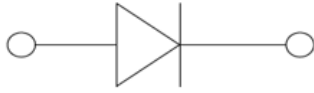


Small Signal Schottky Rectifier



Features

- Epoxy meets UL-94 V-0 flammability rating and halogen free
- Moisture Sensitivity Level 1
- Low Forward Voltage Schottky Rectifier
- V_R 30V
- I_{FAV} 0.2A
- Part no. with suffix "Q" means AEC-Q101 qualified



Mechanical Data

- **Case:** SOD323
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end
- **Marking:** L9

SOD323

■ Maximum Ratings ($T_a=25^\circ\text{C}$ Unless otherwise specified)

| PARAMETER | SYMBOL | UNIT | CONDITIONS | VALUE |
|---------------------------------|-----------|------------------|---------------------|-------------|
| Repetitive Peak Reverse Voltage | V_{RRM} | V | | 30 |
| Average Forward Current | I_{FAV} | mA | | 200 |
| Peak Forward Surge Current | I_{FSM} | A | $t_p < 10\text{ms}$ | 0.6 |
| Power Dissipation | P_{tot} | mW | | 200 |
| Maximum Junction Temperature | T_j | $^\circ\text{C}$ | | 125 |
| Storage Temperature Range | T_{stg} | $^\circ\text{C}$ | | -55 to +150 |

■ Electrical Characteristics ($T_a=25^\circ\text{C}$ Unless otherwise specified)

| PARAMETER | SYMBOL | UNIT | CONDITIONS | MIN | MAX |
|---------------------------|----------|---------------|---------------------------------------------------------|-----|------|
| Forward Voltage | V_F | V | $I_F=0.1\text{mA}$ | - | 0.24 |
| | | | $I_F=1\text{mA}$ | - | 0.32 |
| | | | $I_F=10\text{mA}$ | - | 0.40 |
| | | | $I_F=30\text{mA}$ | - | 0.50 |
| | | | $I_F=100\text{mA}$ | - | 1.00 |
| Reverse Current | I_R | μA | $V_R=25\text{V}$ | - | 2 |
| Reverse Breakdown Voltage | V_{BR} | V | $I_R=10\mu\text{A}$ | 30 | - |
| Diode Capacitance | C_D | pF | $V_R=1\text{V}, f=1\text{MHz}$ | - | 10 |
| Reverse Recovery Time | t_{rr} | ns | $I_F=I_R=10\text{mA}, I_{rr}=1\text{mA}, R_L=100\Omega$ | - | 5 |

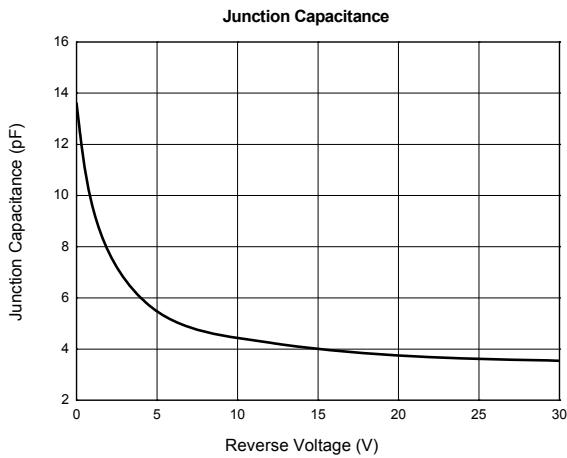
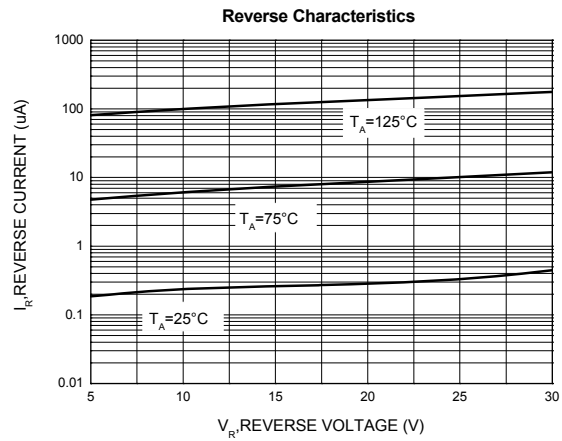
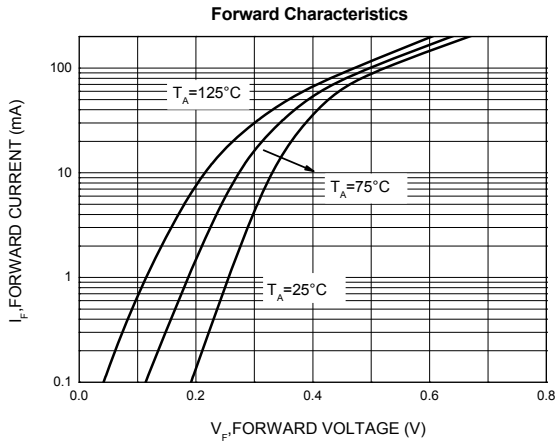


BAT54WSQ

Ordering Information (Example)

| PREFERRED P/N | PACKING CODE | UNIT WEIGHT(g) | MINIMUM PACKAGE(pcs) | INNER BOX QUANTITY(pcs) | OUTER CARTON QUANTITY(pcs) | DELIVERY MODE |
|---------------|--------------|--------------------|----------------------|-------------------------|----------------------------|---------------|
| BAT54WSQ | F2 | Approximate 0.0045 | 3000 | 30000 | 120000 | 7" reel |

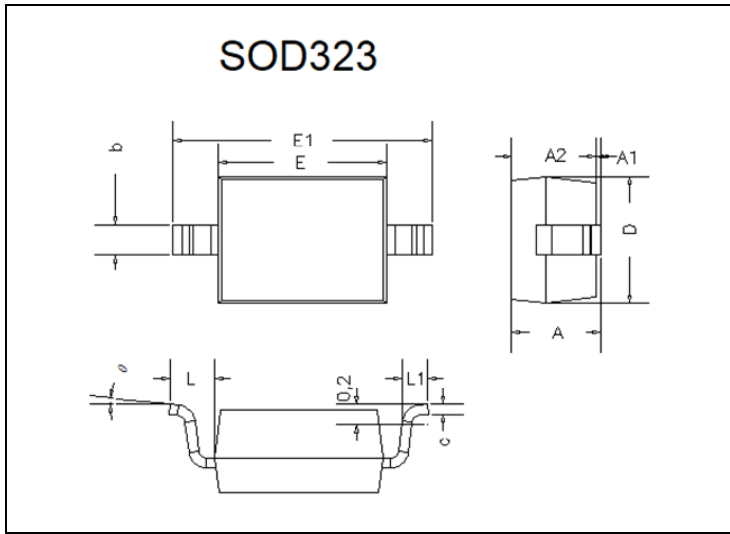
Characteristics (Typical)





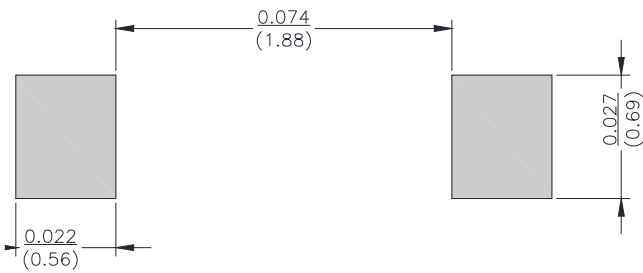
BAT54WSQ

■ Outline Dimensions



| DIM | INCHES | | MM | | NOTE |
|-----|----------|-------|----------|------|------|
| | MIN | MAX | MIN | MAX | |
| A | - | 0.039 | - | 1.00 | |
| A1 | 0.000 | 0.004 | 0.00 | 0.10 | |
| A2 | 0.031 | 0.035 | 0.80 | 0.90 | |
| b | 0.010 | 0.016 | 0.25 | 0.40 | |
| c | 0.003 | 0.007 | 0.08 | 0.17 | |
| D | 0.047 | 0.055 | 1.20 | 1.40 | |
| E | 0.063 | 0.071 | 1.60 | 1.80 | |
| E1 | 0.098 | 0.106 | 2.50 | 2.70 | |
| L | 0.019REF | | 0.475REF | | |
| L1 | 0.008 | 0.016 | 0.20 | 0.40 | |
| θ | 0° | 8° | 0° | 8° | |

■ Soldering Footprint



Unit: $\frac{\text{inch}}{\text{mm}}$



BAT54WSQ

Disclaimer

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