

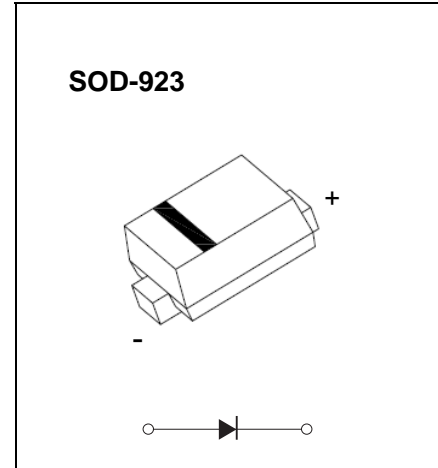
SOD-923 Plastic-Encapsulate Diodes

RB520CS-30 Schottky barrier diode

FEATURES

- Low reverse current and low forward voltage
- High reliability

MARKING: E



Maximum Ratings (Ta=25°C)

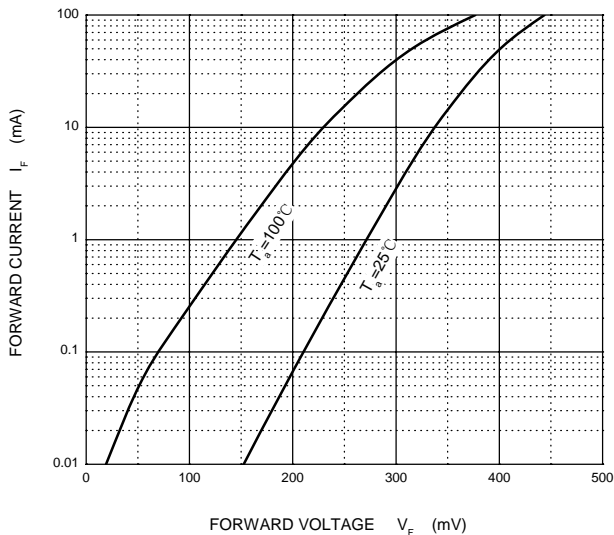
| Parameter | Symbol | Limit | Unit |
|--|-----------------|----------|------|
| DC reverse voltage | V_R | 30 | V |
| Mean rectifying current | I_O | 100 | mA |
| Peak forward surge current @t=8.3ms | I_{FSM} | 0.5 | A |
| Power dissipation | P_D | 100 | mW |
| Thermal Resistance Junction to Ambient | $R_{\theta JA}$ | 1000 | °C/W |
| Junction temperature | T_j | 125 | °C |
| Storage temperature | T_{stg} | -55~+150 | °C |

Electrical characteristic (Ta=25°C)

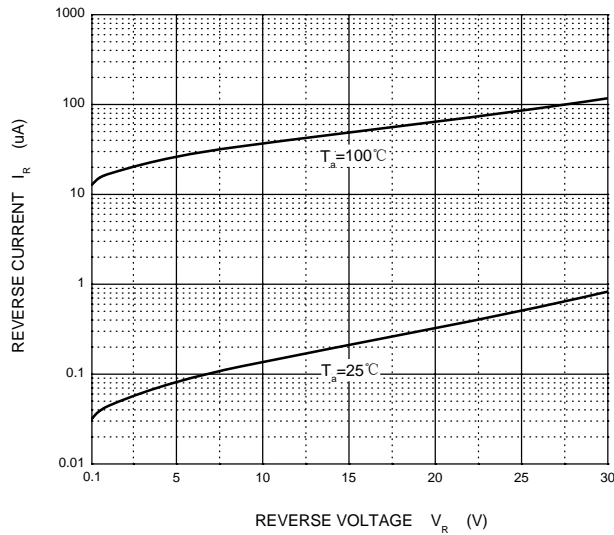
| Parameter | Symbol | Min | Typ | Max | Unit | Conditions |
|-----------------|----------|-----|-----|------|------|----------------|
| Forward voltage | V_{F1} | | | 0.45 | V | $I_{F1}=10mA$ |
| | V_{F2} | | | 0.6 | | $I_{F2}=100mA$ |
| Reverse current | I_R | | | 0.5 | μA | $V_R=10V$ |

Typical Characteristics

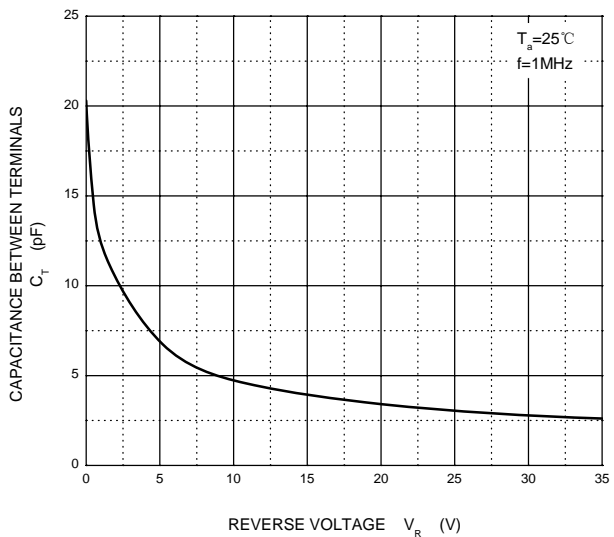
Forward Characteristics



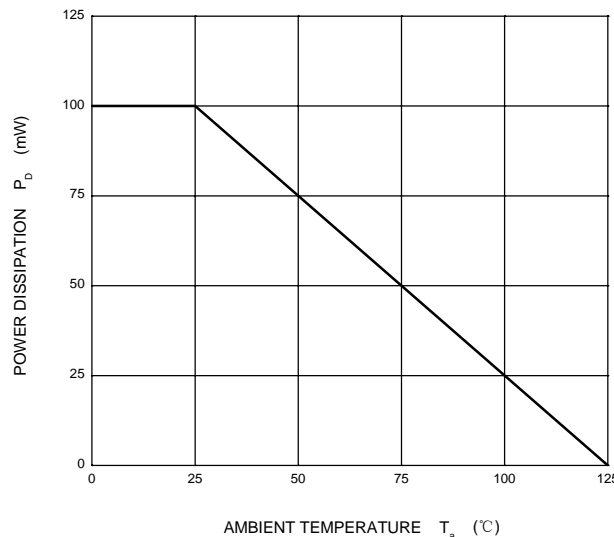
Reverse Characteristics



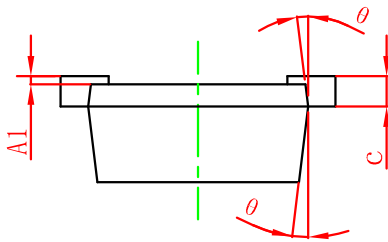
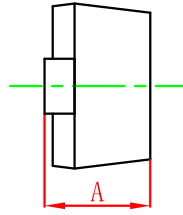
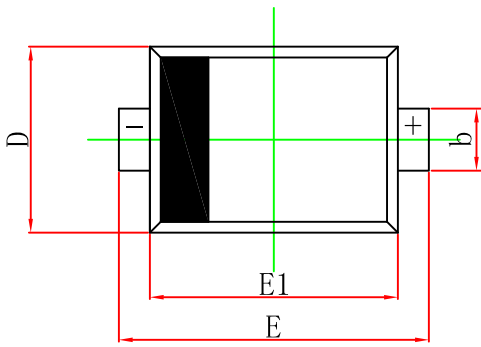
Capacitance Characteristics



Power Derating Curve

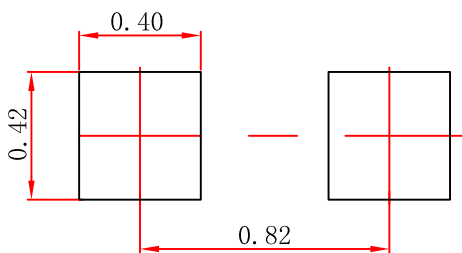


SOD-923 Package Outline Dimensions



| Symbol | Dimensions In Millimeters | | Dimensions In Inches | |
|--------|---------------------------|-------|----------------------|-------|
| | Min. | Max. | Min. | Max. |
| A | 0.350 | 0.430 | 0.014 | 0.017 |
| A1 | 0.000 | 0.050 | 0.000 | 0.002 |
| b | 0.170 | 0.270 | 0.007 | 0.011 |
| c | | 0.150 | | 0.006 |
| D | 0.550 | 0.650 | 0.022 | 0.026 |
| E | 0.900 | 1.100 | 0.035 | 0.043 |
| E1 | 0.750 | 0.850 | 0.030 | 0.033 |
| θ | 7° REF. | | 7° REF. | |

SOD-923 Suggested Pad Layout



Note:

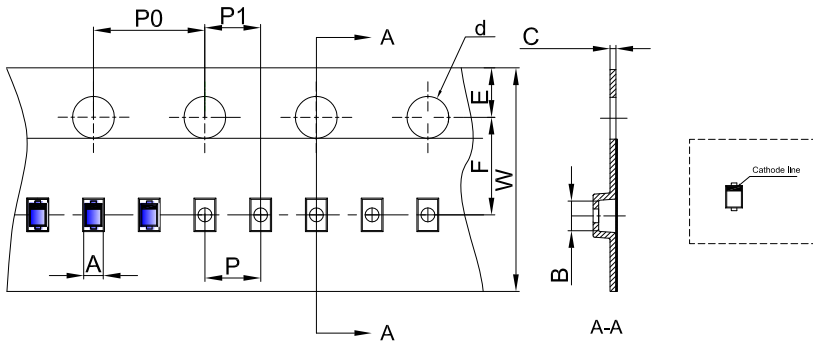
1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.

NOTICE

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

SOD-923 Tape and Reel

SOD-923 Embossed Carrier Tape



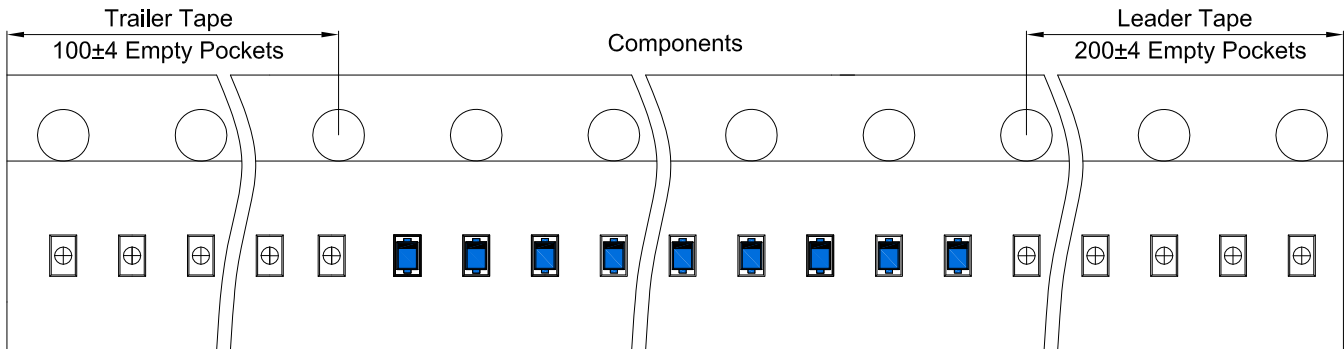
Packaging Description:

SOD-923 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).

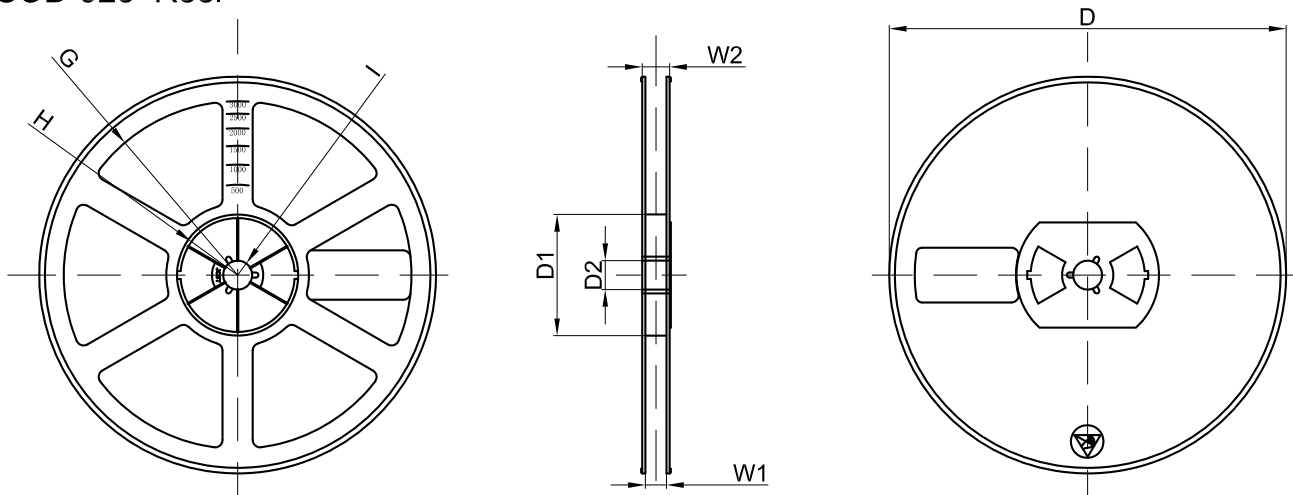
Note: If it is the product of the same polarity, the cathode line should be removed.

| Dimensions are in millimeter | | | | | | | | | | |
|------------------------------|-----|------|------|-------|------|------|------|------|------|------|
| Pkg type | A | B | C | d | E | F | P0 | P | P1 | W |
| SOD-923 | 0.7 | 1.12 | 0.23 | Ø1.50 | 1.75 | 3.50 | 4.00 | 2.00 | 2.00 | 8.00 |

SOD-923 Tape Leader and Trailer



SOD-923 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 | |