

### **New Product**

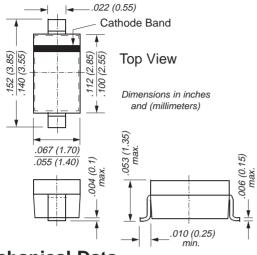
Vishay Semiconductors formerly General Semiconductor



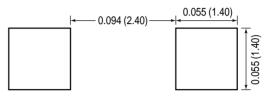
SOD-123

# Small Surface Mount Schottky Rectifier

Reverse Voltage 30V Forward Current 0.5A



# Mounting Pad Layout



### **Mechanical Data**

Case: SOD-123 plastic case

**Polarity:** Band denotes cathode end **Weight:** 0.01g **Marking Code:** B3 **Terminals:** High temperature soldering:

250°C/10 seconds at terminals **Packaging Codes/Options:**D3/10K per 13" reel (8mm tape)
D4/3K per 7" reel (8mm tape)

#### **Features**

- For surface mounted applications
- Low profile package
- Ideal for automated placement
- · Low power loss, high efficiency

## Maximum Ratings and Thermal Characteristics (TA = 25°C unless otherwise noted)

| <u> </u>   |                  |             |      |
|--|------------------|-------------|------|
| Parameter  | Symbol           | Value       | Unit |
| Maximum repetitive peak reverse voltage  | VRRM             | 30          | V    |
| Working peak reverse voltage   | V <sub>RWM</sub> | 30          | V    |
| Maximum DC blocking voltage  | VR               | 30          | V    |
| Maximum average forward rectified current at rated V <sub>R</sub> , T <sub>C</sub> = 115°C | lF(AV)           | 0.5         | А    |
| Peak forward surge current 8.3ms single half sine-wave T <sub>L</sub> = 25°C               | I <sub>FSM</sub> | 5.5         | А    |
| Voltage rate of change at rated VR, TJ = 25°C  | dv/dt            | 1,000       | V/μs |
| Typical thermal resistance junction to lead junction to ambient                            | R⊕jl<br>R⊕ja     | 118<br>206  | °C/W |
| Operating junction and storage temperature   | TJ, TSTG         | -55 to +125 | °C   |

## Electrical Characteristics (TA = 25°C unless otherwise noted)

| Maximum instantaneous forward voltage (1) | at IF = 0.1A, TJ = 25°C<br>at IF = 0.1A, TJ = 100°C<br>at IF = 0.5A, TJ = 25°C<br>at IF = 0.5A, TJ = 100°C | VF | 0.375<br>0.340<br>0.43<br>0.420 | V              |
|---|--|----|---------------------------------|----------------|
| Maximum DC reverse current                | VR = 30V, TJ = 25°C<br>VR = 30V, TJ = 100°C<br>VR = 15V, TJ = 25°C   | lr | 130<br>5<br>20                  | μΑ<br>mA<br>μΑ |

Note: (1) Pulse test: 300 ms pulse width, 1% duty cycle.