

### Schottky Barrier Diodes

#### PINNING

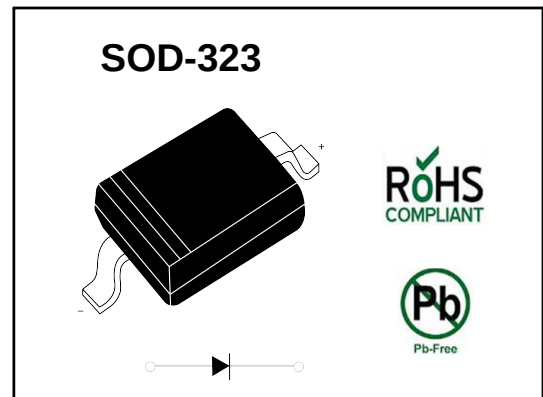
| PIN | DESCRIPTION |
|-----|-------------|
| 1   | Cathode     |
| 2   | Anode       |

#### Features

- Low forward voltage
- Low reverse current

#### Applications

- High Speed Switching



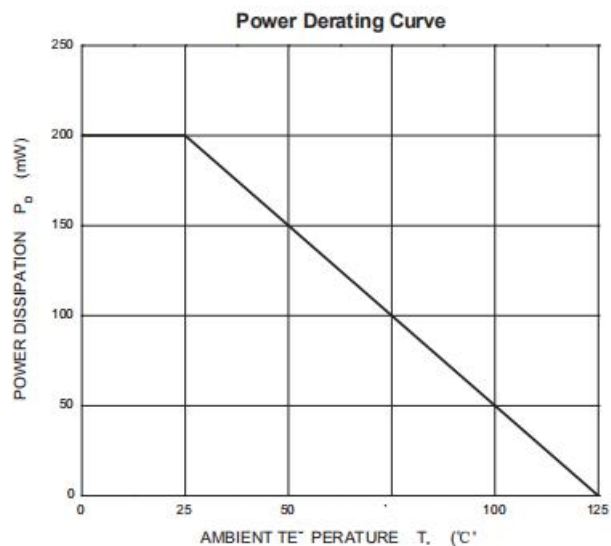
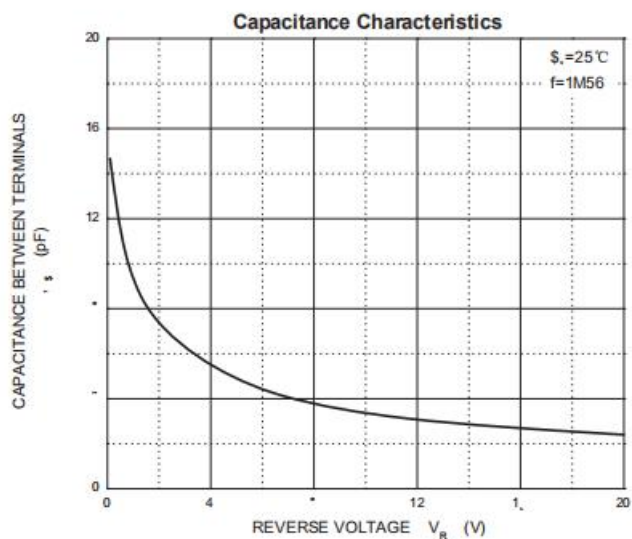
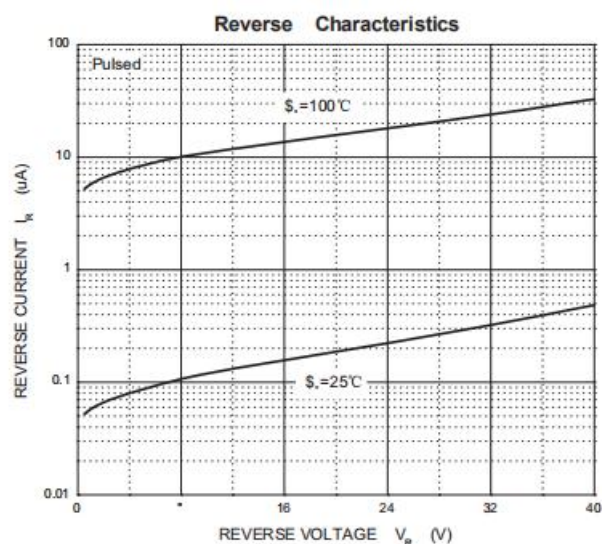
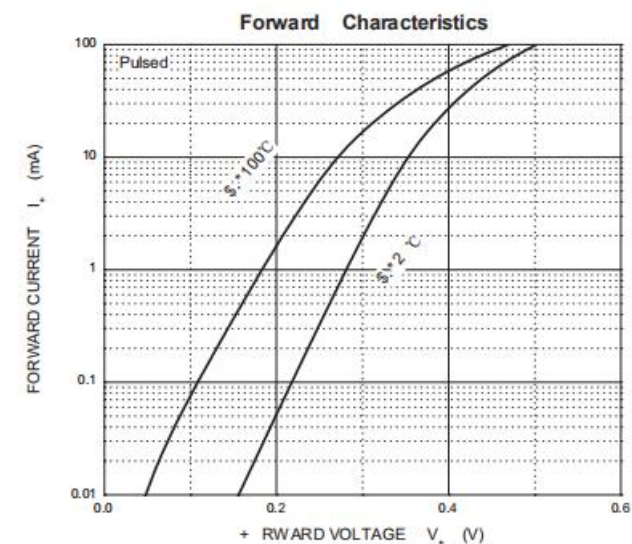
#### Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

| Parameter                                                   | Symbol          | Limit           | Unit |
|-------------------------------------------------------------|-----------------|-----------------|------|
| Peak reverse voltage                                        | $V_{RM}$        | 45              | V    |
| DC reverse voltage                                          | $V_R$           | 40              | v    |
| Mean rectifying current                                     | $I_O$           | 0.1             | A    |
| Non-repetitive Peak Forward Surge Current@ $t=8.3\text{ms}$ | $I_{FSM}$       | 1               | A    |
| Power dissipation                                           | $P_D$           | 200             | mW   |
| Thermal Resistance Junction to Ambient                      | $R_{\theta JA}$ | 500             | C/W  |
| Operating Junction Temperature Range                        | $T_j$           | $-40 \sim +125$ | C    |
| Storage Temperature Range                                   | $T_{stg}$       | $-55 \sim +150$ | C    |

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

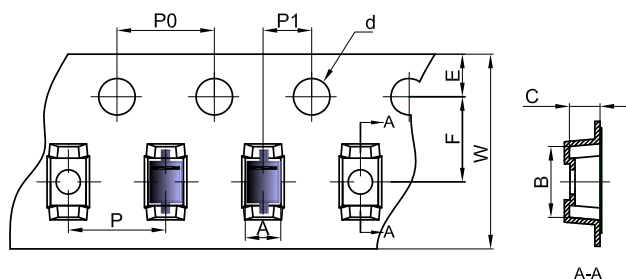
|                               |       |  |  |      |               |                                   |
|-------------------------------|-------|--|--|------|---------------|-----------------------------------|
| Forward voltage               | $V_F$ |  |  | 0.35 | V             | $I_F=1\text{mA}$                  |
| Forward voltage               | $V_F$ |  |  | 0.45 | v             | $I_F=10\text{mA}$                 |
| Forward voltage               | $V_F$ |  |  | 0.60 | v             | $I_F=100\text{mA}$                |
| Reverse current               | $I_R$ |  |  | 5    | $\mu\text{A}$ | $V_R=40\text{V}$                  |
| Capacitance between terminals | $C_T$ |  |  | 25   | pF            | $V_R=0\text{V}$ , $f=1\text{MHz}$ |

## Typical Characteristics



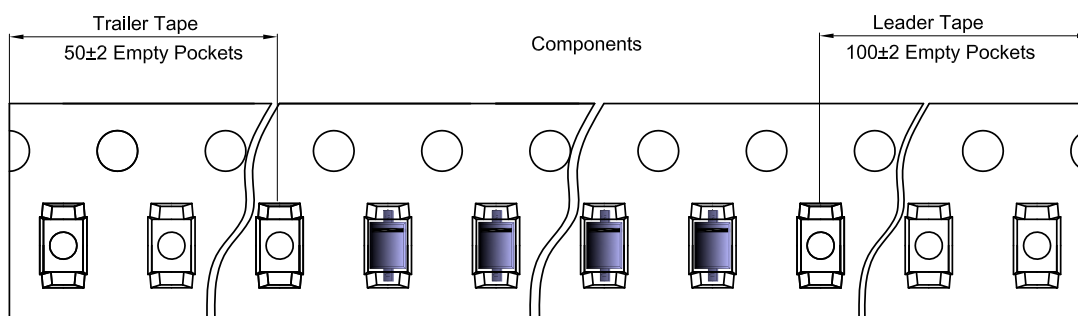
## SOD-323 Tape and Reel

### SOD-323 Embossed Carrier Tape

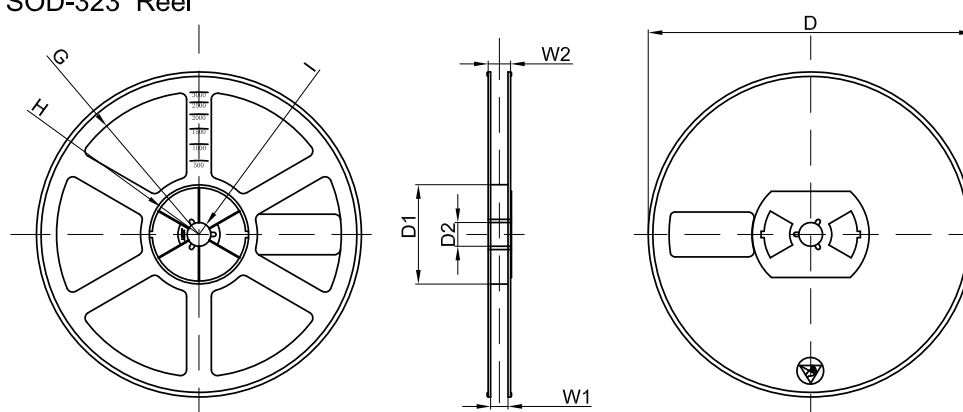


| Dimensions are in millimeter |      |     |      |       |      |      |      |      |      |      |
|------------------------------|------|-----|------|-------|------|------|------|------|------|------|
| Pkg type                     | A    | B   | C    | d     | E    | F    | P0   | P    | P1   | 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



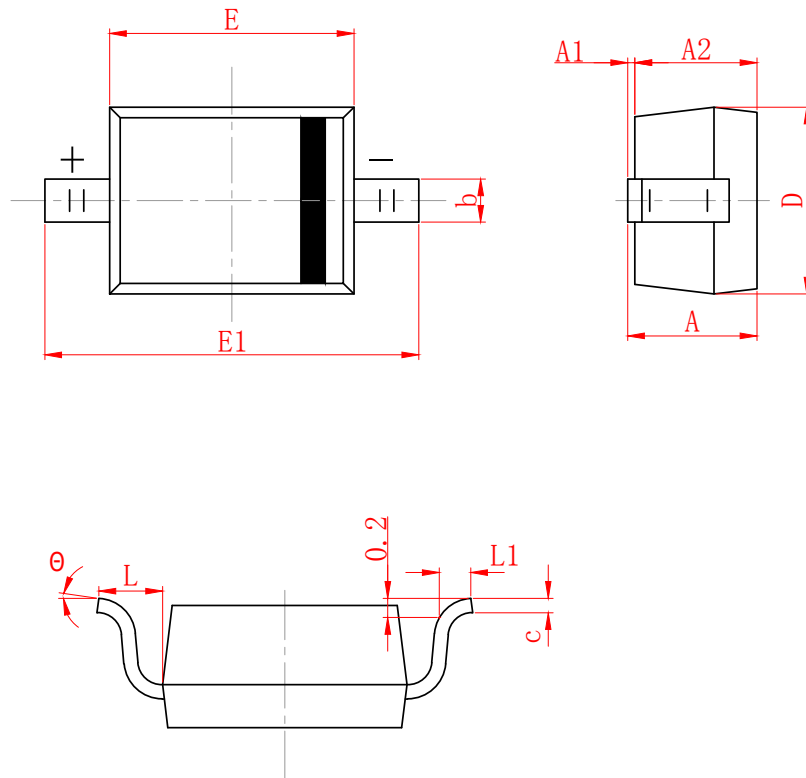
### SOD-323 Reel



| 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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