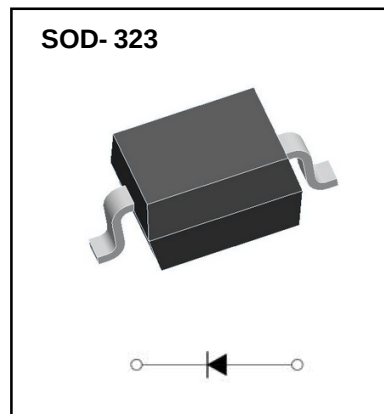


## SOD-323 Plastic-Encapsulate Diodes

### Schottky Rectifier

#### Features

- Low current rectifier schottky diode
- Low voltage, low inductance
- For power supply



#### Marking

- 5

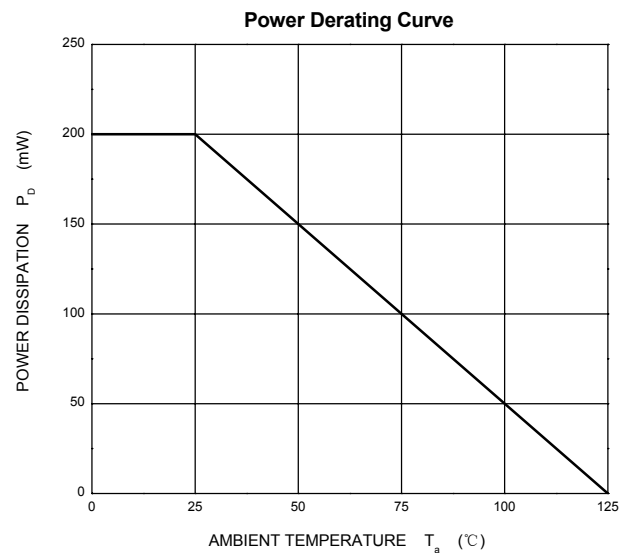
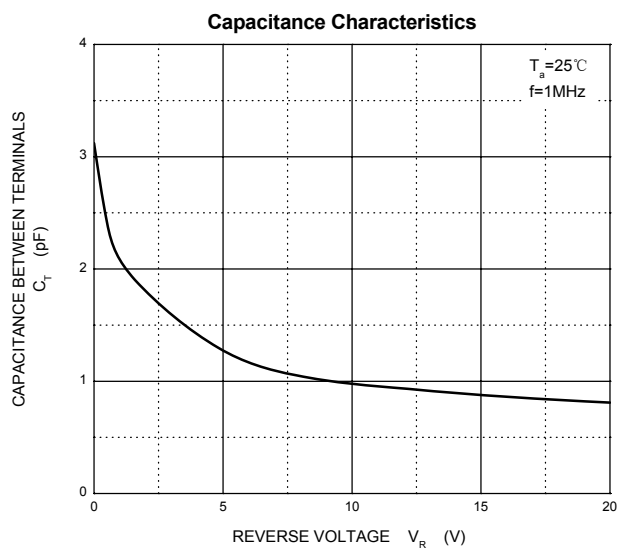
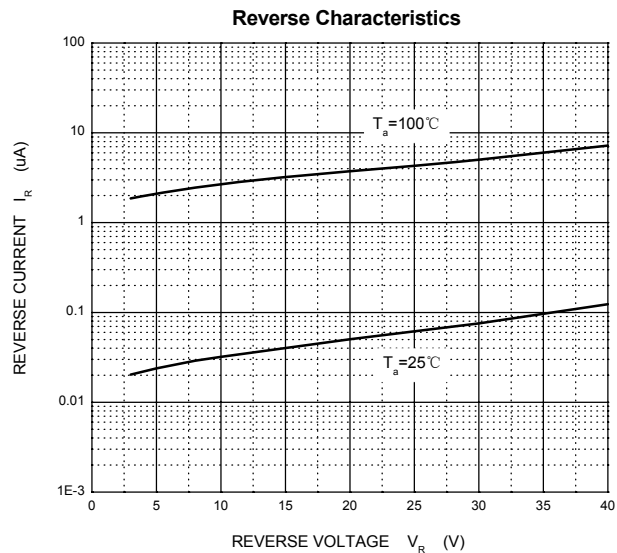
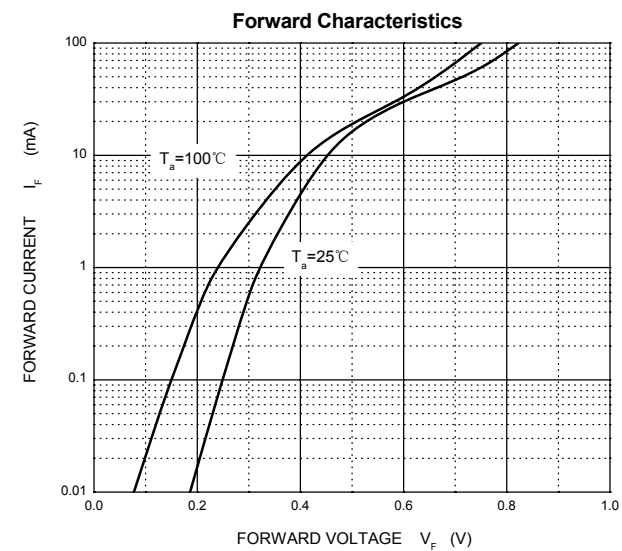
#### Limiting Values (Absolute Maximum Rating)

| Parameter                                         | Symbol          | Limit    | Unit |
|---------------------------------------------------|-----------------|----------|------|
| Peak reverse voltage                              | $V_{RM}$        | 40       | V    |
| DC reverse voltage                                | $V_R$           | 30       | V    |
| Mean rectifying current                           | $I_O$           | 0.03     | A    |
| Non-repetitive Peak Forward Surge Current@t=8.3ms | $I_{FSM}$       | 0.2      | A    |
| Power dissipation                                 | $P_D$           | 200      | mW   |
| Thermal Resistance Junction to Ambient            | $R_{\theta JA}$ | 500      | °C/W |
| Junction temperature                              | $T_j$           | 125      | °C   |
| Storage temperature                               | $T_{stg}$       | -55~+150 | °C   |

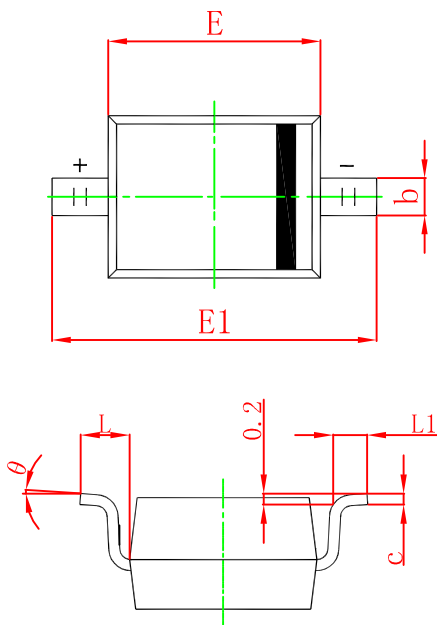
#### Electrical Ratings @Ta=25°C

| Parameter                     | Symbol | Min | Typ | Max  | Unit | Conditions       |
|-------------------------------|--------|-----|-----|------|------|------------------|
| Forward voltage               | $V_F$  |     |     | 0.37 | V    | $I_F=1mA$        |
| Reverse current               | $I_R$  |     |     | 0.5  | μA   | $V_R=30V$        |
| Capacitance between terminals | $C_T$  |     | 2   |      | pF   | $V_R=1V, f=1MHZ$ |

## Typical Characteristics

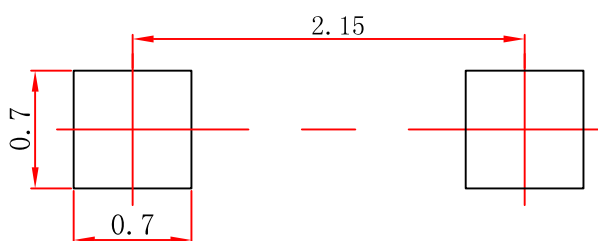


## SOD-323 Package Outline Dimensions



| Symbol | Dimensions In Millimeters |       | Dimensions In Inches |       |
|--------|---------------------------|-------|----------------------|-------|
|        | Min                       | Max   | Min                  | Max   |
| A      |                           | 1.100 |                      | 0.043 |
| A1     | 0.000                     | 0.100 | 0.000                | 0.004 |
| A2     | 0.800                     | 1.000 | 0.031                | 0.039 |
| b      | 0.250                     | 0.350 | 0.010                | 0.014 |
| c      | 0.080                     | 0.150 | 0.003                | 0.006 |
| D      | 1.200                     | 1.400 | 0.047                | 0.055 |
| E      | 1.600                     | 1.800 | 0.063                | 0.071 |
| E1     | 2.500                     | 2.750 | 0.098                | 0.108 |
| L      | 0.475 REF                 |       | 0.019 REF            |       |
| L1     | 0.250                     | 0.400 | 0.010                | 0.016 |
| θ      | 0°                        | 8°    | 0°                   | 8°    |

## SOD-323 Suggested Pad Layout



### Note:

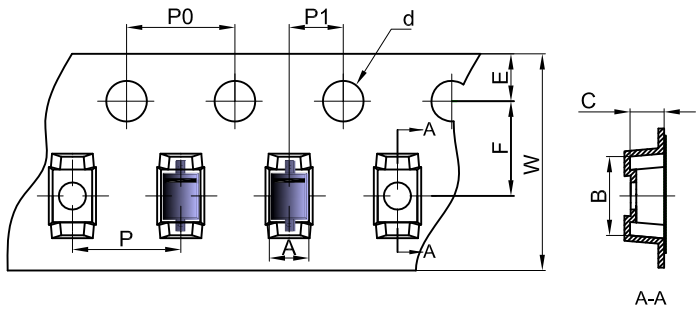
1. Controlling dimension: in millimeters.
2. General tolerance:  $\pm 0.05\text{mm}$ .
3. The pad layout is for reference purposes only.

### NOTICE

JSHD reserve the right to make modifications, enhancements, improvements, corrections or other changes without further notice to any product herein. JSHD does not assume any liability arising out of the application or use of any product described herein.

Reel Taping Specifications For Surface Mount Devices–SOD-323

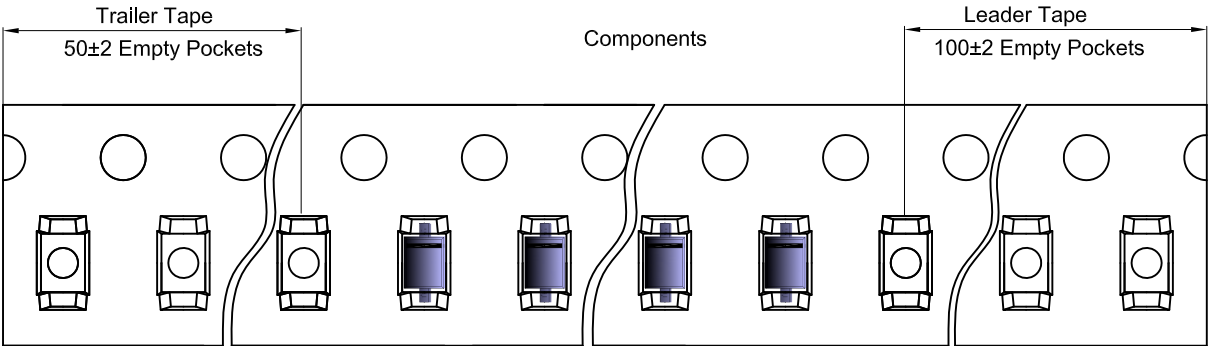
SOD-323 Embossed Carrier Tape



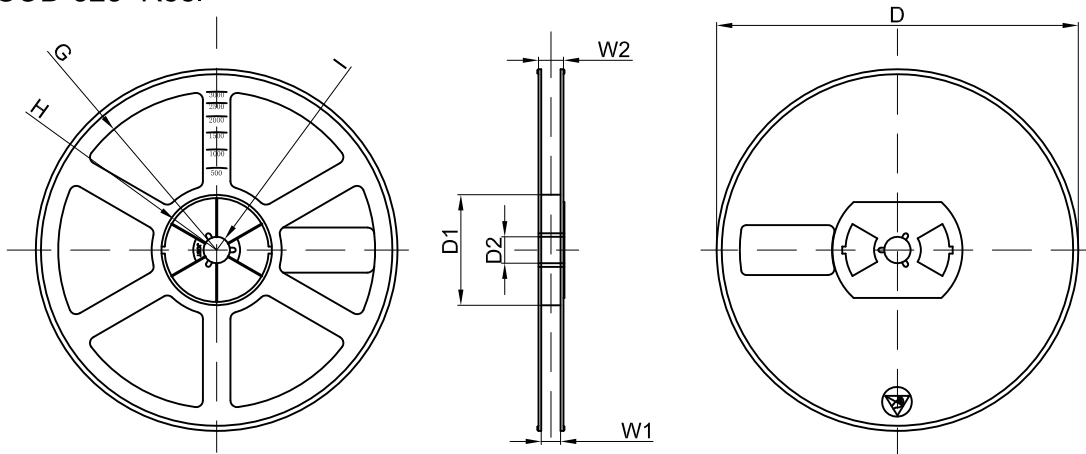
Packaging Description:  
SOD-323 parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts in standard option are shipped with 3,000 units per 7" or 17.8cm diameter reel. The reels are clear in color and is made of polystyrene plastic (anti-static coated).

| 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     |          |