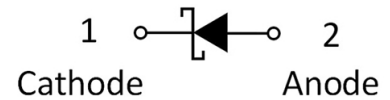
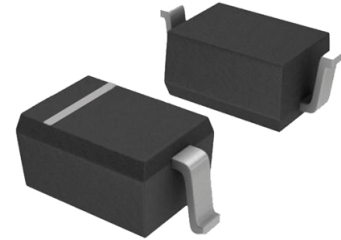


»Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Epitaxial construction



»General Description

- Case: molded plastic
- Polarity: Color band denotes cathode
- Package: SOD-323 Plastic Package

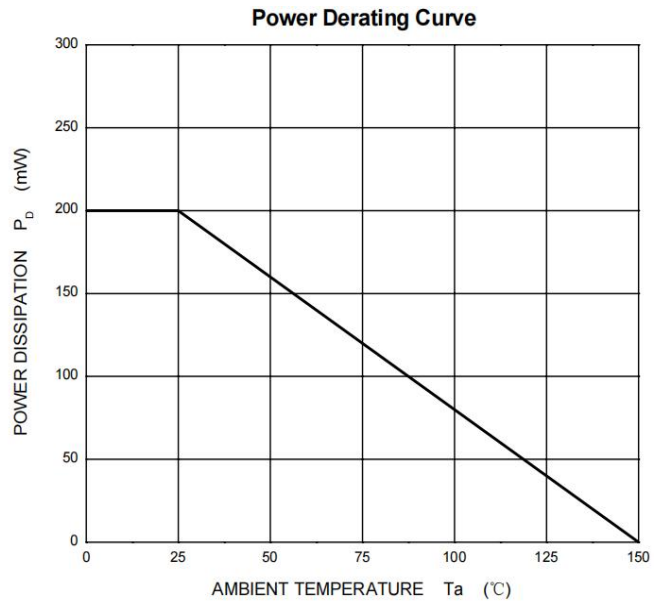
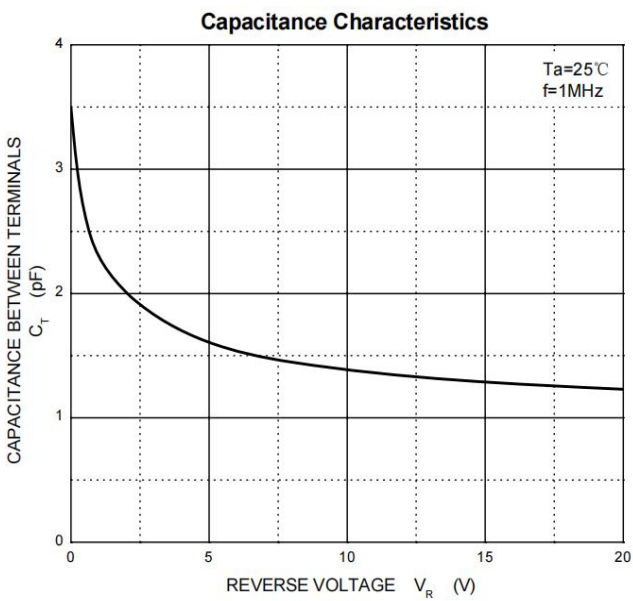
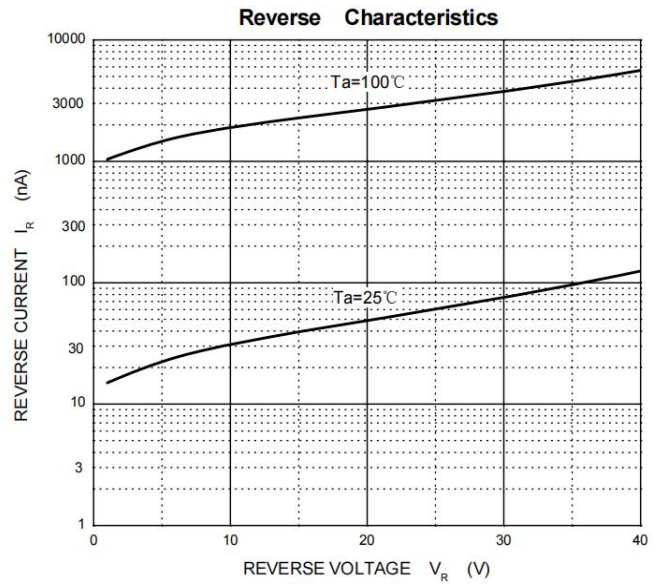
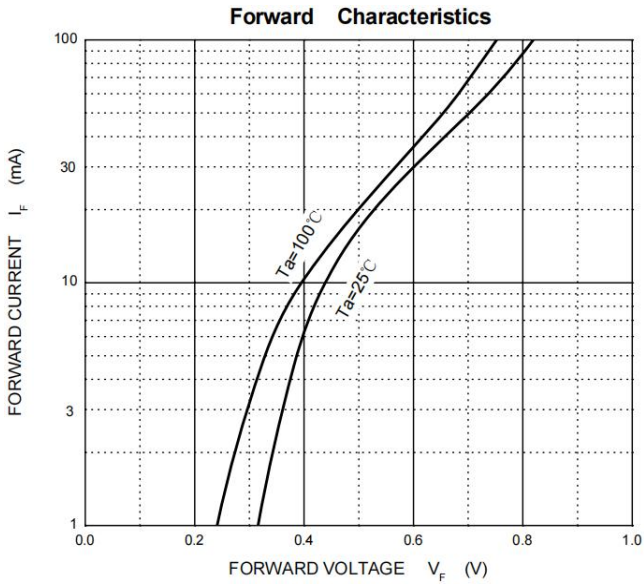
» Maximum Ratings @ $T_A=25^{\circ}\text{C}$ unless otherwise noted

| Symbol | Parameter | Limit | Unit |
|--------------------|---|----------|-----------------------------|
| VRRM VRWM VR | Peak Repetitive Peak Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage | 40 | V |
| IFM | Forward Continuous Current | 200 | mA |
| IFSM | Non-repetitive Peak Forward Surge Current@8.3mS | 600 | mA |
| Pd | Power Dissipation | 200 | mW |
| RθJA | Thermal Resistance From Junction To Ambient | 500 | $^{\circ}\text{C}/\text{W}$ |
| TJ | Operation Junction Temperature Range | -40~+125 | $^{\circ}\text{C}$ |
| TSTG | Storage Temperature Range | -55~+150 | $^{\circ}\text{C}$ |

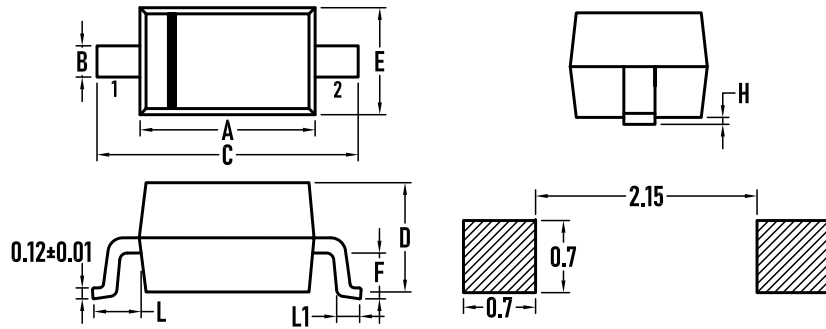
»Electrical Characteristics @ $T_A=25^{\circ}\text{C}$ unless otherwise noted

| Symbol | Parameter | Test conditions | Min | Typ | Max | Unit |
|--------------------|---------------------------------|---|-----|-----|------|------|
| V(BR) | Reverse breakdown voltage | $I_R=10\mu\text{A}$ | 40 | | | V |
| V _F (1) | Forward voltage(1) | $I_F=1\text{mA}$ | | | 0.38 | V |
| V _F (2) | Forward voltage(2) | $I_F=10\text{mA}$ | | | 0.50 | V |
| V _F (3) | Forward voltage(1) | $I_F=40\text{mA}$ | | | 1.0 | V |
| I _R | Reverse voltage leakage current | $V_R=30\text{V}$ | | 20 | 200 | nA |
| CT | Capacitance between terminals | $V_R=0\text{V}, f=1.0\text{MHz}$ | | 4 | 5 | pF |
| t _{rr} | Reverse recovery time | $I_F=I_R=10\text{mA}$ $I_{rr}=0.1 \times I_R, R_L=100\Omega$ | | | 5 | nS |

»Typical Performance Characteristics (T_J = 25 °C, unless otherwise noted)

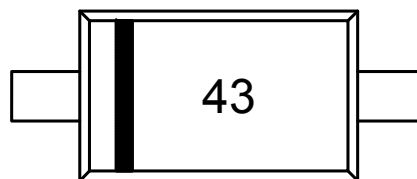


»Package Information SOD-323



| SYMBOL | MILLIMETER | | INCHES | |
|--------|------------|-------|----------|-------|
| | MIN. | MAX. | MIN. | MAX. |
| A | 1.600 | 1.800 | 0.063 | 0.071 |
| B | 0.250 | 0.350 | 0.010 | 0.014 |
| C | 2.500 | 2.700 | 0.098 | 0.106 |
| D | – | 1.000 | – | 0.039 |
| E | 1.200 | 1.400 | 0.047 | 0.055 |
| F | 0.080 | 0.150 | 0.003 | 0.006 |
| L | 0.475REF | | 0.019REF | |
| L1 | 0.250 | 0.400 | 0.010 | 0.016 |
| H | 0.000 | 0.100 | 0.000 | 0.004 |

»Marking



»Ordering information

| Order code | Package | Base qty | Delivery mode |
|------------|---------|----------|---------------|
| BAS40WS | SOD-323 | 3K | Tape and reel |