

AUDIO FREQUENCY POWER AMPLIFIER
LOW SPEED SWITCHING

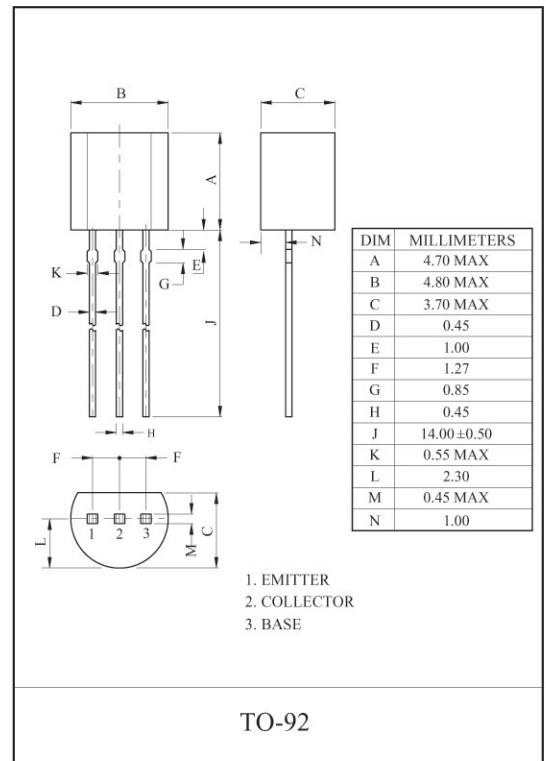
FEATURES

- Complementary to KTB1772.

MAXIMUM RATING (Ta=25°C)

| CHARACTERISTIC | | SYMBOL | RATING | UNIT |
|-----------------------------|--------------|-----------|-----------|------|
| Collector-Base Voltage | | V_{CBO} | 40 | V |
| Collector-Emitter Voltage | | V_{CEO} | 30 | V |
| Emitter-Base Voltage | | V_{EBO} | 5 | V |
| Collector Current | DC | I_C | 3 | A |
| | Pulse (Note) | I_{CP} | 7 | |
| Base Current (DC) | | I_B | 0.1 | A |
| Collector Power Dissipation | | P_C | 25 | mW |
| Junction Temperature | | T | 150 | °C |
| Storage Temperature Range | | T_{st} | -55 ~ 150 | °C |

Note : Pulse Width $\leq 10\text{ms}$, Duty Cycle $\leq 50\%$.



ELECTRICAL CHARACTERISTICS (Ta=25°C)

| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT |
|--|--------------------|--|------|------|------|---------------|
| Collector Cut-off Current | I_{CBO} | $V_{CB}=30\text{V}, I_E=0$ | - | - | 1 | μA |
| Emitter-Cut-off Current | I_{EBO} | $V_{EB}=3\text{V}, I_C=0$ | - | - | 1 | μA |
| DC Current Gain * | $h_{FE}(1)$ | $V_{CE}=2\text{V}, I_C=20\text{mA}$ | 30 | 150 | - | |
| | $h_{FE}(2)$ (Note) | $V_{CE}=2\text{V}, I_C=1\text{A}$ | 100 | 10 | 400 | |
| Collector-Emitter Saturation Voltage * | $V_{CE(sat)}$ | $I_C=2\text{A}, I_B=0.2\text{A}$ | - | 0.3 | 0.5 | V |
| Base-Emitter Saturation Voltage * | $V_{BE(sat)}$ | $I_C=2\text{V}, I_B=0.2\text{A}$ | - | 1.0 | 2.0 | V |
| Current Gain Bandwidth Product | f_T | $V_{CE}=5\text{V}, I_C=0.1\text{A}$ | - | 90 | - | MH |
| Collector Output Capacitance | C_o | $V_{CB}=10\text{V}, I_E=0, f=1\text{MH}$ | - | 45 | - | pF |

* Pulse Test : Pulse Width $\leq 350\mu\text{s}$, Duty Cycle $\leq 2\%$ Pulse

Note: $h_{FE}(2)$ Classification O:100~200, Y:100~320, GR:200~400

