

## Small Signal Schottky diode

# RB520S-30C2

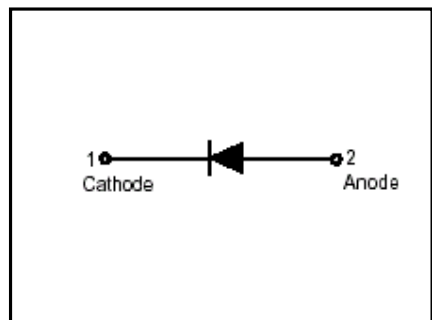
### Description

These devices are designed for high speed switching applications, circuit protection, and voltage clamping. Extremely low forward voltage reduces conduction loss. Miniature surface mount package is excellent for hand held and portable applications where space is limited.

### Features

- Extremely small surface mounting type.(SC-79/SOD523)
- Extremely fast switching speed
- Low reverse current
- Extremely low forward voltage.( $V_F=0.6V$  max. at 200mA)

### Symbol



### Outline



### Absolute Maximum Ratings

- Maximum Temperatures
 

Storage Temperature $T_{stg}$ .....	-55~+150°C
Junction Temperature $T_j$ .....	+150°C
- Maximum Voltages and Currents ( $T_a=25^\circ C$ )
 

DC Reverse Voltage $V_R$ .....	30 V
Mean Rectifying Current $I_F$ .....	200 mA
- Thermal Characteristics
 

Total Device Dissipation @ $T_A=25^\circ C$ (Note) $P_d$ .....	200mW
Thermal Resistance, Junction to Ambient $R_{\theta JA}$ .....	625°C/W

**Note: FR-5 board minimum pad.**

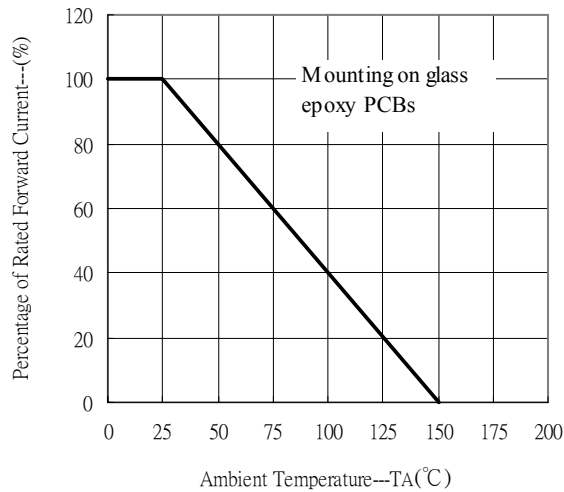


**Characteristics (Ta=25°C)**

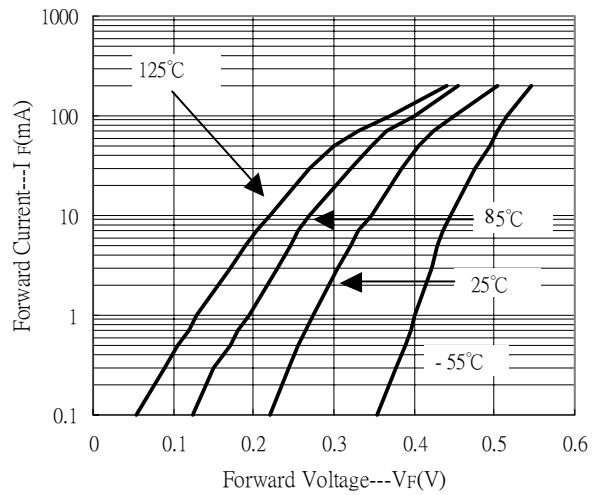
Characteristic	Symbol	Condition	Min.	Max.	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =200mA	-	600	mV
Reverse Leakage Current	I <sub>R</sub>	V <sub>R</sub> =10V	-	1	μA

**Characteristic Curves**

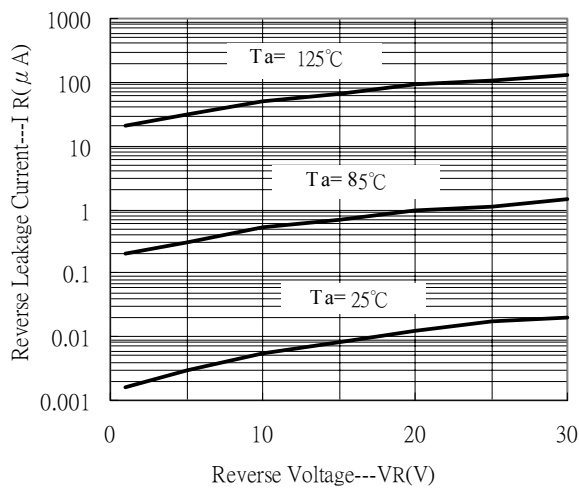
Forward Current Derating Curve



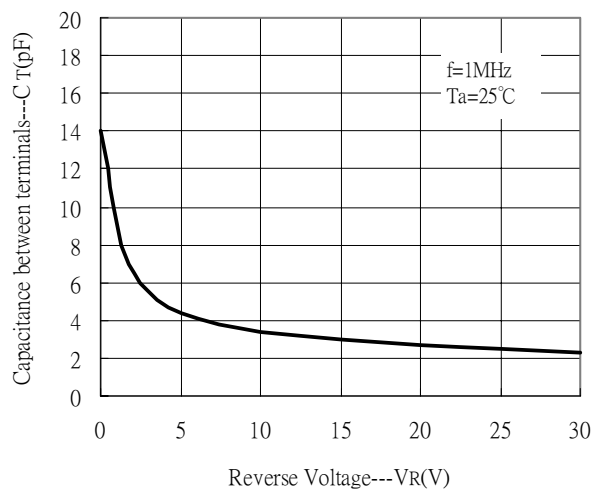
Forward Current vs Forward Voltage



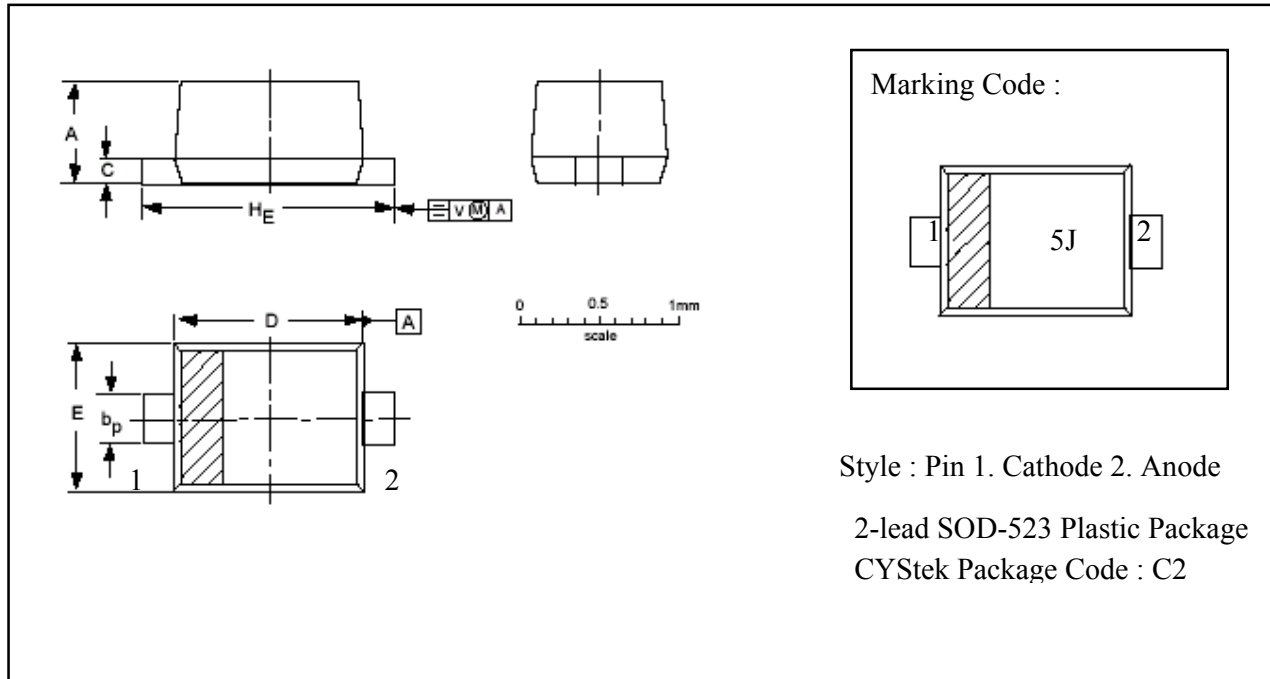
Reverse Leakage Current vs Reverse Voltage



Capacitance vs Reverse Voltage



**SOD-523 Dimension**



Marking Code :

Style : Pin 1. Cathode 2. Anode

2-lead SOD-523 Plastic Package  
 CYStek Package Code : C2

\*: Typical

DIM	Millimeters		DIM	Millimeters	
	Min	.Max.		Min.	Max.
A	0.5	0.7	E	0.7	0.9
b <sub>p</sub>	0.25	0.35	H <sub>E</sub>	1.5	1.7
c	0.1	0.2	V	0.15(typ)	
D	1.1	1.3			

**Notes:** 1. Maximum lead thickness includes lead finish thickness, and minimum lead thickness is the minimum thickness of base material.  
 2. 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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