

# M.C.C.

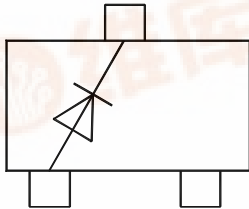
Micro Commercial Components

Micro Commercial Components  
20736 Marilla Street Chatsworth  
CA 91311  
Phone: (818) 701-4933  
Fax: (818) 701-4939

## BAS16WT MMBD4148WT

### Features

- Power dissipation: 200mW ( $T_{amb}=25^{\circ}\text{C}$ )
- Collector current: 150mA



Marking: A2, KA2, KT1

### Maximum Ratings

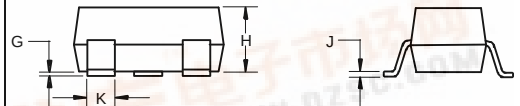
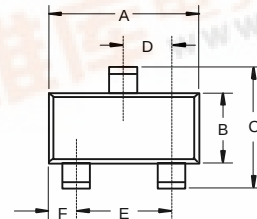
- Operating Temperature:  $-55^{\circ}\text{C}$  to  $+150^{\circ}\text{C}$
- Storage Temperature:  $-55^{\circ}\text{C}$  to  $+150^{\circ}\text{C}$

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

|                                                         |          |                                  |                                                                                                  |
|---------------------------------------------------------|----------|----------------------------------|--------------------------------------------------------------------------------------------------|
| Reverse Voltage                                         | $V_R$    | 75V                              | $I_R=100\mu\text{A}$                                                                             |
| Peak Forward Current                                    | $I_F$    | 150mA                            |                                                                                                  |
| Maximum Instantaneous Forward Voltage                   | $V_F$    | 0.715V<br>0.855<br>1.0V<br>1.25V | $I_{FM}=1\text{mA};$<br>$I_{FM}=10\text{mA};$<br>$I_{FM}=50\text{mA};$<br>$I_{FM}=150\text{mA};$ |
| Maximum DC Reverse Current At Rated DC Blocking Voltage | $I_R$    | 1.0 $\mu\text{A}$                | $V_R=75\text{Volts}$                                                                             |
| Diode Capacitance                                       | $C_D$    | 2pF                              | Measured at 1.0MHz, $V_R=0\text{V}$                                                              |
| Reverse Recovery Time                                   | $T_{rr}$ | 4ns                              | $I_F=I_R=10\text{mA}$<br>$I_{rr}=0.1I_R$                                                         |

### 200mW Switching Diode

#### SOT-323



| DIMENSIONS |              |      |             |      |      |
|------------|--------------|------|-------------|------|------|
| DIM        | INCHES       |      | MM          |      | NOTE |
|            | MIN          | MAX  | MIN         | MAX  |      |
| A          | .071         | .087 | 1.80        | 2.20 |      |
| B          | .045         | .053 | 1.15        | 1.35 |      |
| C          | .079         | .087 | 2.00        | 2.20 |      |
| 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          | .012         | .016 | .30         | .40  |      |

#### Suggested Solder Pad Layout

