TOSHIBA TRANSISTOR SILICON PNP TRIPLE DIFFUSED TYPE (PCT PROCESS)

2 S B 5 9 5

POWER AMPLIFIER APPLICATIONS.

• High Breakdown Voltage : $V_{CEO} = -100V$

• Low Collector-Emitter Saturation Voltage

: $V_{CE(sat)} = -2.0V$ (Max.)

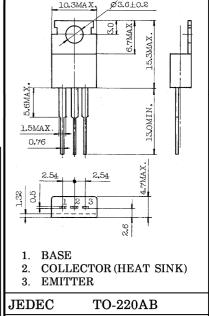
• Complementary to 2SD525.

• Recommended for 30W High-Fidelity Audio Frequency Amplifier Output Stage.

MAXIMUM RATINGS (Ta = 25°C)

| CHARACTERISTIC | SYMBOL | RATING | UNIT |
|---------------------------------------|--------------------|---------|------|
| Collector-Base Voltage | v_{CBO} | -100 | V |
| Collector-Emitter Voltage | V_{CEO} | -100 | V |
| Emitter-Base Voltage | V_{EBO} | -5 | V |
| Collector Current | $I_{\mathbf{C}}$ | -5 | Α |
| Emitter Current | ${ m I_E}$ | -5 | Α |
| Base Current | $I_{\mathbf{B}}$ | -4 | Α |
| Collector Power Dissipation (Tc=25°C) | PC | 40 | w |
| Junction Temperature | $T_{ m j}$ | 150 | °C |
| Storage Temperature Range | $\mathrm{T_{stg}}$ | -55~150 | °C |

Unit in mm



JEDEC TO-220AB
EIAJ SC-46
TOSHIBA 2-10A1A

Mounting kit No.AC75

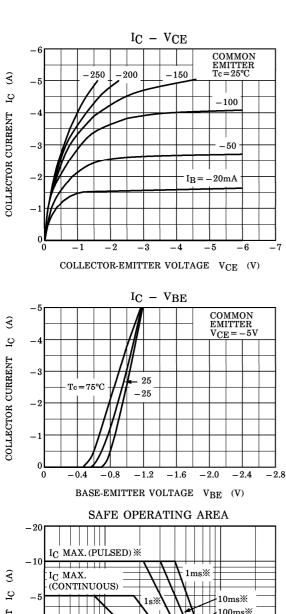
Weight: 1.9g

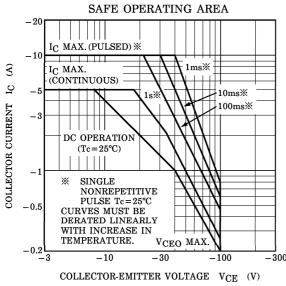
ELECTRICAL CHARACTERISTICS (Ta = 25°C)

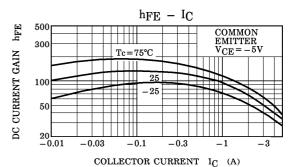
| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT | |
|---|------------------------------|------------------------------------|------|------|------|---------|--|
| Collector Cut-off Current | I_{CBO} | $V_{CB} = -100V, I_{E} = 0$ | _ | _ | -100 | μ A | |
| Emitter Cut-off Current | $I_{ m EBO}$ | $V_{EB} = -5V$, $I_{C} = 0$ | — | _ | -1 | mA | |
| Collector-Emitter Breakdown Voltage | V _{(BR)CEO} | $I_{C} = -50 \text{mA}, I_{B} = 0$ | -100 | _ | _ | V | |
| Emitter-Base Breakdown Voltage | V _{(BR)EBO} | $I_{C} = -10 \text{mA}, I_{C} = 0$ | -5 | _ | _ | V | |
| DC Current Gain | h _{FE(1)} (Note) | $V_{CE} = -5V, I_{C} = -1A$ | 40 | _ | 240 | | |
| | $h_{\mathrm{FE}(2)}$ | $V_{CE} = -5V, I_{C} = -4A$ | 20 | _ | _ | | |
| Collector Emitter Saturation Voltage | V _{CE(sat)} | $I_{C} = -4A, I_{C} = -0.4A$ | _ | _ | -2.0 | V | |
| Base-Emitter Voltage | $ m V_{BE}$ | $V_{CE} = -5V$, $I_{C} = -4A$ | I — | _ | -1.5 | V | |
| Transition Frequency | $\mathbf{f_{T}}$ | $V_{CE} = -5V$, $I_{C} = -1A$ | _ | 5 | _ | MHz | |
| Collector Output Capacitance | C_{ob} | $V_{CB} = -10V, I_E = 0, f = 1MHz$ | _ | 270 | _ | pF | |

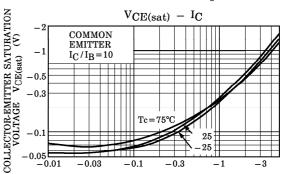
Note: $h_{FE(1)}$ Classification R: 40~80, O: 70~140, Y: 120~240

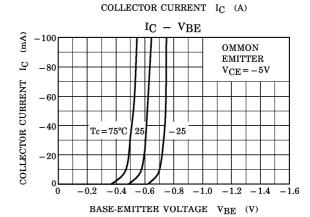
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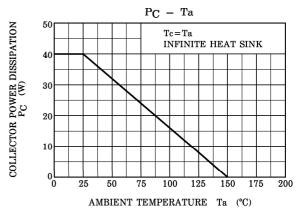












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