

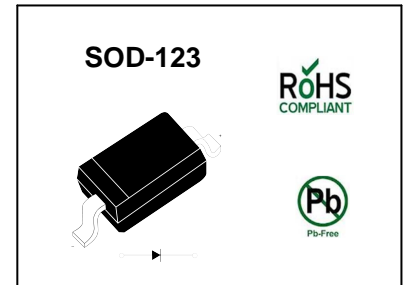
Surface Mount Schottky Barrier Diodes

Features

- Low Forward Voltage

PINNING

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



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

| Parameter | Symbol | Value | Unit |
|---|----------------|----------------|------------------|
| Peak Repetitive Reverse Voltage | V_{RRM} | 40 30 20 | V |
| Reverse Voltage | V_R | 40 30 20 | V |
| Average Forward Rectified Current | $I_{F(AV)}$ | 350 | mA |
| Non-Repetitive Peak Forward Surge Current at $t = 1\text{ s}$ | I_{FSM} | 2 | A |
| Power Dissipation | P_{tot} | 400 | mW |
| Operating and Storage Temperature Range | T_j, T_{stg} | - 65 to + 125 | $^\circ\text{C}$ |

Characteristics at $T_a = 25^\circ\text{C}$

| Parameter | Symbol | Min. | Typ. | Max. | Unit |
|--|-------------|----------------|-------------|-------------|---------------|
| Reverse Breakdown Voltage at $I_R = 10\text{ }\mu\text{A}$ | $V_{(BR)R}$ | 40 30 20 | - - - | - - - | V |
| Reverse Leakage Current at $V_R = 30\text{ V}$ at $V_R = 20\text{ V}$ at $V_R = 10\text{ V}$ | I_R | - - - | - - - | 5 5 5 | μA |
| Forward Voltage at $I_F = 20\text{ mA}$ at $I_F = 200\text{ mA}$ | V_F | - - | - - | 0.37 0.6 | V |
| Total Capacitance at $V_R = 0\text{ V}$, $f = 1\text{ MHz}$ | C_T | - | 50 | - | pF |
| Reverse Recovery Time at $I_F = I_R = 200\text{ mA}$, $I_{rr} = 0.1 I_R$, $R_L = 100\text{ }\Omega$ | t_{rr} | - | 10 | - | ns |

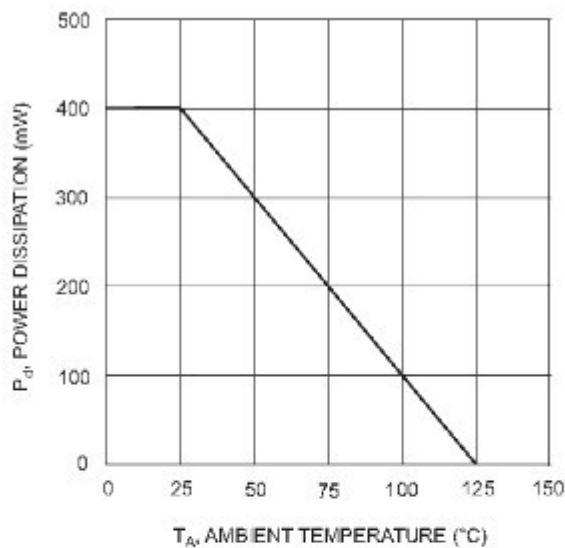


Fig. 1 Power Derating Curve

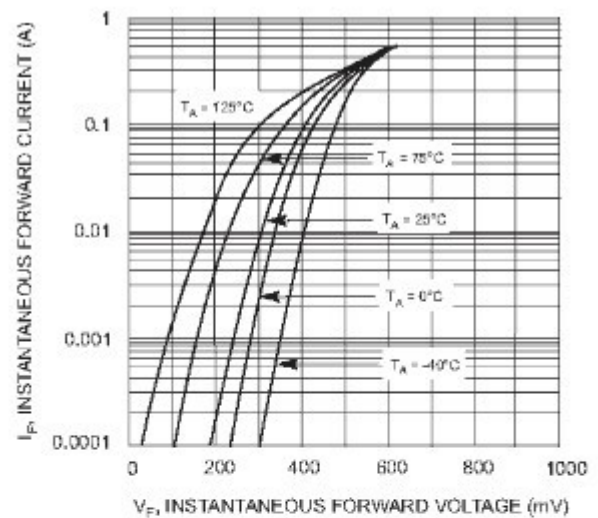


Fig. 2 Typical Forward Characteristics

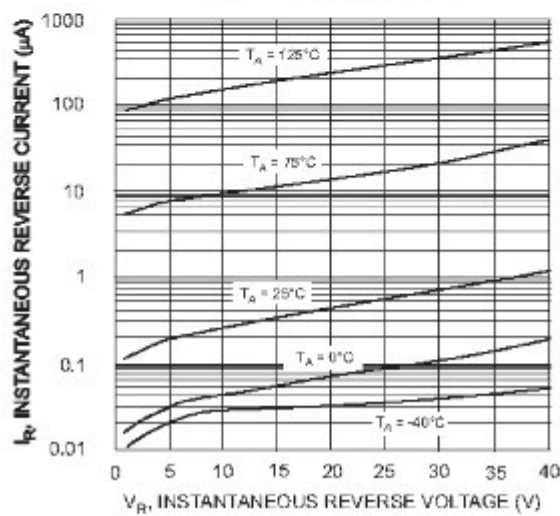


Fig. 3 Typical Reverse Characteristics

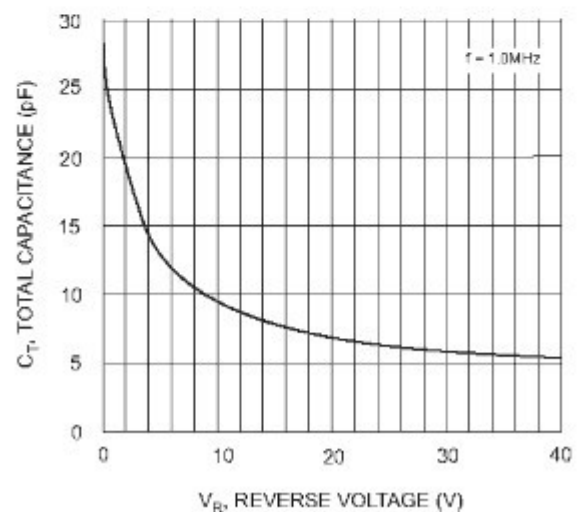
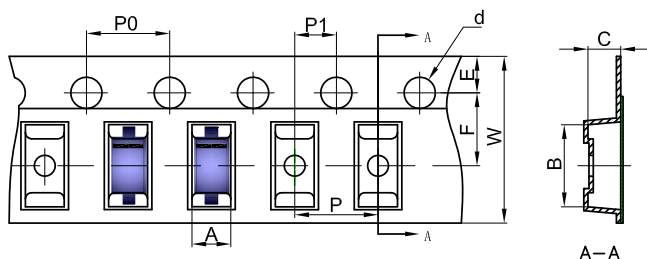


Fig. 4 Typ. Total Capacitance vs. Reverse Voltage

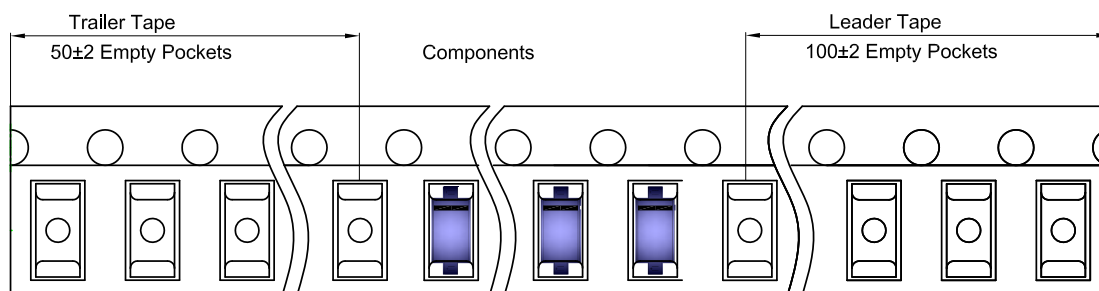
SOD-123 Tape and Reel

SOD-123 Embossed Carrier Tape

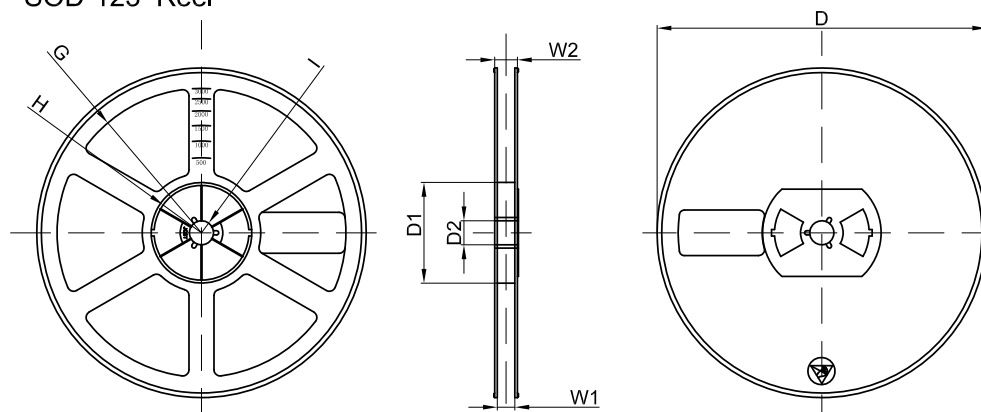


| Dimensions are in millimeter | | | | | | | | | | |
|------------------------------|------|------|------|-------|------|------|------|------|------|------|
| Pkg type | A | B | C | d | E | F | P0 | P | P1 | W |
| SOD-123 | 1.85 | 3.95 | 1.57 | Ø1.55 | 1.75 | 3.50 | 4.00 | 4.00 | 2.00 | 8.00 |

SOD-123 Tape Leader and Trailer

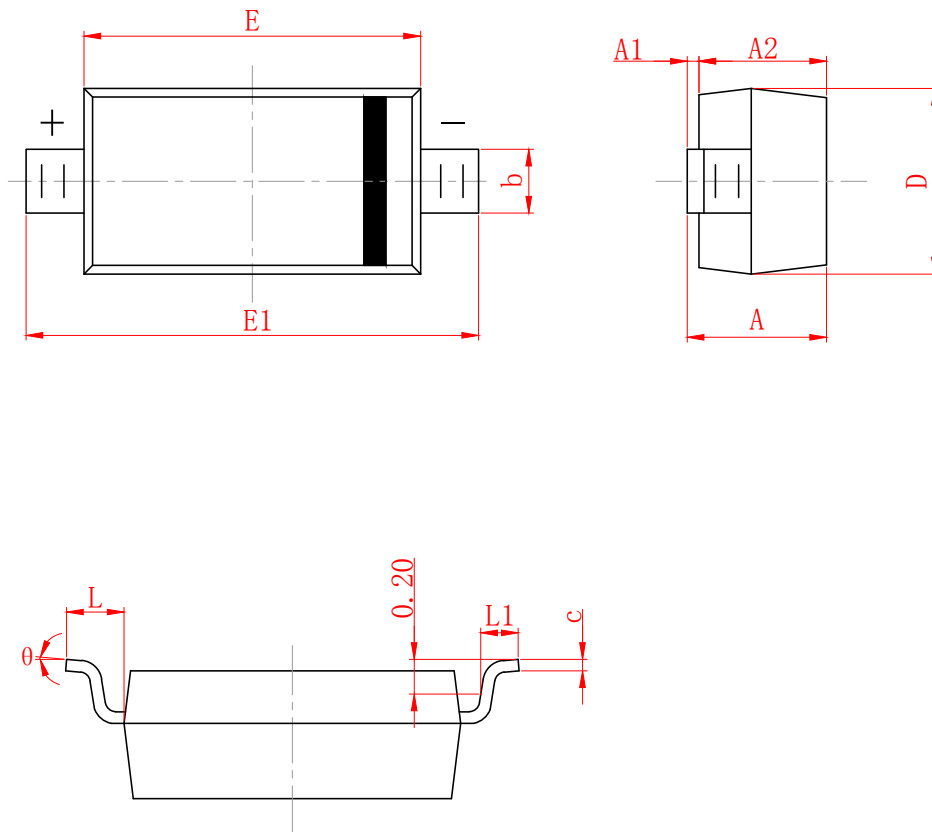


SOD-123 Reel



| 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 | |



| SYMBOL | MILLIMETER | |
|--------|-------------|-------|
| | MIN | MAX |
| A | 1.050 | 1.250 |
| A1 | 0.000 | 0.100 |
| A2 | 1.050 | 1.150 |
| b | 0.450 | 0.650 |
| c | 0.008 | 0.150 |
| D | 1.500 | 1.700 |
| E | 2.600 | 2.800 |
| E1 | 3.550 | 3.850 |
| L | 0.500 (REF) | |
| L1 | 0.250 | 0.450 |
| θ | 0° | 8° |

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