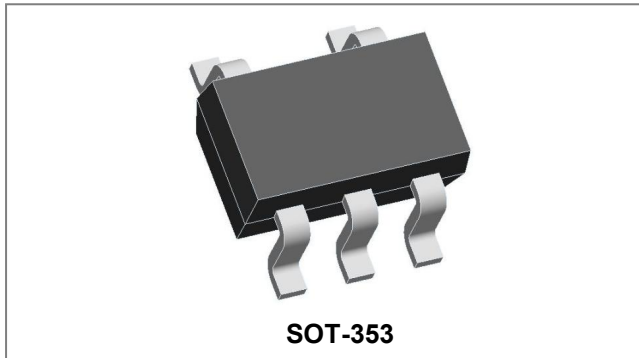


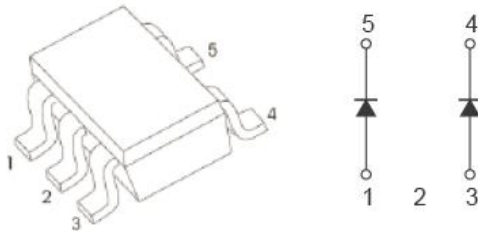
RB13 SURFACE MOUNT SCHOTTKY BARRIER DIODE



Features

- Low forward voltage
- This is a Halogen Free device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Circuit Diagram



Mechanical Data

- Case: SOT-353, Molded Plastic

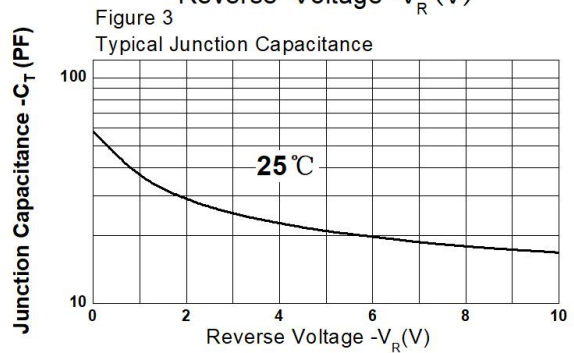
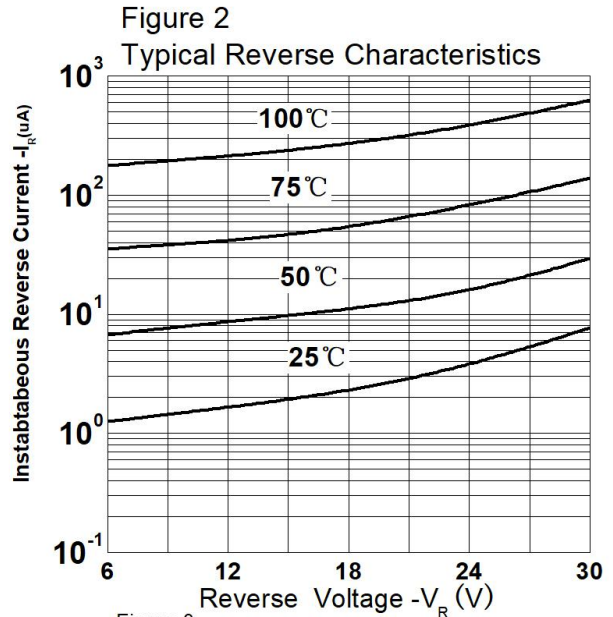
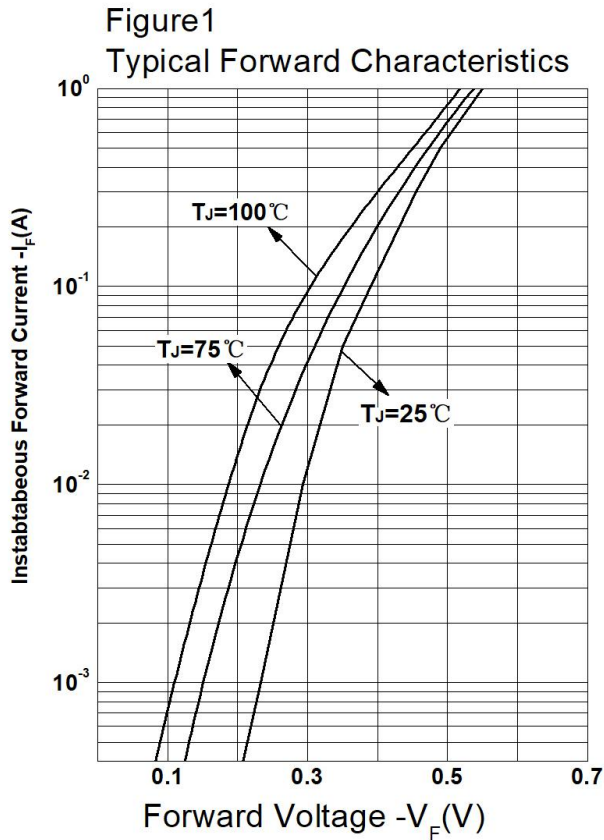
Maximum Ratings and Electrical Characteristics @ $T_A=25^{\circ}\text{C}$ unless otherwise specified

| Characteristic | Symbol | RB13 | Unit |
|---|-----------------|-------------|----------------------|
| Peak Repetitive Reverse Voltage | V_{RRM} | 30 | V |
| Working Peak Reverse Voltage | V_{RWM} | | |
| DC Blocking Voltage | V_R | | |
| Forward Continuous Current | I_F | 1.0 | A |
| Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load(JEDEC Method) | I_{FSM} | 5 | A |
| Typical Thermal Resistance, Junction to Ambient Air | $R_{\theta JA}$ | 667 | $^{\circ}\text{C/W}$ |
| Junction and Storage Temperature Range | T_J, T_{STG} | -55 to +125 | $^{\circ}\text{C}$ |

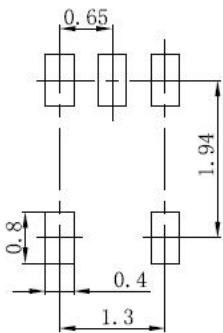
| Characteristic | Symbol | Typ. | Max. | Unit |
|---|----------|------|------|---------------|
| Forward Voltage Drop * @ $I_F=1.0\text{A}$ | V_{FM} | 0.55 | 0.57 | V |
| Peak Reverse Leakage Current* | I_{RM} | 8 | 50 | μA |
| Junction Capacitance($V_R=0\text{V}$, $f=1\text{MHz}$) | C_J | 58 | - | pF |

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

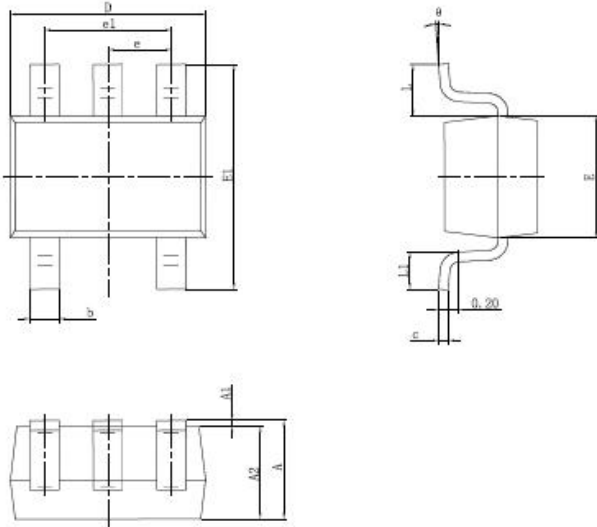
Ratings and Characteristics Curves



SOT-353 Suggested Pad Layout(Millimeters)



Notes: Tolerance($\pm 0.05\text{mm}$).

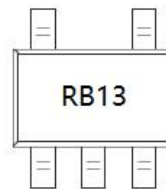
Mechanical Dimensions SOT-353


| SYMBOL | Millimeters | | Inches | |
|--------|-------------|-------|------------|-------|
| | MIN. | MAX. | MIN. | MAX. |
| A | 0.900 | 1.100 | 0.035 | 0.043 |
| A1 | 0.000 | 0.100 | 0.000 | 0.004 |
| A2 | 0.900 | 1.000 | 0.035 | 0.039 |
| b | 0.150 | 0.350 | 0.006 | 0.014 |
| c | 0.110 | 0.175 | 0.004 | 0.007 |
| D | 2.000 | 2.200 | 0.079 | 0.087 |
| E | 1.150 | 1.350 | 0.045 | 0.053 |
| E1 | 2.150 | 2.450 | 0.085 | 0.096 |
| e | 0.650 TYP. | | 0.026 TYP. | |
| e1 | 1.200 | 1.400 | 0.047 | 0.055 |
| L | 0.525 REF. | | 0.021 REF. | |
| L1 | 0.260 | 0.460 | 0.010 | 0.018 |
| θ | 0° | 8° | 0° | 8° |

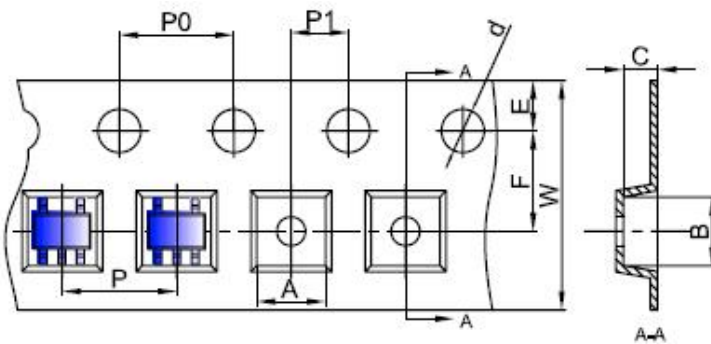
Ordering Information

| Device | Package | Shipping |
|--------|-------------------|----------------|
| RB13 | SOT-353 (Pb-Free) | 3000pcs / reel |
| RB13TR | SOT-353 (Pb-Free) | 3000pcs / 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


RB13 = Part Name

Carrier Tape Specification SOT-353


| SYMBOL | Millimeters | |
|--------|-------------|------|
| | Min. | Max. |
| A | 2.20 | 2.30 |
| B | 2.50 | 2.60 |
| C | 1.15 | 1.25 |
| d | 1.45 | 1.65 |
| E | 1.65 | 1.85 |
| F | 3.40 | 3.60 |
| P | 3.90 | 4.10 |
| P0 | 3.90 | 4.10 |
| P1 | 1.90 | 2.10 |
| W | 7.90 | 8.30 |

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