



Micro Commercial Components

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

## 2SA1015-O 2SA1015-Y 2SA1015-GR

### Features

- Capable of 0.4Watts of Power Dissipation.
- Collector-current 0.15A
- Collector-base Voltage 50V
- Operating and storage junction temperature range: -55°C to +150°C
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Marking: A1015

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

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

#### OFF CHARACTERISTICS

|               |                                                                  |     |     |         |
|---------------|------------------------------------------------------------------|-----|-----|---------|
| $V_{(BR)CEO}$ | Collector-Emitter Breakdown Voltage<br>( $I_C=0.1mA$ , $I_E=0$ ) | 50  | --- | Vdc     |
| $V_{(BR)CBO}$ | Collector-Base Breakdown Voltage<br>( $I_C=100\mu A$ , $I_E=0$ ) | 50  | --- | Vdc     |
| $I_{CBO}$     | Collector Cutoff Current<br>( $V_{CB}=50V$ , $I_E=0$ )           | --- | 0.1 | $\mu A$ |
| $I_{EBO}$     | Emitter Cutoff Current<br>( $V_{EB}=5.0V$ , $I_C=0$ )            | --- | 0.1 | $\mu A$ |

#### ON CHARACTERISTICS

|               |                                                                      |     |      |     |
|---------------|----------------------------------------------------------------------|-----|------|-----|
| $h_{FE}$      | DC Current Gain<br>( $I_C=2.0mA$ , $V_{CE}=6.0V$ )                   | 70  | 400  | --- |
| $V_{CE(sat)}$ | Collector-Emitter Saturation Voltage<br>( $I_C=100mA$ , $I_E=10mA$ ) | --- | 0.3  | Vdc |
| $V_{BE(sat)}$ | Base-Emitter Saturation Voltage<br>( $I_C=100mA$ , $I_E=10mA$ )      | --- | 1.1  | Vdc |
| $V_{BE}$      | Base-Emitter Voltage<br>( $I_E=310mA$ )                              | --- | 1.45 | Vdc |

#### SMALL-SIGNAL CHARACTERISTICS

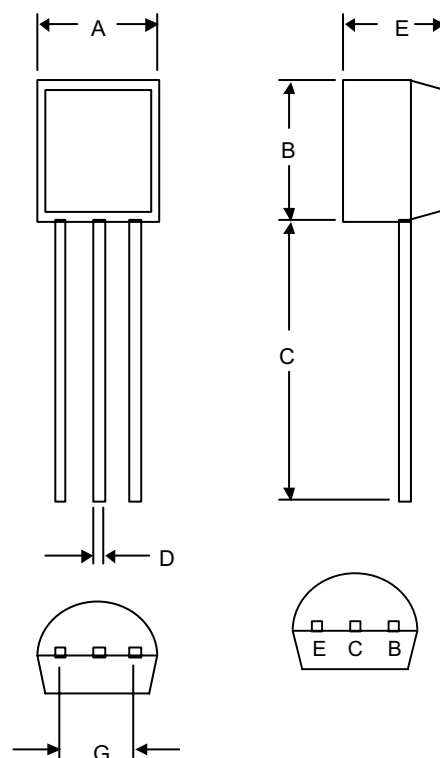
|       |                                                                    |    |     |     |
|-------|--------------------------------------------------------------------|----|-----|-----|
| $f_T$ | Transistor Frequency<br>( $I_C=1.0mA$ , $V_{CE}=10V$ , $f=30MHz$ ) | 80 | --- | MHz |
|-------|--------------------------------------------------------------------|----|-----|-----|

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

|       |        |         |         |
|-------|--------|---------|---------|
| Rank  | O      | Y       | GR      |
| Range | 70-140 | 120-240 | 200-400 |

### PNP Silicon Plastic-Encapsulate Transistor

#### 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.