

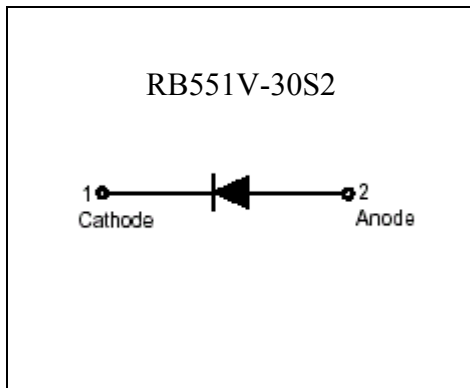
# Small Signal Schottky Barrier diode

## RB551V-30S2

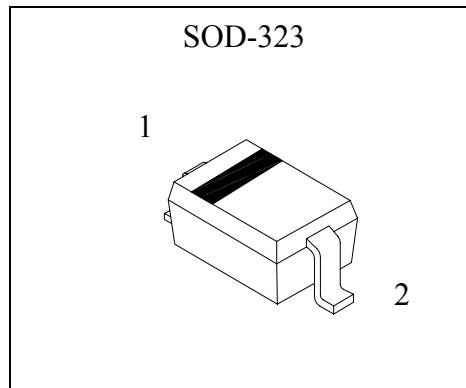
### Description

The RB551V-30S2 is a silicon Schottky barrier diode fabricated in planar technology, and encapsulated in a small SOD-323 plastic SMD package.

### Symbol



### Outline



### Features

- Small plastic SMD package
- Ultra low  $V_F$ ,  $V_F=0.45$  typ. at 0.5A
- High reliability

### Applications

- High frequency rectification
- Switching regulators

### Absolute Maximum Ratings @ $T_A=25^{\circ}C$

Parameters	Symbol	Min	Max	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	$^{\circ}C$
Storage Temperature	$T_{stg}$	-40	+125	$^{\circ}C$



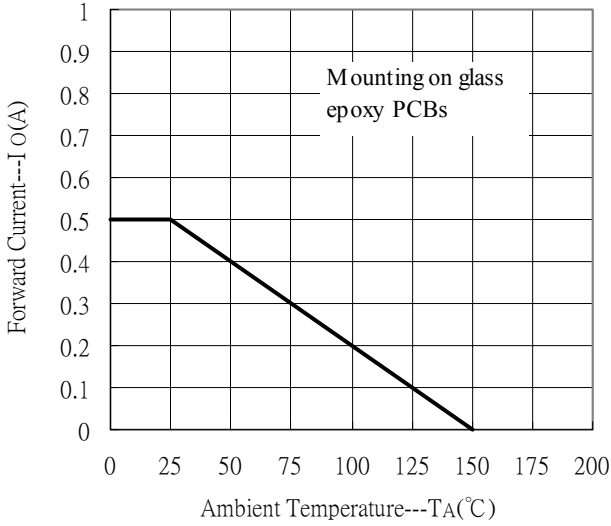
**Electrical Characteristics @  $T_A=25^{\circ}\text{C}$  unless otherwise specified**

Parameters	Symbol	Conditions	Min	Typ.	Max	Unit
Forward voltage	$V_F 1$	$I_F=100\text{mA}$	-	-	0.36	V
	$V_F 2$	$I_F=500\text{mA}$	-	-	0.5	V
Reverse leakage current	$I_R$	$V_R=20\text{V}$	-	-	100	$\mu\text{A}$

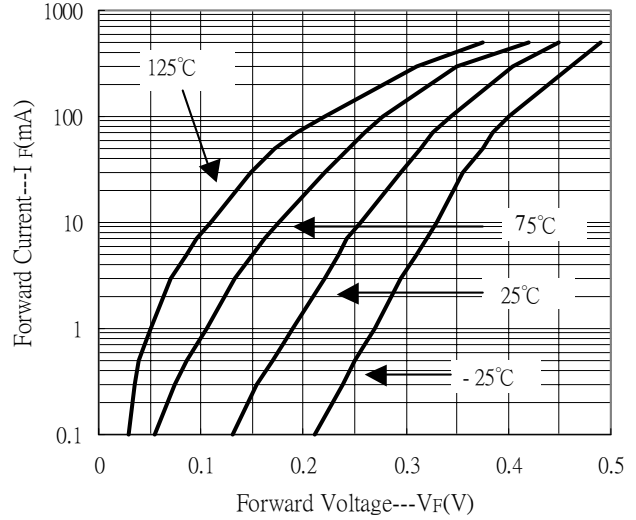


### Characteristic Curves

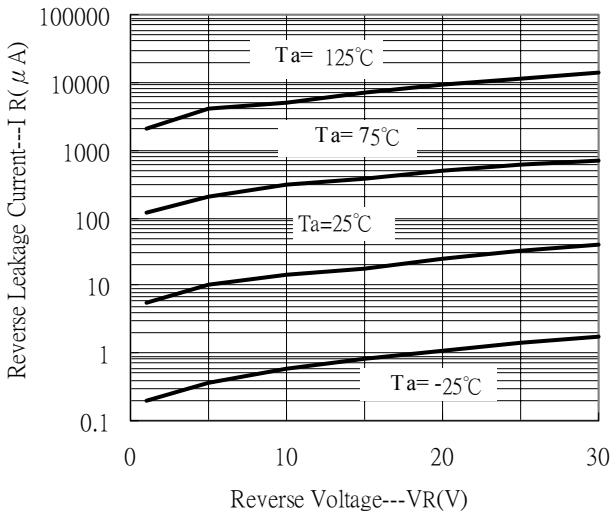
Forward Current Derating Curve



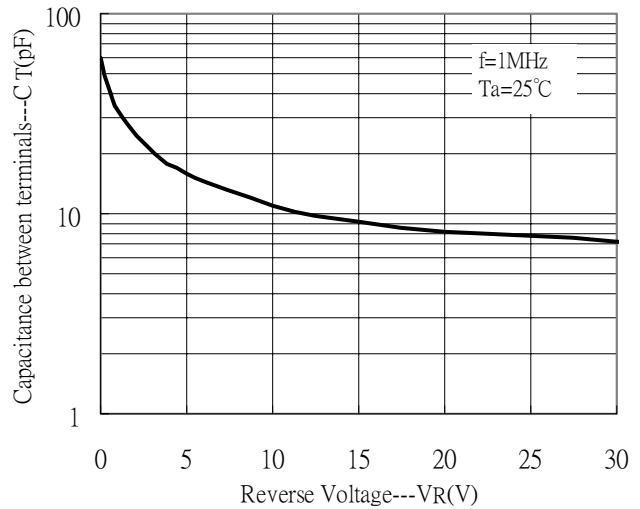
Forward Current vs Forward Voltage



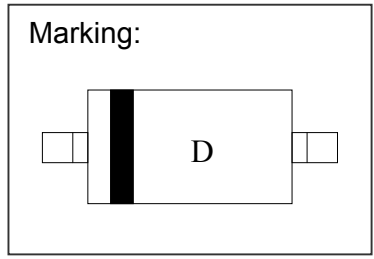
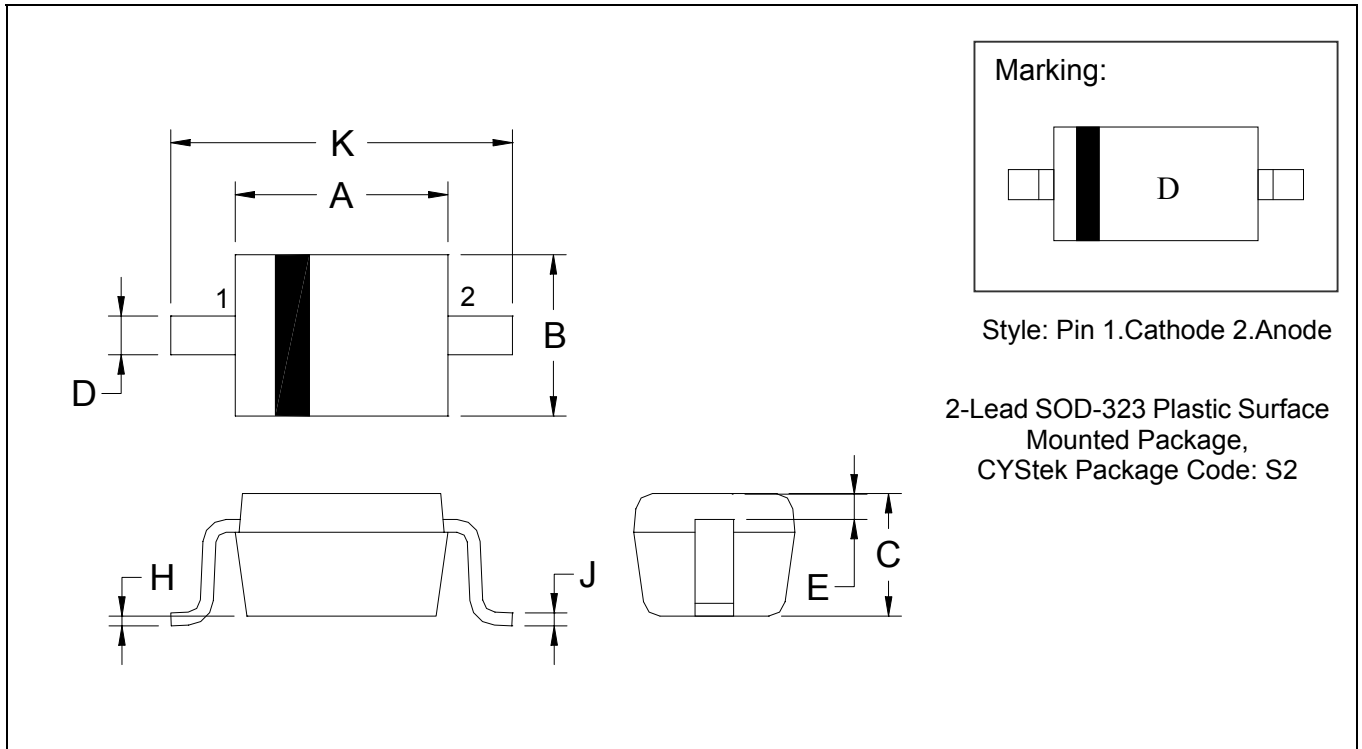
Reverse Leakage Current vs Reverse Voltage



Capacitance vs Reverse Voltage



**SOD-323 Dimension**



Style: Pin 1.Cathode 2.Anode

2-Lead SOD-323 Plastic Surface Mounted Package, CYStek Package Code: S2

\*: Typical

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.0630	0.0709	1.60	1.80	E	0.0060 REF		0.15 REF	
B	0.0453	0.0531	1.15	1.35	H	0.0000	0.0040	0.00	0.10
C	0.0315	0.0394	0.80	1.00	J	0.0035	0.0070	0.089	0.177
D	0.0098	0.0157	0.25	0.40	K	0.0906	0.1063	2.30	2.70

Notes: 1.Controlling dimension : millimeters.  
 2.Lead thickness specified per L/F drawing with solder plating.  
 3.If there is any question with packing specification or packing method, please contact your local CYStek sales office.

Material:  
 • Lead: 42 Alloy ; solder plating  
 • Mold Compound: Epoxy resin family, flammability solid burning class: UL94V-0

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