## **Schottky Barrier Diode**

### **FEATURES**

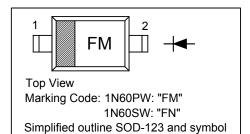
- High reliability
- Low forward voltage and reverse current

#### **APPLICATIONS**

- For electronic calculator, etc.
- Low current rectification and high speed switching

#### **PINNING**

| PIN | DESCRIPTION |
|-----|-------------|
| 1   | Cathode     |
| 2   | Anode       |



Absolute Maximum Ratings (T<sub>a</sub> = 25 °C)

| Parameter                        | Symbol             | Value       | Unit |
|----------------------------------|--------------------|-------------|------|
| Peak Reverse Voltage             | $V_{RM}$           | 45          | V    |
| Reverse Voltage                  | $V_R$              | 10          | V    |
| Peak Forward Current             | I <sub>FM</sub>    | 150         | mA   |
| Average Rectified Output Current | Io                 | 50          | mA   |
| Surge Forward Current            | I <sub>surge</sub> | 500         | mA   |
| Junction Temperature             | Tj                 | 125         | °C   |
| Storage Temperature Range        | T <sub>S</sub>     | -55 to +125 | °C   |

## Characteristics (T<sub>a</sub> = 25 °C)

| Parameter   | Symbol         | Min. | Max.      | Unit |
|---|----------------|------|-----------|------|
| Forward Current at $V_F = 1 \text{ V}$  | I <sub>F</sub> | 4    | -         | mA   |
| Reverse Current   1N60PW   1N60SW   | I <sub>R</sub> |      | 50<br>100 | μA   |
| Reverse Voltage at $I_R = 100 \mu A$  | $V_R$          | 45   | -         | V    |
| Junction Capacitance<br>at f = 1 MHz, V = -1 V                                    | CJ             | -    | 1         | pF   |
| Rectification efficiency at Vi = 2 Vrms, R = 5 K $\Omega$ , C = 20 pF, f = 40 MHz | η              | 55   | -         | %    |

Pair  $\Delta$  I<sub>F</sub>  $\leq$  6 mA at 1V,  $\Delta$  I<sub>R</sub>  $\leq$  20  $\mu$ A at 10 V





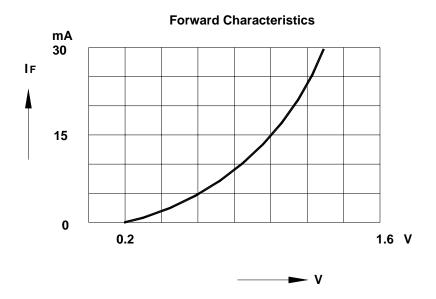


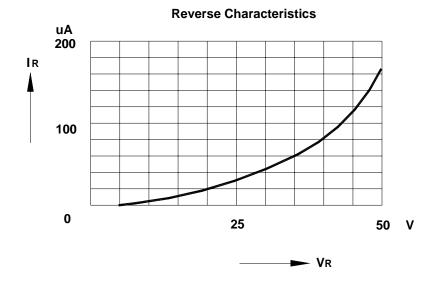






Dated: 07/04/2006







## SEMTECH ELECTRONICS LTD.

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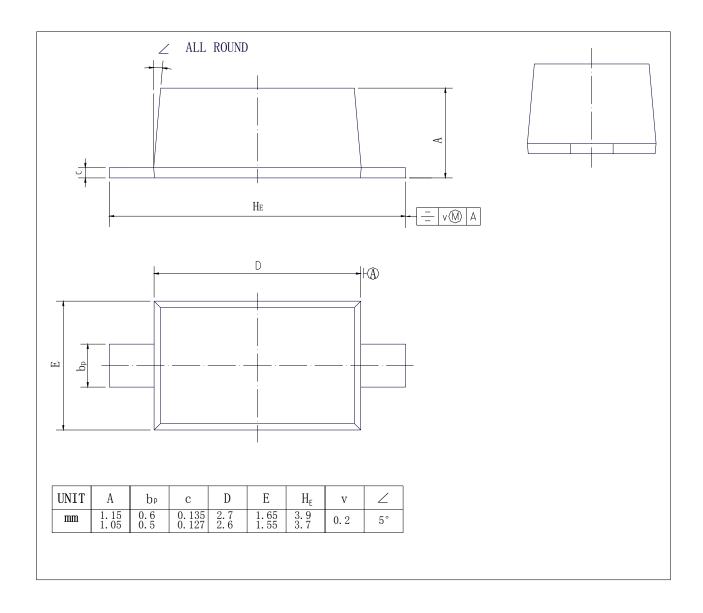


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### **PACKAGE OUTLINE**

## Plastic surface mounted package; 2 leads

**SOD-123** 





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