

TOSHIBA TRANSISTOR SILICON NPN TRIPLE DIFFUSED TYPE

**2SD526**

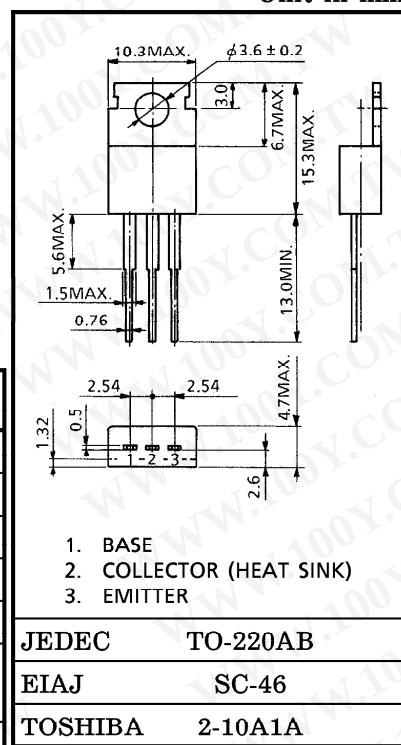
## POWER AMPLIFIER APPLICATIONS

Unit in mm

- High Power Dissipation :  $P_C = 30W$  ( $T_c = 25^\circ C$ )
- Good Linearity of  $h_{FE}$ .
- Complementary to 2SB596.
- Recommend for 20~25W High Fidelity Audio Frequency Amplifier Output Stage.

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

| CHARACTERISTIC                                        | SYMBOL    | RATING  | UNIT       |
|-------------------------------------------------------|-----------|---------|------------|
| Collector-Base Voltage                                | $V_{CBO}$ | 80      | V          |
| Collector-Emitter Voltage                             | $V_{CEO}$ | 80      | V          |
| Emitter-Base Voltage                                  | $V_{EBO}$ | 5       | V          |
| Collector Current                                     | $I_C$     | 4       | A          |
| Base Current                                          | $I_B$     | 0.4     | A          |
| Collector Power Dissipation<br>( $T_c = 25^\circ C$ ) | $P_C$     | 30      | W          |
| Junction Temperature                                  | $T_j$     | 150     | $^\circ C$ |
| Storage Temperature Range                             | $T_{stg}$ | -55~150 | $^\circ C$ |



Weight : 1.9g

Mounting Kit No. AC75

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

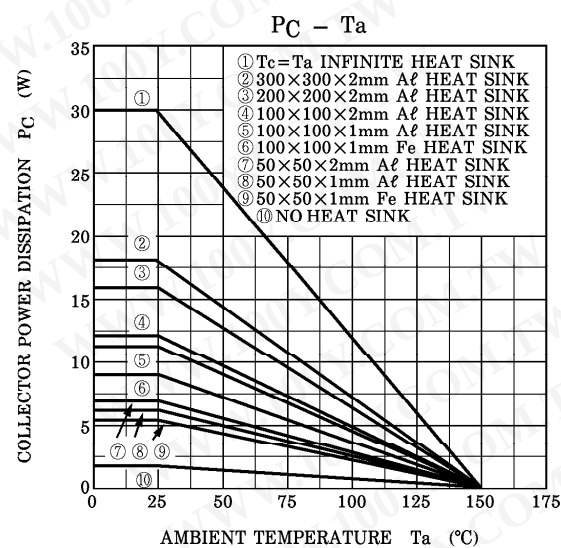
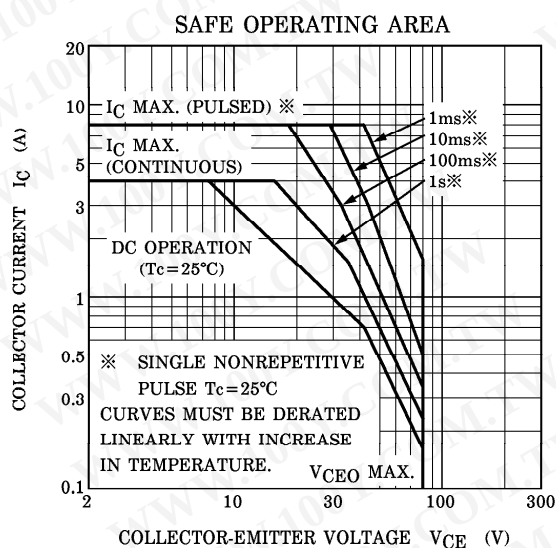
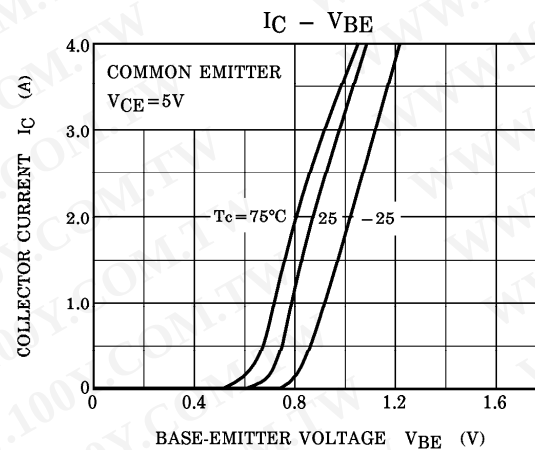
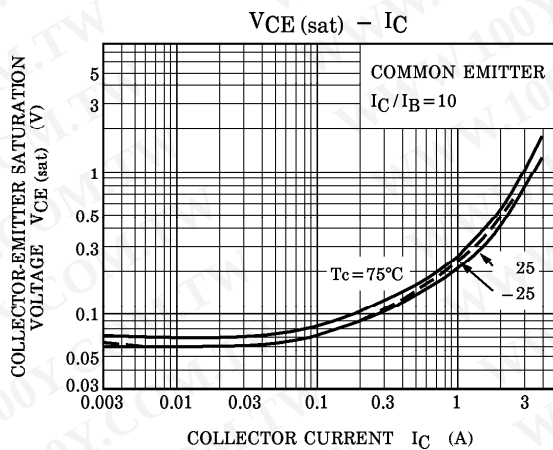
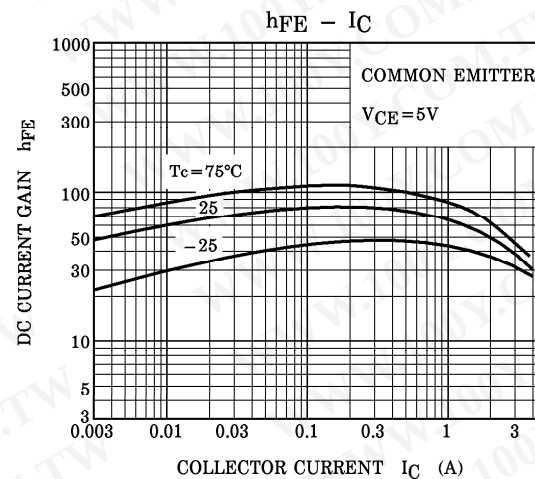
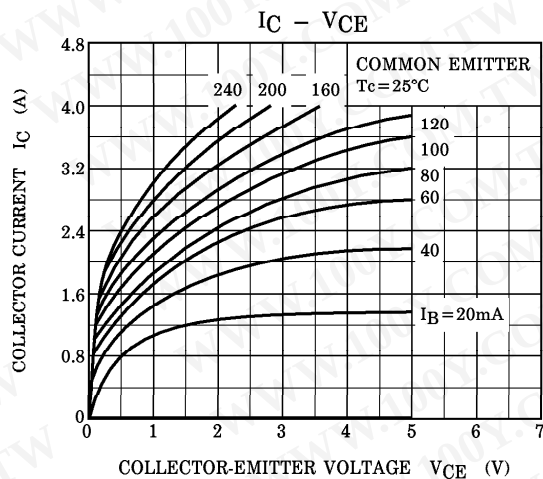
| CHARACTERISTIC                       | SYMBOL                 | TEST CONDITION                    | MIN. | TYP. | MAX. | UNIT    |
|--------------------------------------|------------------------|-----------------------------------|------|------|------|---------|
| Collector Cut-off Current            | $I_{CBO}$              | $V_{CB} = 80V, I_E = 0$           | —    | —    | 30   | $\mu A$ |
| Emitter Cut-off Current              | $I_{EBO}$              | $V_{EB} = 5V, I_C = 0$            | —    | —    | 100  | $\mu A$ |
| Collector-Emitter Breakdown Voltage  | $V_{(BR) CEO}$         | $I_C = 50mA, I_B = 0$             | 80   | —    | —    | V       |
| DC Current Gain                      | $h_{FE} (1)$<br>(Note) | $V_{CE} = 5V, I_C = 0.5A$         | 40   | —    | 240  |         |
|                                      | $h_{FE} (2)$           | $V_{CE} = 5V, I_C = 3A$           | 15   | 50   | —    |         |
| Collector-Emitter Saturation Voltage | $V_{CE (sat)}$         | $I_C = 3A, I_B = 0.3A$            | —    | 0.45 | 1.5  | V       |
| Base-Emitter Voltage                 | $V_{BE}$               | $V_{CE} = 5V, I_C = 3A$           | —    | 1.0  | 1.5  | V       |
| Transition Frequency                 | $f_T$                  | $V_{CE} = 5V, I_C = 0.5A$         | 3    | 8    | —    | MHz     |
| Collector Output Capacitance         | $C_{ob}$               | $V_{CB} = 10V, I_E = 0, f = 1MHz$ | —    | 90   | —    | pF      |

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

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