

9097250 TOSHIBA (DISCRETE/OPTO)

56C 07301 DY-33-17

SILICON PNP EPITAXIAL TYPE (PCT PROCESS)

2SA1305

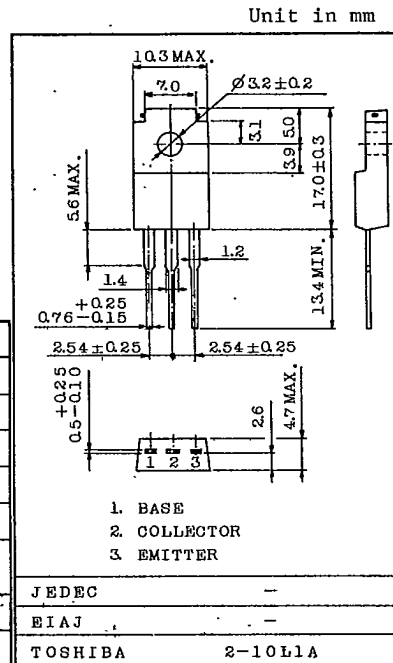
POWER AMPLIFIER APPLICATIONS.
CAR RADIO AND CAR STEREO OUTPUT STAGE APPLICATIONS.

FEATURES:

- Good Linearity of h_{FE}
- Complementary to 2SC3297

MAXIMUM RATINGS ($T_a=25^\circ\text{C}$)

| CHARACTERISTIC | SYMBOL | RATING | UNIT |
|---|-----------|-----------|------------------|
| Collector-Base Voltage | V_{CB0} | -30 | V |
| Collector-Emitter Voltage | V_{CE0} | -30 | V |
| Emitter-Base Voltage | V_{EB0} | -5 | V |
| Collector Current | I_C | -3 | A |
| Base Current | I_B | -0.3 | A |
| Collector Power Dissipation ($T_c=25^\circ\text{C}$) | P_C | 15 | W |
| Junction Temperature | T_j | 150 | $^\circ\text{C}$ |
| Storage Temperature Range | T_{stg} | -55 ~ 150 | $^\circ\text{C}$ |



Weight : 2.1g

ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$)

| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT |
|--------------------------------------|--------------------|--|------|-------|------|---------------|
| Collector Cut-off Current | I_{CBO} | $V_{CB}=-20\text{V}, I_E=0$ | - | - | -1.0 | μA |
| Emitter Cut-off Current | I_{EBO} | $V_{EB}=-5\text{V}, I_C=0$ | - | - | -1.0 | μA |
| Collector-Emitter Breakdown Voltage | $V_{(BR)CE0}$ | $I_C=-10\text{mA}, I_B=0$ | -30 | - | - | V |
| DC Current Gain | h_{FE} (Note) | $V_{CE}=-2\text{V}, I_C=-0.5\text{A}$ | 70 | - | 240 | |
| | $h_{FE}(2)$ | $V_{CE}=-2\text{V}, I_C=-2.5\text{A}$ | 25 | - | - | |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C=-2\text{A}, I_B=-0.2\text{A}$ | - | -0.3 | -0.8 | V |
| Base-Emitter Voltage | V_{BE} | $V_{CE}=-2\text{V}, I_C=-0.5\text{A}$ | - | -0.75 | -1.0 | V |
| Transition Frequency | f_T | $V_{CE}=-2\text{V}, I_C=-0.5\text{A}$ | - | 100 | - | MHz |
| Collector Output Capacitance | C_{ob} | $V_{CB}=-10\text{V}, I_E=0, f=1\text{MHz}$ | - | 40 | - | pF |

Note : $h_{FE}(1)$ Classification O : 70 ~ 140, Y : 120 ~ 240

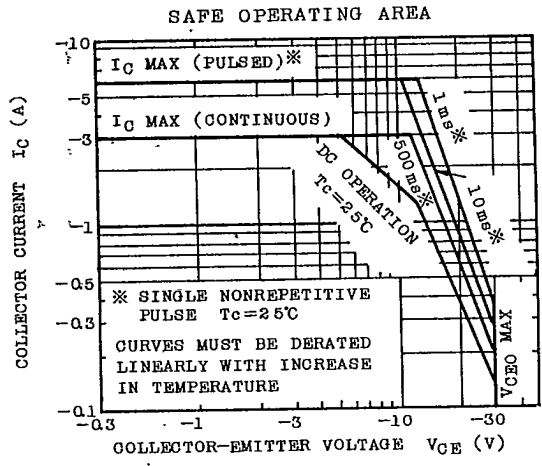
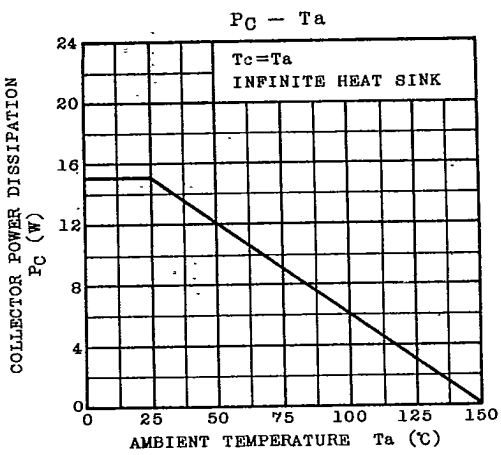
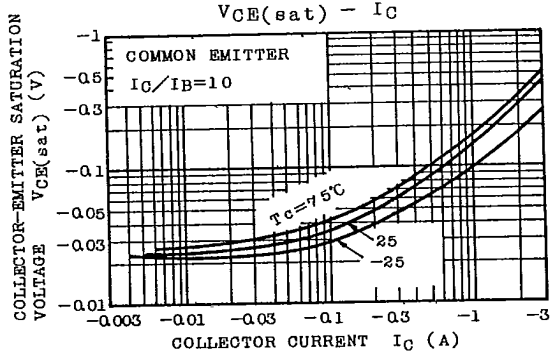
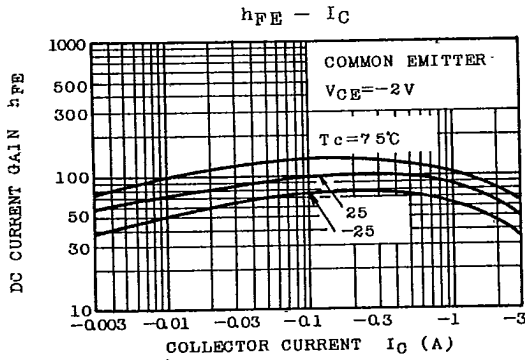
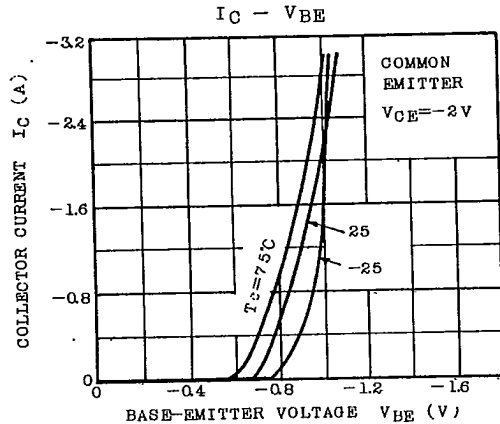
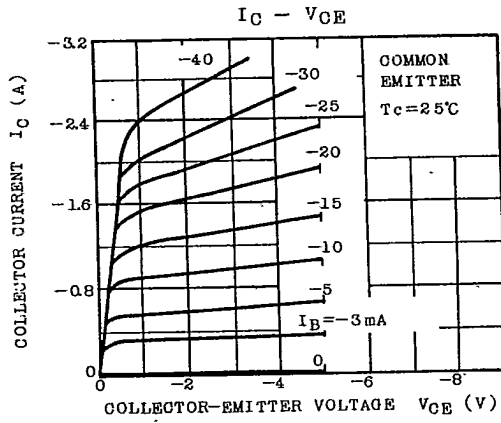
TOSHIBA CORPORATION

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