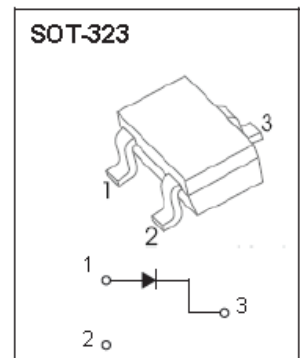
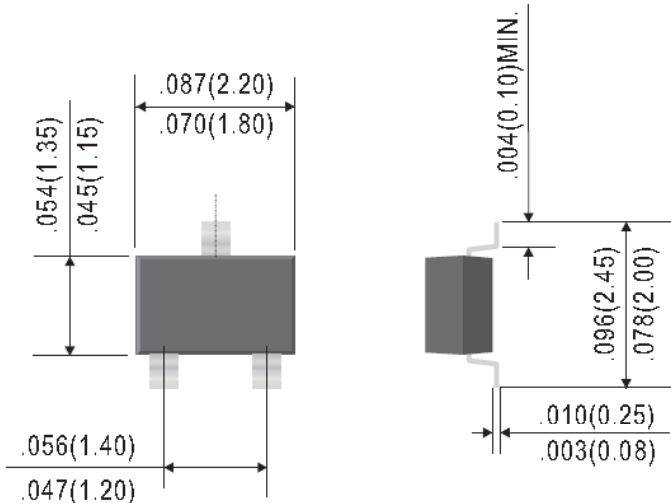


Dimensions in inches and (millimeters)

### FEATURES

- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- High Conductance
- Pb-Free package is available
- RoHS product for packing code suffix "G"
- Halogen free product for packing code suffix "H"
- Moisture Sensitivity Level 1

**MARKING:**

BAS19W KA8

BAS20W KT2

BAS21W KT3

| Maximum Ratings (T <sub>a</sub> =25°C unless otherwise noted) |                  |          |        |        |      |
|---------------------------------------------------------------|------------------|----------|--------|--------|------|
| Parameter                                                     | Symbol           | BAS19W   | BAS20W | BAS21W | Unit |
| Peak Repetitive Reverse Voltage                               | V <sub>RRM</sub> | 100      | 150    | 250    | V    |
| DC Blocking Voltage                                           | V <sub>R</sub>   |          |        |        |      |
| Average Rectified Forward Current                             | I <sub>O</sub>   | 200      |        |        | mA   |
| Power Dissipation                                             | P <sub>D</sub>   | 200      |        |        | mW   |
| Thermal Resistance From Junction To Ambient                   | R <sub>θJA</sub> | 625      |        |        | °C/W |
| Junction temperature                                          | T <sub>J</sub>   | 150      |        |        | °C   |
| Operating/ Storage temperature                                | T <sub>STG</sub> | -55~+150 |        |        | °C   |

| Electrical Characteristics (T <sub>a</sub> =25°C unless otherwise noted) |                         |                                                                              |                   |             |             |      |
|--------------------------------------------------------------------------|-------------------------|------------------------------------------------------------------------------|-------------------|-------------|-------------|------|
| Parameter                                                                | Symbol                  | Test conditions                                                              | Min.              | Typ.        | Max.        | Unit |
| Reverse Breakdown Voltage                                                | BAS19<br>BAS20<br>BAS21 | V <sub>(BR)</sub><br>I <sub>R</sub> = 100μA                                  | 100<br>150<br>250 | —<br>—<br>— | —<br>—<br>— | V    |
| Reverse voltage leakage current                                          | BAS19<br>BAS20<br>BAS21 | V <sub>R</sub> =100V<br>V <sub>R</sub> =150V<br>V <sub>R</sub> =200V         | —<br>—<br>—       | —<br>—<br>— | 0.1         | μA   |
| Forward voltage                                                          | V <sub>F</sub>          | I <sub>F</sub> =100mA<br>I <sub>F</sub> =200mA                               | —<br>—            | —<br>—      | 1<br>1.25   | V    |
| Diode capacitance                                                        | C <sub>D</sub>          | V <sub>R</sub> =0V, f=1MHz                                                   | —                 | —           | 5           | pF   |
| Reverse Recovery Time                                                    | t <sub>rr</sub>         | I <sub>F</sub> =I <sub>R</sub> =30mA<br>I <sub>rr</sub> =0.1X I <sub>R</sub> | —                 | —           | 50          | ns   |

### Typical Characteristics

