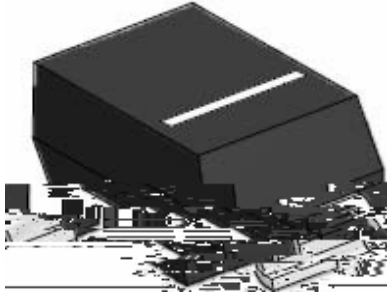


## High Speed Switching Diode



### Features

$V_R$  75V  
 $I_{FAV}$  200mA

### Typical Applications

Extreme fast switches

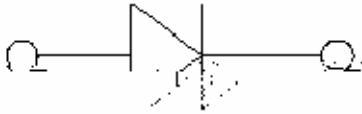
### Mechanical Data

**Package:** SOD-323

**Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102

**Polarity:** Cathode line denotes the cathode end

**Marking:** T4



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

| PARAMETER                       | SYMBOL     | UNIT | Conditions    | VALUE      |
|---------------------------------|------------|------|---------------|------------|
| Repetitive peak reverse voltage | $V_{RRM}$  | V    |               | 75         |
| Peak forward surge current      | $I_{FSM}$  | A    | $t_p=10\mu s$ | 2          |
| Average forward current         | $I_{FAV}$  | mA   |               | 200        |
| Power dissipation               | $P_{tot}$  | mW   |               | 350        |
| Thermal Resistance              | $R_{thJA}$ | /W   |               | 315        |
| Maximum junction temperature    | $T_j$      |      |               | -55 ~ +150 |
| Storage temperature range       | $T_{stg}$  |      |               | -55 ~ +150 |

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

| PARAMETER                 | SYMBOL | UNIT    | Conditions                         | Min | Typ | Max   |
|---------------------------|--------|---------|------------------------------------|-----|-----|-------|
| Maximum Forward voltage   | $V_F$  | V       | $I_F=1mA$                          |     |     | 0.715 |
|                           | $V_F$  | V       | $I_F=10mA$                         |     |     | 0.855 |
|                           | $V_F$  | V       | $I_F=50mA$                         |     |     | 1.0   |
|                           | $V_F$  | V       | $I_F=150mA$                        |     |     | 1.25  |
| Minimum Breakdown voltage | $I_R$  | $\mu A$ | $V_R=75V$                          |     |     | 1.0   |
|                           | $V_R$  | V       | $I_R=100\mu A$                     | 100 |     |       |
|                           | $t_r$  | ns      | $I_F=10mA, I_{rr}=0.1I_R, R_L=100$ |     |     | 6     |

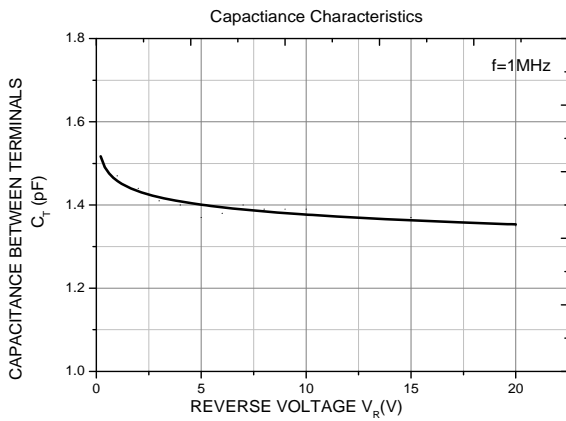
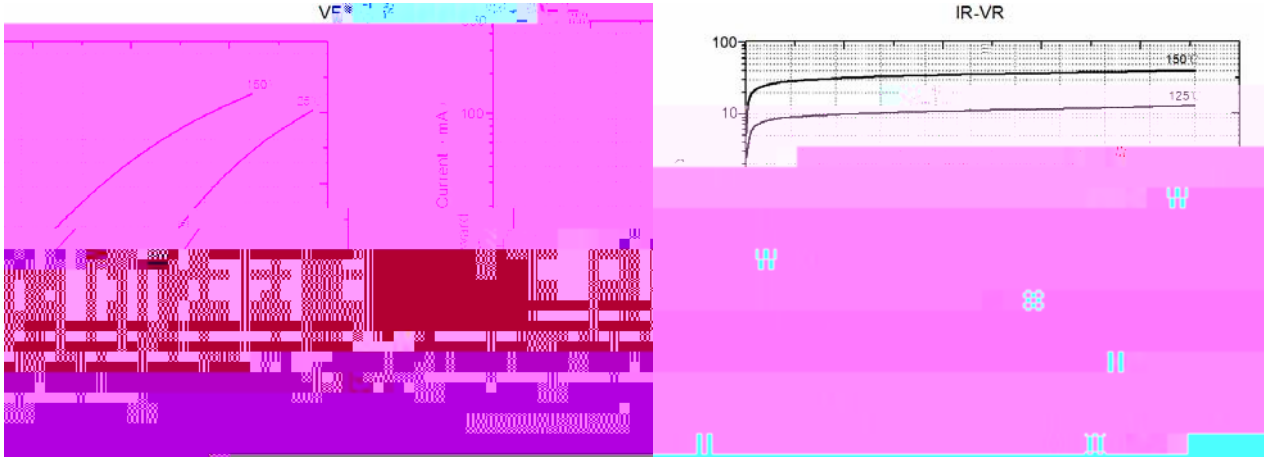


# BAS16WS

## Ordering Information (Example)

| PREFERED P/N | PACKING CODE | UNIT WEIGHT(g)     | MINIMUM PACKAGE(pcs) | INNER BOX QUANTITY(pcs) | OUTER CARTON QUANTITY(pcs) | DELIVERY MODE |
|--------------|--------------|--------------------|----------------------|-------------------------|----------------------------|---------------|
| BAS16WS      | F2           | Approximate 0.0048 | 3000                 | 30000                   | 120000                     | 7" reel       |

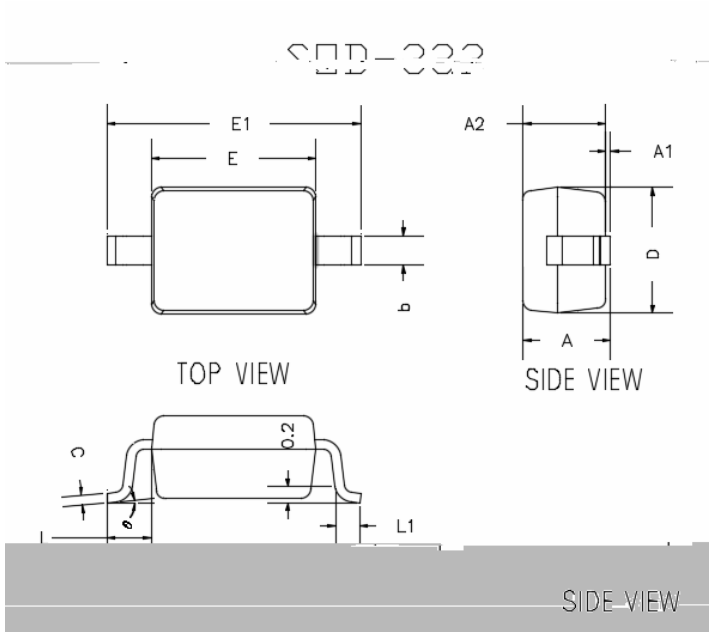
## Characteristics (Typical)





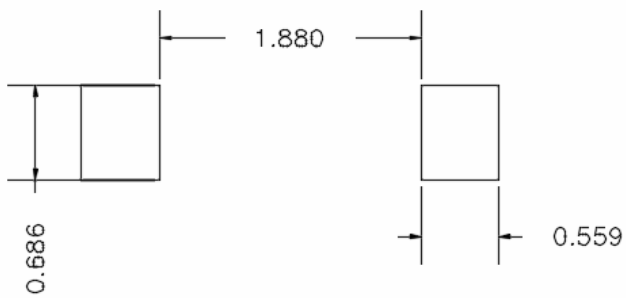
# BAS16WS

## Outline Dimensions



| DIM | DIMENSIONS |        |          |        |
|-----|------------|--------|----------|--------|
|     | 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 |
| D   | 0.0031     | 0.0059 | 0.0800   | 0.1500 |
| E   | 0.0472     | 0.0551 | 1.2000   | 1.4000 |
| E1  | 0.0629     | 0.0709 | 1.6000   | 1.8000 |
| L   | 0.0187TYP  |        | 0.475TYP |        |
| L1  | 0.0098     | 0.0157 | 0.250    | 0.400  |
| θ   | 0°         | 8°     | 0°       | 8°     |

## Soldering Footprint



UNIT: mm

SUGGESTED SOLDER PAD LAYOUT



# BAS16WS

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## Disclaimer

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