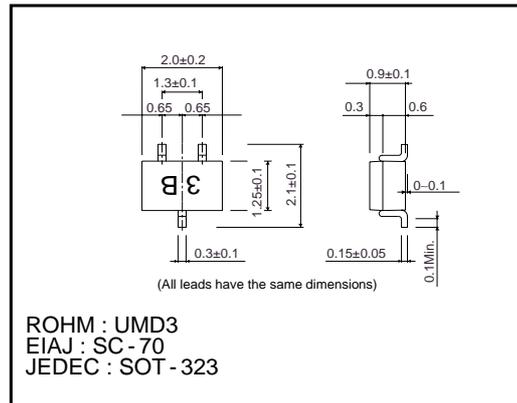
### ●Construction

Silicon epitaxial planar

### ●Circuit



### ●External dimensions (Units : mm)



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

Parameter	Symbol	Limits	Unit
Peak reverse voltage	$V_{RM}$	25	V
DC reverse voltage	$V_R$	20	V
DC forward current	$I_F$	0.7	A
Peak forward surge current*	$I_{FSM}$	3	A
Junction temperature	$T_j$	125	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-40~+125	$^\circ\text{C}$

\* 60Hz for 1

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	$V_F$	-	-	0.49	V	$I_F=700\text{mA}$
Reverse current	$I_R$	-	-	200	$\mu\text{A}$	$V_R=20\text{V}$

Note) ESD sensitive product handling required.

Diodes

●Electrical characteristic curves (Ta=25°C)

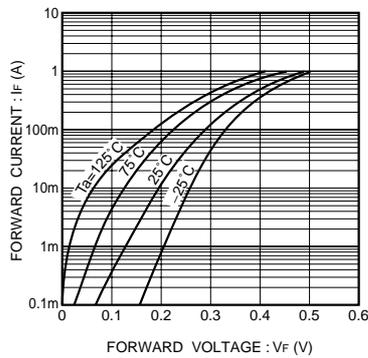


Fig.1 Forward characteristics

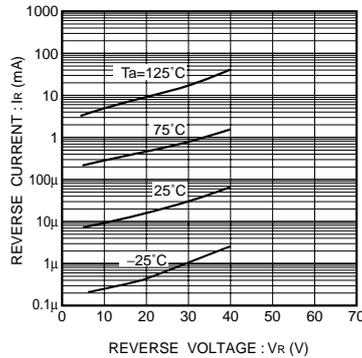


Fig.2 Reverse characteristics

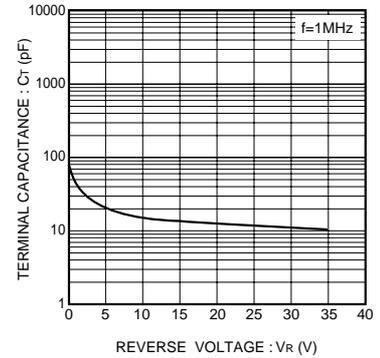


Fig.3 Capacitance between terminals characteristics

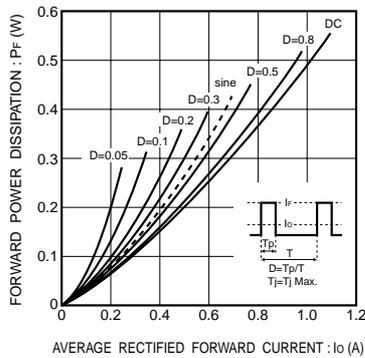


Fig.4 Forward power dissipation characteristics

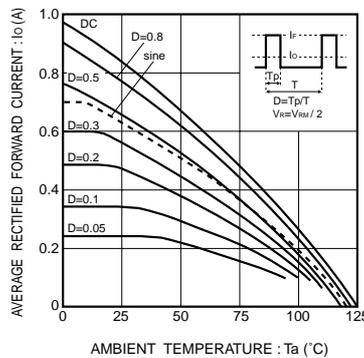


Fig.5 Derating curve (when mounted on a glass epoxy PCBs board)