

# SOD-323 SURFACE MOUNT Flat Lead Plastic Package Schottky Barrier Diode

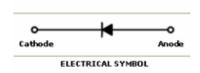
# **Absolute Maximum Ratings** $T_A = 25$ °C unless otherwise noted

| Symbol           | Parameter   | Value       | Units |  |
|------------------|---|-------------|-------|--|
| P <sub>D</sub>   | Power Dissipation   | 250         | mW    |  |
| T <sub>STG</sub> | Storage Temperature Range                                     | -55 to +125 | °C    |  |
| TJ               | Junction Temperature  | +125        | °C    |  |
| V <sub>RM</sub>  | Repetitive Peak Reverse Voltage                               | 40          | V     |  |
| Io               | Average Rectified Output Current                              | 1           | Α     |  |
| I <sub>FSM</sub> | Peak Forward Surge Current<br>(t=8.3ms Single Half Sine-wave) | 9           | Α     |  |
| I <sub>FRM</sub> | Repetitive Peak Forward Current                               | 1.5         | А     |  |

# **Green Product**



SOD-323 Flat Lead



These ratings are limiting values above which the serviceability of the diode may be impaired.

#### **Specification Features:**

- RoHS Compliant
- Green EMC
- Matte Tin(Sn) Lead Finish
- Band Indicates Cathode
- Weight: approx. 0.004g

# **DEVICE MARKING CODES:**

| Device Type | Device Marking |  |  |
|-------------|----------------|--|--|
| B5819WS     | SL             |  |  |
|             |                |  |  |

# **Electrical Characteristics**

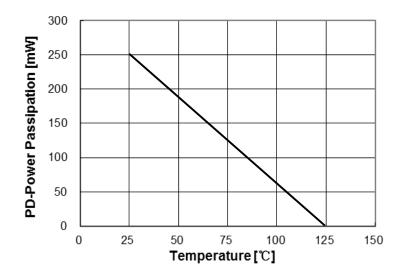
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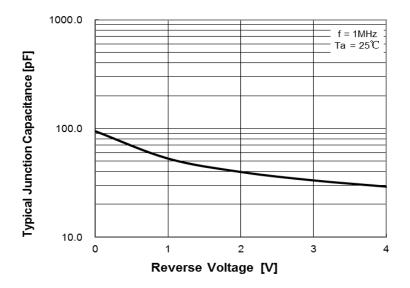
| Symbol          | Parameter                 | Test Condition              | Limits |     |      | 11.24 |
|-----------------|---------------------------|-----------------------------|--------|-----|------|-------|
|                 |                           |                             | Min    | Тур | Max  | Unit  |
| V <sub>BR</sub> | Reverse Breakdown Voltage | I <sub>R</sub> =1mA         | 40     |     |      | Volts |
| I <sub>R</sub>  | Reverse Leakage Current   | V <sub>R</sub> =40V         |        |     | 1    | mA    |
| V <sub>F</sub>  | Forward Voltage           | I <sub>F</sub> =1A          |        |     | 0.60 | Volts |
| Cd              | Diode Capacitance         | V <sub>R</sub> =4V, f= 1MHz |        | 30  |      | pF    |

Number: DB-259 July 2014, Revision A



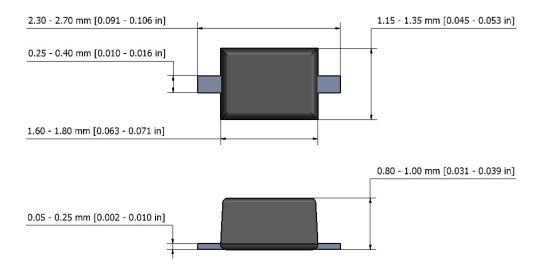
#### **RATING AND CHARACTERISTIC CURVES**







# **SOD-323 Package Outline**



- The above package outline is similar to JEITA SC-90.
  Dimensions are exclusive of Burrs, Mold Flash & Tie Bar extrusions.





# **NOTICE**

The information presented in this document is for reference only. Tak Cheong reserves the right to make changes without notice for the specification of the products displayed herein.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of with would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Tak Cheong Semiconductor Co., Ltd., or anyone on its behalf, assumes no responsibility or liability for any damagers resulting from such improper use of sale.

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Number: DB-100 April 14, 2008 / A