

Schottky barrier diode

RB715W / RB715F

● Applications

General purpose detection
High speed switching

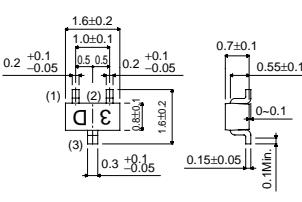
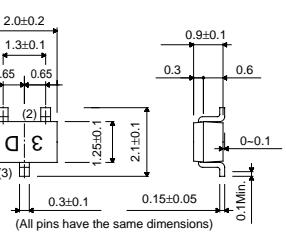
● Features

- 1) Small surface mounting type (EMD3, UMD3)
- 2) Low V_F and low I_R
- 3) High reliability

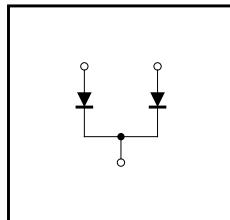
● Construction

Silicon epitaxial planar

● External dimensions (Units : mm)

RB715W	RB715F
 <p>ROHM : EMD3 EIAJ : SC - 75 JEDEC : SOT - 416</p>	 <p>ROHM : UMD3 EIAJ : SC - 70 JEDEC : SOT - 323</p> <p>(All pins have the same dimensions)</p>

● Circuit



● Absolute maximum ratings ($T_a=25^\circ C$)

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	$^\circ C$
Storage temperature	T_{stg}	-40~+125	$^\circ C$

* 60 Hz for 1 \triangle

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	-	-	0.37	V	$I_F=1\text{mA}$
Reverse current	I_R	-	-	1	μA	$V_R=10\text{V}$
Capacitance between terminals	C_T	-	2.0	-	pF	$V_R=1\text{V}, f=1\text{MHz}$

Note) ESD sensitive product handling required.

Diodes

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

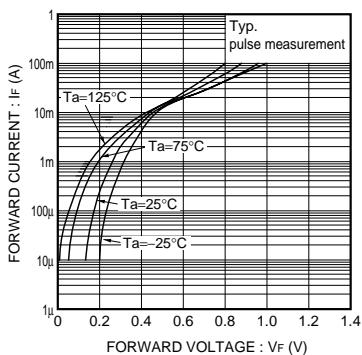


Fig. 1 Forward characteristics

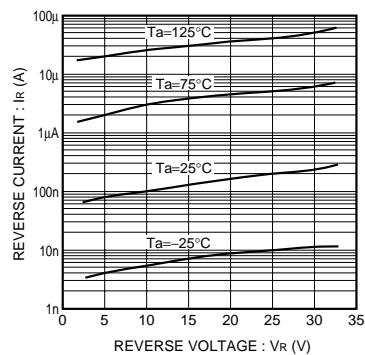


Fig. 2 Reverse characteristics

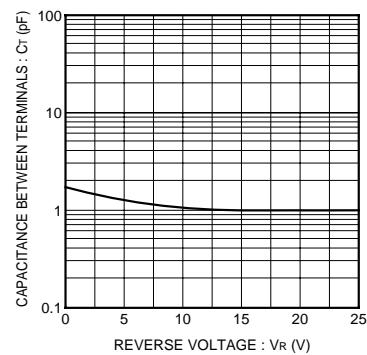


Fig. 3 Capacitance between terminals characteristics

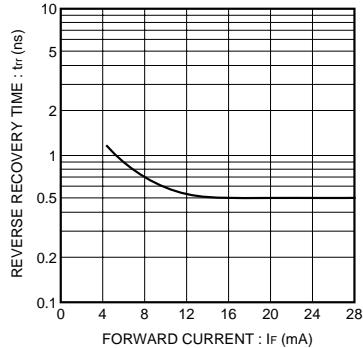


Fig. 4 Reverse recovery time characteristics