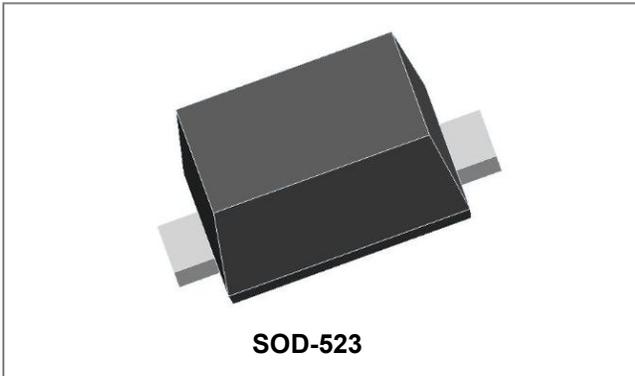


RB751S-40 SCHOTTKY BARRIER DIODE



Features

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

Circuit Diagram



Maximum Ratings@T_A=25°C unless otherwise specified

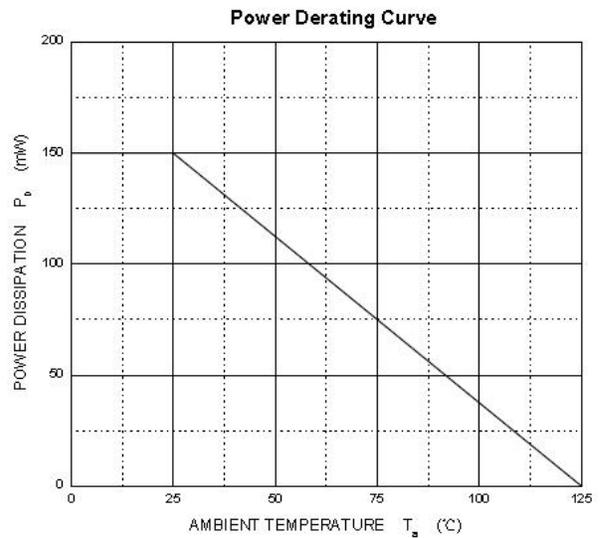
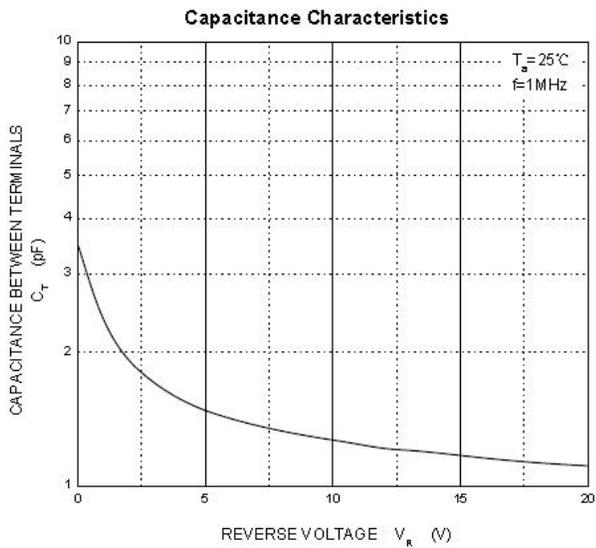
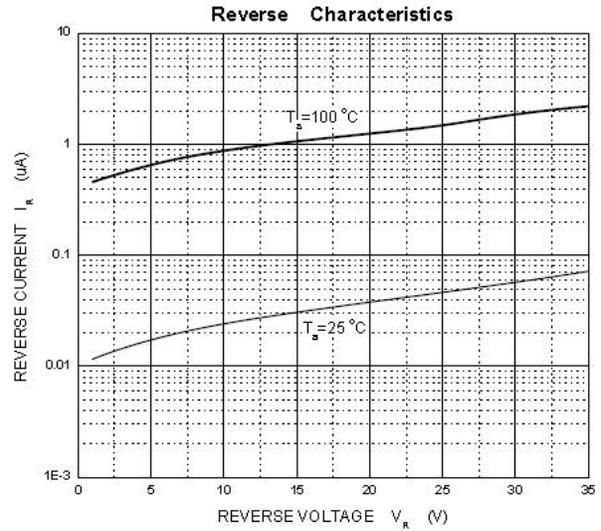
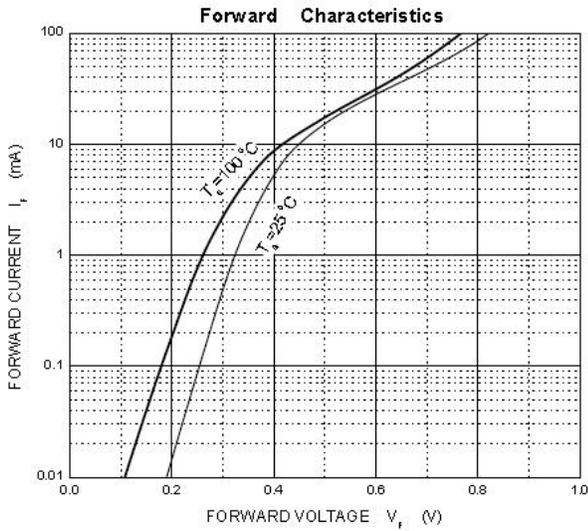
| Parameter | Symbol | Value | Units |
|--|------------------|----------|-------|
| Peak Reverse Voltage | V _{RM} | 40 | V |
| DC Reverse Voltage | V _R | 30 | V |
| Mean rectifying current | I _O | 30 | mA |
| Non-repetitive Peak Forward Surge Current @t=8.3ms | I _{FSM} | 200 | mA |
| Power Dissipation | P _D | 150 | mW |
| Thermal Resistance from Junction to Ambient | R _{θJA} | 667 | °C/W |
| Junction Temperature | T _j | 125 | °C |
| Storage Temperature | T _{stg} | -55~+150 | °C |

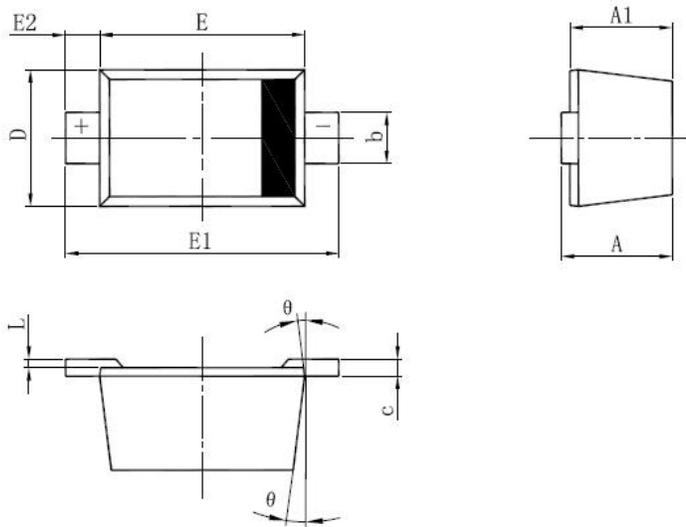
Electrical Characteristics@T_A=25°C unless otherwise specified

| Parameter | Symbol | Test conditions | Min | Typ | Max | Units |
|-------------------------------|----------------|----------------------------|-----|-----|------|-------|
| Reverse current* | I _R | V _R =30V | - | - | 0.5 | μA |
| Forward voltage* | V _F | I _F =1mA | - | - | 0.37 | V |
| Capacitance between terminals | C _T | V _R =1V, f=1MHz | - | 2 | - | pF |

* Pulse width < 300 μs, duty cycle < 2%

Ratings and Characteristics Curves



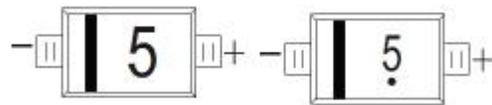
Mechanical Dimensions SOD-523


| SYMBOL | Millimeters | | 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 |
| θ | 7° REF | | 7° REF | |

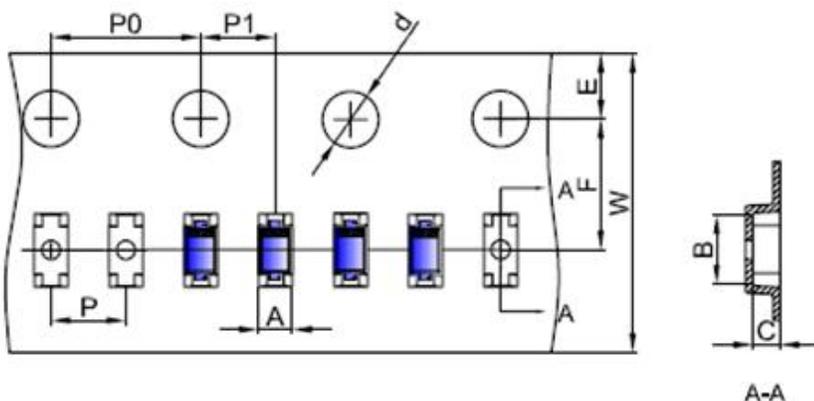
Ordering Information

| Device | Package | Shipping |
|-----------|----------------------|----------------|
| RB751S-40 | SOD-523 (Pb-Free) | 8000pcs / reel |

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

Marking Diagram


The marking bar indicates the cathode
 Solid dot = Green molding compound device,
 if none, the normal device.

Carrier Tape & Reel Specification SOD-523


| SYMBOL | Millimeters | |
|--------|-------------|------|
| | Min. | Max. |
| A | 0.85 | 0.95 |
| B | 1.89 | 1.99 |
| C | 0.68 | 0.78 |
| d | 1.40 | 1.60 |
| E | 1.65 | 1.85 |
| F | 3.40 | 3.60 |
| P | 1.90 | 2.10 |
| P0 | 3.90 | 4.10 |
| P1 | 1.90 | 2.10 |
| W | 7.90 | 8.30 |

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