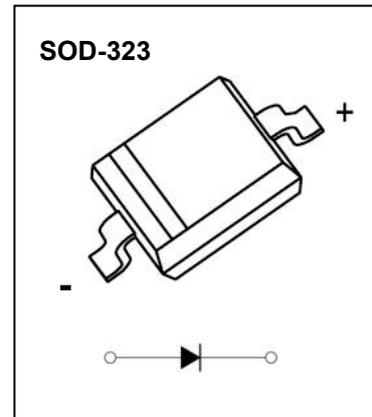


CSD520S323 SCHOTTKY BARRIER DIODE

FEATURES

- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- High Conductance
- Also Available in Lead Free Version

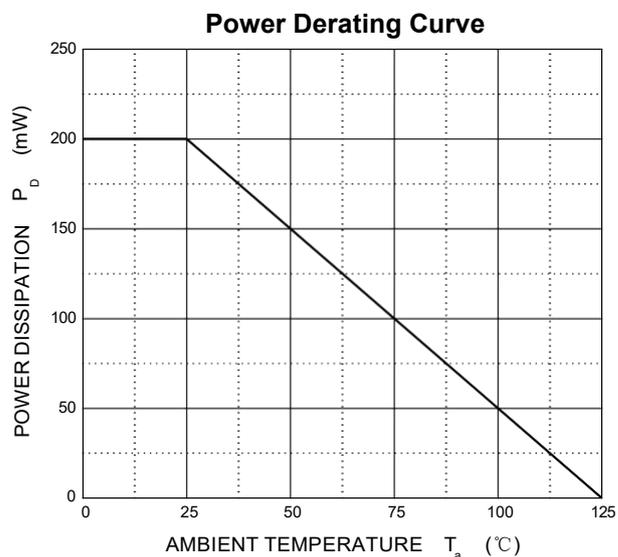
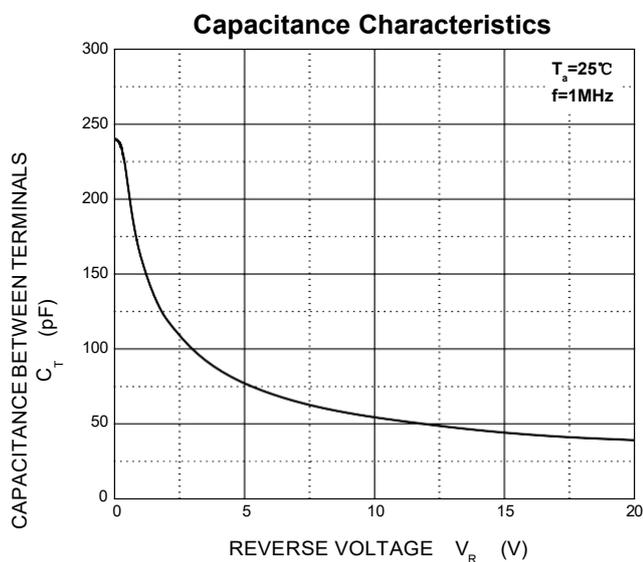
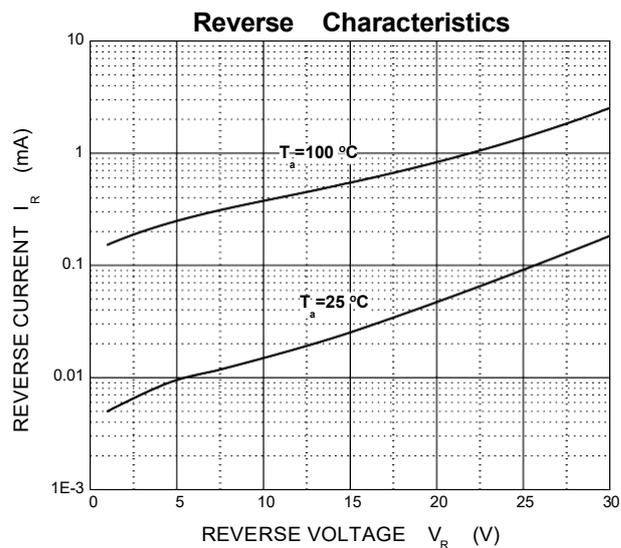
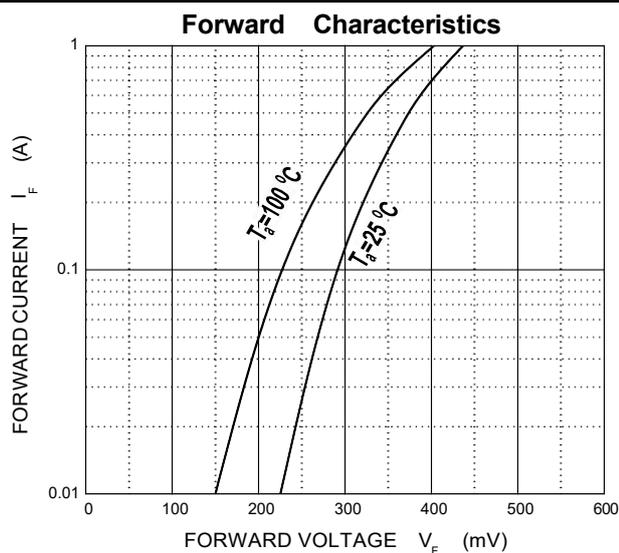


Maximum Ratings @Ta=25°C

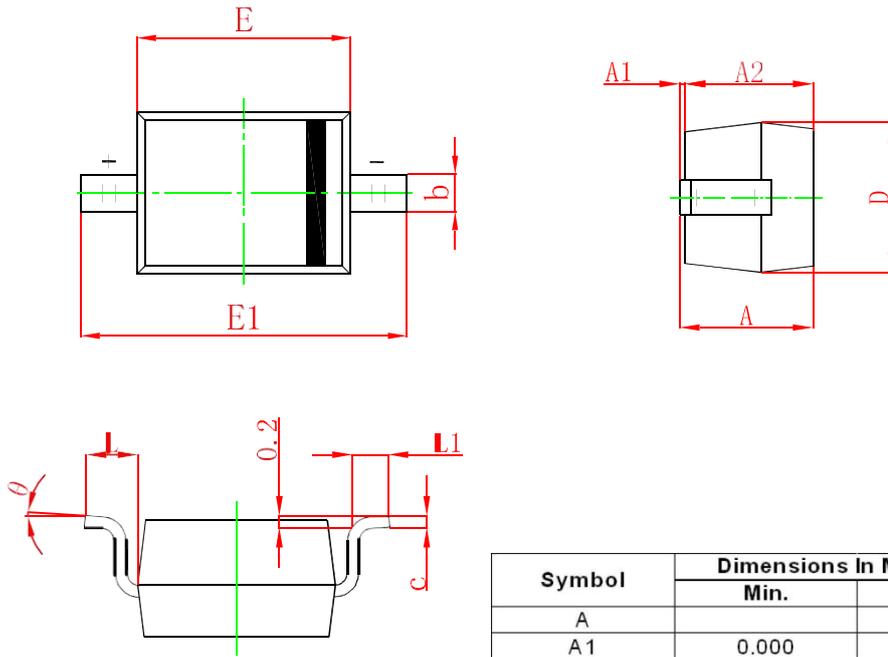
| Parameter | Symbol | Value | Unit |
|--|-----------------|----------|------|
| Peak repetitive peak reverse voltage | V_{RRM} | 20 | V |
| Working peak reverse voltage | V_{RWM} | | |
| DC blocking voltage | V_R | | |
| RMS reverse voltage reverse voltage (DC) | $V_{R(RMS)}$ | 14 | V |
| Average rectified output current | I_o | 0.5 | A |
| Non-repetitive Peak Forward Surge Current @t=8.3ms | I_{FSM} | 5.5 | A |
| Power dissipation | P_D | 200 | mW |
| Thermal resistance junction to ambient | $R_{\theta JA}$ | 500 | °C/W |
| Junction temperature | T_j | 125 | °C |
| Storage temperature | T_{STG} | -55~+150 | °C |
| Voltage rate of change | dv/dt | 1000 | V/μs |

Electrical Characteristics @Ta=25°C

| | Symbol | Test conditions | Min | Typ | Max | Unit |
|-------------------------------|------------|-----------------|-----|-----|------|------|
| Reverse breakdown voltage | $V_{(BR)}$ | $I_R=250\mu A$ | 20 | | | V |
| Reverse current | I_R | $V_R=10V$ | | | 75 | μA |
| | | $V_R=20V$ | | | 250 | |
| Forward voltage | V_F | $I_F=0.1A$ | | | 0.33 | V |
| | | $I_F=0.5A$ | | | 0.39 | |
| Capacitance between terminals | C_T | $V_R=1, f=1MHz$ | | 170 | | pF |

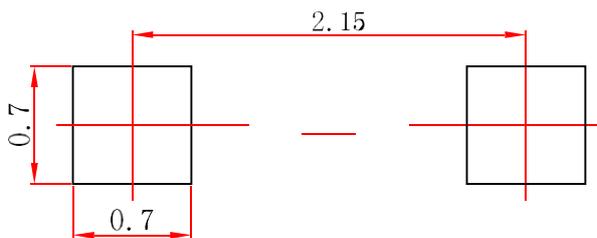


SOD-323 Package Outline Dimensions



| Symbol | Dimensions In Millimeters | | Dimensions In Inches | |
|--------|---------------------------|-------|----------------------|-------|
| | Min. | Max. | Min. | Max. |
| A | | 1.000 | | 0.039 |
| A1 | 0.000 | 0.100 | 0.000 | 0.004 |
| A2 | 0.800 | 0.900 | 0.031 | 0.035 |
| b | 0.250 | 0.350 | 0.010 | 0.014 |
| c | 0.080 | 0.150 | 0.003 | 0.006 |
| D | 1.200 | 1.400 | 0.047 | 0.055 |
| E | 1.600 | 1.800 | 0.063 | 0.071 |
| E1 | 2.550 | 2.750 | 0.100 | 0.108 |
| L | 0.475 REF. | | 0.019 REF. | |
| L1 | 0.250 | 0.400 | 0.010 | 0.016 |
| θ | 0° | 8° | 0° | 8° |

SOD-323 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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