

# 200mW SOD-523 SURFACE MOUNT Very Small Outline Flat Lead Plastic Package Schottky Barrier Diode

**Absolute Maximum Ratings** T<sub>A</sub> = 25°C unless otherwise noted

| Symbol                | Parameter                      | Value       | Units |  |
|-----------------------|--------------------------------|-------------|-------|--|
| P <sub>D</sub>        | Power Dissipation              | 200         | mW    |  |
| T <sub>STG</sub>      | Storage Temperature Range      | -55 to +125 | °C    |  |
| TJ                    | Operating Junction Temperature | +125        | °C    |  |
| <b>V</b> <sub>R</sub> | Reverse Voltage                | 30          | V     |  |
| I <sub>F(AV)</sub>    | Average Forward Current        | 200         | mA    |  |

These ratings are limiting values above which the serviceability of the diode may be impaired.



# **Specification Features:**

- Low Forward Voltage Drop
- Flat Lead SOD-523 Small Outline Plastic Package
- Extremely Small SOD-523 Package
- Surface Device Type Mounting
- RoHS Compliant
- Green EMC
- Matte Tin(Sn) Lead Finish
- Band Indicates Cathode

#### **DEVICE MARKING CODES:**

| Device Type | Device Marking |  |  |
|-------------|----------------|--|--|
| TCRB521S-30 | 2B             |  |  |

#### **Electrical Characteristics** T<sub>A</sub> = 25°C unless otherwise noted

| Symbol         | Parameter               | Test Condition        | Limits |     | Unit  |
|----------------|-------------------------|-----------------------|--------|-----|-------|
|                |                         |                       | Min    | Max | Onit  |
| B <sub>V</sub> | Breakdown Voltage       | I <sub>R</sub> =500μA | 30     |     | Volts |
| I <sub>R</sub> | Reverse Leakage Current | V <sub>R</sub> =10V   |        | 30  | μΑ    |
| V <sub>F</sub> | Forward Voltage         | I <sub>F</sub> =200mA |        | 0.5 | Volts |



## **RATING AND CHARACTERISTIC CURVES**

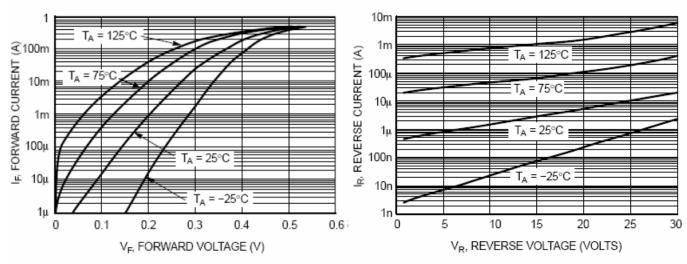
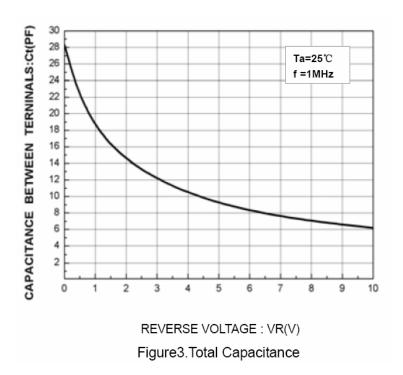


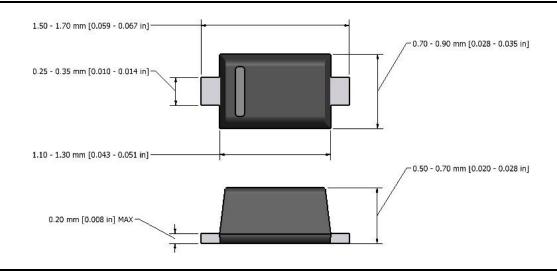
Figure 1. Forward Characteristics

Figure 2. Reverse Characteristics





## Flat Lead SOD-523 Package Outline



This datasheet presents technical data of Tak Cheong's Schottky Barrier Diodes. Complete specifications for the individual devices are provided in the form of datasheets. A comprehensive Selector Guide is included to simplify the task of choosing the best set of components required for a specific application. For additional information, please visit our website <a href="http://www.takcheong.com">http://www.takcheong.com</a>.

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