

**Micro Commercial Components** 

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Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

Phone: (818) 701-4933 Fax: (818) 701-4939 2SC3279-L 2SC3279-M 2SC3279-N 2SC3279-P

# **Features**

- High DC Current Gain and excellent  $h_{FE}$  Linearity  $h_{FE(1)}$  =140-600 ( $V_{CE}$ =1.0V,  $I_{C}$ =0.5A)  $h_{FE(2)}$  =70 (Min.), 200 (Typ.) ( $V_{CE}$ =1.0V,  $I_{C}$ =2.0A)
- Epoxy meets UL 94 V-0 flammability rating
- Moisure Sensitivity Level 1
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Halogen free available upon request by adding suffix "-HF"

# **Maximum Ratings**

| Symbol           | Rating                      | Rating      | Unit |
|------------------|-----------------------------|-------------|------|
| $V_{CEO}$        | Collector-Emitter Voltage   | 10          | V    |
| $V_{\sf CES}$    | Collector-Emitter Voltage   | 30          | V    |
| $V_{CBO}$        | Collector-Base Voltage      | 30          | V    |
| $V_{EBO}$        | Emitter-Base Voltage        | 6.0         | V    |
|                  | Collector Current - DC      | 2.0         | Λ    |
| lc               | Pulsed (1)                  | 5.0         | Α    |
| $I_{B}$          | Base Current                | 0.2         | Α    |
| P <sub>C</sub>   | Collector power dissipation | 750         | mW   |
| TJ               | Junction Temperature        | -55 to +150 | °C   |
| T <sub>STG</sub> | Storage Temperature         | -55 to +150 | °C   |

# Electrical Characteristics @ 25°C Unless Otherwise Specified

**Parameter** 

| OFF CHARACTERISTICS |   |     |  |     |      |
|---------------------|---|-----|--|-----|------|
| $V_{(BR)CEO}$       | Collector-Emitter Voltage (b=10mAdc, b=0)         | 10  |  |     | Vdc  |
| $V_{(BR)EBO}$       | Collector-Emitter Voltage (½=1.0mAdc, ½=0)        | 6.0 |  |     | Vdc  |
| Ісво                | Collector Cutoff Current (V <sub>CB</sub> =30Vdc, |     |  | 0.1 | μAdc |
| I <sub>EBO</sub>    | Emitter Cutoff Current                            |     |  | 0.1 | μAdc |

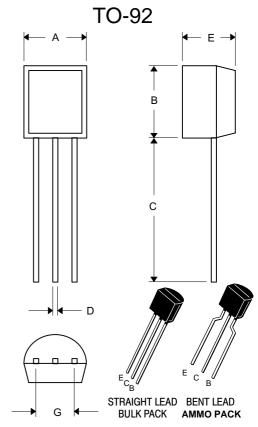
### ON CHARACTERISTICS

Symbol

| h <sub>FE(1)</sub>   | DC Current Gain <sup>(2)</sup><br>(b=0.5Adc, V <sub>CE</sub> =1.0Vdc)   | 140 |      | 600 |     |
|----------------------|---|-----|------|-----|-----|
| h <sub>FE(2)</sub>   | DC Current Gain<br>(b=2.0Adc, Vce=1.0Vdc)                               | 70  | 200  |     |     |
| V <sub>CE(sat)</sub> | Collector Saturation Voltage (b=2.0Adc, b=50mAdc)                       |     | 0.2  | 0.5 | Vdc |
| $V_{BE}$             | Base Saturation Voltage (L=2.0Adc, V <sub>CE</sub> =1.0Vdc)             |     | 0.86 | 1.5 | Vdc |
| f <sub>⊤</sub>       | Transition Frequency (V <sub>CE</sub> =1.0Vdc, L=0.5Adc)                | 100 | 150  |     | MHz |
| C <sub>ob</sub>      | Collector Output Capacitance<br>(V <sub>CB</sub> =10Vdc, ½=0, f=1.0MHz) |     | 27   |     | pF  |

- (1) Pulse Width=10 ms (Max.), Duty Cycle=30% (Max.)
- (2) h<sub>FE(1)</sub> Classification L: 140-240, M: 200-330, N: 300-450, P: 420-600

# NPN Silicon Epitaxial Transistors



| DIMENSIONS |       |      |       |      |               |
|------------|-------|------|-------|------|---------------|
|            | INCHE | ΞS   | ММ    |      |               |
| DIM        | MIN   | MAX  | MIN   | MAX  | NOTE          |
| Α          | .175  | .185 | 4.45  | 4.70 |               |
| В          | .175  | .185 | 4.45  | 4.70 |               |
| С          | .500  |      | 12.70 |      |               |
| D          | .016  | .020 | 0.41  | 0.63 |               |
| Е          | .135  | .145 | 3.43  | 3.68 |               |
| G          | .095  | .105 | 2.42  | 2.67 | Straight Lead |
| G          | .173  | .220 | 4.40  | 5.60 | Bent Lead     |

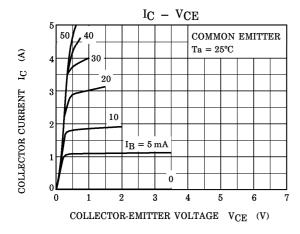
For ammo packing detailed specification, click here to visit our website of product packaging for details.

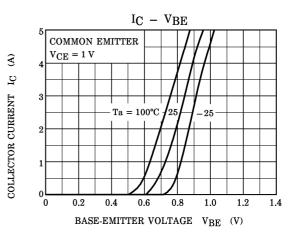
Min Typ Max Units

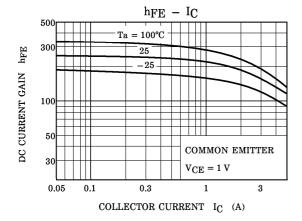
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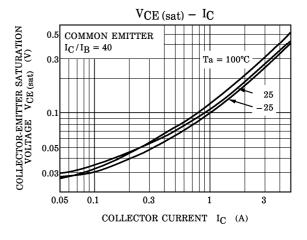


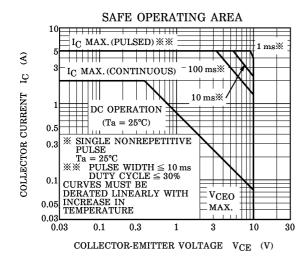
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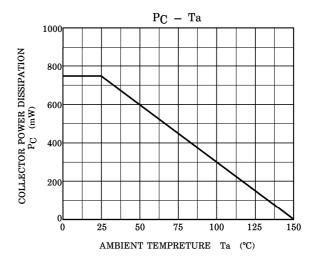














#### **Micro Commercial Components**

# Ordering Information:

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

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

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