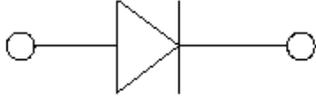


Schottky Barrier Diode



Features

- V_R 40V
- I_{FAV} 0.03A
- Moisture Sensitivity Level 1
- Low Voltage, Low Inductance

Mechanical Data

- **Package:** SOD323
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end
- **Marking:** 5

■ Maximum Ratings (Ta=25°C Unless otherwise specified)

| PARAMETER | SYMBOL | UNIT | Conditions | VALUE |
|---|------------|------|------------------------|-------------|
| Peak Repetitive Reverse Voltage | V_{RRM} | V | | 40 |
| DC Blocking Voltage | V_R | V | $I_R=0.1mA$ | 30 |
| Non-repetitive Peak forward surge current | I_{FSM} | A | | 0.2 |
| Repetitive Peak Forward Current | I_{FRM} | A | $t_p=1ms, \delta=0.25$ | 1 |
| Average forward current | I_{FAV} | A | | 0.03 |
| Power Dissipation | P_D | mW | | 200 |
| Thermal Resisance Junction to Ambient Air | R_{thja} | °C/W | | 500 |
| Maximum junction temperature | T_j | °C | | 125 |
| Storage temperature range | T_{stg} | °C | | -40 to +125 |

■ Ordering Information (Example)

| PREFERRED P/N | PACKING CODE | UNIT WEIGHT(g) | MINIMUM PACKAGE(pcs) | INNER BOX QUANTITY(pcs) | OUTER CARTON QUANTITY(pcs) | DELIVERY MODE |
|---------------|--------------|--------------------|----------------------|-------------------------|----------------------------|---------------|
| RB751V-40 | F2 | Approximate 0.0048 | 3000 | 30000 | 120000 | 7" reel |



RB751V-40

■ Electrical Characteristics (Ta=25°C Unless otherwise specified)

| PARAMETER | Symbol | UNIT | Conditions | Min. | Typ. | Max. |
|-------------------------|--------|---------------|--------------------|------|------|------|
| Breakdown Voltage* | V_R | V | $I_R=0.1\text{mA}$ | 40 | | |
| Forward Voltage * | V_F | V | $I_F=1\text{mA}$ | | | 0.37 |
| Reverse Leakage Current | I_R | μA | $V_R=30\text{V}$ | | | 0.5 |

■ Typical Characteristics

Fig 1: P_D -Ta Curve

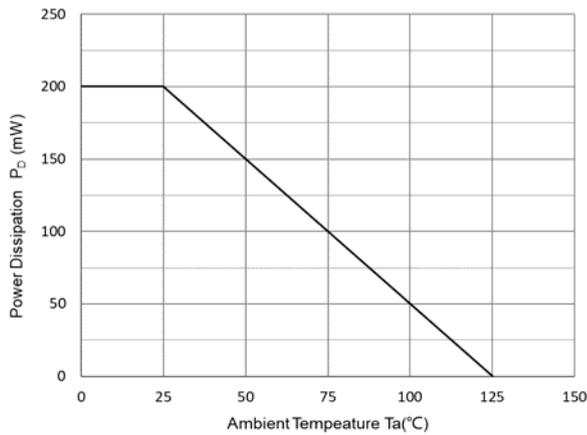


Fig 2: Capacitance Capability

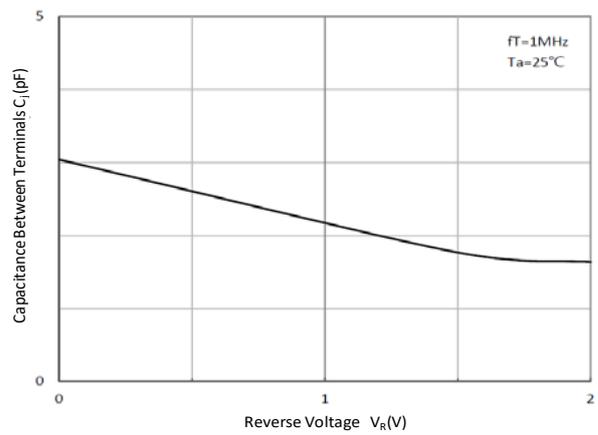


Fig 3: Typical Forward Characteristics

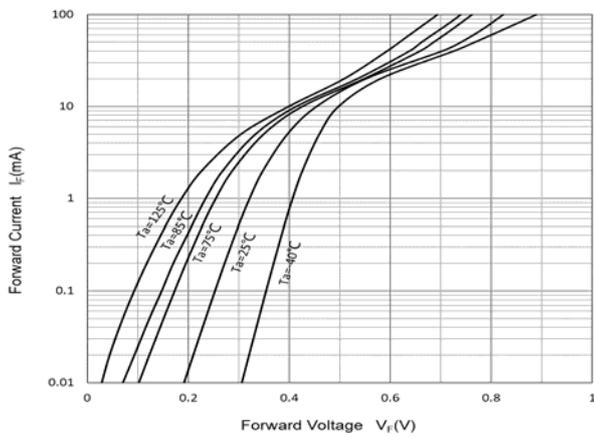
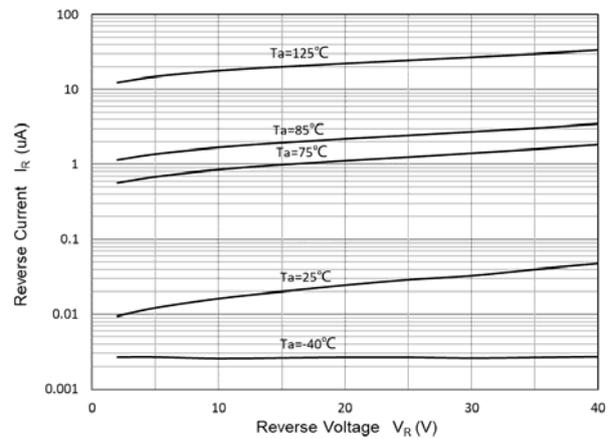


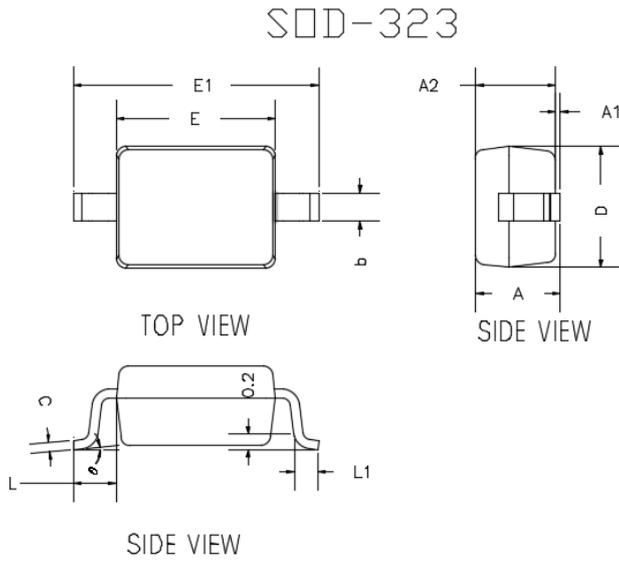
Fig 4: Typical Reverse Characteristics





RB751V-40

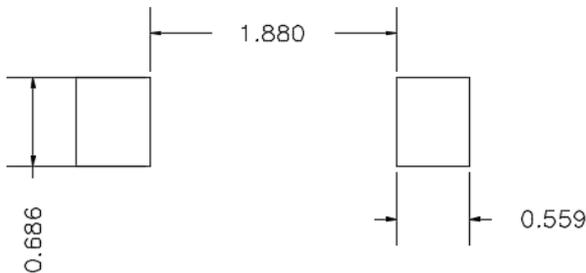
■ Outline Dimensions



| DIMENSIONS | | | | |
|------------|-----------|--------|----------|--------|
| DIM | INCHES | | MM | |
| | MIN | MAX | MIN | MAX |
| A | --- | 0.0393 | --- | 1.0000 |
| A1 | 0.0000 | 0.0039 | 0.0000 | 0.1000 |
| A2 | 0.0314 | 0.0354 | 0.8000 | 0.9000 |
| b | 0.0098 | 0.0157 | 0.2500 | 0.4000 |
| c | 0.0031 | 0.0059 | 0.0800 | 0.1500 |
| D | 0.0472 | 0.0551 | 1.2000 | 1.4000 |
| E | 0.0629 | 0.0709 | 1.6000 | 1.8000 |
| E1 | 0.0984 | 0.1063 | 2.5000 | 2.7000 |
| L | 0.0187TYP | | 0.475TYP | |
| L1 | 0.0098 | 0.0157 | 0.250 | 0.400 |
| e | 0° | 8° | 0° | 8° |

- NOTES:
- All dimensions are in millimeters (mm) unless otherwise specified.
[所有尺寸均以毫米为单位, 除非另有说明]
 - General tolerances: $\pm 0.10\text{mm}$ unless otherwise specified.
[通用公差为 $\pm 0.10\text{mm}$, 除非另有说明]
 - Dimensions and tolerances per ASME Y14.5M-2018.
[尺寸和公差遵循 ASME Y14.5M-2018 标准]
 - All dimensions shown are exclusive of burrs and gate residues.
Burr and gate vestiges shall not exceed 0.15 mm in maximum.
[所有尺寸均不包括毛刺和浇口残留。毛刺与浇口残留的尺寸最大不得超过 0.15mm]
 - Dimension b does not include dambar protrusion of max 0.100 mm per side.
[尺寸b不包括单边最大0.100 MM的中筋凸出部分]
 - Dimensions D and E are the overall extreme outer dimensions of the mold compound. These dimensions exclude mold flash, lead flash, protrusions and burrs but include the maximum allowable mold mismatch.
[D和E是塑封体的外部极限尺寸, 不包括包封溢料、内引线溢料、凸出部分以及胶体毛刺, 但是包含了包封错位的最大尺寸]
 - Formed leads shall be planar with respect to one another within a maximum of 0.076 mm relative to the seating plane.
[成型的管脚应为同一平面, 共面性最大为0.1mm]

■ Soldering Footprint



UNIT: mm

SUGGESTED SOLDER PAD LAYOUT



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