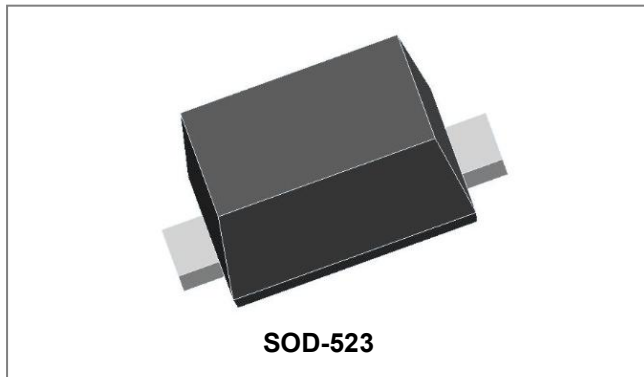


1SS388 FAST SWITCHING DIODE



Features

- Fast switching devices
- SOD523 Micro SMD package
- RoHS compliant / Green EMC
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- High Conductance
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Circuit Diagram



Mechanical Characteristics

- Case: SOD-523, Molded plastic
- Matte Tin (Sn) Lead finish
- Polarity: Cathode Band
- Weight: 0.002 grams(approx)

Maximum Ratings @ $T_A=25^{\circ}\text{C}$ unless otherwise specified

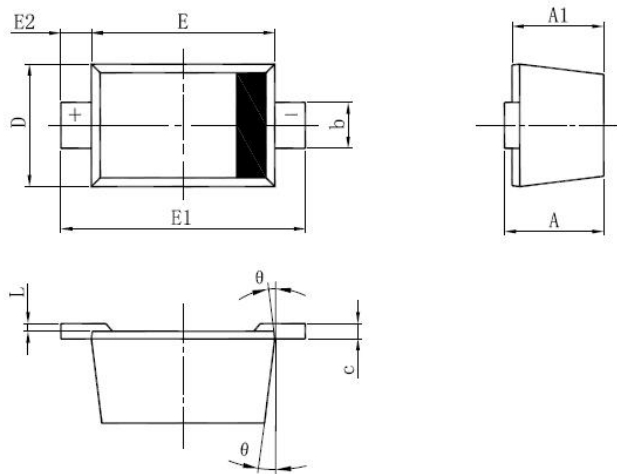
| Characteristic | Symbol | Limits | Unit |
|--|---------------------------------|-------------|--------------------|
| Non- Repetitive Peak Reverse Voltage | V_{RM} | 45 | V |
| Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage | V_{RRM} V_{RWM} V_R | 40 | V |
| Forward Continuous Current | I_F | 100 | mA |
| Non-Repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$ | I_{FSM} | 1 | A |
| Power Dissipation | P_D | 150 | mW |
| Junction and Storage Temperature Range | T_J, T_{STG} | -55 to +125 | $^{\circ}\text{C}$ |

Electrical Characteristics @T_A=25°C unless otherwise specified

| Characteristic | Symbol | Min | Max | Units | Test Condition |
|--------------------------|-----------------|-----|----------------------|-------|--|
| Forward Voltage* | V _{FM} | - | 0.28 0.36 0.60 | V | @I _F =1mA @I _F =10mA @I _F =50mA |
| Reverse Leakage Current* | I _{RM} | - | 5 | uA | @V _R =10V |
| Capacitance | C _T | - | 25 | pF | V _R =0V, f=1.0MHz |

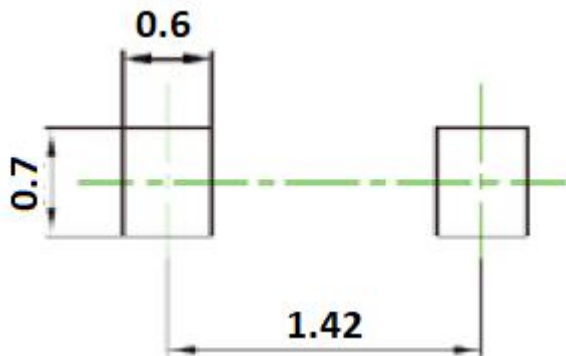
* Pulse width < 300 μs, duty cycle < 2%

Mechanical Dimensions SOD-523



| SYMBOL | Millimeters | | Inches | |
|-----------|-------------|-------|------------|-------|
| | Min. | Max. | Min. | Max. |
| A | 0.510 | 0.770 | 0.020 | 0.031 |
| A1 | 0.500 | 0.700 | 0.020 | 0.028 |
| b | 0.250 | 0.350 | 0.010 | 0.014 |
| c | 0.080 | 0.200 | 0.003 | 0.008 |
| D | 0.700 | 0.850 | 0.028 | 0.033 |
| E | 1.100 | 1.300 | 0.043 | 0.051 |
| E1 | 1.500 | 1.700 | 0.059 | 0.067 |
| E2 | 0.200 REF | | 0.008 REF. | |
| L | 0.010 | 0.070 | 0.001 | 0.003 |
| θ | 7° REF | | 7° REF | |

Land Pattern Recommendation SOD-523 (Millimeters)



Tolerance: ±0.05mm

Ordering Information

| Device | Package | Shipping |
|--------|---------|----------------|
| 1SS388 | SOD-523 | 3000pcs / reel |

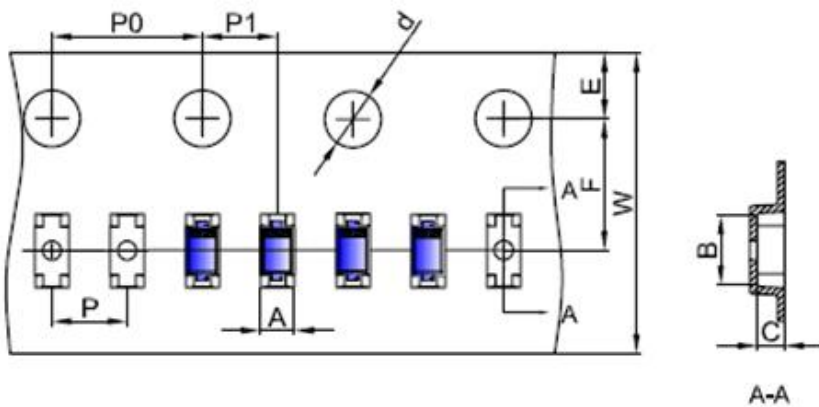
For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

Marking Diagram



S3 =Marking code

Carrier Tape & Reel Specification SOD-523



| SYMBOL | Millimeters | |
|--------|-------------|------|
| | Min. | Max. |
| A | 0.85 | 0.95 |
| B | 1.89 | 1.99 |
| C | 0.68 | 0.78 |
| d | 1.40 | 1.60 |
| E | 1.65 | 1.85 |
| F | 3.40 | 3.60 |
| P | 1.90 | 2.10 |
| P0 | 3.90 | 4.10 |
| P1 | 1.90 | 2.10 |
| W | 7.90 | 8.30 |

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