



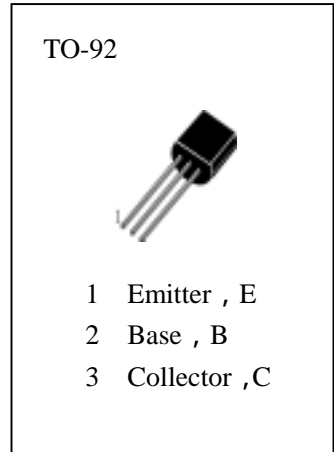
**AMPLIFIER TRANSISTOR**

Collector-Emitter Voltage:  $V_{ce0}=160V$ .

CollectorDissipation:  $P_c(max)=625mW$

**ABSOLUTE MAXIMUM RATINGS (  $T_a=25$  )**

- $T_{stg}$ ——Storage Temperature..... -55~150
- $T_j$ ——Junction Temperature..... 150
- $P_c$ ——Collector Dissipation.....625mW
- $V_{CBO}$ ——Collector-Base Voltage.....180V
- $V_{CEO}$ ——Collector-Emitter Voltage.....160V
- $V_{EBO}$ ——Emitter-Base Voltage.....6V
- $I_c$ ——Collector Current.....600mA



**ELECTRICAL CHARACTERISTICS (  $T_a=25$  )**

| Symbol         | Characteristics                       | Min | Typ | Max  | Unit | Test Conditions                      |
|----------------|---------------------------------------|-----|-----|------|------|--------------------------------------|
| $BV_{CBO}$     | Collector-Base Breakdown Voltage      | 180 |     |      | V    | $I_C=100 \mu A, I_E=0$               |
| $BV_{CEO}$     | Collector-Emitter Breakdown Voltage   | 160 |     |      | V    | $I_C=1mA, I_B=0$                     |
| $BV_{EBO}$     | Emitter-Base Breakdown Voltage        | 6   |     |      | V    | $I_E=10 \mu A, I_C=0$                |
| $I_{CBO}$      | Collector Cut-off Current             |     |     | 50   | nA   | $V_{CB}=120V, I_E=0$                 |
| $I_{EBO}$      | Emitter-Base Cut-off Current          |     |     | 50   | nA   | $V_{EB}=4V, I_C=0$                   |
| $H_{FE} (1)$   | DC Current Gain                       | 80  |     |      |      | $V_{CE}=5V, I_C=1mA$                 |
| $H_{FE} (2)$   |                                       | 80  |     | 280  |      | $V_{CE}=5V, I_C=10mA$                |
| $H_{FE} (3)$   |                                       | 30  |     |      |      | $V_{CE}=5V, I_C=50mA$                |
| $V_{CE(sat1)}$ | Collector- Emitter Saturation Voltage |     |     | 0.15 | V    | $I_C=10mA, I_B=-1mA$                 |
| $V_{CE(sat2)}$ |                                       |     |     | 0.2  | V    | $I_C=50mA, I_B=5mA$                  |
| $V_{BE(sat1)}$ | Base-Emitter Saturation Voltage       |     |     | 1    | V    | $I_C=10mA, I_B=1mA$                  |
| $V_{BE(sat2)}$ |                                       |     |     | 1    | V    | $I_C=50mA, I_B=5mA,$                 |
| $f_T$          | Current Gain-Bandwidth Product        | 100 |     | 300  | MHz  | $V_{CE}=10V, I_C=10mA$<br>$F=100MHz$ |