

**Micro Commercial Components** 



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

## 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 +125°C
- Epoxy meets UL 94 V-0 flammability rating
- Moisure Sensitivity Level 1
- Marking:A1015
- Lead Free Finish/Rohs Compliant ("P"Suffix designates Compliant. See ordering information) Halogen free available upon request by adding suffix "-HF"

| Electrical Characteristics @ 25°C Unless Otherwise Specified |  |     |      |       |  |  |
|--|--|-----|------|-------|--|--|
| Symbol   | Parameter  | Min | Max  | Units |  |  |
| <b>OFF CHARA</b>   | OFF CHARACTERISTICS  |     |      |       |  |  |
| V <sub>(BR)CEO</sub>   | Collector-Emitter Breakdown Voltage<br>(I <sub>c</sub> =-0.1mAdc, I <sub>B</sub> =0)   | -50 |      | Vdc   |  |  |
| V <sub>(BR)CBO</sub>   | Collector-Base Breakdown Voltage<br>(┟=-100µAdc, І <sub>∈</sub> =0)                    | -50 |      | Vdc   |  |  |
| V <sub>(BR)EBO</sub>   | Emitter-Base Breakdown Voltage<br>(┟=-100µAdc, І <sub>с</sub> =0)                      | -5  |      | Vdc   |  |  |
| сво  | Collector Cutoff Current<br>(V <sub>CB</sub> =-50Vdc, I <sub>E</sub> =0)               |     | -0.1 | µAdc  |  |  |
| I <sub>EBO</sub>   | Emitter Cutoff Current<br>(V <sub>EB</sub> =-5.0Vdc, I <sub>C</sub> =0)                |     | -0.1 | µAdc  |  |  |
| ON CHARAC  | TERISTICS  |     |      |       |  |  |
| h <sub>FE</sub>  | DC Current Gain<br>(t <sub>c</sub> =-2.0mAdc, V <sub>CE</sub> =-6.0Vdc)                | 70  | 400  |       |  |  |
| V <sub>CE(sat)</sub>   | Collector-Emitter Saturation Voltage<br>(ᡶ=-100mAdc, ৳=-10mAdc)                        |     | -0.3 | Vdc   |  |  |
| V <sub>BE(sat)</sub>   | Base-Emitter Saturation Voltage<br>(t <sub>c</sub> =-100mAdc, t <sub>s</sub> =-10mAdc) |     | -1.1 | Vdc   |  |  |

### **SMALL-SIGNAL CHARACTERISTICS**

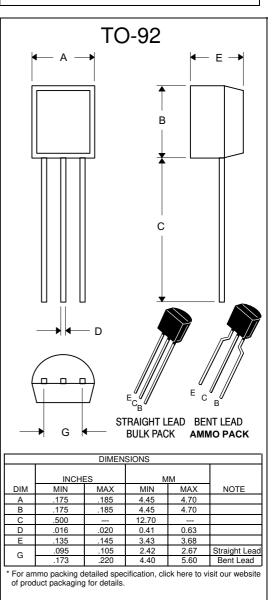
| f <sub>T</sub>  | Transistor Frequency<br>(I <sub>c</sub> =-1.0mAdc, V <sub>ce</sub> =-10Vdc, f=30MHz) | 80 |     | MHz |
|-----------------|--|----|-----|-----|
| C <sub>OB</sub> | Collector Output Capacitance<br>(V <sub>CB</sub> =-10Vdc, I <sub>E</sub> =0,f=1MHz)  |    | 7.0 | pF  |
| NF              | Noise Figure<br>(V <sub>c=</sub> =-6Vdc, lc=-0.1mAdc,f=1KHz,Rg=10K)                  |    | 6.0 | dB  |

#### **CLASSIFICATION OF HELLO**

| Rank  | 0      | Y       | GR      |
|-------|--------|---------|---------|
| Range | 70-140 | 120-240 | 200-400 |

# 2SA1015-0 2SA1015-Y 2SA1015-GR

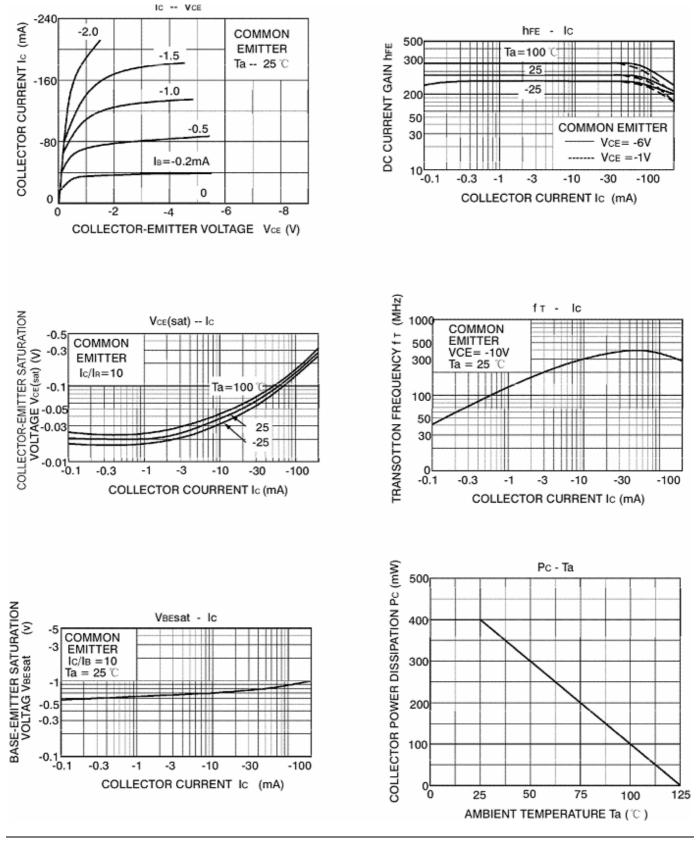
## **PNP Silicon Plastic-Encapsulate Transistor**



www.mccsemi.com

## 2SA1015 Typical Characteristics





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## **Ordering Information :**

| Device         | Packing                     |  |
|----------------|-----------------------------|--|
| Part Number-AP | Ammo Packing: 20Kpcs/Carton |  |
| Part Number-BP | Bulk: 100 Kpcs/Carton       |  |

Note : Adding "-HF" suffix for halogen free, eg. Part Number-BP-HF

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