

AUDIO FREQUENCY, HIGH FREQUENCY
POWER AMPLIFIER

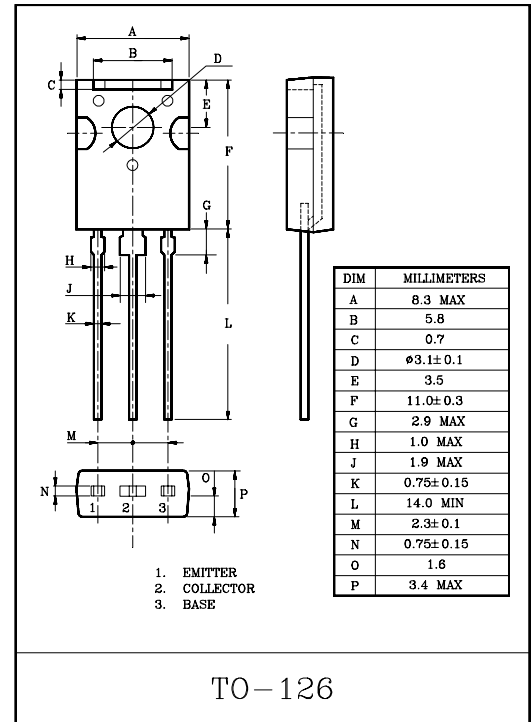
FEATURES

- Complementary to KTA1704.

MAXIMUM RATINGS (Ta=25°C)

| CHARACTERISTIC | | SYMBOL | RATING | UNIT |
|-----------------------------|---------------|-----------|---------|------|
| Collector-Base Voltage | | V_{CBO} | 120 | V |
| Collector-Emitter Voltage | | V_{CEO} | 120 | V |
| Emitter-Base Voltage | | V_{EBO} | 5 | V |
| Collector Current | DC | I_C | 1.2 | A |
| | Pulse (Note1) | | 2.5 | |
| Base Current | | I_B | 0.3 | A |
| Collector Power Dissipation | Ta=25°C | P_C | 1.5 | W |
| | Tc=25°C | | 20 | |
| Junction Temperature | | T_j | 150 | °C |
| Storage Temperature Range | | T_{stg} | -55~150 | °C |

Note 1 : 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 of Current | I_{CBO} | $V_{CB}=50\text{V}, I_E=0$ | - | - | 1 | μA |
| Emitter Cut of Current | I_{EBO} | $V_{EB}=4\text{V}, I_C=0$ | - | - | 1 | μA |
| Collector-Base Breakdown Voltage | $V_{(BR)CBO}$ | $I_C=10\mu\text{A}$ | 120 | - | - | V |
| Collector-Emitter Breakdown Voltage | $V_{(BR)CEO}$ | $I_C=1\text{mA}$ | 120 | - | - | V |
| Emitter-Base Breakdown Voltage | $V_{(BR)EBO}$ | $I_E=10\mu\text{A}$ | 5 | - | - | V |
| DC Current Gain | $h_{FE(1)}$ Note | $V_{CE}=5\text{V}, I_C=50\text{mA}$ | 100 | - | 320 | |
| | $h_{FE(2)}$ | $V_{CE}=5\text{V}, I_C=500\text{mA}$ | 20 | - | - | |
| Gain Bandwidth Product | f_T | $V_{CE}=10\text{V}, I_C=50\text{mA}$ | - | 110 | - | MHz |
| Output Capacitance | C_{ob} | $V_{CB}=10\text{V}, f=1\text{MHz}$ | - | 30 | - | pF |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C=500\text{mA}, I_B=50\text{mA}$ | - | 0.15 | 0.4 | V |
| Base-Emitter Saturation Voltage | $V_{BE(sat)}$ | $I_C=500\text{mA}, I_B=50\text{mA}$ | - | 0.85 | 1.2 | V |

(Note) : $h_{FE(1)}$ Classification Y:100~200 , GR:160~320

KTC2803

