

Schottky barrier diode

RB551V-30

●Applications

High-frequency rectification
Switching regulators

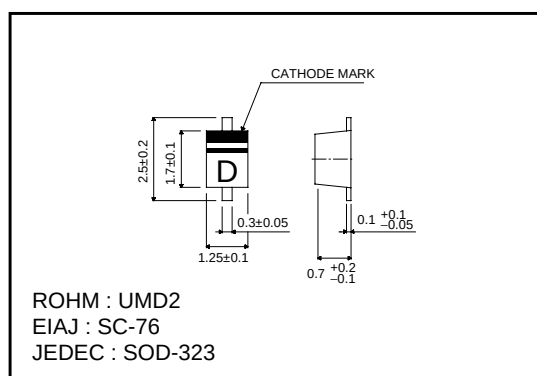
●Features

- 1) Small surface mounting type. (UMD2)
- 2) High reliability.
- 3) Ultra low VF (0.41V Typ. @ 0.5A)

●Construction

Silicon epitaxial planar

●External dimensions (Units : mm)



●Absolute maximum ratings (Ta = 25°C)

Parameter	Symbol	Limits	Unit
Peak reverse voltage	V_{RM}	30	V
DC reverse voltage	V_R	20	V
Mean rectifying current	I_o	0.5	A
Peak forward surge current*	I_{FSM}	2	A
Junction temperature	T_j	125	°C
Storage temperature	T_{stg}	-40~+125	°C

* 60 Hz for 1 ms

●Electrical characteristics (Ta = 25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_{F1}	—	0.30	0.36	V	$I_F = 100mA$
	V_{F2}	—	0.41	0.47	V	$I_F = 500mA$
Reverse current	I_R	—	—	100	μA	$V_R = 20V$

Diodes

●Electrical characteristic curves (Ta = 25°C)

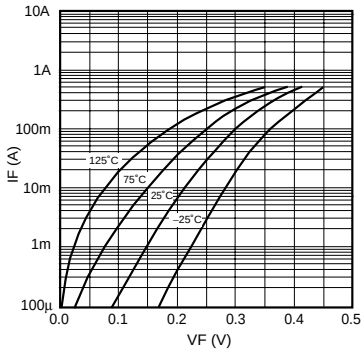


Fig.1 Forward characteristics

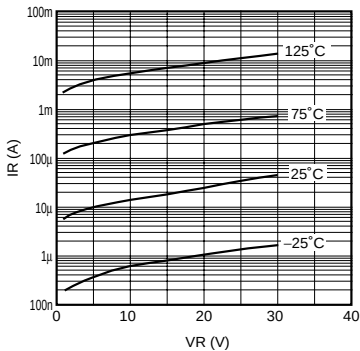


Fig.2 Reverse characteristics

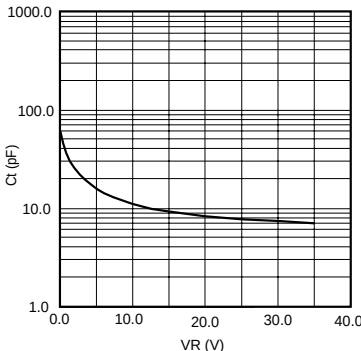


Fig.3 Capacitance between terminals characteristics

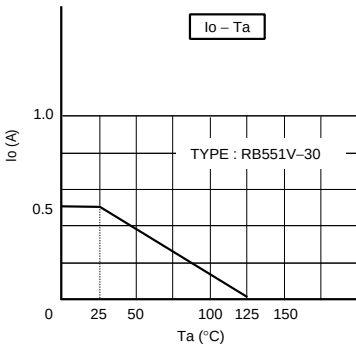


Fig.4 Derating curve