

Schottky barrier diode

RB551V-30

●Applications

High-frequency rectification
Switching regulators

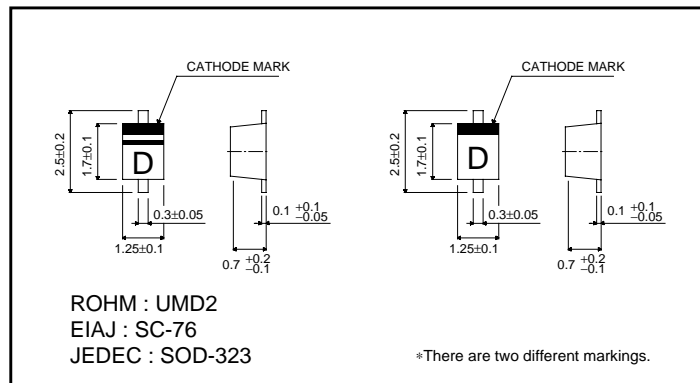
●Features

- 1) Small surface mounting type.
(UMD2)
- 2) Ultra low V_F .
($V_F = 0.41V$ Typ. at 0.5A)
- 3) High reliability.

●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

* 60Hz for 1 μ s

●Electrical characteristics (Ta = 25°C)

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

Diodes

●Electrical characteristic curves (Ta = 25°C)

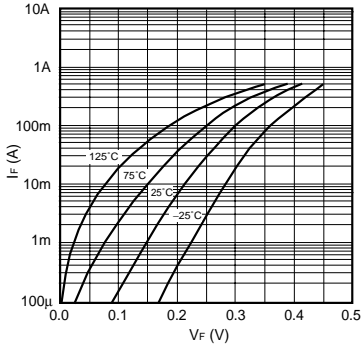


Fig.1 Forward characteristics

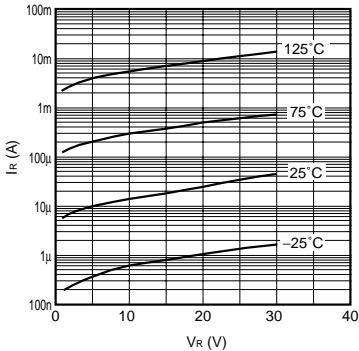


Fig.2 Reverse characteristics

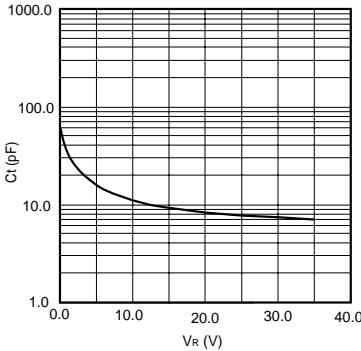


Fig.3 Capacitance between terminals characteristics

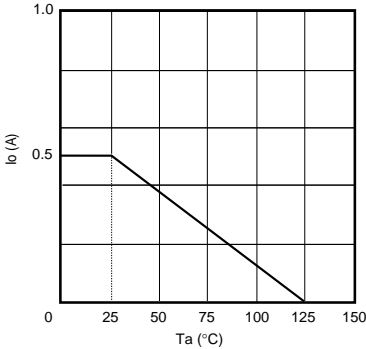


Fig.4 Derating curve