

Small Signal Schottky diode

RB520S-30C2

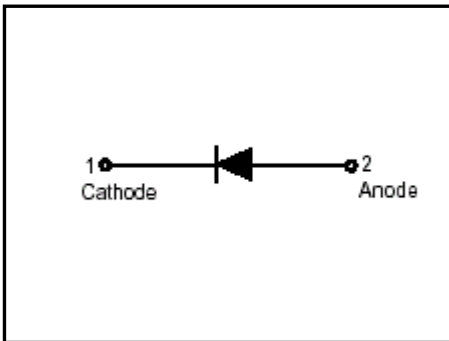
Description

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.

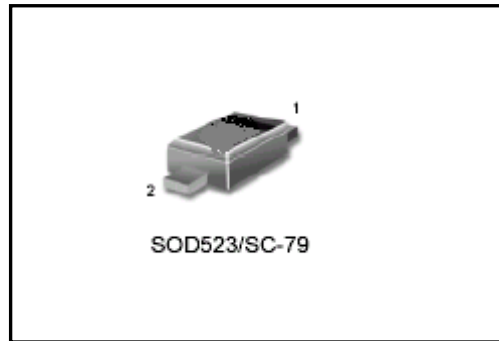
Features

- 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.

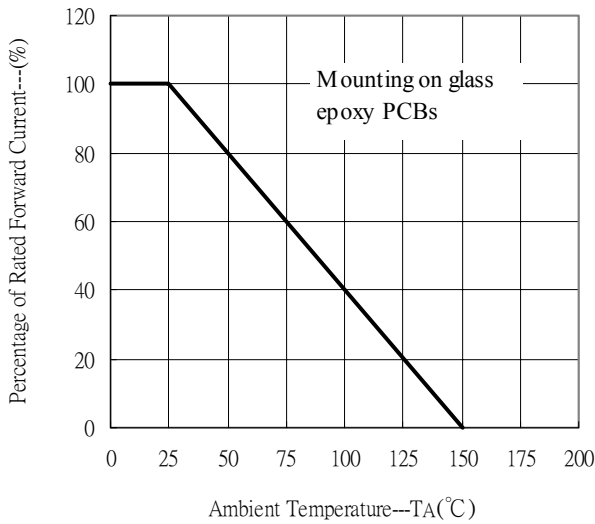


Characteristics (Ta=25°C)

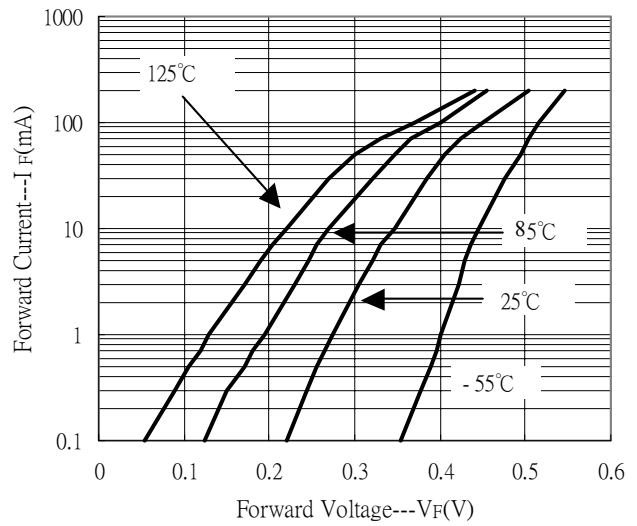
| Characteristic | Symbol | Condition | Min. | Max. | Unit |
|-------------------------|----------------|-----------------------|------|------|------|
| Forward Voltage | V _F | I _F =200mA | - | 600 | mV |
| Reverse Leakage Current | I _R | V _R =10V | - | 1 | μA |

Characteristic Curves

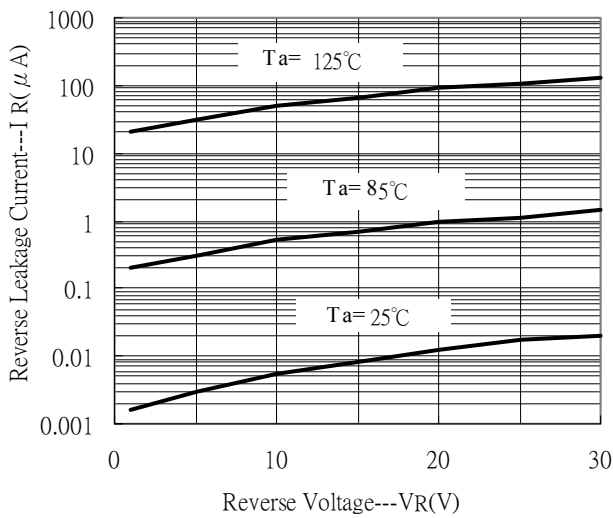
Forward Current Derating Curve



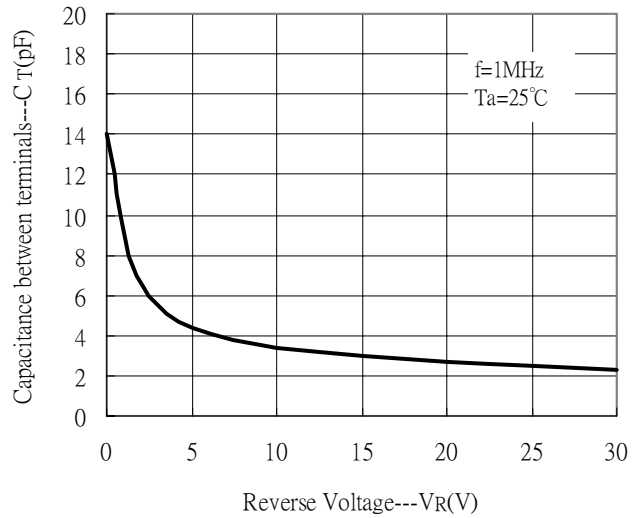
Forward Current vs Forward Voltage



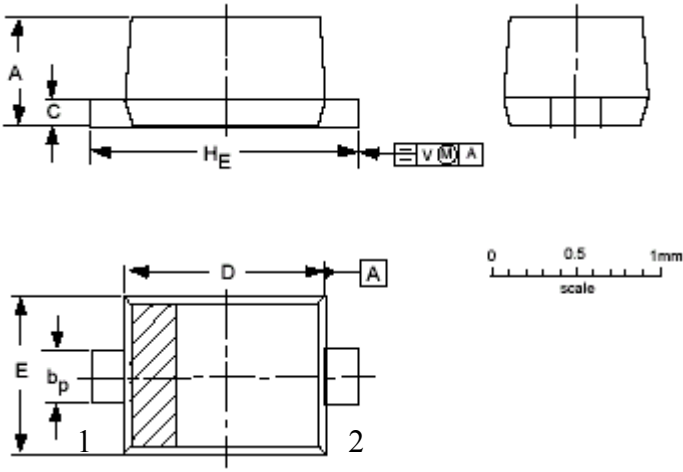
Reverse Leakage Current vs Reverse Voltage



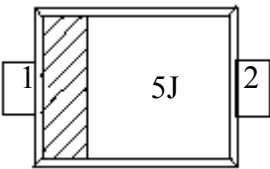
Capacitance vs Reverse Voltage



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 _p | 0.25 | 0.35 | H _E | 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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