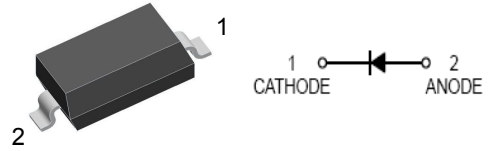


Fast Switching Diode in SOD-323

Features

- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- High Conductance



Mechanical Data

- **Case:** SOD-323 (plastic package).
Lead free; RoHS compliant; Halogen free
- **Molding Compound Flammability Rating:**
UL 94 V-0
- **Terminals:** High temperature soldering guaranteed:
260 °C/10 sec. at terminals

Applications

- High Speed Switching and Reverse Polarity Protection
- High Speed Rectifying Applications
- Consumer, Automotive and Telecommunication Industry

Absolute Maximum Ratings

Ratings at 25 °C, ambient temperature unless otherwise specified

| Symbol | Parameter | Value | Unit |
|-----------------|---|----------|------|
| V_{RRM} | Peak Repetitive Reverse Voltage | 90 | V |
| V_R | DC Blocking Voltage | 80 | |
| I_O | Continuous Forward Current | 100 | mA |
| I_{FSM} | Non-repetitive Peak Forward Surge Current@t=8.3ms | 2.0 | A |
| P_D | Power Dissipation | 200 | mW |
| $R_{\theta JA}$ | Thermal Resistance from Junction to Ambient | 625 | °C/W |
| T_J | Junction Temperature | 150 | °C |
| T_{stg} | Storage Temperature | -55~+150 | °C |

Electrical Characteristics

($T_A = 25\text{ °C}$ unless otherwise specified)

| Parameter | Symbol | Min | Typ | Max | Unit | Conditions |
|-------------------------------|----------|-----|-----|-----|------|---|
| Forward voltage | V_F | | | 1.2 | V | $I_F=100\text{mA}$ |
| Reverse current | I_R | | | 0.1 | μA | $V_R=80\text{V}$ |
| Capacitance between terminals | C_T | | | 3 | pF | $V_R=0.5\text{V}, f=1\text{MHz}$ |
| Reverse recovery time | t_{rr} | | | 4 | ns | $I_F=10\text{mA}, V_R=6\text{V}, R_L=100\Omega$ |

Typical Characteristics ($T_{amb} = 25\text{ }^{\circ}\text{C}$ unless otherwise specified)

Fig.1 Forward current(IF) vs Forward voltage(VF)

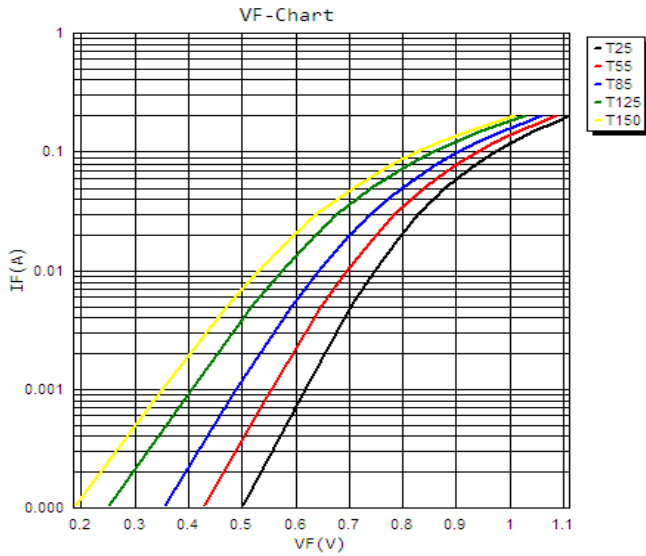


Fig.2 Reverse current(IR) vs Reverse voltage(VR)

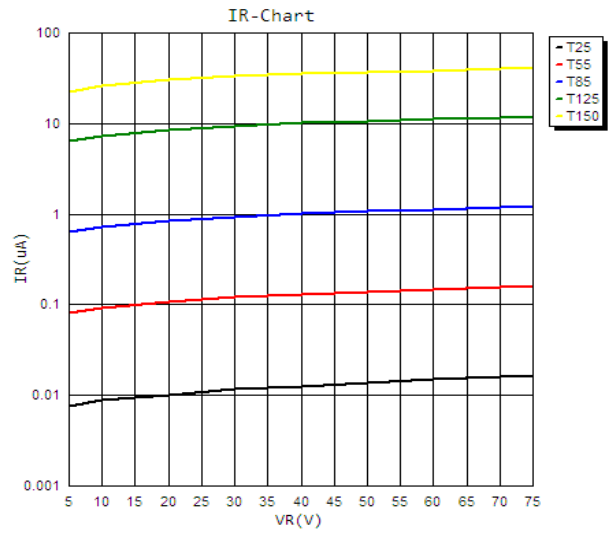


Fig.3 Power Derating Curve

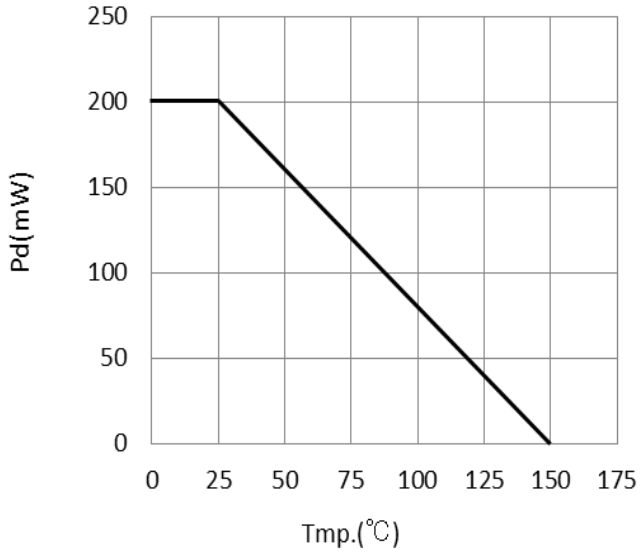
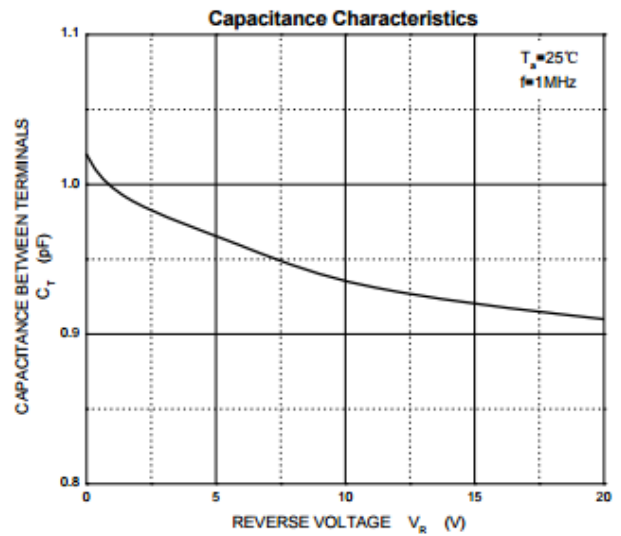
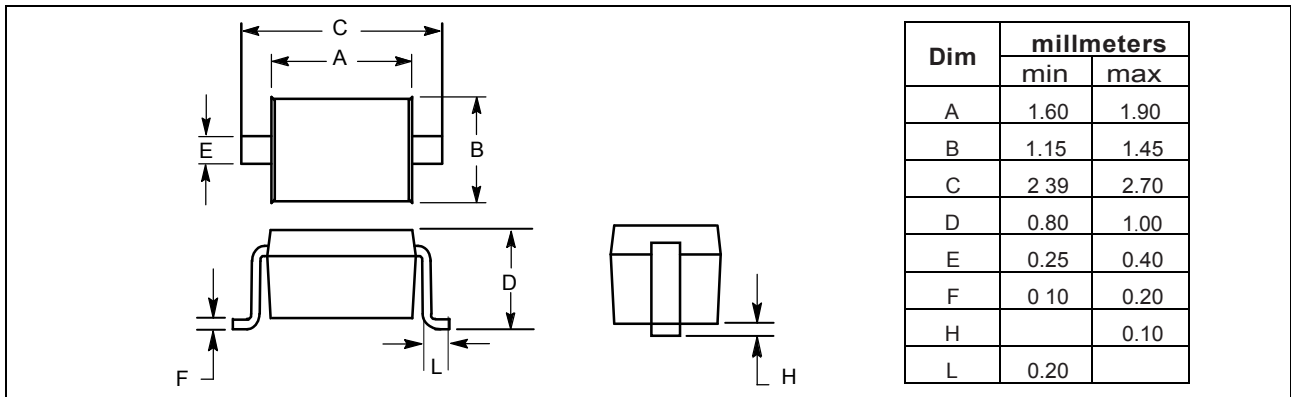


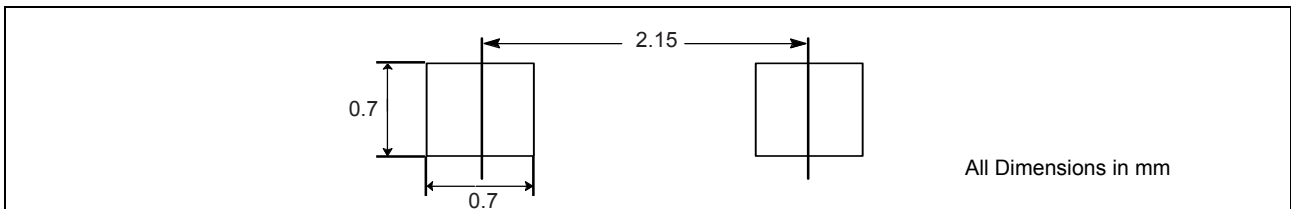
Fig.4 Capacitance vs Reverse voltage(VR)



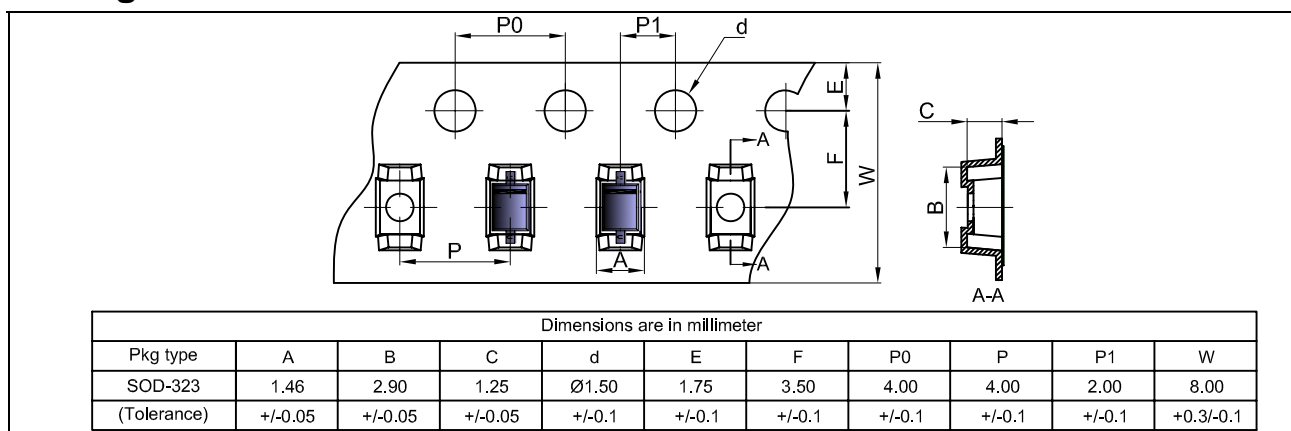
Package Dimensions



PAD Dimension



Package Information



Marking



Ordering information

| Order code | Package | Packaging option | Base quantity | Packaging specification |
|------------|---------|------------------|----------------|-------------------------|
| 1SS355WX | SOD-323 | Tape and reel | 3000pcs / reel | EIA STD RS-481 |

Revision history

| Date | Revision | Changes |
|-------------|----------|-----------------|
| 23-May-2020 | 1.0 | Initial release |

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