

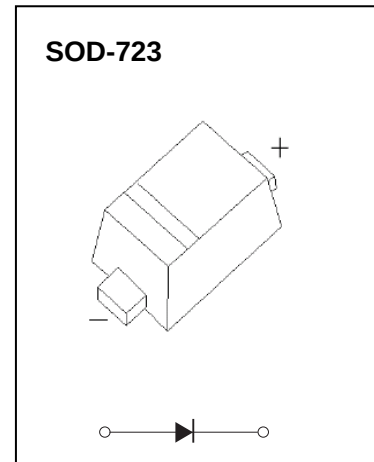
**SOD-723 Plastic-Encapsulate Diodes****RB520G-30** Schottky barrier Diode**FEATURES**

- Small surface mounting type
- Low reverse current and low forward voltage
- High reliability

**MARKING: E**

E=Device code

The marking bar indicates the cathode

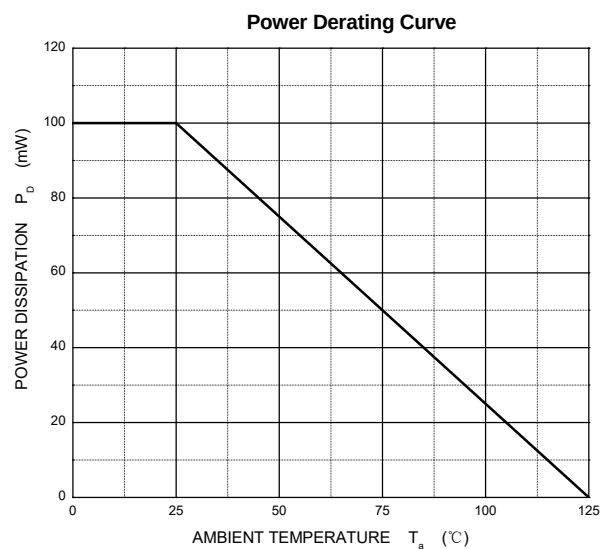
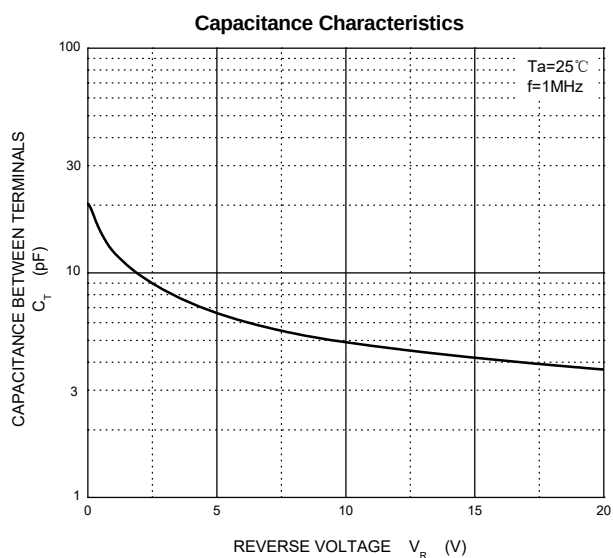
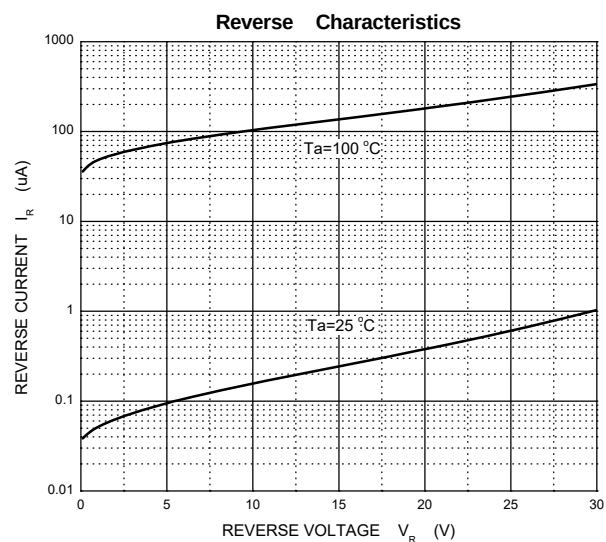
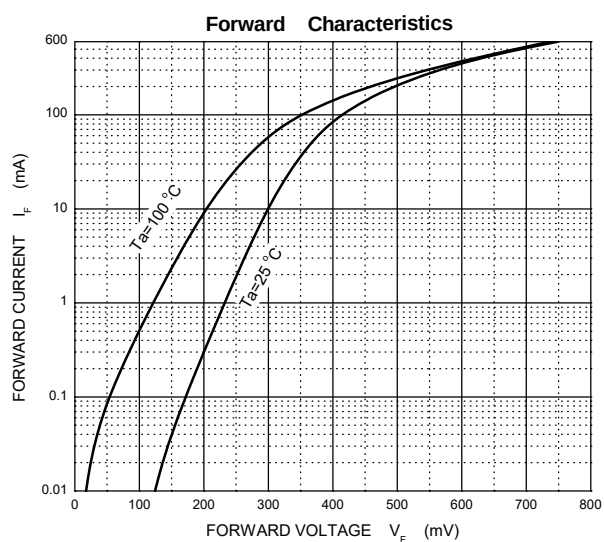
**Maximum Ratings and Electrical Characteristics, Single Diode @Ta=25°C**

| Parameter                                         | Symbol    | Limit      | Unit |
|---------------------------------------------------|-----------|------------|------|
| DC reverse voltage                                | $V_R$     | 30         | V    |
| Mean rectifying current                           | $I_O$     | 200        | mA   |
| Non-repetitive Peak Forward Surge Current@t=8.3ms | $I_{FSM}$ | 500        | mA   |
| Power dissipation                                 | $P_D$     | 100        | mW   |
| Thermal Resistance Junction to Ambient            | $R_{dJA}$ | 1000       | °C/W |
| Operating Junction Temperature Range              | $T_j$     | -40 ~ +125 | °C   |
| Storage Temperature Range                         | $T_{stg}$ | -55 ~ +150 | °C   |

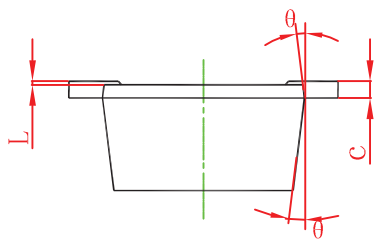
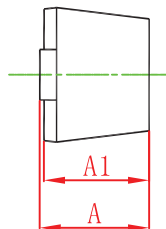
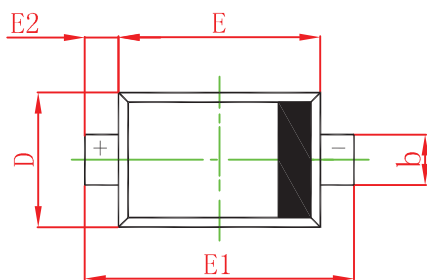
**Electrical Ratings @Ta=25°C**

| Parameter       | Symbol | Min | Typ | Max  | Unit    | Conditions |
|-----------------|--------|-----|-----|------|---------|------------|
| Forward voltage | $V_F$  |     |     | 0.45 | V       | $I_F=10mA$ |
| Reverse current | $I_R$  |     |     | 0.5  | $\mu A$ | $V_R=10V$  |

## Typical Characteristics

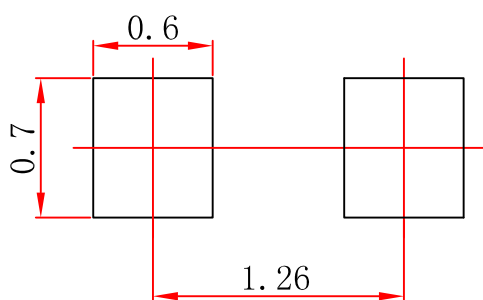


## SOD-723 Package Outline Dimensions



| Symbol | Dimensions In Millimeters |       | Dimensions In Inches |       |
|--------|---------------------------|-------|----------------------|-------|
|        | Min                       | Max   | Min                  | Max   |
| A      | 0.525                     | 0.650 | 0.021                | 0.026 |
| A1     | 0.515                     | 0.580 | 0.020                | 0.023 |
| b      | 0.250                     | 0.350 | 0.010                | 0.014 |
| c      | 0.080                     | 0.150 | 0.003                | 0.006 |
| D      | 0.550                     | 0.650 | 0.022                | 0.026 |
| E      | 0.900                     | 1.100 | 0.035                | 0.043 |
| E1     | 1.300                     | 1.500 | 0.051                | 0.059 |
| E2     | 0.200 REF                 |       | 0.008 REF            |       |
| L      | 0.010                     | 0.070 | 0.001                | 0.003 |
| θ      | 7° REF                    |       | 7° REF               |       |

## SOD-723 Suggested Pad Layout



### Note:

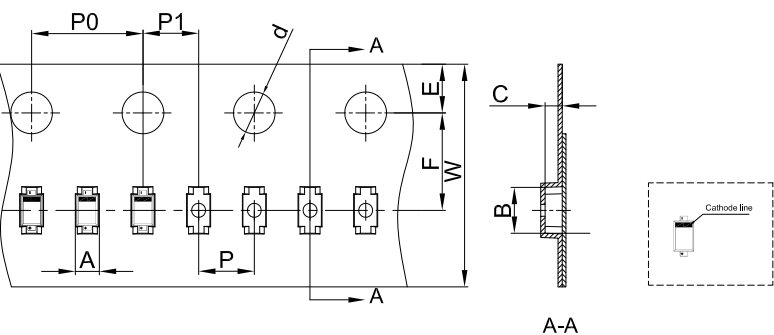
1. Controlling dimension: in millimeters.
2. General tolerance:  $\pm 0.05\text{mm}$ .
3. The pad layout is for reference purposes only.

### NOTICE

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

SOD-723 Tape and Reel

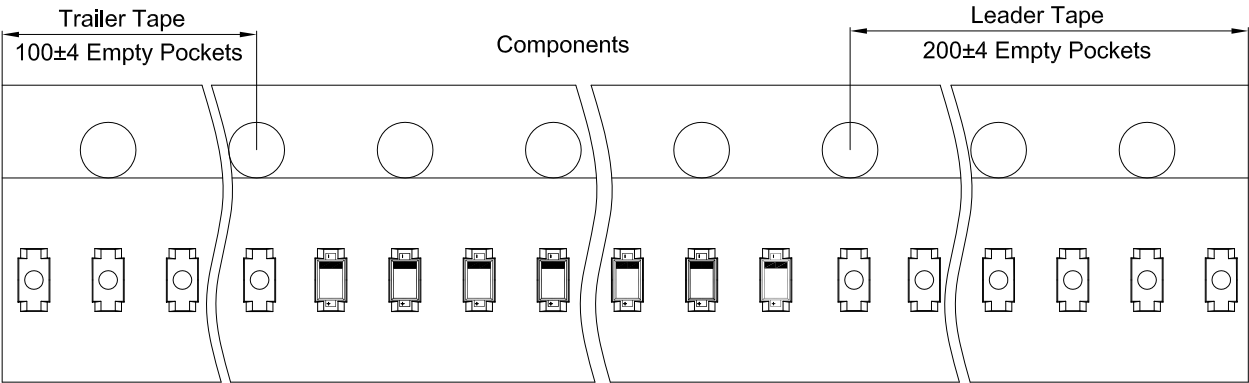
SOD-723 Embossed Carrier Tape



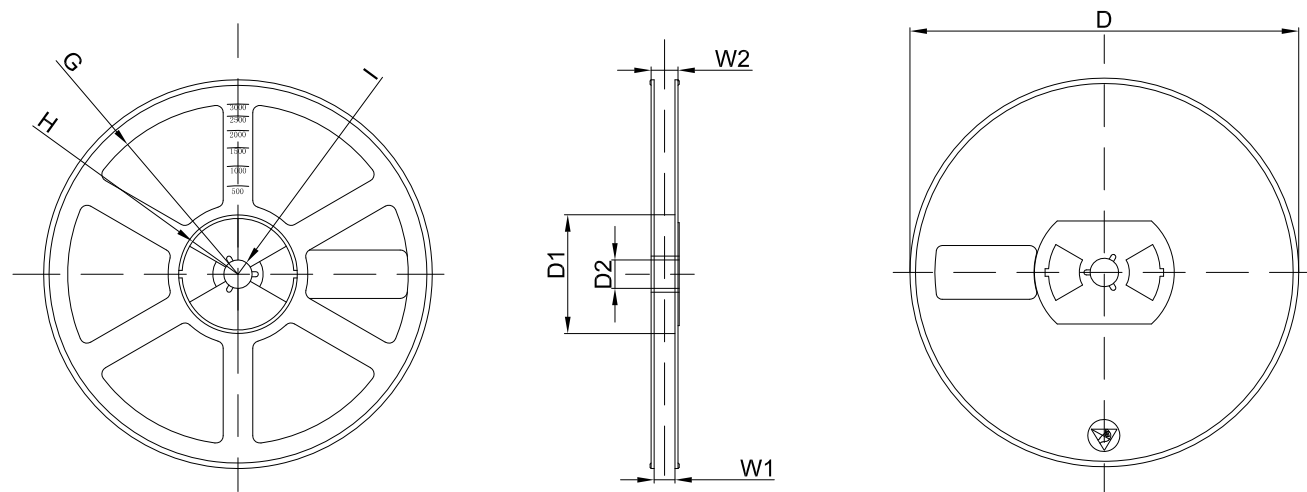
Packaging Description:  
SOD-723 parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts in standard option are shipped with 8,000 units per 7" or 17.8cm diameter reel. The reels are clear in color and is made of polystyrene plastic (anti-static coated).  
Note:If it is the product of the same polarity ,the cathode line should be removed.

| Dimensions are in millimeter |      |      |      |       |      |      |      |      |      |      |
|------------------------------|------|------|------|-------|------|------|------|------|------|------|
| Pkg type                     | A    | B    | C    | d     | E    | F    | P0   | P    | P1   | W    |
| SOD-723                      | 0.73 | 1.71 | 0.62 | Ø1.50 | 1.75 | 3.50 | 4.00 | 2.00 | 2.00 | 8.00 |

SOD-723 Tape Leader and Trailer



SOD-723 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) |
|----------|-----------|-------------|--------------|-------------|-----------------|----------|
| 8000 pcs | 7 inch    | 120,000 pcs | 203×203×195  | 480,000 pcs | 438×438×220     |          |