

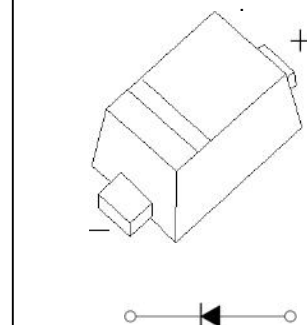
SOD-523 Plastic-Encapsulate Diodes

CSD521S523 Schottky barrier Diode

FEATURE

- Small surface mounting type
- Low reverse current and low forward voltage
- High reliability

SOD-523



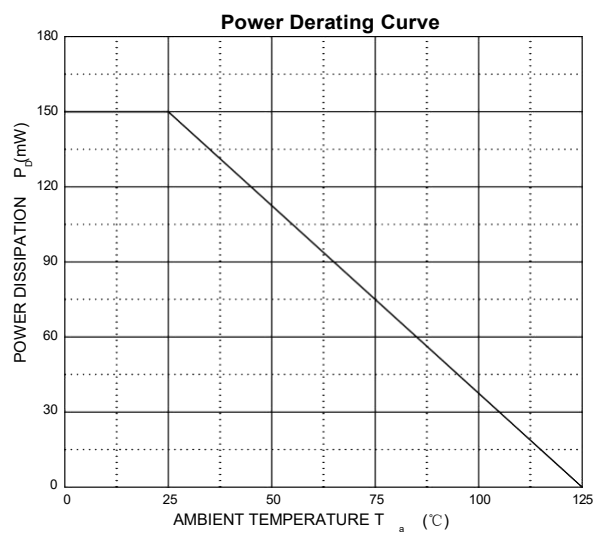
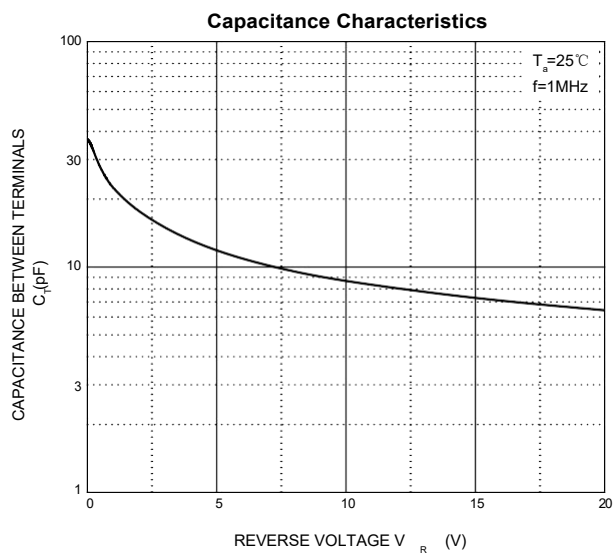
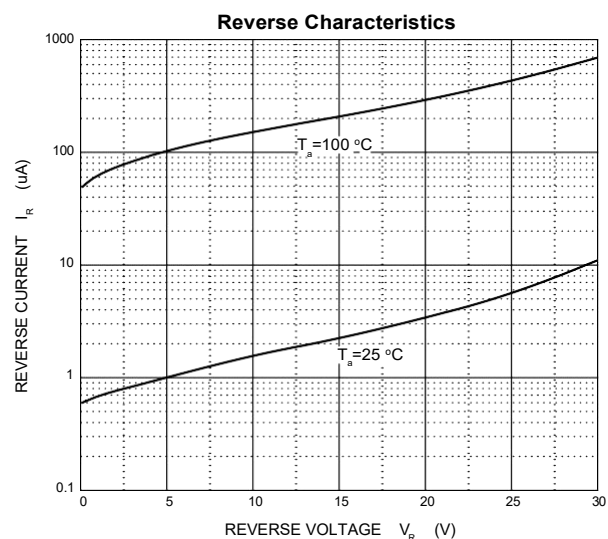
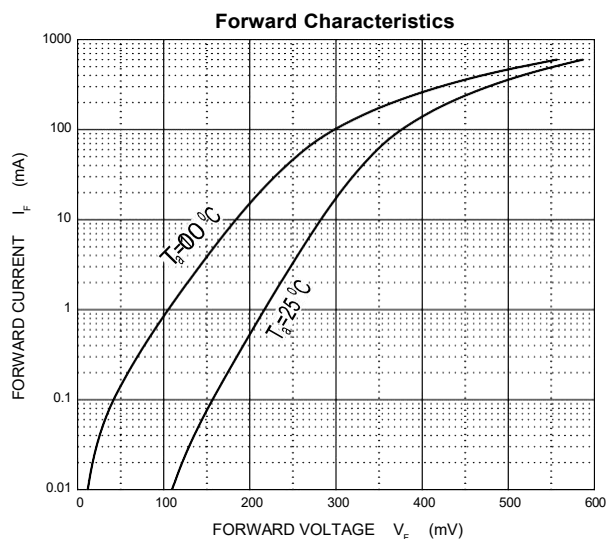
Maximum Ratings and Electrical Characteristics, Single Diode @Ta=25°C

| Parameter | Symbol | Limit | Unit |
|-----------------------------------------------------|-----------------|----------|------|
| DC reverse voltage | V_R | 30 | V |
| Mean rectifying current | I_o | 200 | mA |
| Non-repetitive Peak forward surge current @ t=8.3ms | I_{FSM} | 1 | A |
| Power dissipation | P_D | 150 | mW |
| Thermal Resistance Junction to Ambient | $R_{\theta JA}$ | 667 | °C/W |
| Junction temperature | T_j | 125 | °C |
| Storage temperature | T_{stg} | -55~+150 | °C |

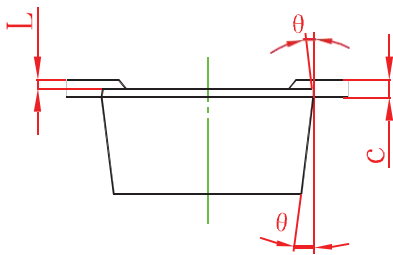
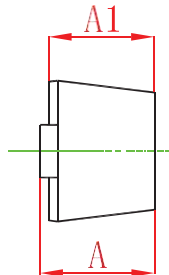
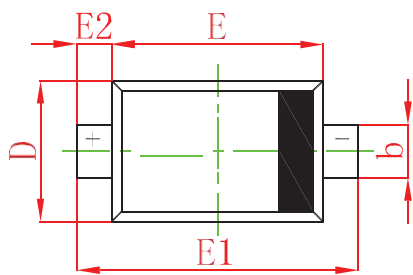
Electrical Ratings @Ta=25°C

| Parameter | Symbol | Min | Typ | Max | Unit | Conditions |
|-----------------|----------|-----|-----|------|---------|-------------|
| Forward voltage | V_{F1} | | | 0.35 | V | $I_F=10mA$ |
| | V_{F2} | | | 0.5 | V | $I_F=200mA$ |
| Reverse current | I_R | | | 30 | μA | $V_R=10V$ |

Typical Characteristics

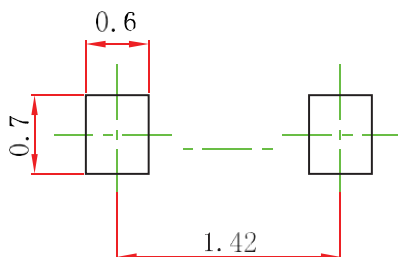


SOD-523 Package Outline Dimensions



| Symbol | Dimensions In Millimeters | | Dimensions In 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 | 0.150 | 0.003 | 0.006 |
| D | 0.750 | 0.850 | 0.030 | 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 |
| 0 | 7° REF | | 7° REF | |

SOD-523 Suggested Pad Layout



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.

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