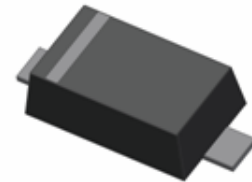
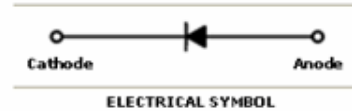


400mW SOD-123 SURFACE MOUNT
Very Small Outline Flat Lead Plastic Package
Schottky Barrier Diode

Green Product



SOD-123 Flat Lead



Absolute Maximum Ratings $T_A = 25^\circ\text{C}$ unless otherwise noted

| Symbol | Parameter | Value | Units |
|-------------|-----------------------------------|-------------|------------------|
| P_D | Power Dissipation | 400 | mW |
| T_{STG} | Storage Temperature Range | -65 to +125 | $^\circ\text{C}$ |
| T_J | Operating Junction Temperature | +125 | $^\circ\text{C}$ |
| V_{RRM} | Repetitive Peak Reverse Voltage | 30 | V |
| V_R | Maximum DC Blocking Voltage | 30 | V |
| $I_{F(AV)}$ | Average Forward Rectified Current | 200 | mA |
| I_{FSM} | Peak Forward Surge Current | 4 | A |

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

Specification Features:

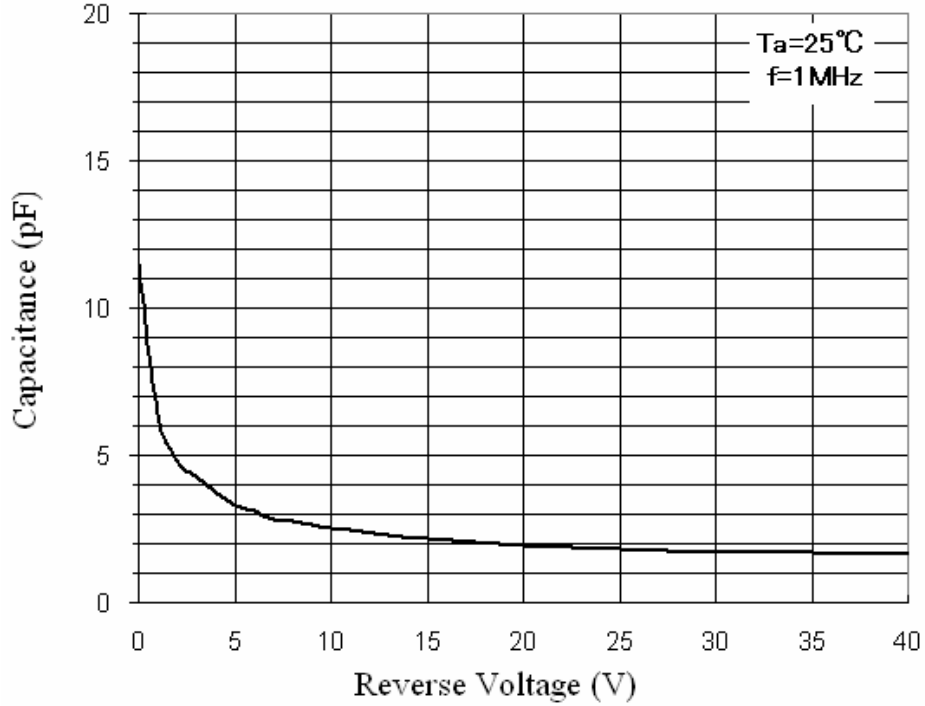
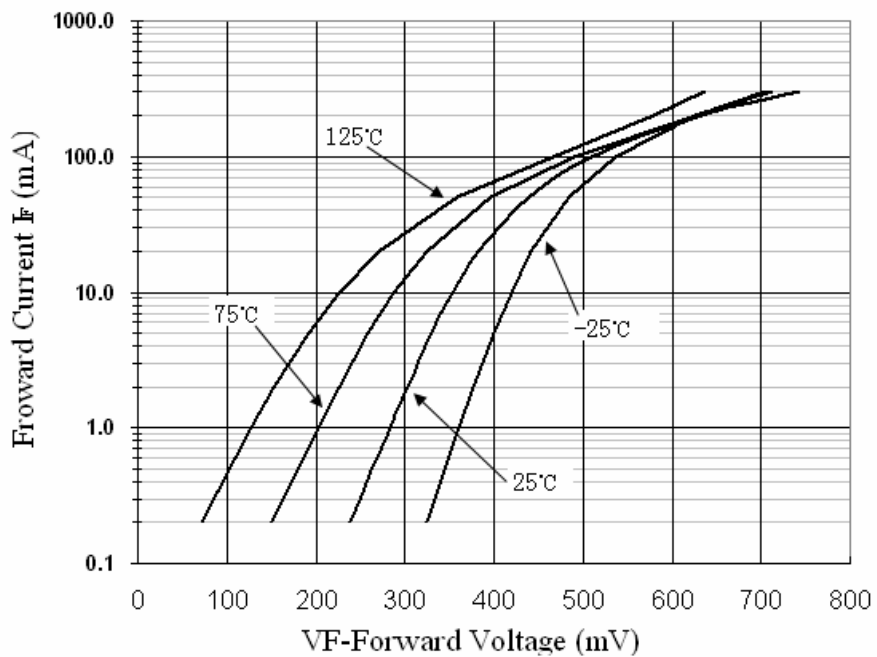
- Low Forward Voltage Drop
- Flat Lead SOD-123 Small Outline Plastic Package
- Surface Device Type Mounting
- RoHS Compliant
- Green EMC
- Matte Tin(Sn) Lead Finish
- Band Indicates Cathode

DEVICE MARKING CODES:

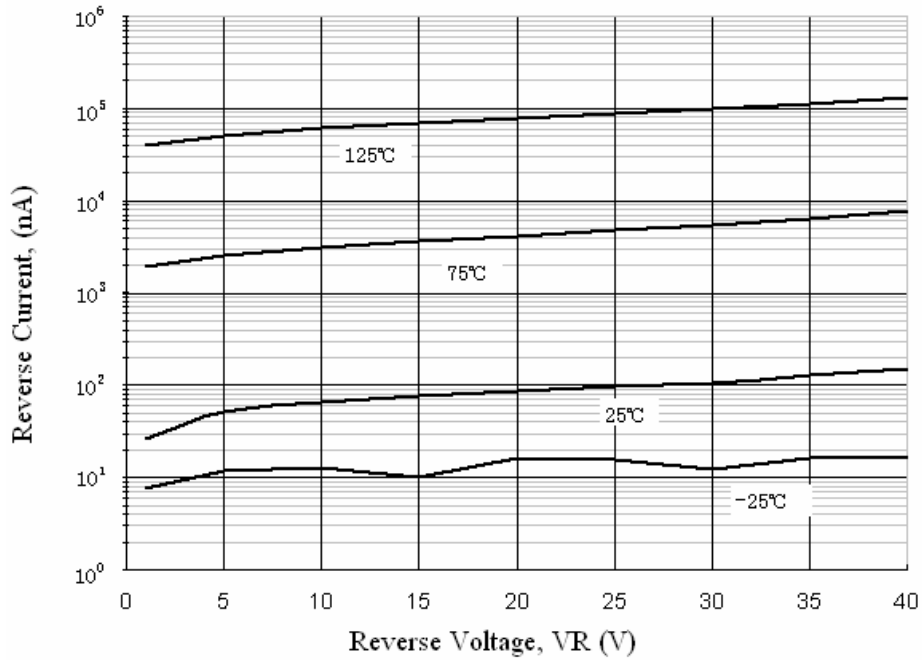
| Device Type | Device Marking |
|-------------|----------------|
| BAT54W | C3 |

Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise noted

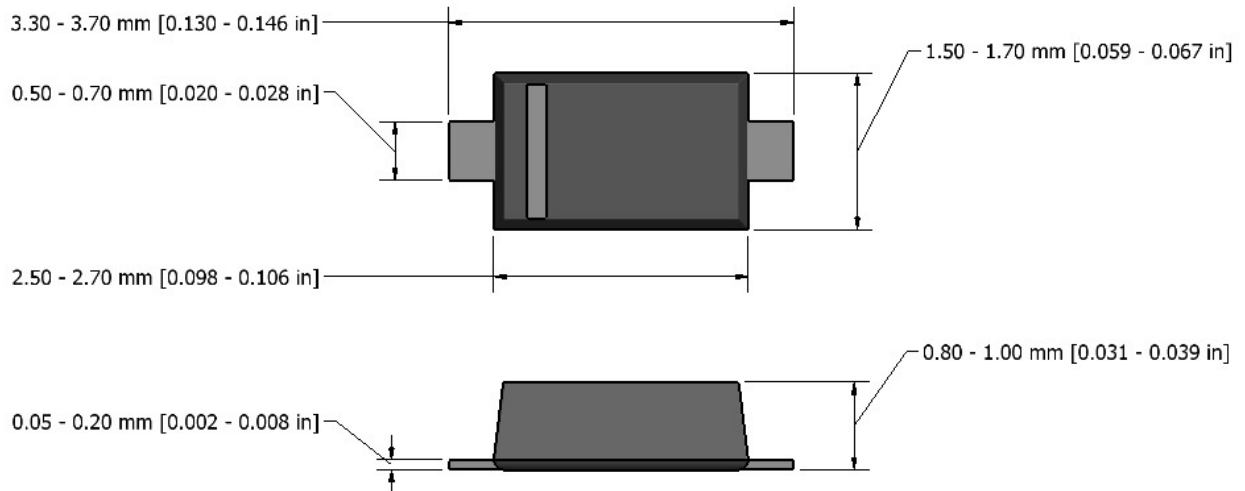
| Symbol | Parameter | Test Condition | Limits | | Unit |
|----------|-------------------------|--|--------|--------------------------------------|---------------|
| | | | Min | Max | |
| B_V | Breakdown Voltage | $I_R=10\mu\text{A}$ | 30 | | Volts |
| I_R | Reverse Leakage Current | $V_R=25\text{V}$ | | 2 | μA |
| V_F | Forward Voltage | $I_F=0.1\text{mA}$ $I_F=1\text{mA}$ $I_F=10\text{mA}$ $I_F=30\text{mA}$ $I_F=100\text{mA}$ | | 0.24 0.32 0.40 0.50 0.80 | Volts |
| T_{RR} | Reverse Recovery Time | $I_F=I_R=10\text{mA}$ $R_L=100\Omega$ $I_{RR}=1\text{mA}$ | | 5 | nS |
| C | Capacitance | $V_R=1\text{V}$, $f=1\text{MHz}$ | | 10 | pF |

Typical Performance Characteristics
Total Capacitance

Forward Voltage vs Ambient Temperature


Reverse Current vs Reverse Voltage



SOD-123 Package Outline




NOTE: The above package outline is similar to JEITA SC-90.

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 <http://www.takcheong.com>.

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