

Schottky barrier diode

RB461F

●Applications

Low-power rectification
For switching power supply

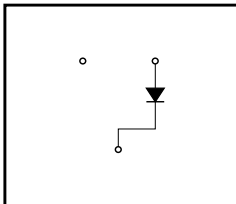
●Features

- 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.

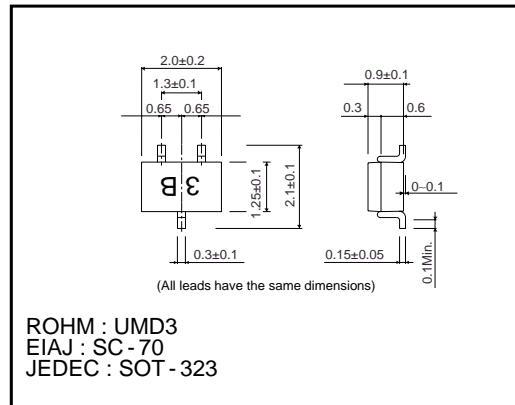
●Construction

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 μs

●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	μA	$V_R=20\text{V}$

Note) ESD sensitive product handling required.

Diodes

●Electrical characteristic curves (Ta=25°C)

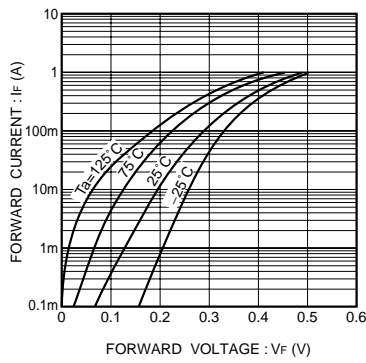


Fig.1 Forward characteristics

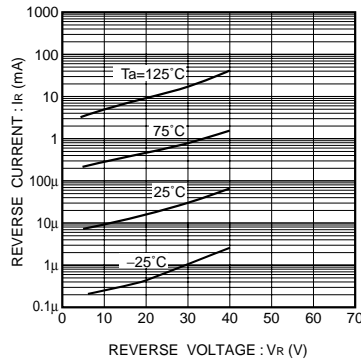


Fig.2 Reverse characteristics

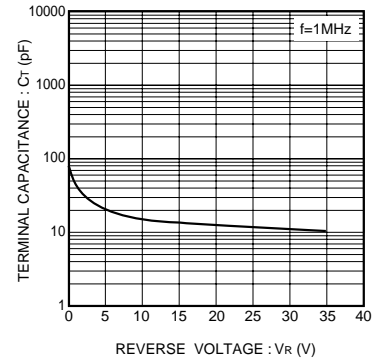


Fig.3 Capacitance between terminals characteristics

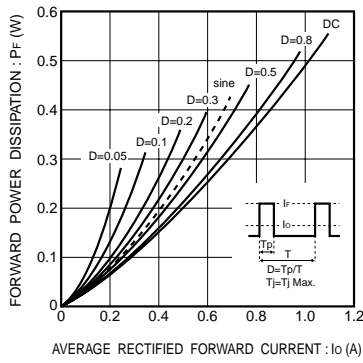


Fig.4 Forward power dissipation characteristics

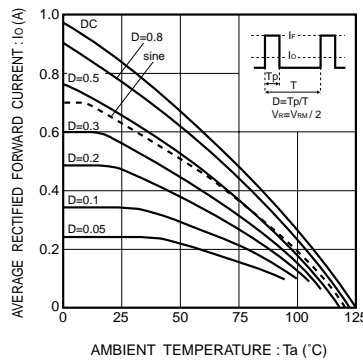


Fig.5 Derating curve (when mounted on a glass epoxy PCBs board)