



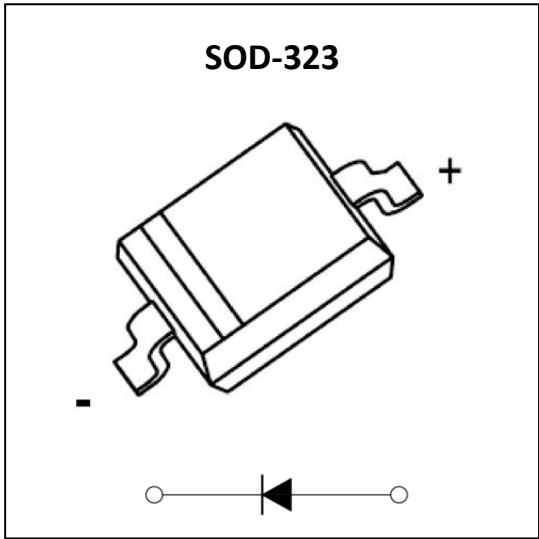
B0540WS Schottky Barrier Diode

Feature

- Low Forward Voltage Drop
- Low Reverse current
- Very Small SMD Package

Application

- Low Voltage Rectification
- High Efficiency DC/DC Conversion
- Switch Mode Power Supply
- Inverse Polarity Protection
- Low Power Consumption Applications



MARKING:



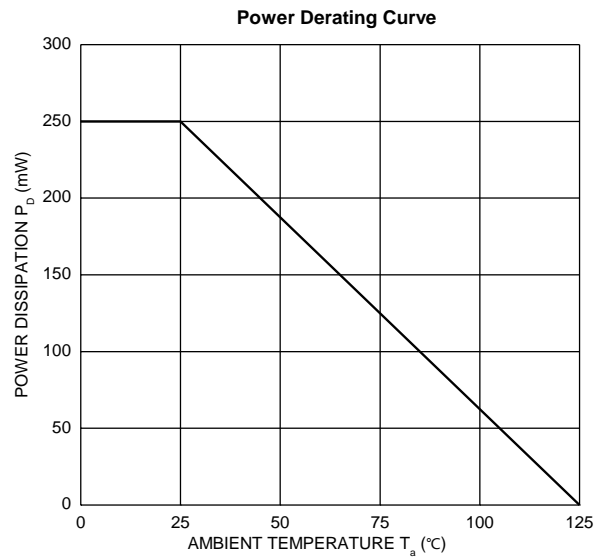
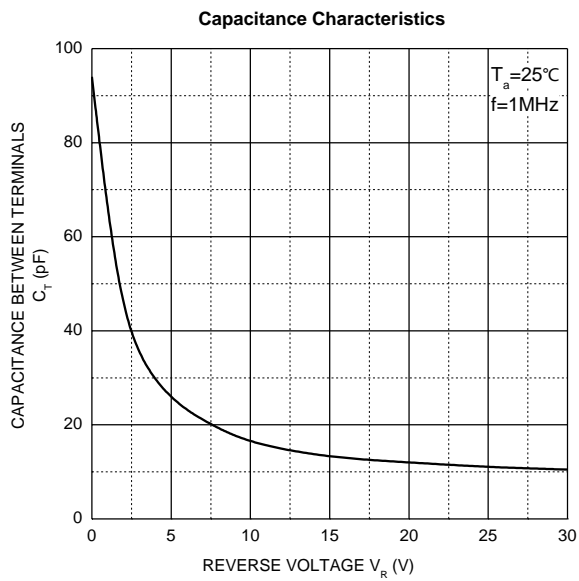
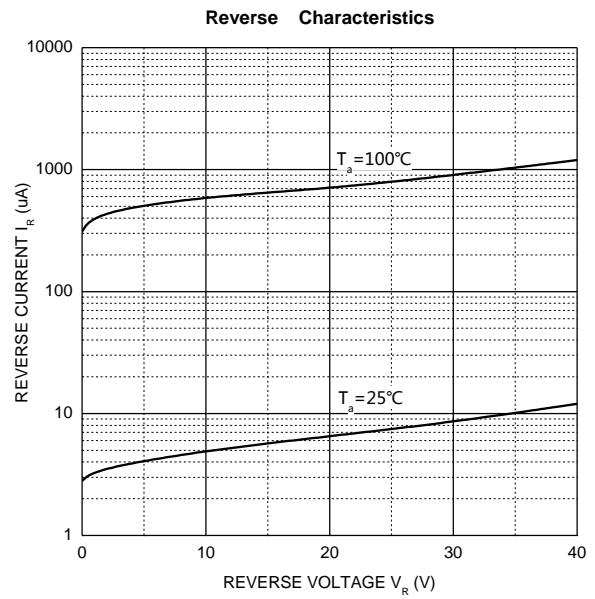
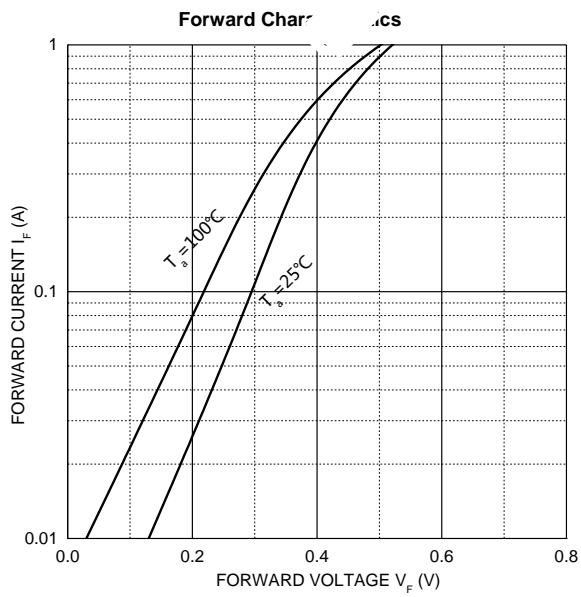
ABSOLUTE MAXIMUM RATINGS (T_a=25°C unless otherwise noted)

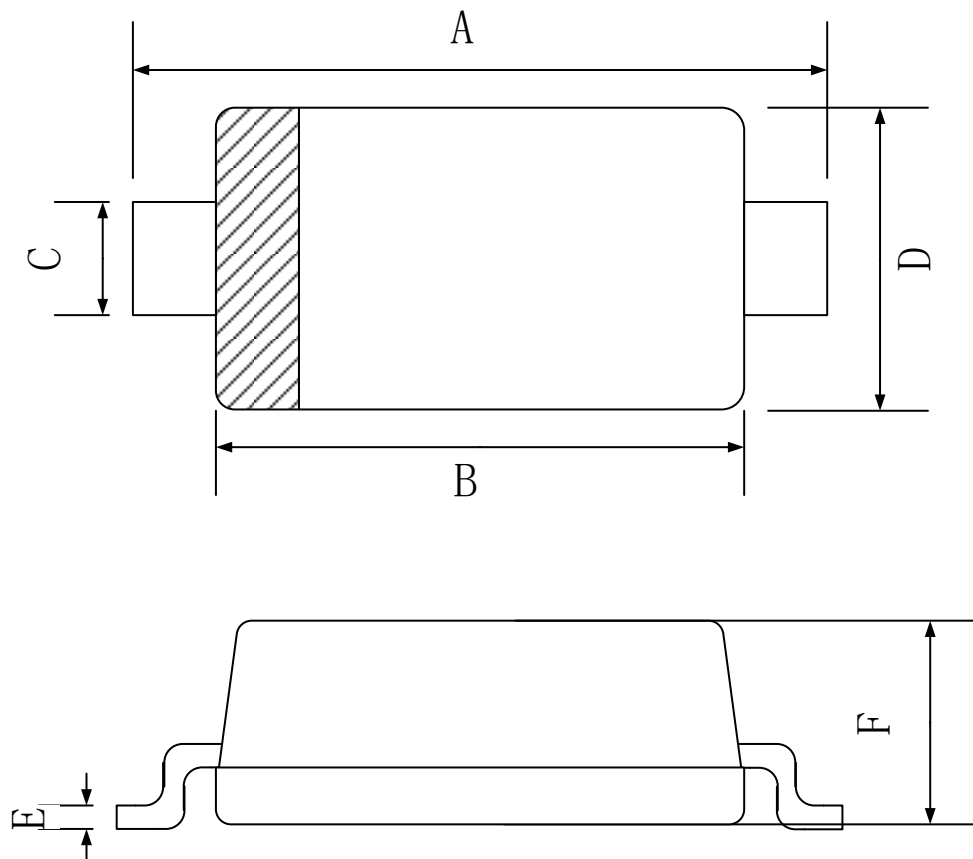
| Parameter | Symbol | Value | Unit |
|---|------------------|------------|------|
| DC reverse voltage | V _R | 40 | V |
| Mean rectifying current | I _O | 0.5 | A |
| Non-repetitive Peak Forward Surge Current @ t=8.3ms | I _{FSM} | 9 | A |
| Power Dissipation | P _D | 0.25 | W |
| Thermal Resistance from Junction to Ambient | R _{θJA} | 400 | °C/W |
| Junction Temperature | T _J | 125 | °C |
| Storage Temperature | T _{STG} | -55 ~ +150 | °C |

ELECTRICAL CHARACTERISTICS (T_a=25°C unless otherwise noted)

| Parameter | Symbol | Test Condition | Min | Type | Max | Unit |
|-------------------|-----------------|----------------------------|-----|------|------|------|
| Reverse voltage | V _{BR} | I _R =20uA | 40 | | | V |
| Reverse current | I _R | V _R =20V | | 4 | 10 | μA |
| | | V _R =40V | | 8 | 20 | μA |
| Forward voltage | V _F | I _F =0.5A | | 0.42 | 0.51 | V |
| | | I _F =1.0A | | 0.52 | 0.62 | V |
| Diode capacitance | C _D | V _R =0V, f=1MHz | | 30 | 170 | pF |

Typical Characteristics



SOD-323 Package Outline Dimensions


| Symbol | Dimensions In Millimeters | | |
|--------|---------------------------|-------|-------|
| | Min. | Typ. | Max. |
| A | 2.30 | 2.50 | 2.70 |
| B | 1.60 | 1.70 | 1.90 |
| C | 0.25 | 0.325 | 0.40 |
| D | 1.15 | 1.25 | 1.35 |
| E | 0.089 | 0.095 | 0.101 |
| F | 0.80 | 0.90 | 1.00 |