

### Features

- Forward Continuous Current:I<sub>FM</sub>=350mA
- Power Dissipation of 400mw

#### Package Marking and Ordering Information

| Product ID | Pack    | Marking | Qty(PCS) |  |
|------------|---------|---------|----------|--|
| 1N5819W    | SOD-123 | S4      | 3000     |  |







## Maxmim Ratings (Ta=25°C unless otherwise noted)

| Symbol              | Parameter   | Value    | Unit |
|---------------------|---|----------|------|
| V <sub>RRM</sub>    | Peak Repetitive Reverse Voltage                   | 40       |      |
| V <sub>RWM</sub>    | Working Peak Reverse Voltage                      | 40       | V    |
| V <sub>R(RMS)</sub> | RMS Reverse Voltage                               | 28       | V    |
| I <sub>FM</sub>     | Forward Continuous Current                        | 350      | mA   |
| I <sub>FSM</sub>    | Non-repetitive Peak Forward Surge Current@t=8.3ms | 2        | А    |
| PD                  | Power Dissipation                                 | 400      | mW   |
| R <sub>ØJA</sub>    | Thermal Resistance from Junction to Ambient       | 250      | °C/W |
| Tj                  | Junction Temperature                              | 125      | °C   |
| T <sub>stg</sub>    | Storage Temperature                               | -55~+150 | °C   |

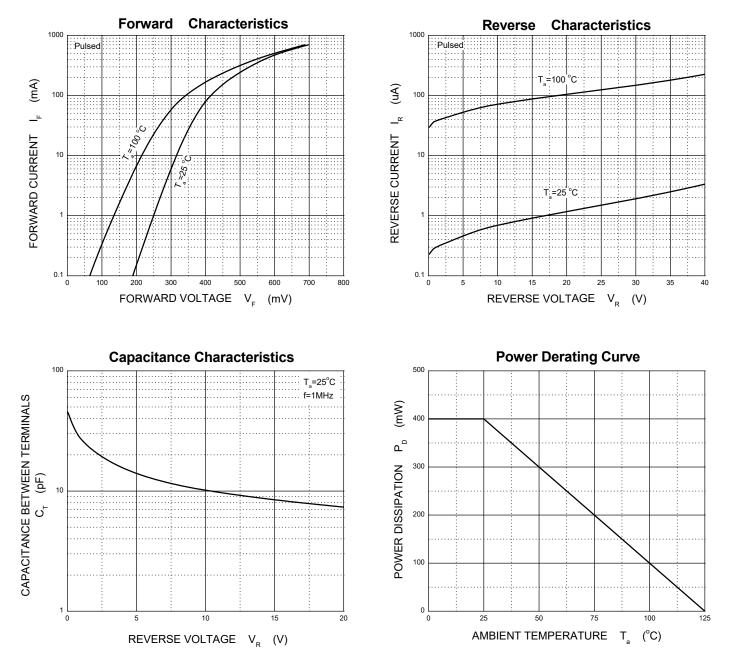
## Electrcal Charcteristics (Ta=25°C unless otherwise specified)

| Parameter             | Symbol            | Test conditions   | Min | Тур  | Max  | Unit |  |
|-----------------------|-------------------|---|-----|------|------|------|--|
| Reverse voltage       | V <sub>(BR)</sub> | I <sub>R</sub> =100μA   | 40  |      |      | V    |  |
| Reverse current       | I <sub>R</sub>    | V <sub>R</sub> =30V   |     |      | 5    | μA   |  |
|                       |                   | V <sub>R</sub> =20V   |     |      | 2    |      |  |
|                       |                   | V <sub>R</sub> =10V   |     |      | 1    |      |  |
| Forward voltage       | VF                | I <sub>F</sub> =1mA   |     | 0.27 |      |      |  |
|                       |                   | I <sub>F</sub> =5mA   |     | 0.32 |      | V    |  |
|                       |                   | I <sub>F</sub> =20mA  |     |      | 0.37 |      |  |
|                       |                   | I <sub>F</sub> =200mA   |     |      | 0.6  |      |  |
| Total capacitance     | C <sub>tot</sub>  | V <sub>R</sub> =0V,f=1MHz   |     | 50   |      | pF   |  |
| Reverse recovery time | t <sub>rr</sub>   | $I_{F}=I_{R}=200$ mA, $I_{rr}=0.1 \times I_{R}$ , $R_{L}=100\Omega$ |     | 10   |      | ns   |  |



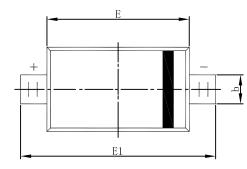
# 1N5819W SCHOTTKY BARRIER DIODE

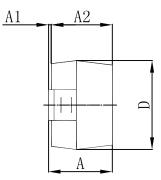
## **Typical Characteristics**

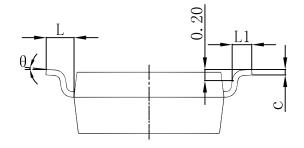




# SOD-123 Package Outline Dimensions







| Symbol | Dimensions In Millimeters |       | Dimensions In 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 |  |
| С      | 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°    |  |



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