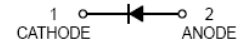


# Surface Mount Schottky Barrier Diode



SOD-123

## Features:

- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- Fast Switching Time
- Low Reverse Capacitance.
- Surface Mount Package Ideally Suited for Automatic Insertion

## Applications:

- Surface mount fast switching Schottky diode

## Maximum Ratings:

T<sub>A</sub> = 25°C unless otherwise specified

| Characteristic  | Symbol   | Value      | Unit |
|---|--|------------|------|
| Peak repetitive reverse voltage<br>Working peak reverse voltage<br>DC reverse voltage | V <sub>RRM</sub><br>V <sub>RWM</sub><br>V <sub>R</sub> | 70         | V    |
| RMS reverse voltage   | V <sub>R(RMS)</sub>                                    | 49         | V    |
| Forward continuous current  | I <sub>F</sub>   | 15         | mA   |
| Power dissipation   | P <sub>D</sub>   | 250        | mW   |
| Thermal resistance junction to ambient air  | R <sub>θJA</sub>                                       | 600        | °C/W |
| Operating and storage temperature range   | T <sub>J</sub> , T <sub>STG</sub>                      | -65 to+150 | °C   |

# Surface Mount Schottky Barrier Diode



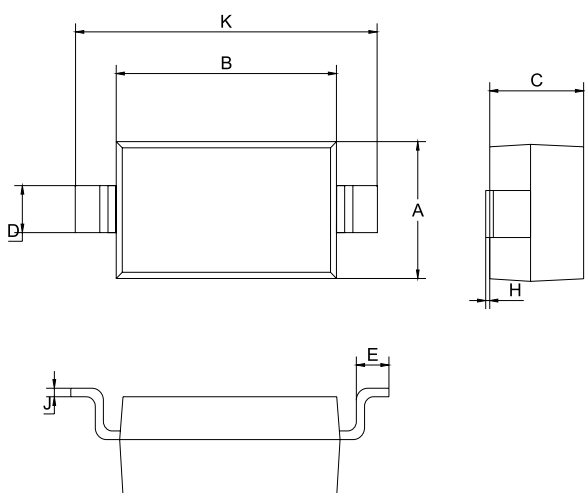
## Electrical Characteristics:

T<sub>A</sub> = 25°C unless otherwise specified.

| Characteristic                | Symbol             | Min. | Max.      | Unit | Test Condition   |
|-------------------------------|--------------------|------|-----------|------|--|
| Reverse breakdown voltage     | V <sub>(BR)R</sub> | 70   | -         | V    | I <sub>R</sub> =10μA   |
| Forward voltage               | V <sub>F</sub>     | -    | 0.41<br>1 | V    | I <sub>F</sub> =1mA<br>I <sub>F</sub> =15mA  |
| Reverse current               | I <sub>R</sub>     | -    | 200       | nA   | V <sub>R</sub> =50V  |
| Capacitance between terminals | C <sub>j</sub>     | -    | 2         | pF   | V <sub>R</sub> =0, f=1MHz  |
| Reverse recovery time         | t <sub>rr</sub>    | -    | 1         | ns   | I <sub>F</sub> =I <sub>R</sub> =5mA,<br>I <sub>rr</sub> =0.1 × I <sub>R</sub> , R <sub>L</sub> =100Ω |

## Package Outline:

Plastic surface mounted package



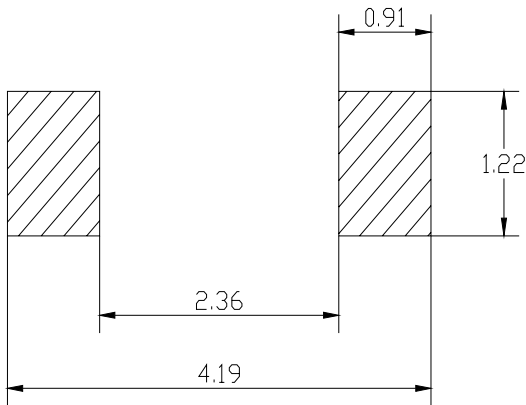
| SOD-123 |           |      |
|---------|-----------|------|
| Dim.    | Min.      | Max. |
| A       | 1.4       | 1.8  |
| B       | 2.55      | 2.85 |
| C       | 1.15 Typ. |      |
| D       | 0.5       | 0.6  |
| E       | 0.3       | 0.4  |
| H       | 0.02      | 0.1  |
| J       | 0.1 Typ.  |      |
| K       | 3.55      | 3.85 |

Dimensions : Millimetres

# Surface Mount Schottky Barrier Diode



## Soldering Footprint:



Dimensions : Millimetres

## Package Information:

| Device      | Package | Shipping            |
|-------------|---------|---------------------|
| 1N5711W-7-F | SOD-123 | 3,000 / Tape & Reel |

## Part Number Table

| Description                          | Part Number |
|--------------------------------------|-------------|
| Surface Mount Schottky Barrier Diode | 1N5711W-7-F |

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