



## FEATURES

- Low Forward Voltage Drop
- Very Small SMD Package

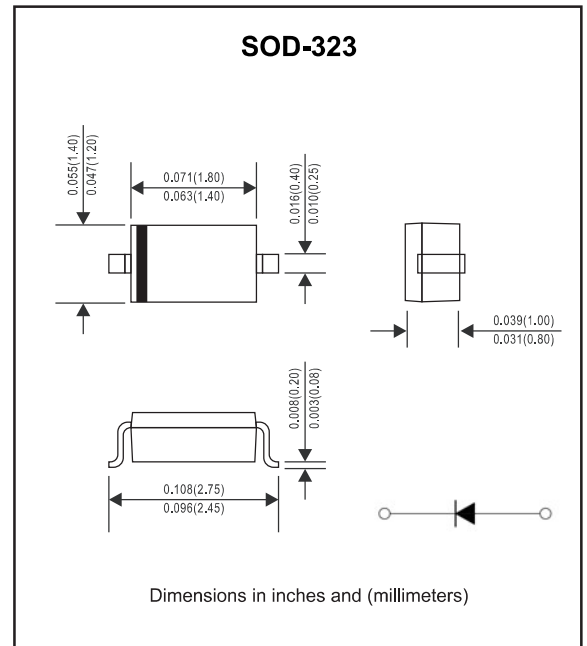
## APPLICATIONS

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

## MARKING: SH



## Package outline



## MAXIMUM RATINGS (T<sub>a</sub>=25°C unless otherwise noted )

| Symbol              | Parameter                                           | Value      | Unit |
|---------------------|-----------------------------------------------------|------------|------|
| V <sub>RRM</sub>    | Peak Repetitive Reverse Voltage                     | 40         | V    |
| V <sub>RWM</sub>    | Working Peak Reverse Voltage                        |            |      |
| V <sub>R(RMS)</sub> | RMS Reverse Voltage                                 | 28         | V    |
| I <sub>F</sub>      | Continuous Forward Current                          | 2          | A    |
| I <sub>FSM</sub>    | Non-repetitive Peak Forward Surge Current @ t=8.3ms | 9          | A    |
| P <sub>D</sub>      | Power Dissipation Note1                             | 250        | mW   |
|                     | Note2                                               | 480        |      |
| R <sub>θJA</sub>    | Thermal Resistance from Junction to Ambient Note1   | 400        | °C/W |
|                     | Note2                                               | 208        |      |
| T <sub>j</sub>      | Operating Junction Temperature Range                | -40 ~ +125 | °C   |
| T <sub>stg</sub>    | Storage Temperature Range                           | -55 ~ +150 | °C   |

1:Device mounted on an FR4 PCB, single-sided copper, tin-plated and standard footprint.

2:Device mounted on an FR4 PCB with copper pad 10 x 10 mm.

## ELECTRICAL CHARACTERISTICS(T<sub>a</sub>=25°C unless otherwise specified)

| Parameter                 | Symbol            | Test conditions           | Min | Typ  | Max  | Unit |
|---------------------------|-------------------|---------------------------|-----|------|------|------|
| Reverse breakdown voltage | V <sub>(BR)</sub> | I <sub>R</sub> =1mA       | 40  |      |      | V    |
| Reverse current           | I <sub>R</sub>    | V <sub>R</sub> =30V       |     |      | 50   | μA   |
|                           |                   | V <sub>R</sub> =40V       |     |      | 100  |      |
| Forward voltage           | V <sub>F</sub> *  | I <sub>F</sub> =1A        |     | 0.41 | 0.45 | V    |
|                           |                   | I <sub>F</sub> =2A        |     | 0.50 | 0.55 |      |
| Total capacitance         | C <sub>tot</sub>  | V <sub>R</sub> =4V,f=1MHz |     |      | 120  | pF   |

\*Pulse test: t<sub>p</sub> ≤ 300 μs; δ ≤ 0.02.

## Typical Characteristics

