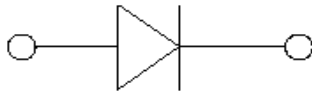


Schottky Barrier Diode



Features

- For Power Supply
- Moisture Sensitivity Level 1
- Low Voltage, Low Inductance

Mechanical Data

- **Package:** SOD-323
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end
- **Marking:** DS

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

| PARAMETER | SYMBOL | UNIT | Conditions | VALUE |
|---|------------------|------|------------------------|-------------|
| Peak Repetitive Reverse Voltage | V _{RRM} | V | | 30 |
| DC Blocking Voltage | V _R | V | I _R = 100uA | 20 |
| Non-repetitive Peak forward surge current | I _{FSM} | A | tp=8.3ms, half sine | 2 |
| Average forward current | I _{FAV} | A | | 0.5 |
| Power Dissipation | P _D | mW | | 200 |
| Thermal Resisitance Junction to Ambient Air | R _{θJA} | °C/W | | 500 |
| Junction temperature | T _j | °C | | 125 |
| Storage temperature range | T _{stg} | °C | | -55 to +150 |

*Part mounted on FR-4 board with recommended pad layout.

■ Ordering Information (Example)

| PREFERRED P/N | PACKING CODE | UNIT WEIGHT(g) | MINIMUM PACKAGE(pcs) | INNER BOX QUANTITY(pcs) | OUTER CARTON QUANTITY(pcs) | DELIVERY MODE |
|---------------|--------------|-------------------|----------------------|-------------------------|----------------------------|---------------|
| RB551V-30S | F2 | Approximate 0.004 | 3000 | 30000 | 120000 | 7" reel |

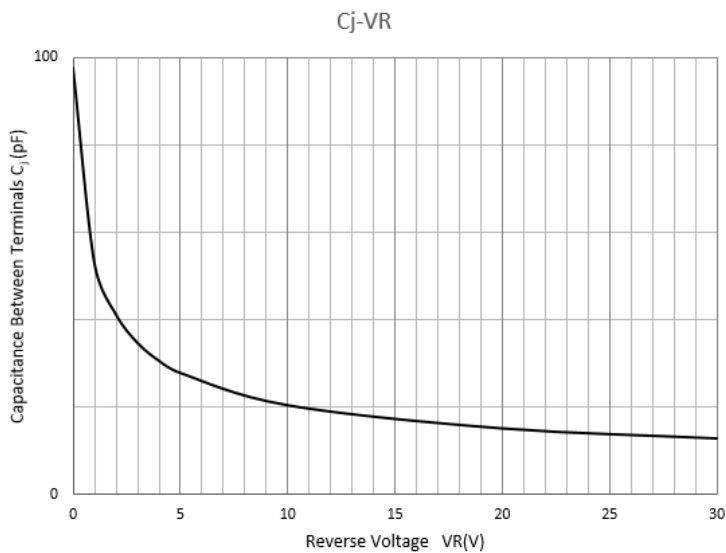
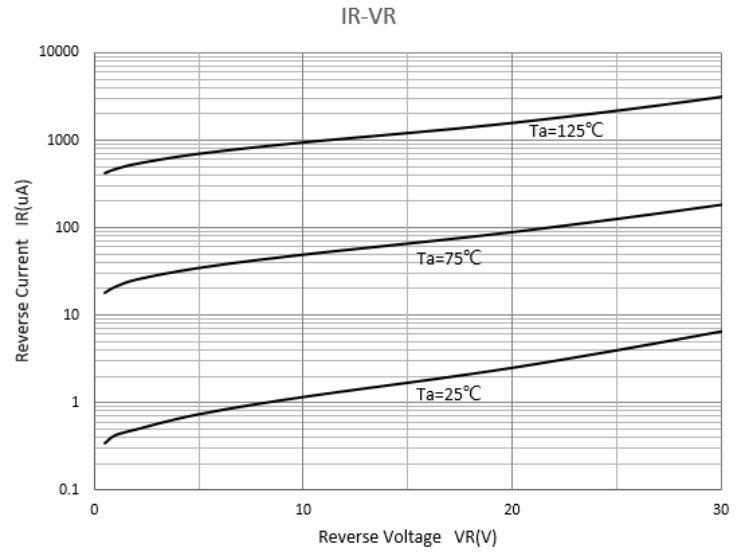
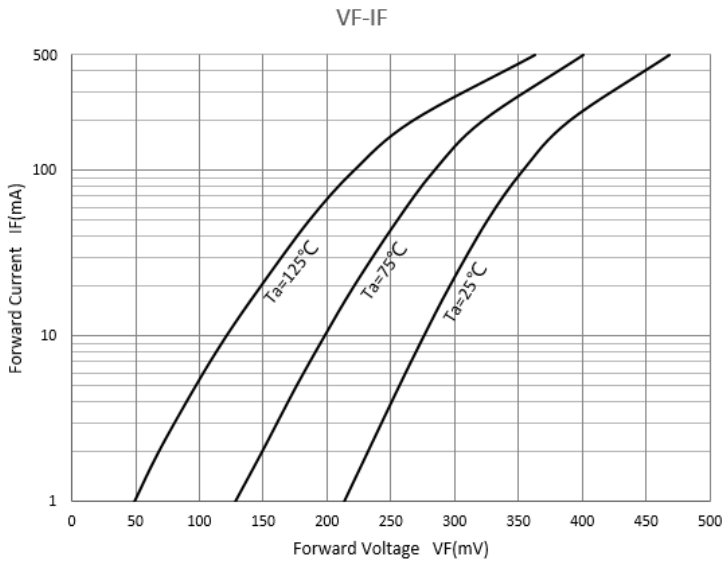


RB551V-30S

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

| PARAMETER | Symbol | UNIT | Conditions | Min. | Typ. | Max. |
|-------------------------|----------------|------|----------------------|------|------|------|
| Forward Voltage * | V _F | V | I _F =0.1A | - | - | 0.37 |
| | | | I _F =0.5A | - | - | 0.47 |
| Reverse Leakage Current | I _R | μA | V _R =20V | - | - | 100 |

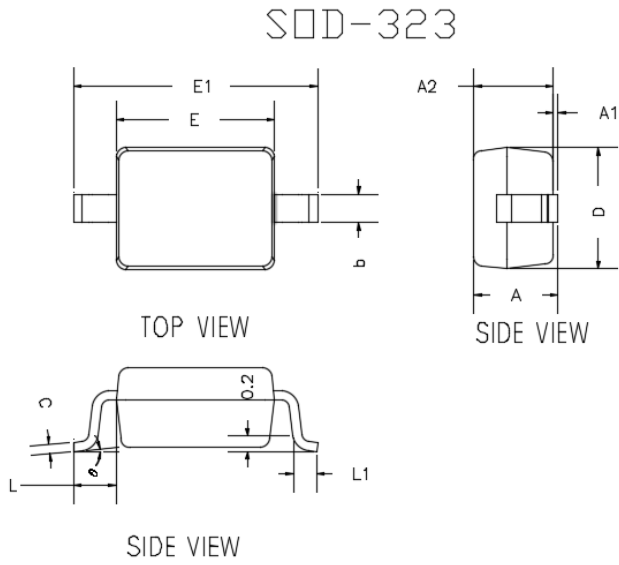
■ Typical Characteristics





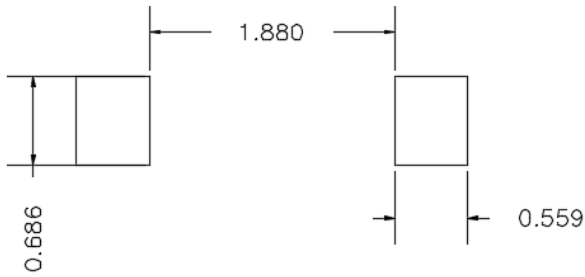
RB551V-30S

■ 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° |

■ Soldering Footprint



UNIT : mm

SUGGESTED SOLDER PAD LAYOUT



RB551V-30S

Disclaimer

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