



Micro Commercial Components

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

**2SC2001**  
**2SC2001-M**  
**2SC2001-L**  
**2SC2001-K**

## Features

- Capable of 0.6Watts of Power Dissipation.
- Collector-current 0. 7A
- Collector-base Voltage 30V
- Operating and storage junction temperature range: -55°C to +150°C
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Marking: C2001

**NPN Silicon**  
**Plastic-Encapsulate**  
**Transistor**

### Electrical Characteristics @ 25°C Unless Otherwise Specified

| Symbol | Parameter | Min | Max | Units |
|--------|-----------|-----|-----|-------|
|--------|-----------|-----|-----|-------|

#### OFF CHARACTERISTICS

|               |  |     |     |      |
|---------------|--|-----|-----|------|
| $V_{(BR)CEO}$ | Collector-Emitter Breakdown Voltage<br>( $I_C=10\text{mAdc}$ , $I_B=0$ ) | 25  | --- | Vdc  |
| $V_{(BR)CBO}$ | Collector-Base Breakdown Voltage<br>( $I_C=100\text{uAdc}$ , $I_E=0$ )   | 30  | --- | Vdc  |
| $V_{(BR)EBO}$ | Emitter-Base Breakdown Voltage<br>( $I_E=100\text{uAdc}$ , $I_C=0$ )     | 5.0 | --- | Adc  |
| $I_{CBO}$     | Collector Cutoff Current<br>( $V_{CB}=30\text{Vdc}$ , $I_E=0$ )          | --- | 0.1 | uAdc |
| $I_{CEO}$     | Collector Cutoff Current<br>( $V_{CE}=20\text{Vdc}$ , $I_E=0$ )          | --- | 0.1 | Vdc  |
| $I_{EBO}$     | Emitter Cutoff Current<br>( $V_{EB}=5.0\text{Vdc}$ , $I_C=0$ )           | --- | 0.1 | uAdc |

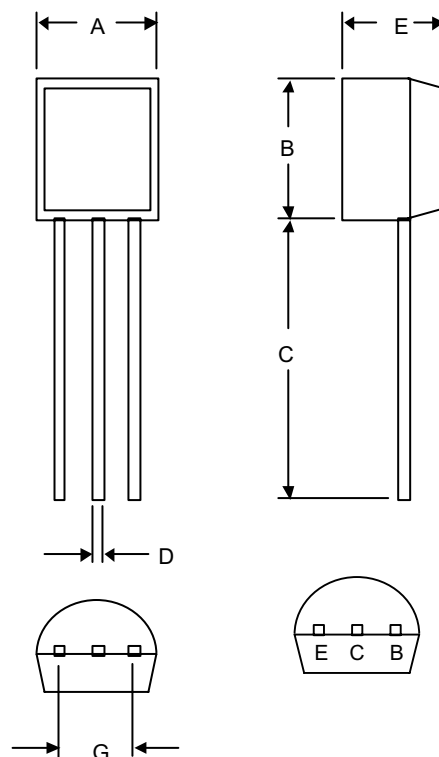
#### ON CHARACTERISTICS

|               |  |     |     |     |
|---------------|--|-----|-----|-----|
| $h_{FE}$      | DC Current Gain<br>( $I_C=100\text{mAdc}$ , $V_{CE}=1.0\text{Vdc}$ )                   | 90  | 400 | --- |
| $V_{CE(sat)}$ | Collector-Emitter Saturation Voltage<br>( $I_C=700\text{mAdc}$ , $I_B=70\text{mAdc}$ ) | --- | 0.6 | Vdc |
| $V_{(BE)sat}$ | Base-Emitter Saturation Voltage<br>( $I_C=700\text{mAdc}$ , $I_B=70\text{mAdc}$ )      | --- | 1.2 | Vdc |
| fT            | Transition Frequency<br>( $V_{CE}=6.0\text{Vdc}$ , $I_C=10\text{mAdc}$ , f=30MHz)      | 50  | --- | MHz |

#### CLASSIFICATION OF $h_{FE}$

| Rank  | M      | L       | K       |
|-------|--------|---------|---------|
| Range | 90-180 | 135-270 | 200-400 |

TO-92



#### DIMENSIONS

| DIM | INCHES |      | MM    |       | NOTE |
|-----|--------|------|-------|-------|------|
|     | MIN    | MAX  | MIN   | MAX   |      |
| A   | .170   | .190 | 4.33  | 4.83  |      |
| B   | .170   | .190 | 4.30  | 4.83  |      |
| C   | .550   | .590 | 13.97 | 14.97 |      |
| D   | .010   | .020 | 0.36  | 0.56  |      |
| E   | .130   | .160 | 3.30  | 3.96  |      |
| G   | .010   | .104 | 2.44  | 2.64  |      |

**\*\*\*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.

**\*\*\*APPLICATIONS DISCLAIMER\*\*\***

Products offer by *Micro Commercial Components Corp.* are not intended for use in Medical,  
Aerospace or Military Applications.