



Micro Commercial Components

Micro Commercial Components  
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# 2SC2216

## Features

- Capable of 300m Watts of Power Dissipation.
- Collector-current :  $I_{CM}=50mA$
- Collector-base Voltage:  $V_{(BR)CBO}= 50V$
- Operating and storage junction temperature range:  $-55^{\circ}C$  to  $+150^{\circ}C$
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL rating 1
- Lead Free Finish/Rohs Compliant ("P" Suffix designates Compliant. See ordering information)

## NPN Silicon Plastic-Encapsulate Transistor

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

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

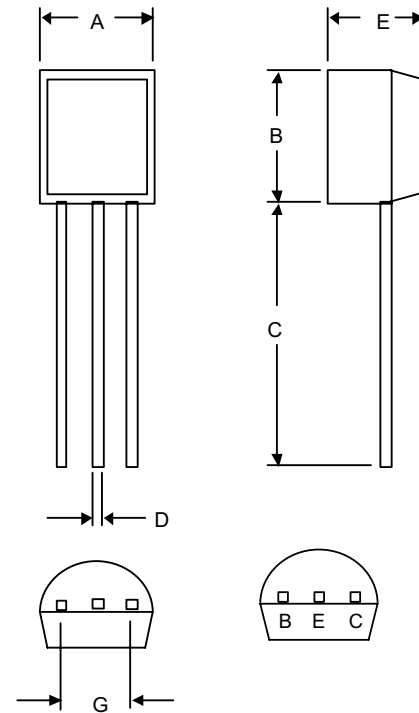
#### OFF CHARACTERISTICS

|               |  |     |     |         |
|---------------|--|-----|-----|---------|
| $V_{(BR)CEO}$ | Collector-Emmitter Breakdown Voltage<br>( $I_C=10mA$ , $I_B=0$ ) | 45  | --- | Vdc     |
| $V_{(BR)CBO}$ | Collector-Base Breakdown Voltage<br>( $I_C=100\mu A$ , $I_E=0$ ) | 50  | --- | Vdc     |
| $V_{(BR)EBO}$ | Emmitter-Base Breakdown Voltage<br>( $I_E=100\mu A$ , $I_C=0$ )  | 4.0 | --- | Adc     |
| $I_{CBO}$     | Collector Cut-off Current<br>( $V_{CB}=50Vdc$ , $I_E=0$ )        | --- | 0.1 | $\mu A$ |
| $I_{EBO}$     | Emmitter Cut-off Current<br>( $V_{EB}=4.0Vdc$ , $I_C=0$ )        | --- | 0.1 | $\mu A$ |

#### ON CHARACTERISTICS

|               |   |     |     |     |
|---------------|---|-----|-----|-----|
| $h_{FE}$      | DC Current Gain<br>( $I_C=12.5mA$ , $V_{CE}=12.5Vdc$ )                      | 40  | 140 | --- |
| $V_{CE(sat)}$ | Collector-Emmitter Saturation Voltage<br>( $I_C=15mA$ , $I_B=1.5mA$ )       | --- | 0.2 | Vdc |
| $V_{(BE)sat}$ | Base-Emmitter Saturation Voltage<br>( $I_C=15mA$ , $I_B=1.5mA$ )            | --- | 1.5 | Vdc |
| fT            | Transition Frequency<br>( $V_{CE}=12.5Vdc$ , $I_C=12.5mA$ ,<br>$f=100MHz$ ) | 300 | --- | MHz |

### 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  |      |



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## Ordering Information

| Device           | Packing                    |
|------------------|----------------------------|
| (Part Number)-AP | Ammo Packing;2Kpcs/AmmoBox |
| (Part Number)-BP | Bulk;1Kpcs/Bag             |

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