

High frequency rectifier schottky barrier diode

RB461F
New

●Applications

Low power rectification
For switching power supply

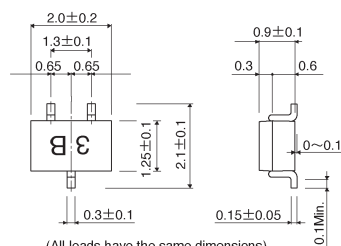
●Features

- 1) Small surface mounting type. (UMD3)
- 2) Extremely low forward drop voltage. (typical capability 0.45V at 0.7A)
- 3) $I_F = 0.7A$ achieved despite the size.

●Construction

Silicon epitaxial planar

●External dimensions (Units: mm)



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}	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}	$-40 \sim +125$	$^\circ\text{C}$

* 60 Hz for 1 ms

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	—	0.45	0.49	V	$I_F = 700\text{mA}$
Reverse current	I_R	—	—	200	μA	$V_R = 20\text{V}$

* ESD sensitive product handling required.

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

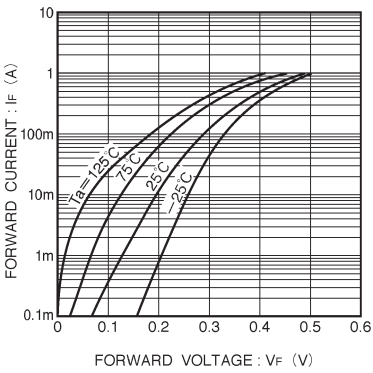


Fig. 1 Forward characteristics

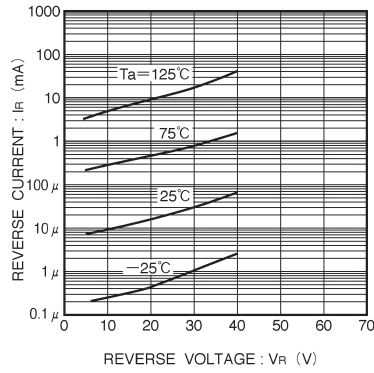


Fig. 2 Reverse characteristics

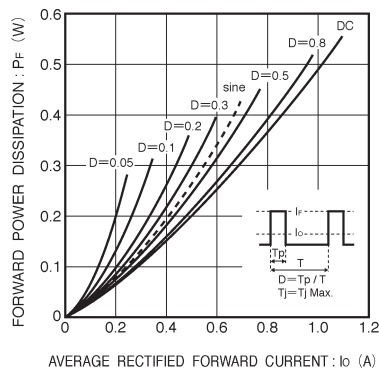


Fig. 3 Forward power dissipation characteristics

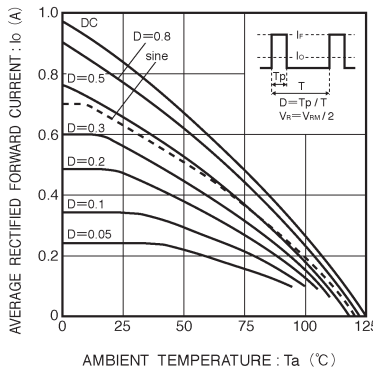


Fig. 4 Derating curve
(when mounted on a glass epoxy PCBs board)