

**Features**

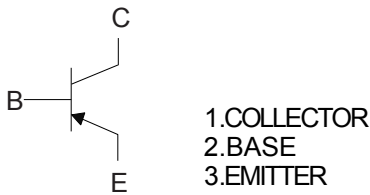
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

**Maximum Ratings @ 25°C Unless Otherwise Specified**

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance: 200°C/W Junction to Ambient

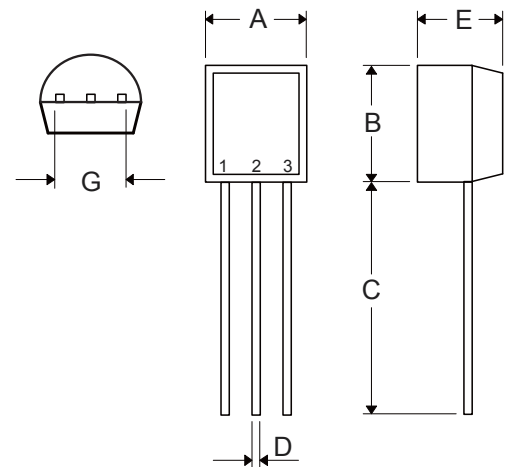
| Parameter                    |       | Symbol    | Rating | Unit |
|------------------------------|-------|-----------|--------|------|
| Collector-Base Voltage       | BC327 | $V_{CBO}$ | -50    | V    |
|                              | BC328 |           | -30    |      |
| Collector-Emitter Voltage    | BC327 | $V_{CEO}$ | -45    | V    |
|                              | BC328 |           | -25    |      |
| Emitter-Base Voltage         |       | $V_{EBO}$ | -5     | V    |
| Continuous Collector Current |       | $I_C$     | -0.8   | A    |
| Power Dissipation            |       | $P_D$     | 0.625  | W    |

**Internal Structure**



**PNP  
Plastic-Encapsulate  
Transistors**

**TO-92**



| DIM | DIMENSIONS |       |       |       | NOTE          |
|-----|------------|-------|-------|-------|---------------|
|     | INCHES     |       | MM    |       |               |
|     | MIN        | MAX   | MIN   | MAX   |               |
| A   | 0.169      | 0.185 | 4.30  | 4.70  |               |
| B   | 0.169      | 0.185 | 4.30  | 4.70  |               |
| C   | 0.500      | ----- | 12.70 | ----- |               |
| D   | 0.015      | 0.022 | 0.38  | 0.55  |               |
| E   | 0.130      | 0.146 | 3.30  | 3.70  |               |
| G   | 0.095      | 0.105 | 2.42  | 2.67  | Straight Lead |
|     | 0.173      | 0.220 | 4.40  | 5.60  | Bent          |

**Electrical Characteristics @  $T_A=25^\circ\text{C}$  Unless Otherwise Specified**

| Parameter                            |       | Symbol        | Min | Typ | Max  | Units         | Conditions   |
|--------------------------------------|-------|---------------|-----|-----|------|---------------|--|
| Collector-Base Breakdown Voltage     | BC327 | $V_{(BR)CBO}$ | -50 |     |      | V             | $I_C=-100\mu\text{A}, I_E=0$                           |
|                                      | BC328 |               | -30 |     |      | V             |  |
| Collector-Emitter Breakdown Voltage  | BC327 | $V_{(BR)CEO}$ | -45 |     |      | V             | $I_C=-10\text{mA}, I_B=0$                              |
|                                      | BC328 |               | -25 |     |      |               |  |
| Emitter-Base Breakdown Voltage       |       | $V_{(BR)EBO}$ | -5  |     |      | V             | $I_E=-10\mu\text{A}, I_C=0$                            |
| Collector Cutoff Current             | BC327 | $I_{CBO}$     |     |     | -0.1 | $\mu\text{A}$ | $V_{CB}=-45\text{V}, I_E=0$                            |
|                                      | BC328 |               |     |     | -0.1 | $\mu\text{A}$ | $V_{CB}=-25\text{V}, I_E=0$                            |
| Collector Cutoff Current             | BC327 | $I_{CEO}$     |     |     | -0.2 | $\mu\text{A}$ | $V_{CE}=-40\text{V}, I_B=0$                            |
|                                      | BC328 |               |     |     | -0.2 | $\mu\text{A}$ | $V_{CE}=-20\text{V}, I_B=0$                            |
| Emitter Cutoff Current               |       | $I_{EBO}$     |     |     | -0.1 | $\mu\text{A}$ | $V_{EB}=-4\text{V}, I_C=0$                             |
| DC Current Gain                      |       | $h_{FE(1)}$   | 100 |     | 630  |               | $V_{CE}=-1\text{V}, I_C=-100\text{mA}$                 |
|                                      |       | $h_{FE(2)}$   | 40  |     |      |               | $V_{CE}=-1\text{V}, I_C=-300\text{mA}$                 |
| Collector-Emitter Saturation Voltage |       | $V_{CE(sat)}$ |     |     | -0.7 | V             | $I_C=-500\text{A}, I_B=-50\text{mA}$                   |
| Base-Emitter Saturation Voltage      |       | $V_{BE(sat)}$ |     |     | -1.2 | V             | $I_C=-500\text{A}, I_B=-50\text{mA}$                   |
| Base-Emitter Voltage                 |       | $V_{BE}$      |     |     | -1.2 | V             | $V_{CE}=-1\text{V}, I_C=-300\text{mA}$                 |
| Transition Frequency                 |       | $f_T$         | 260 |     |      | MHZ           | $V_{CE}=-5\text{V}, I_C=-10\text{mA}, f=100\text{MHZ}$ |

**Classification of  $h_{FE(1)}$** 

|       |         |         |         |
|-------|---------|---------|---------|
| Rank  | 16      | 25      | 40      |
| Range | 100-250 | 160-400 | 250-630 |

**Curve Characteristics**

Fig. 1 - Static Characteristics

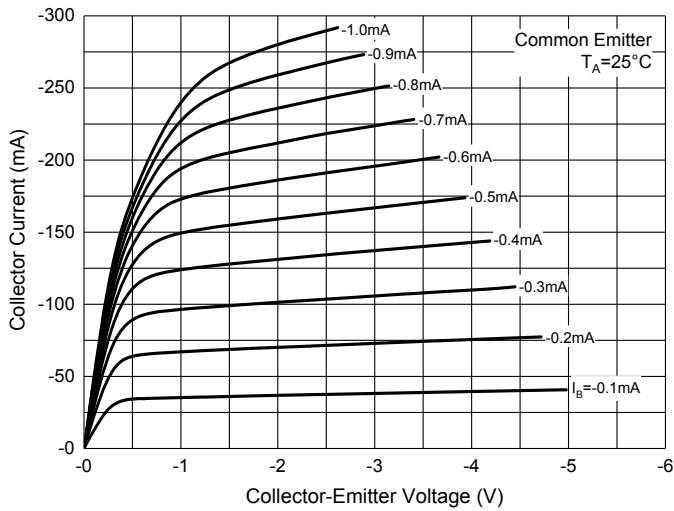


Fig. 2 - DC Current Gain Characteristics

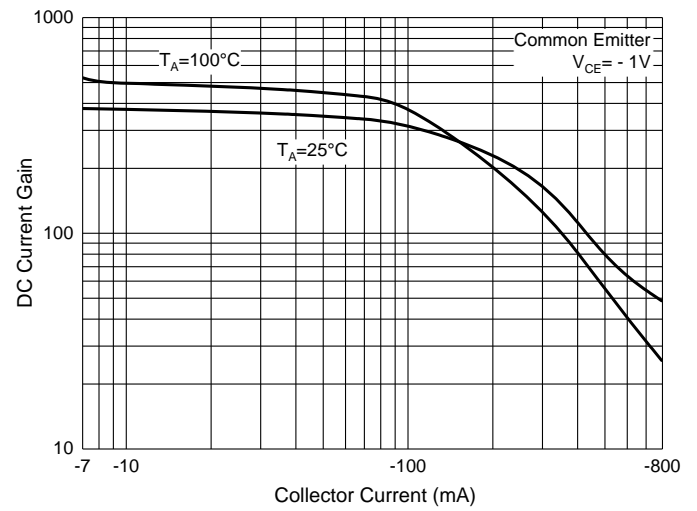


Fig. 3 - Collector-Emitter Saturation Voltage Characteristics

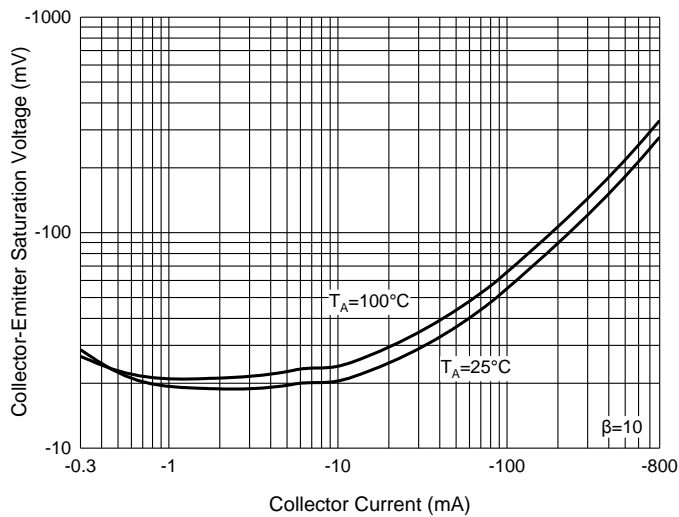


Fig. 4 - Base-Emitter Saturation Voltage Characteristics

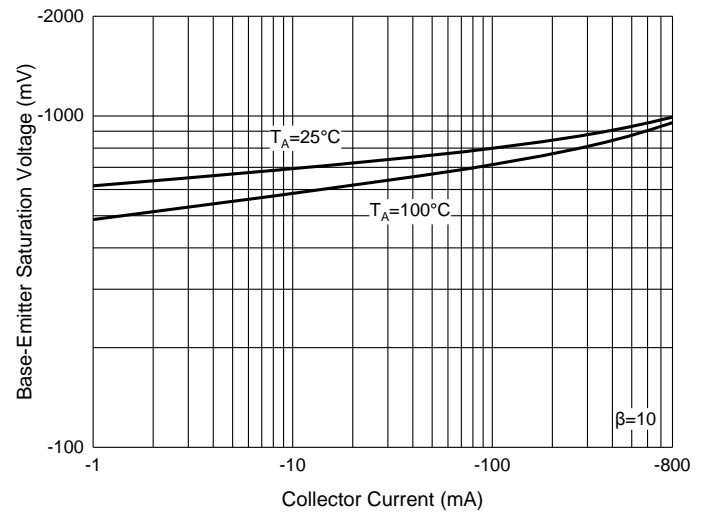


Fig. 5 - Base-Emitter Voltage Characteristics

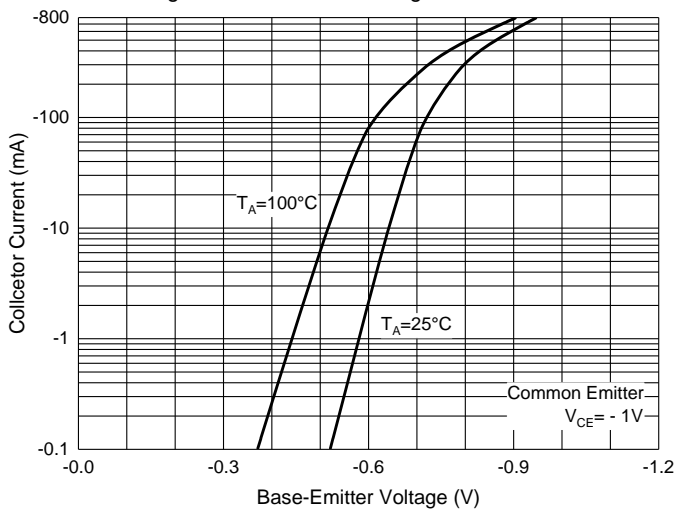
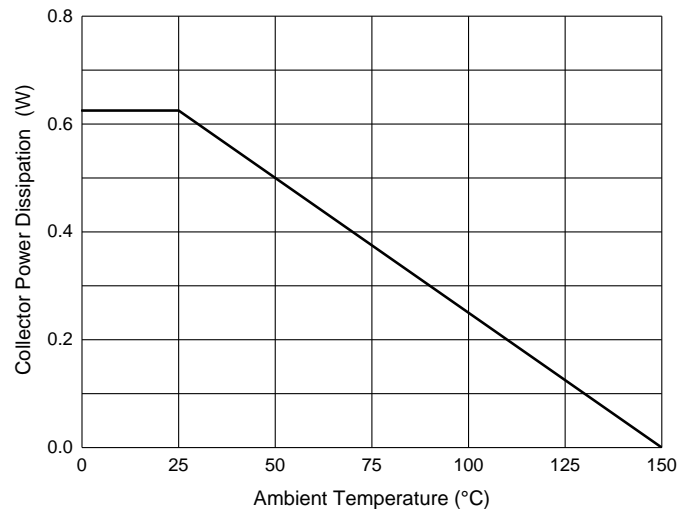


Fig. 6 - Collector Power Derating Curve



## Ordering Information

| Device         | Packing                     |
|----------------|-----------------------------|
| Part Number-AP | Ammo Packing: 20Kpcs/Carton |
| Part Number-BP | Bulk: 1k/Bag, 100K/Ctn;     |

Note : Adding "-HF" Suffix for Halogen Free, eg. Part Number-TP-HF

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