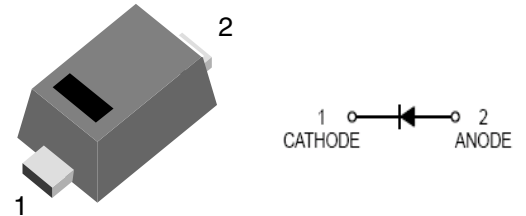


Fast Switching Diode in SOD-523

Features

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



Mechanical Data

- **Case:** SOD-523 (plastic package).
Lead free; RoHS compliant
- **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

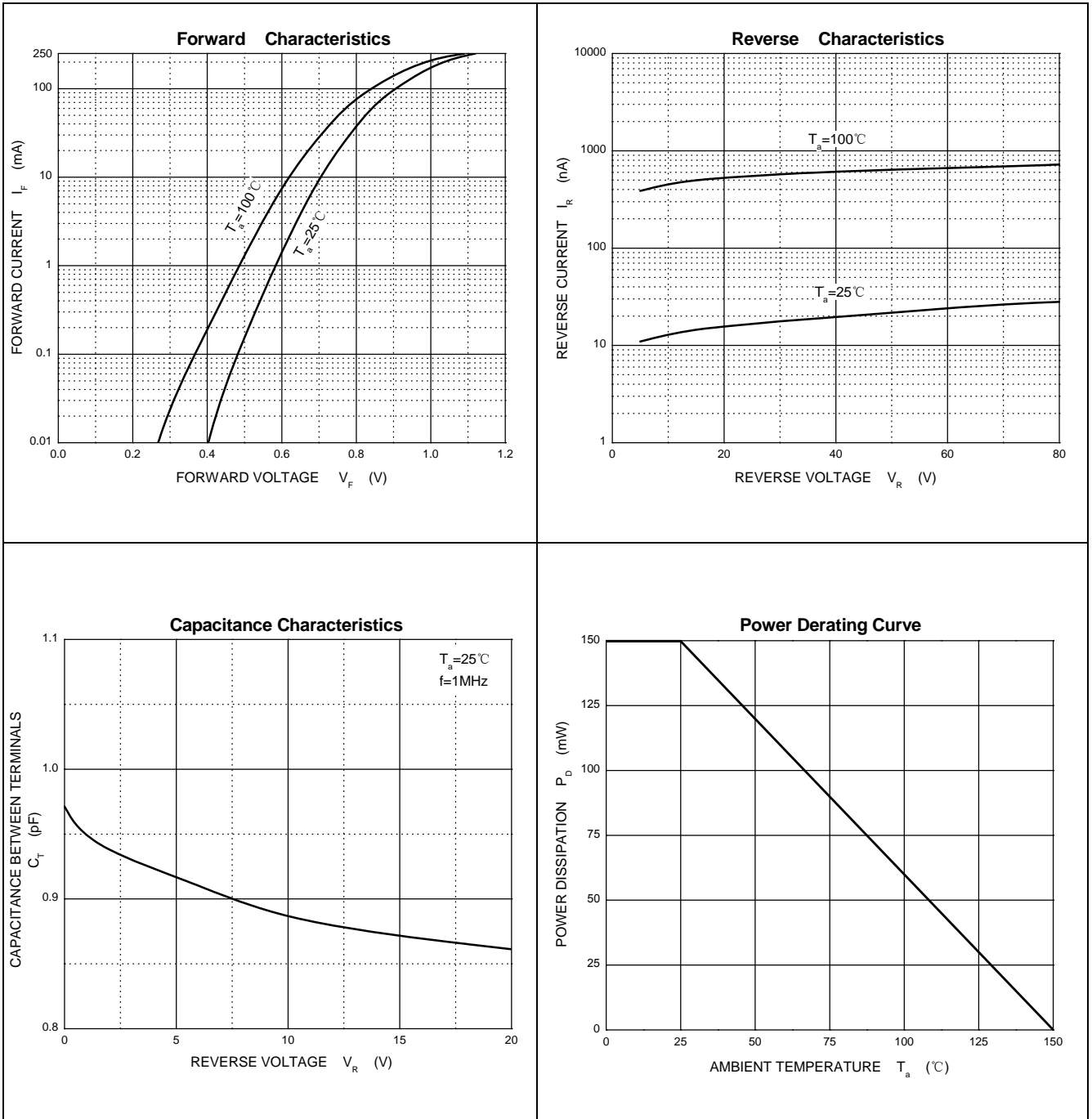
| Symbol | Parameter | Value | Unit |
|-----------------|--|----------|------|
| V_{RRM} | Peak Repetitive Reverse Voltage | 75 | V |
| V_{RM} | DC Blocking Voltage | 100 | |
| I_O | Continuous Forward Current | 250 | mA |
| I_{FSM} | Non-repetitive Peak Forward Surge Current@t= 8.3ms | 2.0 | A |
| P_D | Power Dissipation | 150 | mW |
| $R_{\theta JA}$ | Thermal Resistance from Junction to Ambient | 500 | °C/W |
| T_j | Junction Temperature | 150 | °C |
| T_{stg} | Storage Temperature | -55~+150 | °C |

Electrical Characteristics

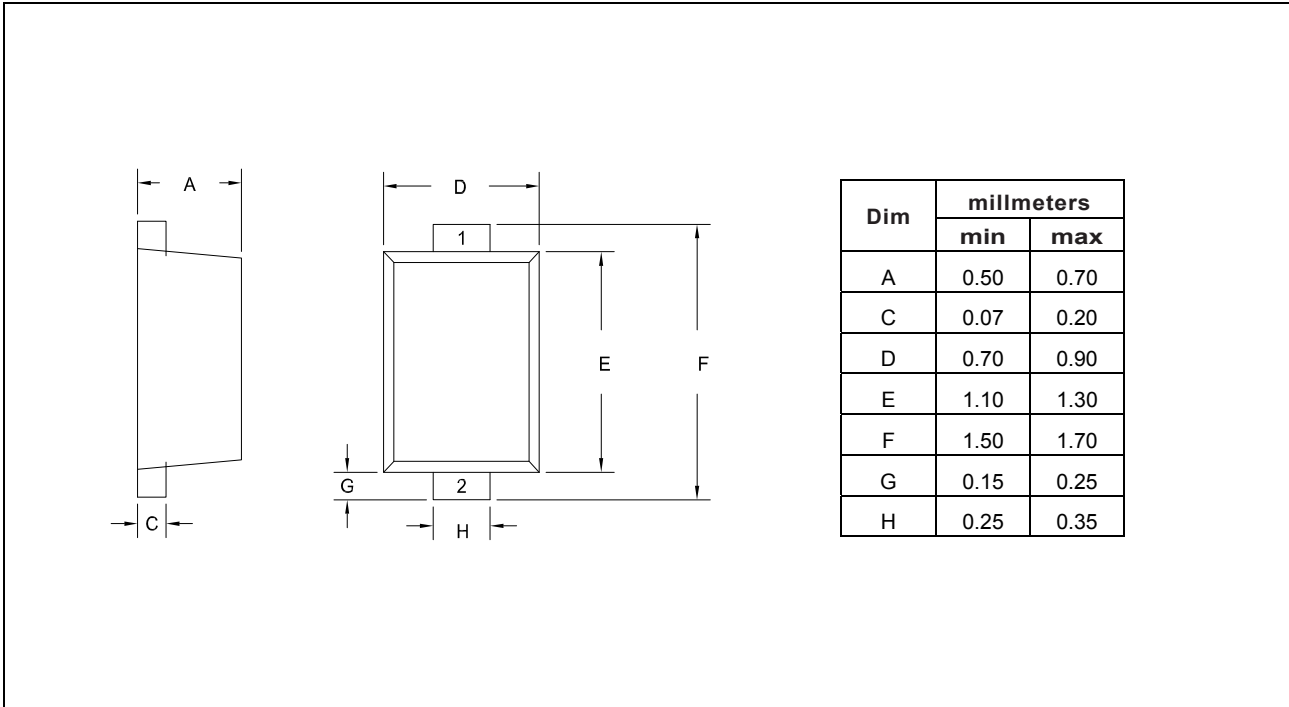
($T_A = 25\text{ °C}$ unless otherwise specified)

| Parameter | Symbol | Test conditions | Min | Typ | Max | Unit |
|-----------------------|------------|---------------------------------------|-----|-----|-------|---------|
| Reverse voltage | $V_{(BR)}$ | $I_R=100\mu A$ | 75 | | | V |
| Reverse current | I_R | $V_R=25V$ | | | 30 | nA |
| | | $V_R=75V$ | | | 1 | μA |
| Forward voltage | V_F | $I_F=1mA$ | | | 0.715 | V |
| | | $I_F=10mA$ | | | 0.855 | |
| | | $I_F=50mA$ | | | 1 | |
| | | $I_F=150mA$ | | | 1.25 | |
| Total capacitance | C_{tot} | $V_R=0V, f=1MHz$ | | | 1.0 | pF |
| Reverse recovery time | t_{rr} | $I_F=I_R=10mA, I_{rr}=0.1 \times I_R$ | | | 4 | ns |

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



Package Dimensions



Marking



Ordering information

| Order code | Package | Packaging option | Base quantity | Packaging specification |
|------------|---------|------------------|----------------|-------------------------|
| BAS516WT | SOD-523 | Tape and reel | 8000pcs / reel | EIA STD RS-481 |

Revision history

| Date | Revision | Changes |
|-------------|----------|-----------------|
| 23-May-2016 | 1.0 | Initial release |

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