



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

**BAS70T  
 BAS70-04T  
 BAS70-05T  
 BAS70-06T**

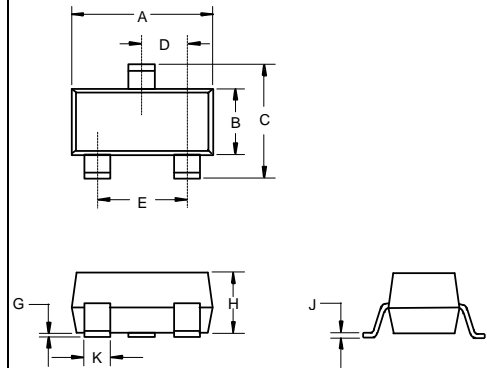
**Features**

- 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

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

| 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          |

**SOT-523**



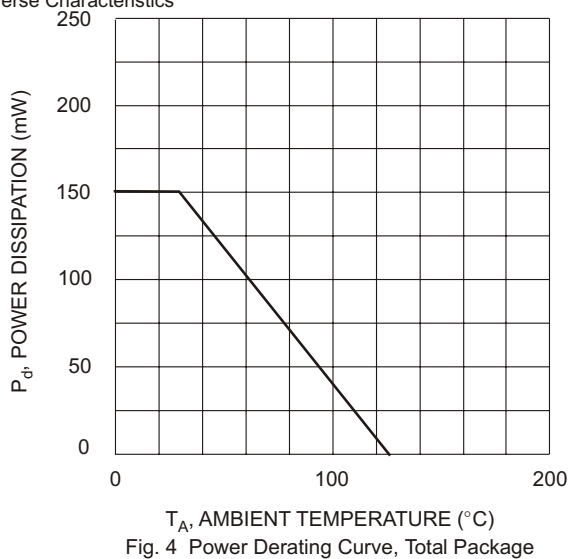
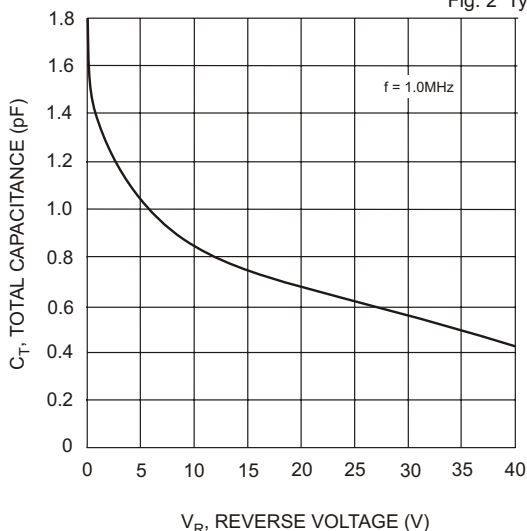
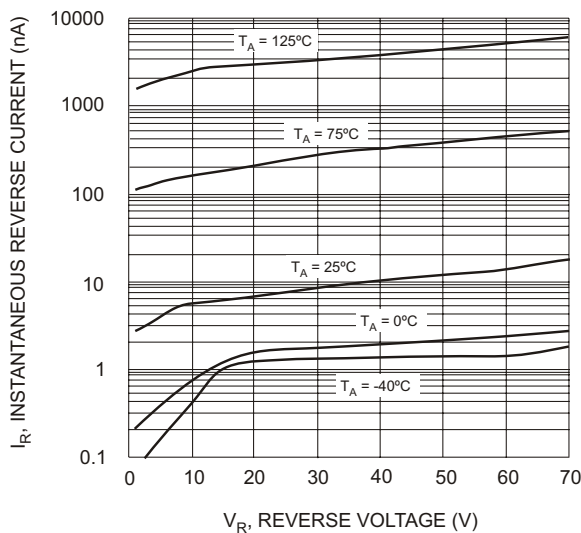
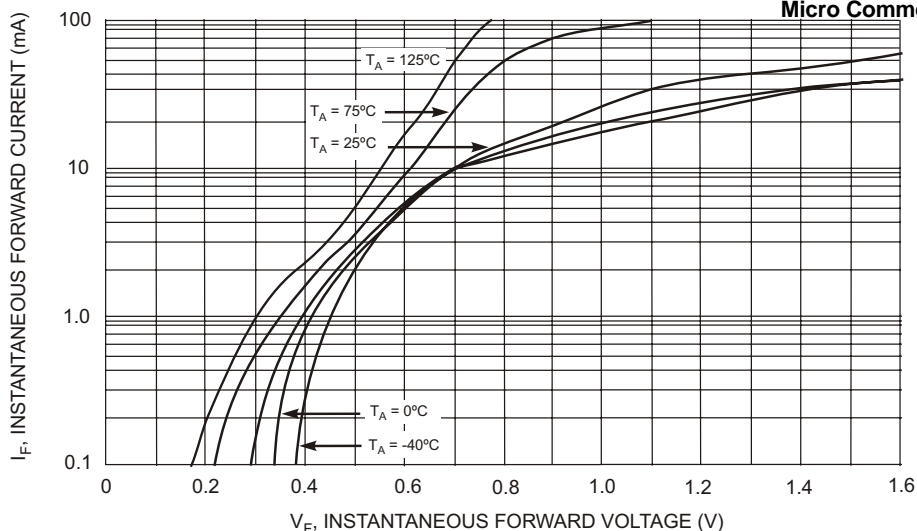
**Maximum Ratings**

|  |           |                                |
|--|-----------|--------------------------------|
| 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°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            | $I_R = 10\mu A$  |
| 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>$R_L = 100 \Omega$ |

| DIM | DIMENSIONS   |      |              |      | NOTE |
|-----|--------------|------|--------------|------|------|
|     | INCHES       |      | MM           |      |      |
|     | 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  |      |



Pin Configuration - Top View

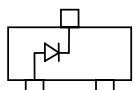


Figure 1

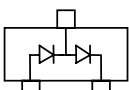


Figure 2

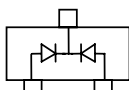


Figure 3

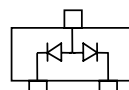


Figure 4



Micro Commercial Components

### Ordering Information :

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

**\*\*\*IMPORTANT NOTICE\*\*\***

**Micro Commercial Components Corp.** reserves the right to make changes without further notice to any product herein to make corrections, modifications , enhancements , improvements , or other changes . **Micro Commercial Components Corp .** does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights ,nor the rights of others . The user of products in such applications shall assume all risks of such use and will agree to hold **Micro Commercial Components Corp .** and all the companies whose products are represented on our website, harmless against all damages.

**\*\*\*LIFE SUPPORT\*\*\***

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

**\*\*\*CUSTOMER AWARENESS\*\*\***

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. **MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources.** MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.

[www.mccsemi.com](http://www.mccsemi.com)