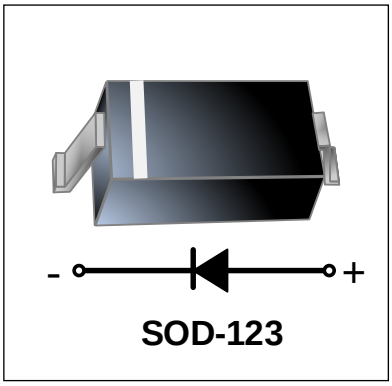
# WSR6005D1

**Schottky Barrier Diode**

## Features

- Low Forward Voltage Schottky Rectifier
- SOD-123 Thin SMD Package




**SOD-123**

## Applications

- High Efficiency DC/DC Conversion
- Switch Mode Power Supply
- Inverse Polarity Protection
- Low Power Consumption Applications

## Absolute Maximum Rating

| Parameter | Symbol | Value | Unit |
|---|---|---|---|
| Non-Repetitive Peak Repetitive Voltage | $V_{RM}$ | 60 | V |
| Repetitive Peak Reverse Voltage | $V_{RRW}$ | 60 | V |
| RMS Reverse Voltage | $V_{R(RMS)}$ | 42 | V |
| Average Rectified Output Current | $I_O$ | 0.5 | A |
| Non-Repetitive Peak Forward Surge Current [1] | $I_{FSM}$ | 5.5 | A |
| Power Dissipation | $P_D$ | 410 | mW |
| Junction Temperature | $T_J$ | 125 | °C |
| Storage Temperature | $T_{STG}$ | -65 to +150 | °C |

Note1：8.3ms single half sine-wave.

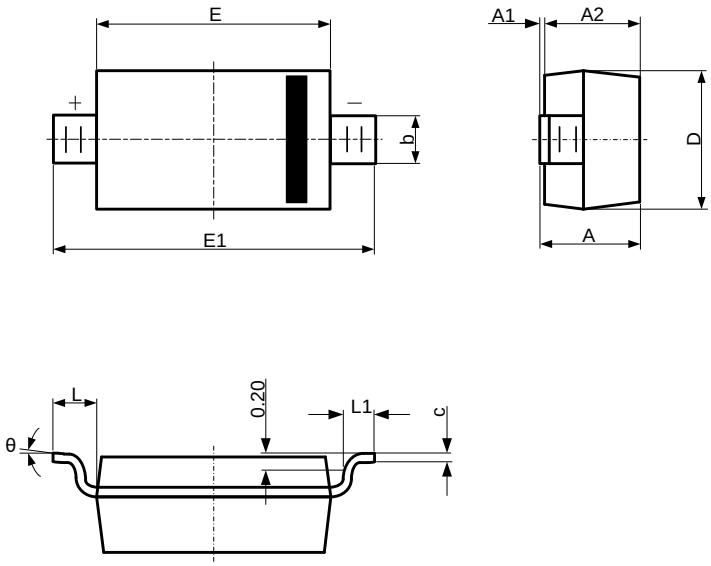
## Electrical Characteristics (Tamb=25°C unless otherwise noted)

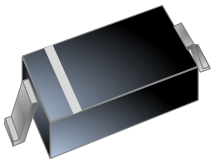
| Parameter | Symbol | Test Conditions | Min. | Typ. | Max. | Unit |
|---|---|---|---|---|---|---|
| Reverse Breakdown Voltage | $V_{BR}$ | $I_R$=100μA | 60 | - | - | V |
| Forward Voltage | $V_F$ | $I_F$ = 0.5A | - | - | 0.7 | V |
| Reverse Current | $I_R$ | $V_R$ = 60V | - | - | 200 | μA |
| Capacitance | $C_T$ | $V_R$=4V,f=1MHz | - | 30 | - | pF |

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## Outline Drawing –SOD-123

### PACKAGE OUTLINE

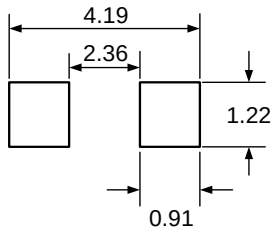


**SOD-123**

**DIMENSIONS**

| SYMBOL | MILLIMETER | | INCHES | |
|---|---|---|---|---|
| | MIN | MAX | MIN | MAX |
| A | 1.050 | 1.250 | 0.041 | 0.049 |
| A1 | 0.000 | 0.100 | 0.000 | 0.004 |
| A2 | 1.050 | 1.150 | 0.041 | 0.045 |
| b | 0.450 | 0.650 | 0.018 | 0.026 |
| c | 0.080 | 0.150 | 0.003 | 0.006 |
| D | 1.500 | 1.700 | 0.059 | 0.067 |
| E | 2.600 | 2.800 | 0.102 | 0.110 |
| E1 | 3.550 | 3.850 | 0.140 | 0.152 |
| L | 0.500 REF | | 0.020 REF | |
| L1 | 0.250 | 0.450 | 0.010 | 0.018 |
| θ | 0° | 8° | 0° | 8° |




DIMENSIONS: MILLIMETERS

**Notes**

1. Controlling Dimensions in Millimeters.
2. Dimensions are exclusive of mold flash and metal burrs.

## Marking Codes

| Part Number | WSR6005D1 |
|---|---|
| Marking Code | R6 |

## Package Information

Qty：3k/Reel

### CONTACT INFORMATION

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*The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.*
*Users should verify actual device performance in their specific applications.*