



Micro Commercial Components

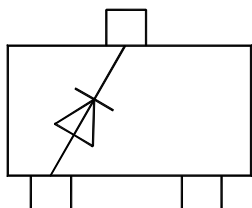


Micro Commercial Components  
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**BAS19WT**  
**BAS20WT**  
**BAS21WT**

## Features

- Power dissipation: 200mW ( $T_{amb}=25^{\circ}C$ )
- Collector current: 200mA
- Halogen free available upon request by adding suffix "-HF"



**Marking:** BAS19W KA8  
BAS20W KT2  
BAS21W KT3

## Maximum Ratings

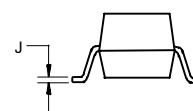
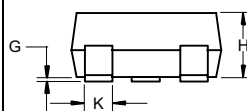
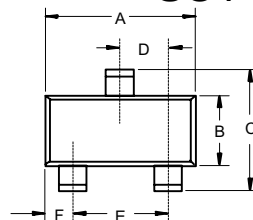
- Operating Temperature:  $-55^{\circ}C$  to  $+150^{\circ}C$
- Storage Temperature:  $-55^{\circ}C$  to  $+150^{\circ}C$
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Lead Free Finish/Rohs Compliant ("P" Suffix designates RoHS Compliant. See ordering information)

### Electrical Characteristics @ $25^{\circ}C$ Unless Otherwise Specified

|                                                               |          |                      |                                                                                  |
|---------------------------------------------------------------|----------|----------------------|----------------------------------------------------------------------------------|
| Reverse Voltage<br>BAS19WT<br>BAS20WT<br>BAS21WT              | $V_R$    | 100V<br>150V<br>200V | $I_R=100 \mu A$                                                                  |
| Peak Forward Current                                          | $I_F$    | 200mA                |                                                                                  |
| Maximum<br>Instantaneous Forward<br>Voltage                   | $V_F$    | 1.0V<br>1.25V        | $I_{FM}=100mA$ ;<br>$I_{FM}=200mA$ ;                                             |
| Maximum DC Reverse<br>Current At Rated DC<br>Blocking Voltage | $I_R$    | 0.1 $\mu A$          | $V_R=100Volts$ (BAS19WT)<br>$V_R=150Volts$ (BAS20WT)<br>$V_R=200Volts$ (BAS21WT) |
| Diode Capacitance                                             | $C_D$    | 5pF                  | Measured at 1.0MHz,<br>$V_R=0V$                                                  |
| Reverse Recovery<br>Time                                      | $T_{rr}$ | 50ns                 | $I_F=I_R=30mA$<br>$I_{rr}=0.1I_R$                                                |

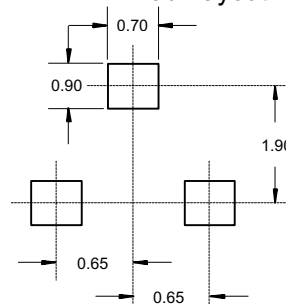
## 200mW Switching Diode

### SOT-323



| DIM | INCHES       |      | MM          |      | NOTE |
|-----|--------------|------|-------------|------|------|
|     | MIN          | MAX  | MIN         | MAX  |      |
| A   | .071         | .087 | 1.80        | 2.20 |      |
| B   | .045         | .053 | 1.15        | 1.35 |      |
| C   | .083         | .096 | 2.10        | 2.45 |      |
| D   | .026 Nominal |      | 0.65Nominal |      |      |
| E   | .047         | .055 | 1.20        | 1.40 |      |
| F   | .012         | .016 | .30         | .40  |      |
| G   | .000         | .004 | .000        | .100 |      |
| H   | .035         | .039 | .90         | 1.00 |      |
| J   | .004         | .010 | .100        | .250 |      |
| K   | .006         | .016 | .15         | .40  |      |

### Suggested Solder Pad Layout



## Ordering Information :

| Device         | Packing               |
|----------------|-----------------------|
| Part Number-TP | Tape&Reel: 3Kpcs/Reel |

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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