

# Schottky barrier diode

## RB551V-30

### ●Applications

High-frequency rectification  
Switching regulators

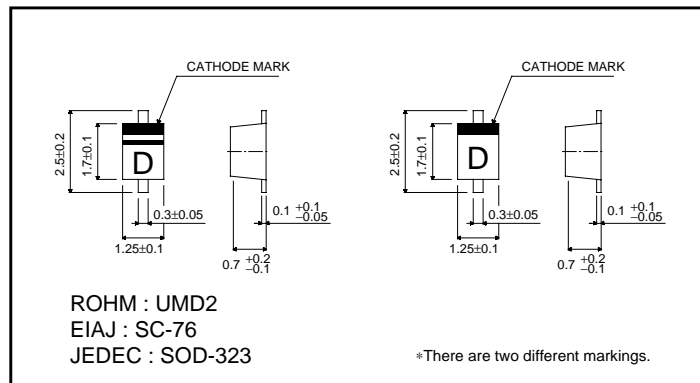
### ●Features

- 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  $\mu$ 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	$\mu A$	$V_R = 20V$

Diodes

●Electrical characteristic curves (Ta = 25°C)

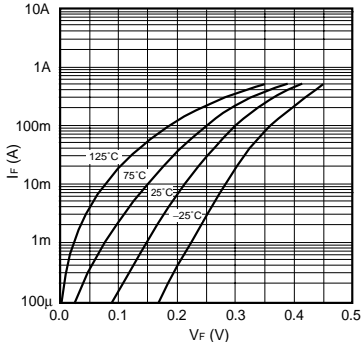


Fig.1 Forward characteristics

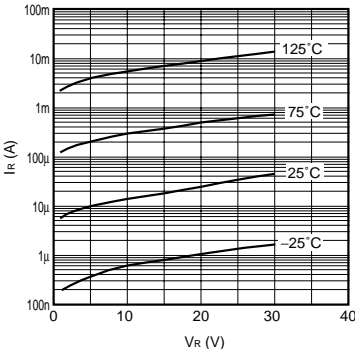


Fig.2 Reverse characteristics

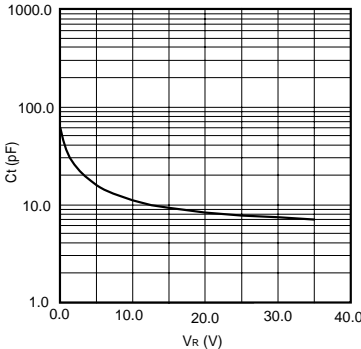


Fig.3 Capacitance between terminals characteristics

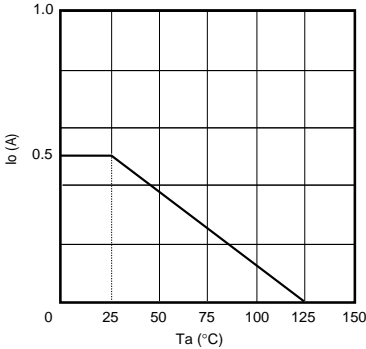


Fig.4 Derating curve