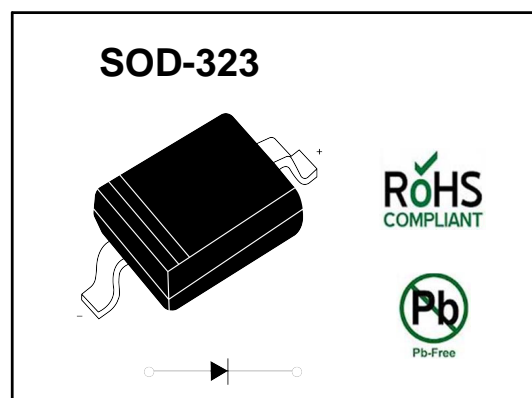


### Silicon Epitaxial Planar Switching Diode

#### PINNING

| PIN | DESCRIPTION |
|-----|-------------|
| 1   | Cathode     |
| 2   | Anode       |

Marking Code: "W2"



#### Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

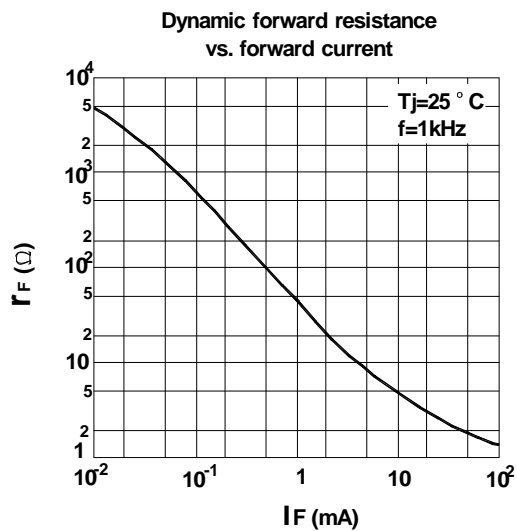
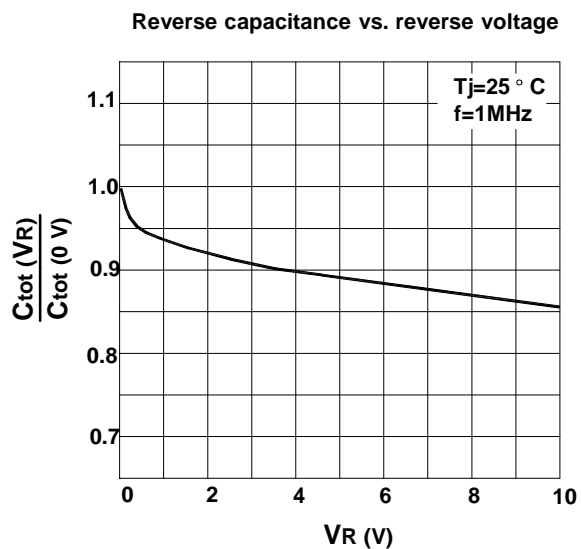
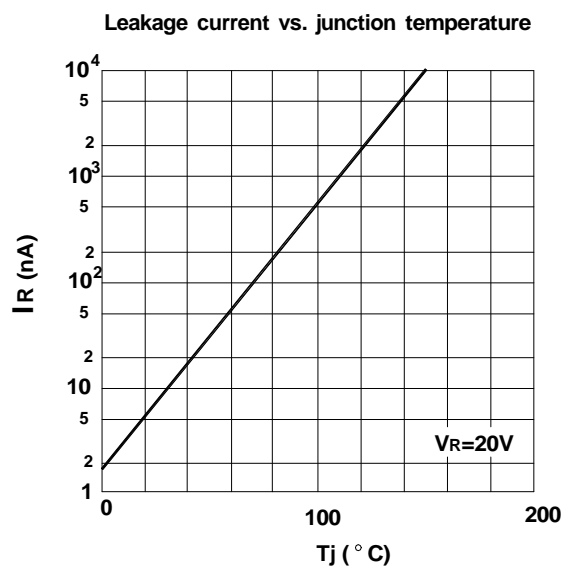
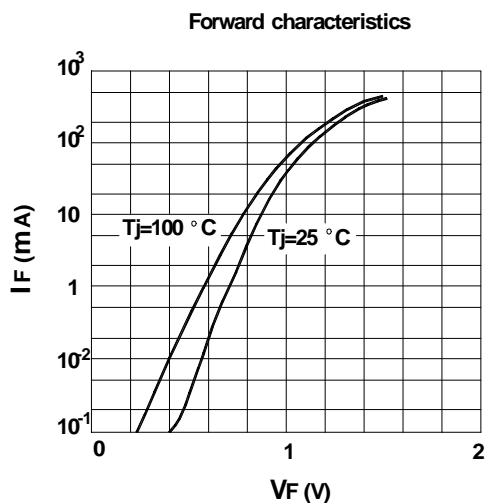
| Parameter                                 | Symbol          | Value         | Unit               |
|---|-----------------|---------------|--------------------|
| Repetitive Reverse Voltage                | $V_{RRM}$       | 100           | V                  |
| Average Rectified Forward Current         | $I_{F(AV)}$     | 200           | mA                 |
| Non-repetitive Peak Forward Surge Current | $I_{FSM}$       | 0.5<br>1      | A                  |
| Power Dissipation                         | $P_{tot}$       | 200           | mW                 |
| Thermal Resistance Junction to Ambient    | $R_{\theta JA}$ | 625           | $^\circ\text{C/W}$ |
| Junction Temperature                      | $T_j$           | 150           | $^\circ\text{C}$   |
| Storage Temperature Range                 | $T_{stg}$       | - 55 to + 150 | $^\circ\text{C}$   |

#### Electrical Characteristics ( $T_a = 25^\circ\text{C}$ )

| Parameter   | Symbol                     | Min.        | Max.          | Unit                                 |
|---|----------------------------|-------------|---------------|--------------------------------------|
| Forward Voltage<br>at $I_F = 10\text{ mA}$  | $V_F$                      | -           | 1             | V                                    |
| Reverse Breakdown Voltage<br>at $I_R = 5\text{ }\mu\text{A}$<br>at $I_R = 100\text{ }\mu\text{A}$                         | $V_{(BR)R}$<br>$V_{(BR)R}$ | 75<br>100   | -<br>-        | V<br>V                               |
| Reverse Current<br>at $V_R = 20\text{ V}$<br>at $V_R = 75\text{ V}$<br>at $V_R = 20\text{ V}$ , $T_J = 150^\circ\text{C}$ | $I_R$                      | -<br>-<br>- | 25<br>5<br>50 | nA<br>$\mu\text{A}$<br>$\mu\text{A}$ |
| Total Capacitance<br>at $V_R = 0\text{ V}$ , $f = 1\text{ MHz}$   | $C_{tot}$                  | -           | 4             | pF                                   |
| Reverse Recovery Time<br>at $I_F = I_R = 30\text{ mA}$ , $R_L = 100\text{ }\Omega$ , $I_{RR} = 3\text{ mA}$               | $t_{rr}$                   | -           | 50            | ns                                   |



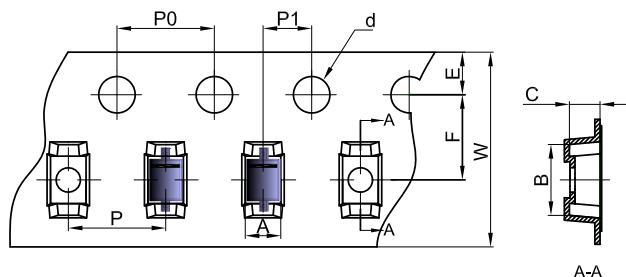
### Typical Characteristics





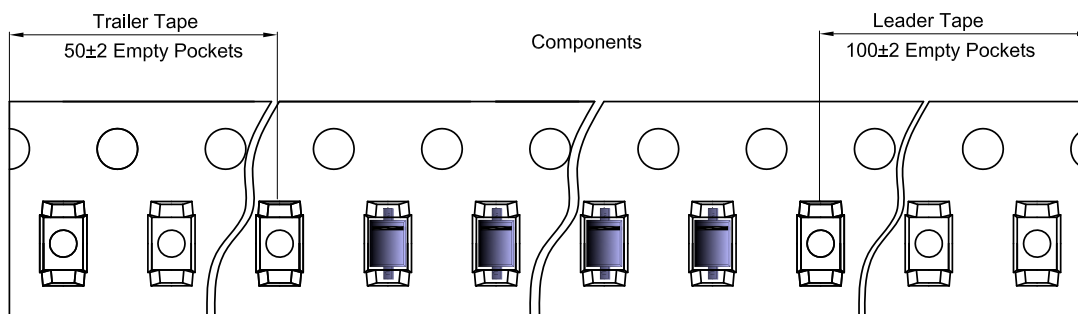
## SOD-323 Tape and Reel

### SOD-323 Embossed Carrier Tape

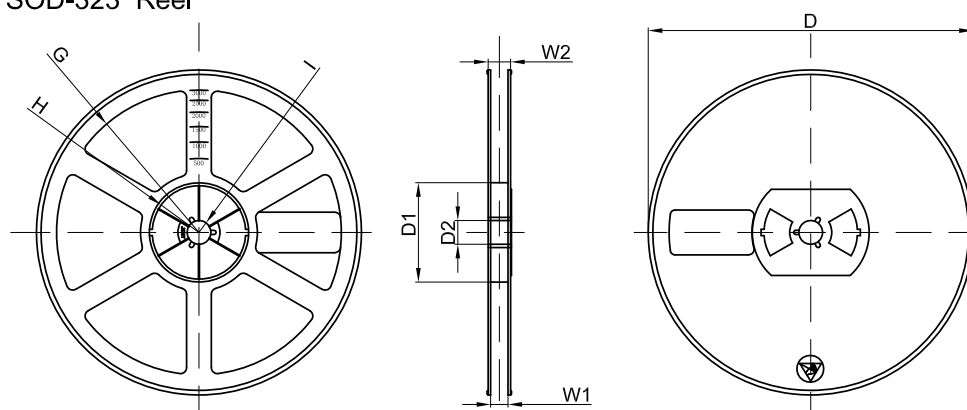


| Dimensions are in millimeter |      |     |      |       |      |      |      |      |      |      |
|------------------------------|------|-----|------|-------|------|------|------|------|------|------|
| Pkg type                     | A    | B   | C    | d     | E    | F    | P0   | P    | P1   | W    |
| SOD-323                      | 1.48 | 3.3 | 1.25 | Ø1.50 | 1.75 | 3.50 | 4.00 | 4.00 | 2.00 | 8.00 |

### SOD-323 Tape Leader and Trailer



### SOD-323 Reel

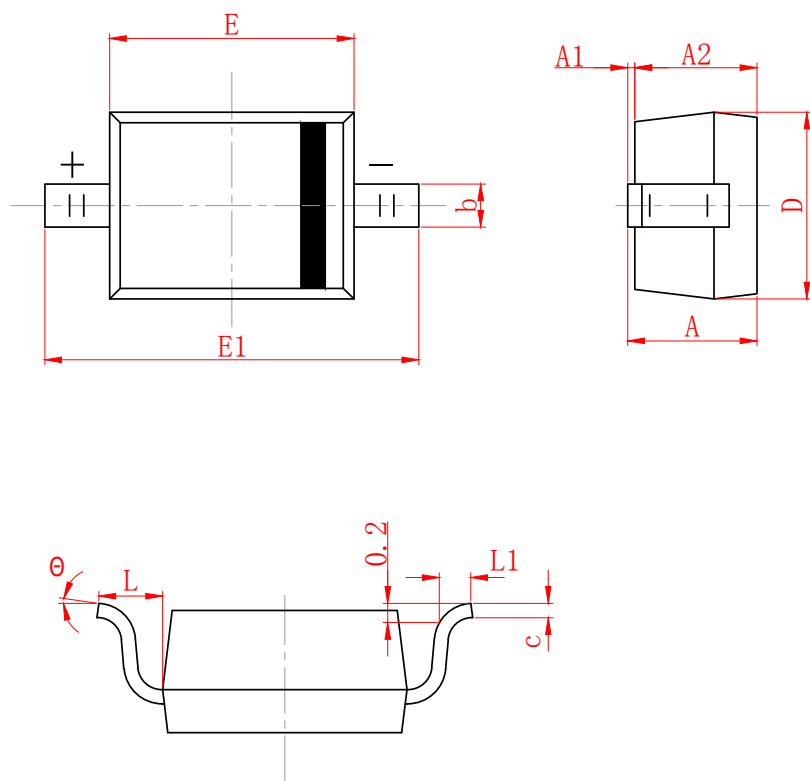


| Dimensions are in millimeter |         |       |       |        |        |       |      |       |
|------------------------------|---------|-------|-------|--------|--------|-------|------|-------|
| Reel Option                  | D       | D1    | D2    | G      | H      | I     | W1   | W2    |
| 7"Dia                        | Ø178.00 | 54.40 | 13.00 | R78.00 | R25.60 | R6.50 | 9.50 | 12.30 |

| REEL     | Reel Size | Box        | Box Size(mm) | Carton      | Carton Size(mm) | G.W.(kg) |
|----------|-----------|------------|--------------|-------------|-----------------|----------|
| 3000 pcs | 7 inch    | 45,000 pcs | 203×203×195  | 180,000 pcs | 438×438×220     |          |



### SOD-323 Package Outline Dimensions



| SYMBOL | MILLIMETER  |       |
|--------|-------------|-------|
|        | MIN         | MAX   |
| A      |             | 1.000 |
| A1     | 0.000       | 0.100 |
| A2     | 0.800       | 0.900 |
| b      | 0.250       | 0.350 |
| c      | 0.008       | 0.150 |
| D      | 1.200       | 1.400 |
| E      | 1.600       | 1.800 |
| E1     | 2.500       | 2.700 |
| L      | 0.475 (REF) |       |
| L1     | 0.250       | 0.400 |
| θ      | 0°          | 8°    |

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