



Micro Commercial Components



Micro Commercial Components  
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**BAS70T**  
**BAS70-04T**  
**BAS70-05T**  
**BAS70-06T**

## Features

- Ultra-Small Surface Mount Package
- Low turn on Voltage
- Fast Switching
- PN Junction Guard Ring for Transient and ESD Protection
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

| MCC Part Number | Device Marking | Type   | Pin Configuration |
|-----------------|----------------|--------|-------------------|
| BAS70T          | 7C             | Single | Figure 1          |
| BAS70-04T       | 7D             | Dual   | Figure 2          |
| BAS70-05T       | 7E             | Dual   | Figure 3          |
| BAS70-06T       | 7F             | Dual   | Figure 4          |

## Maximum Ratings

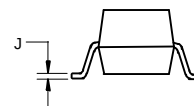
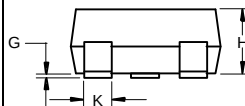
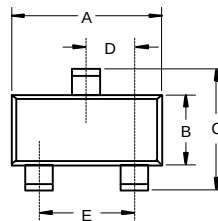
|                                              |           |                                |
|----------------------------------------------|-----------|--------------------------------|
| DC Blocking Voltage                          | $V_R$     | 70V                            |
| Forward Continuous Current                   | $I_F$     | 70mA                           |
| Non-Repetitive Peak Forward Current $t < 1s$ | $I_{FSM}$ | 100mA                          |
| Total Power Dissipation @ $T_A = 25^\circ C$ | $P_D$     | 150mW                          |
| Storage Temperature Range                    | $T_{stg}$ | $-55^\circ C$ to $150^\circ C$ |
| Junction Temperature                         | $T_j$     | $-55^\circ C$ to $150^\circ C$ |

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

| Ratings                   | Symbol     | Max.            | Notes                                                              |
|---------------------------|------------|-----------------|--------------------------------------------------------------------|
| Forward Voltage           | $V_F$      | 410mV<br>1000mV | $I_F = 1mA$<br>$I_F = 15mA$                                        |
| Reverse Current           | $I_R$      | 100nA           | $V_R = 50V$                                                        |
| Reverse Breakdown Voltage | $V_{(BR)}$ | $> 70V$         | $I_R = 10uA$                                                       |
| Total Capacitance         | $C_T$      | 2pF             | Measured at 1.0MHz, $V_R = 0V$                                     |
| Reverse Recovery Time     | $t_{rr}$   | 5nS             | $I_F = I_R = 10mA$ ;<br>$I_{rr} = 0.1 * I_R$<br>$R_L = 100 \Omega$ |

**150mWatt, 70Volt**  
**Schottky Barrier Diode**

**SOT-523**



DIMENSIONS

| DIM | INCHES       |      | MM           |      | NOTE |
|-----|--------------|------|--------------|------|------|
|     | MIN          | MAX  | MIN          | MAX  |      |
| A   | .059         | .067 | 1.50         | 1.70 |      |
| B   | .030         | .033 | 0.75         | 0.85 |      |
| C   | .057         | .069 | 1.45         | 1.75 |      |
| D   | .020 Nominal |      | 0.50 Nominal |      |      |
| E   | .035         | .043 | 0.90         | 1.10 |      |
| G   | .000         | .004 | .000         | .100 |      |
| H   | .028         | .031 | .70          | 0.80 |      |
| J   | .004         | .008 | .100         | .200 |      |
| K   | .010         | .014 | .25          | .35  |      |

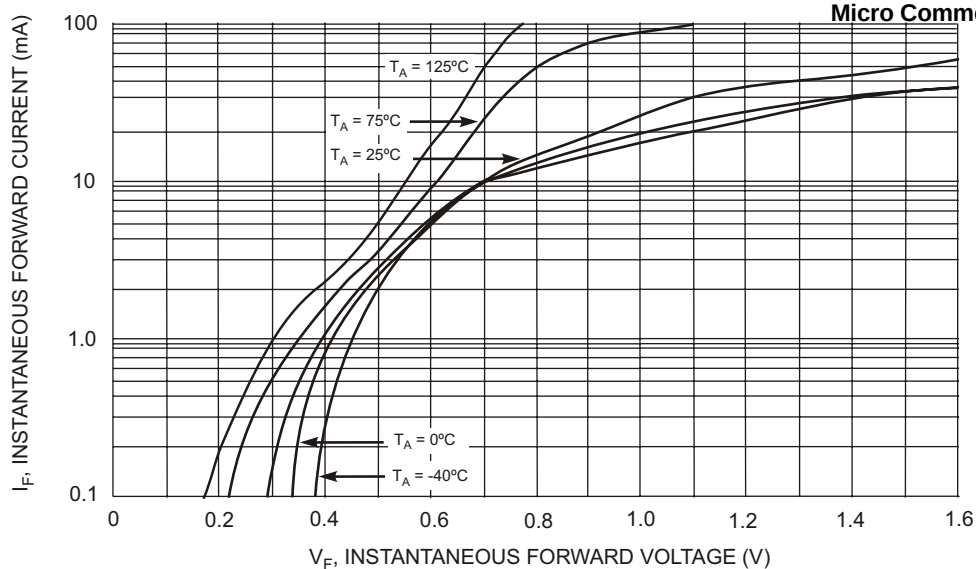


Fig. 1 Typical Forward Characteristics

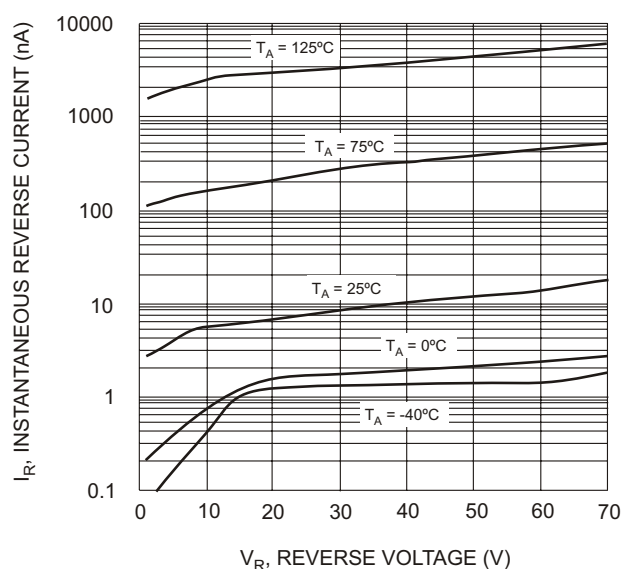


Fig. 2 Typical Reverse Characteristics

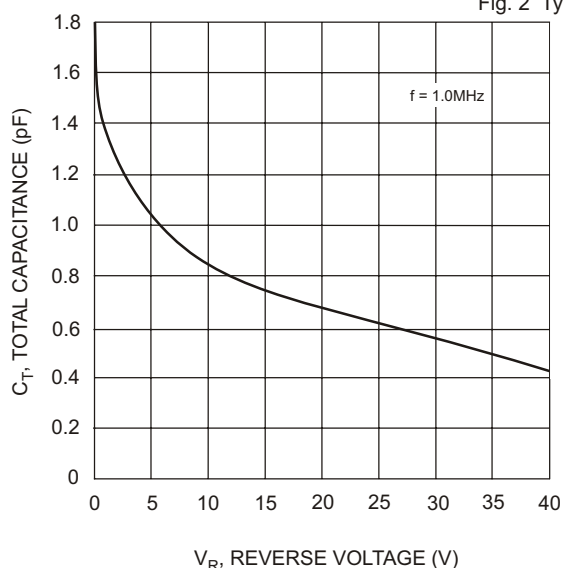


Fig. 3 Typical Capacitance

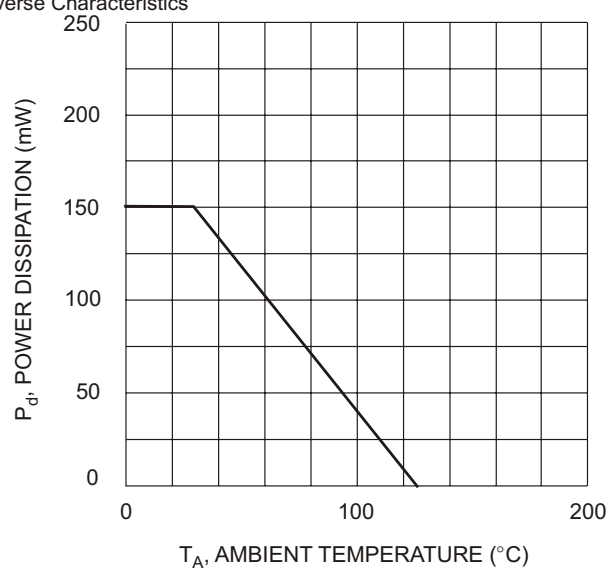


Fig. 4 Power Derating Curve, Total Package

Pin Configuration - Top View

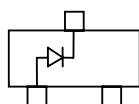


Figure 1

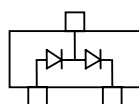


Figure 2

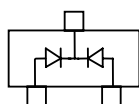


Figure 3

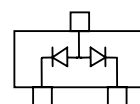


Figure 4

## Ordering Information :

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

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