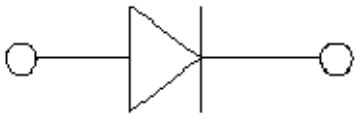
# Small-Signal Schottky Barrier Diode





## Features

- High reliability
- Fast Switching
- Low Forward Voltage Schottky Rectifier

## Mechanical Data

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

## ■Maximum Ratings ($T_a$=25℃ Unless otherwise specified)

| PARAMETER | SYMBOL | UNIT | Conditions | VALUE |
|---|---|---|---|---|
| Repetitive peak reverse voltage | $V_{RRM}$ | V | | 30 |
| Peak forward surge current | $I_{FSM}$ | A | $t_p$＜1s | 0.6 |
| Average forward current | $I_{FAV}$ | mA | | 200 |
| Power dissipation | $P_{tot}$ | mW | | 200 |
| Thermal Resistance, Junction to Ambient | $R_{\theta J\text{-}A}$ | ℃/W | | 500 |
| Maximum junction temperature | $T_j$ | ℃ | | -55 to +125 |
| Storage temperature range | $T_{stg}$ | ℃ | | -55 to +150 |

## ■Electrical Characteristics（$T_a$=25℃ Unless otherwise specified）

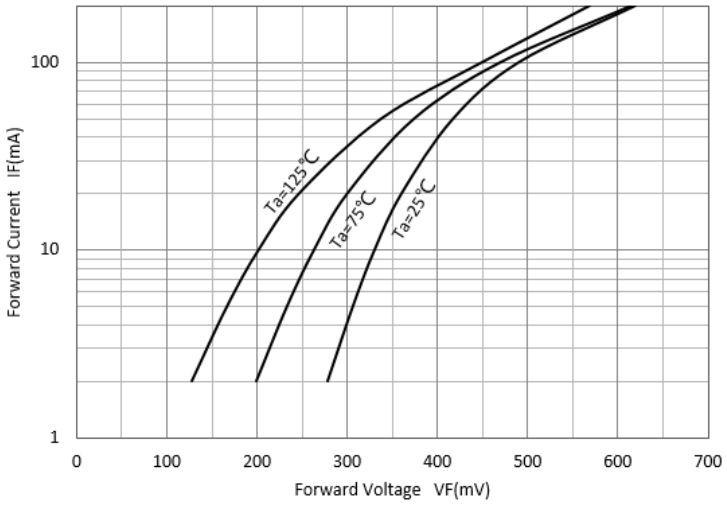
| PARAMETER | SYMBOL | UNIT | Conditions | VALUE |
|---|---|---|---|---|
| Maximum Forward voltage | $V_F$ | V | $I_F$=0.1mA | 0.24 |
| | | | $I_F$=1mA | 0.32 |
| | | | $I_F$=10mA | 0.40 |
| | | | $I_F$=30mA | 0.50 |
| | | | $I_F$=100mA | 0.60 |
| Maximum Reverse current | $I_R$ | μA | $V_R$=25V | 2 |
| Minimum Breakdown voltage | $V_{(BR)}$ | V | $I_R$=10μA | 30 |
| Maximum Diode capacitance | $C_D$ | pF | $V_R$=1V, f =1MH$_Z$ | 10 |
| Maximum Reverse recovery time | $t_{rr}$ | ns | $I_F$=$I_R$=10mA $I_{RR}$=1mA,$R_L$=100Ω | 5 |

## ■Ordering Information (Example)

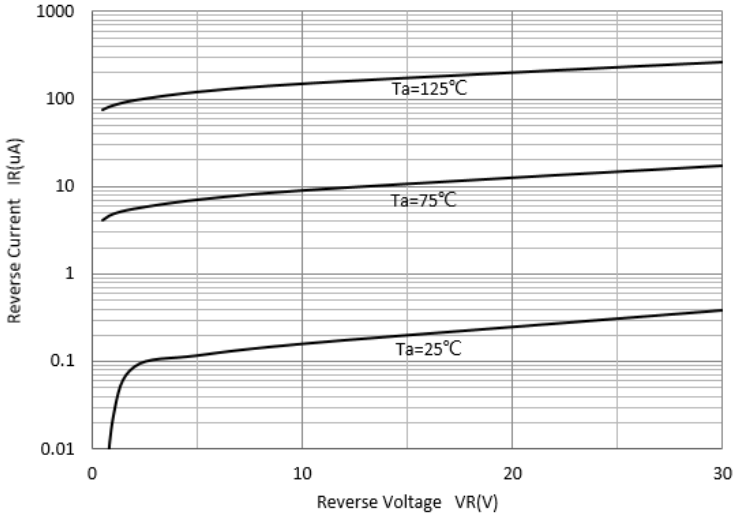
| PREFERED P/N | PACKING CODE | UNIT WEIGHT(g) | MINIMUM PACKAGE(pcs) | INNER BOX QUANTITY(pcs) | OUTER CARTON QUANTITY(pcs) | DELIVERY MODE |
|---|---|---|---|---|---|---|
| BAT54WS | F2 | Approximate 0.0048 | 3000 | 30000 | 120000 | 7” reel |

## ■Characteristics (Typical)

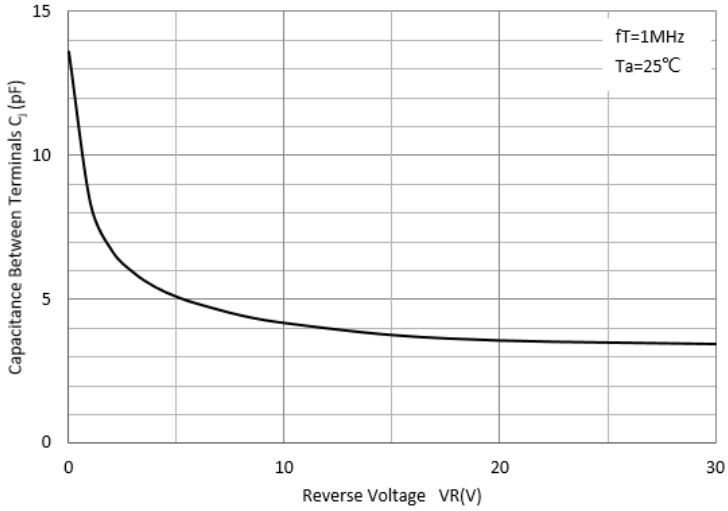
VF-IF



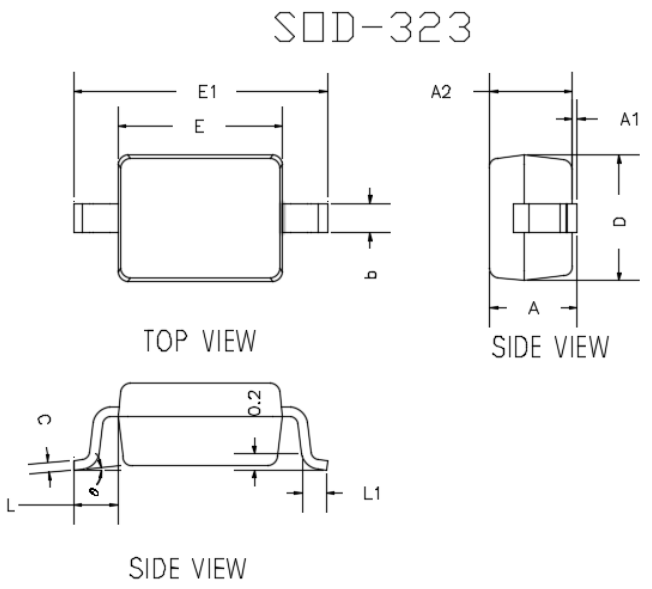

IR-VR




Cj-VR

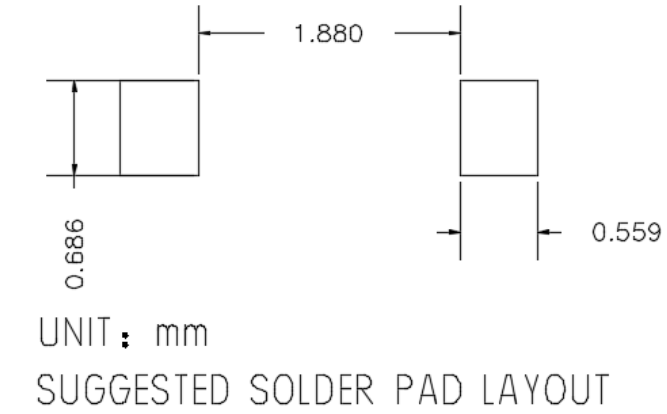


## ■Outline Dimensions




| DIMENSIONS | | | | |
|---|---|---|---|---|
| DIM | INCHES | | MM | |
| | MIN | MAX | MN | 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 |
| θ | 0° | 8° | 0° | 8° |

## ■Soldering Footprint



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