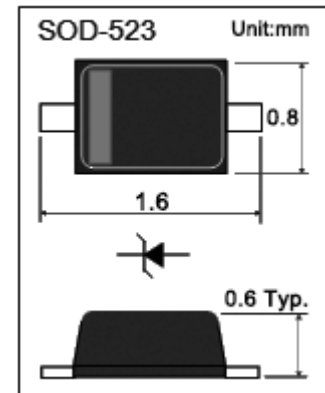


1SS400

- ◇ Fast switching devices
- ◇ **SOD523** Micro SMD package
- ◇ RoHS compliant / Green EMC
- ◇ Matte Tin (Sn) Lead finish
- ◇ Cathode Band / Device marking
- ◇ Surface Mount Package Ideally Suited for Automatic Insertion
- ◇ For General Purpose Switching Applications
- ◇ High Conductance

| Device Marking Code | |
|---------------------|----------|
| 1SS400 | A |



Maximum Ratings (Ta = 25 °C)

| Symbol | Parameter | Value | Units |
|--------------------|----------------------------------|-------------|-------|
| VR | DC Reverse Voltage | 80 | V |
| V _{RM} | Peak Reverse Voltage | 90 | V |
| I _{FM} | Forward Continuous Current | 225 | mA |
| I _o | Average Rectified Output Current | 100 | mA |
| I _{surge} | Surge Current(1s) | 500 | mA |
| P _{ToT} | Total Power Dissipation | 150 | mW |
| T _J | Junction Temperature | 150 | °C |
| T _{STG} | Storage Temperature | -55 to +150 | °C |

Electrical Characteristics (Ta = 25 °C)

| Symbol | Parameter | Conditions | Min | Max | Units |
|-----------------|-----------------------|---|-----|-----|-------|
| V _F | Forward Voltage | I _F = 100mA (25°C) | | 1.2 | V |
| I _R | Reverse current | V _R = 80V (25°C) | | 0.1 | μA |
| C _T | Capacitance | V _R = 0.5V, f = 1MHz | | 3.0 | pF |
| t _{rr} | Reverse Recovery Time | I _F = I _R = 10mA, I _{RR} = 1mA, R _L = 100Ω | | 4 | ns |

Characteristics Curves

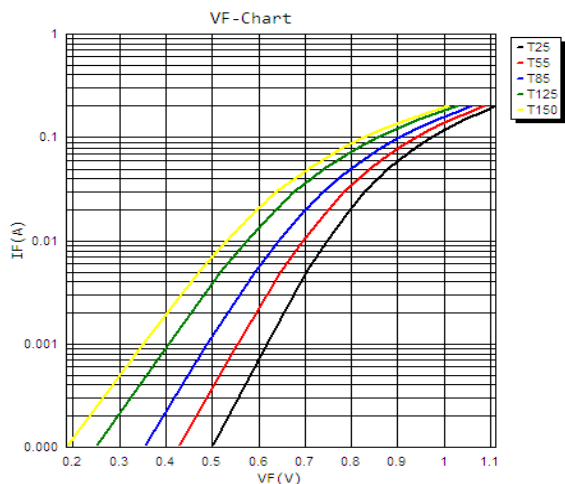


Fig.2 Forward current(IF) vs Forward voltage(VF)

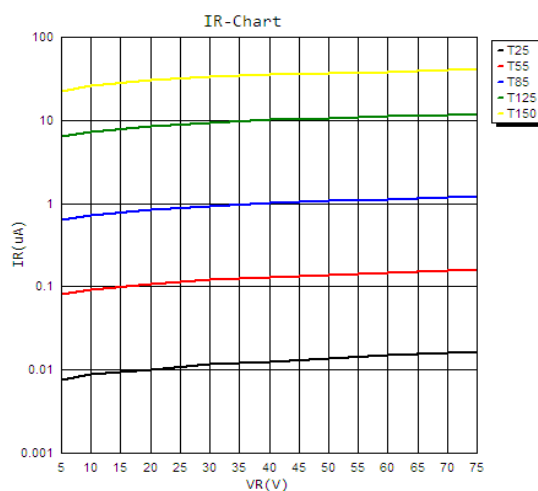


Fig.3 Reverse current(IR) vs Reverse voltage(VR)

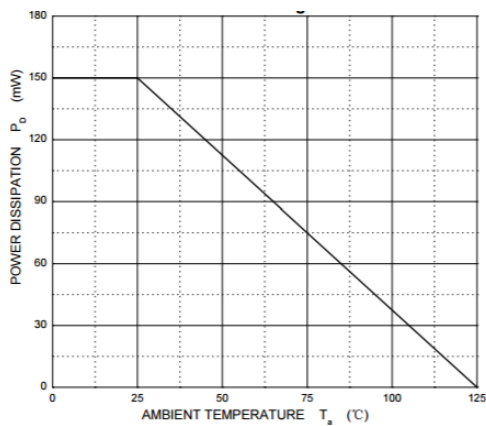


Fig.4 Power Derating Curve

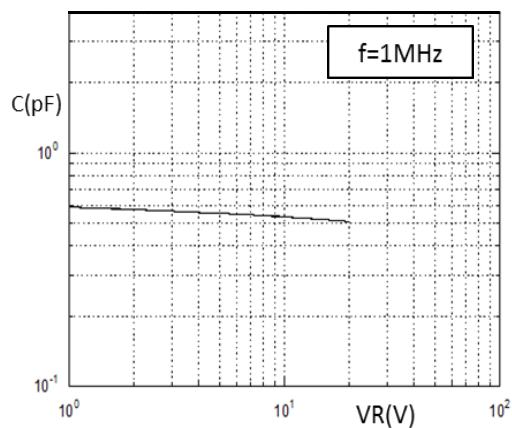


Fig.5 Capacitance vs Reverse voltage(VR)

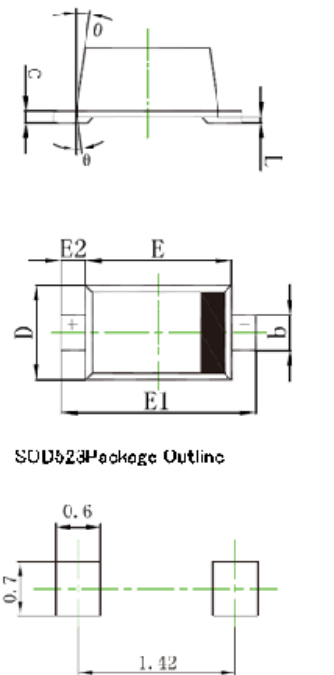
1SS400

Ordering Information

| Device | Package | Shipping | Tape wide | Emboss pitch | Tape specification | Notes |
|--------|---------|---------------------------------|-----------|--------------|--------------------|-------|
| 1SS400 | SOD523 | Tape & Reel 8000pcs /7" Reel | 8 mm | 4 mm | Conductive | |

Package Dimensions

Package outline : SOD-523



| Unit | A | A1 | b | c | D | E | E1 | E2 | L | θ |
|------|------|------|------|------|------|------|------|------|------|----------|
| Max. | 0.77 | 0.70 | 0.35 | 0.15 | 0.85 | 1.30 | 1.70 | 0.20 | 0.07 | 7° |
| Min. | 0.51 | 0.50 | 0.25 | 0.08 | 0.75 | 1.10 | 1.50 | REF. | 0.01 | REF. |

Note:

1. Halogen free,EMC
2. Pb free solder
3. Lead thickness includes solder plating
4. Lead frame: Cu
5. Other Tolerance: ± 0.05
6. Dimensions are exclusive of Burrs,Mold Flash and Tie Bar extrusions
7. Unit: mm

End Pattern Recommendation

