

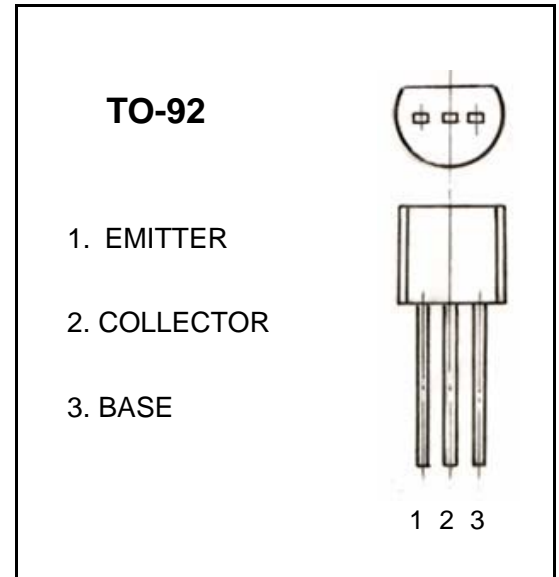
PNP TRANSISTOR

**FEATURE**

- Excellent  $h_{FE}$  linearity
- Low noise
- Complementary to FTC945C

**MAXIMUM RATINGS ( $T_A=25^\circ\text{C}$  unless otherwise noted)**

| Symbol    | Parameter                        | Value   | Units            |
|-----------|----------------------------------|---------|------------------|
| $V_{CBO}$ | Collector-Base Voltage           | -60     | V                |
| $V_{CEO}$ | Collector-Emitter Voltage        | -50     | V                |
| $V_{EBO}$ | Emitter-Base Voltage             | -5      | V                |
| $I_C$     | Collector Current -Continuous    | -100    | mA               |
| $P_C$     | Collector Power Dissipation      | 250     | mW               |
| $T_J$     | Junction Temperature             | 150     | $^\circ\text{C}$ |
| $T_{stg}$ | Junction and Storage Temperature | -55-150 | $^\circ\text{C}$ |

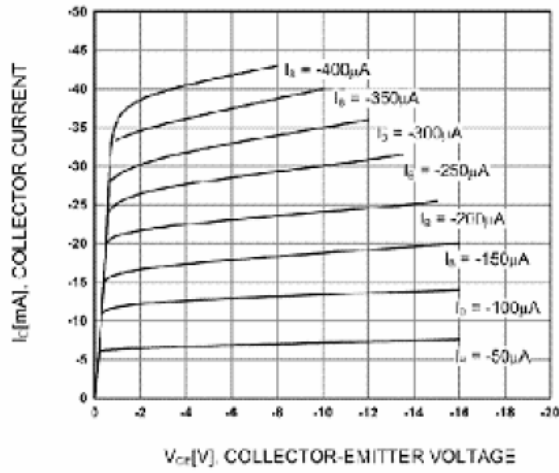


**ELECTRICAL CHARACTERISTICS ( $T_{amb}=25^\circ\text{C}$  unless otherwise specified)**

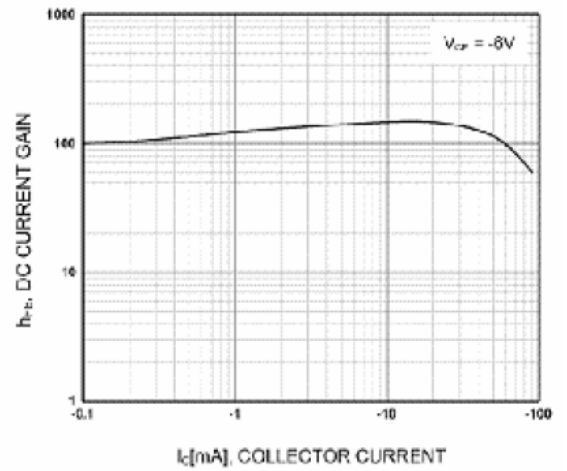
| Parameter                            | Symbol        | Test conditions  | MIN   | TYP   | MAX   | UNIT          |
|--------------------------------------|---------------|--|-------|-------|-------|---------------|
| Collector-base breakdown voltage     | $V_{(BR)CBO}$ | $I_C = -50\mu\text{A}, I_E = 0$  | -60   |       |       | V             |
| Collector-emitter breakdown voltage  | $V_{(BR)CEO}$ | $I_C = -1\text{mA}, I_B = 0$   | -50   |       |       | V             |
| Emitter-base breakdown voltage       | $V_{(BR)EBO}$ | $I_E = -50\mu\text{A}, I_C = 0$  | -5    |       |       | V             |
| Collector cut-off current            | $I_{CBO}$     | $V_{CB} = -60\text{V}, I_E = 0$  |       |       | -0.1  | $\mu\text{A}$ |
| Emitter cut-off current              | $I_{EBO}$     | $V_{EB} = -5\text{V}, I_C = 0$   |       |       | -0.1  | $\mu\text{A}$ |
| DC current gain                      | $h_{FE}$      | $V_{CE} = -6\text{V}, I_C = -1\text{mA}$   | 90    | 200   | 600   |               |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C = -100\text{mA}, I_B = -10\text{mA}$  |       | -0.18 | -0.3  | V             |
| Base-emitter voltage                 | $V_{BE}$      | $V_{CE} = -6\text{V}, I_C = -1.0\text{mA}$   | -0.58 | -0.62 | -0.68 | V             |
| Transition frequency                 | $f_T$         | $V_{CE} = -6\text{V}, I_C = -10\text{mA}$  | 100   |       |       | MHz           |
| Collector output capacitance         | $C_{ob}$      | $V_{CB} = -10\text{V}, I_E = 0, f = 1\text{MHz}$                                     |       |       | 6     | pF            |
| Noise figure                         | NF            | $V_{CE} = -6\text{V}, I_C = -0.3\text{mA}, R_g = 10\text{k}\Omega, f = 100\text{Hz}$ |       |       | 20    | dB            |

**CLASSIFICATION OF  $h_{FE}$**

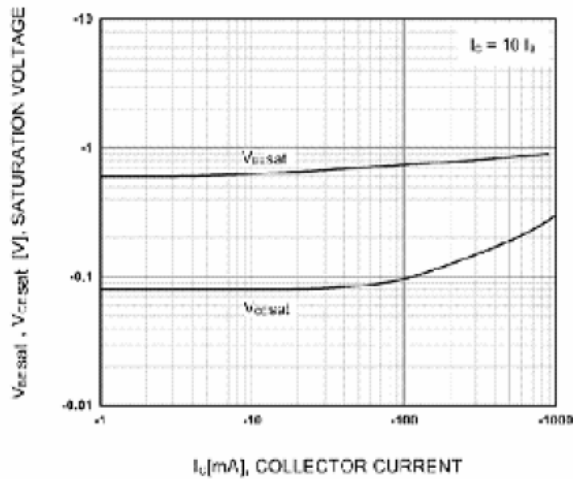
| Rank  | R      | Q       | P       | K       |
|-------|--------|---------|---------|---------|
| Range | 90-180 | 135-270 | 200-400 | 300-600 |



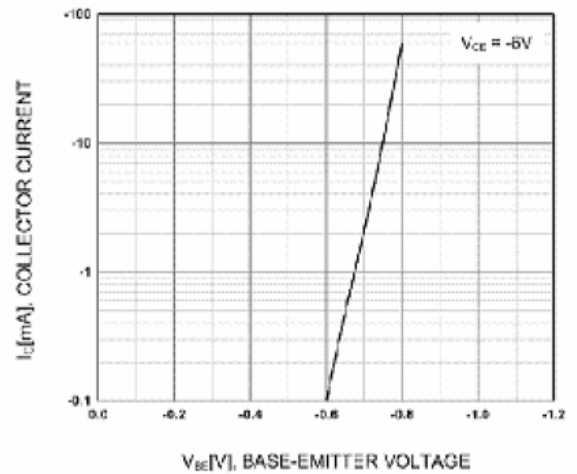
**Static Characteristic**



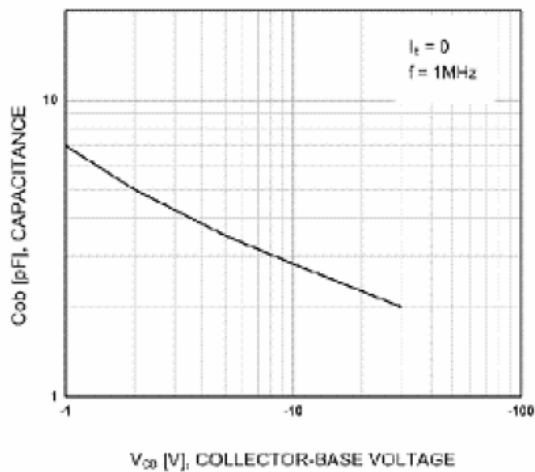
**DC current Gain**



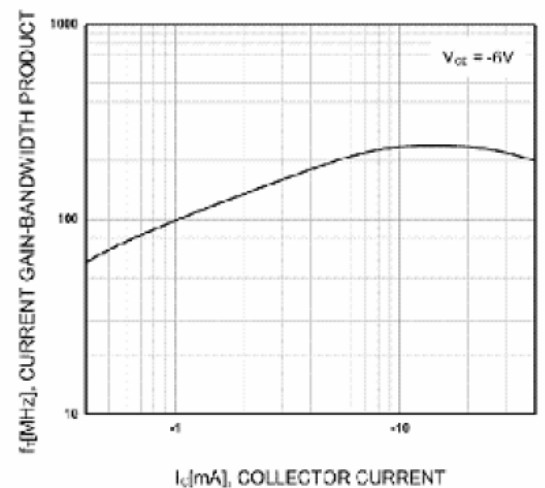
**Base-Emitter Saturation Voltage  
Collector-Emitter Saturation Voltage**



**Base-Emitter On Voltage**



**Collector Output Capacitance**



**Current Gain Bandwidth Product**