

TOSHIBA TRANSISTOR SILICON NPN TRIPLE DIFFUSED TYPE

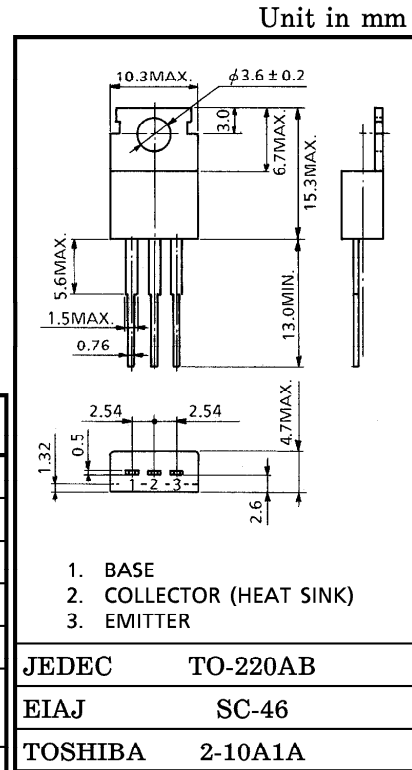
# 2SD526

**POWER AMPLIFIER APPLICATIONS**

- 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                           | $V_{CB0}$ | 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 ( $T_c=25^\circ C$ ) | $P_C$     | 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

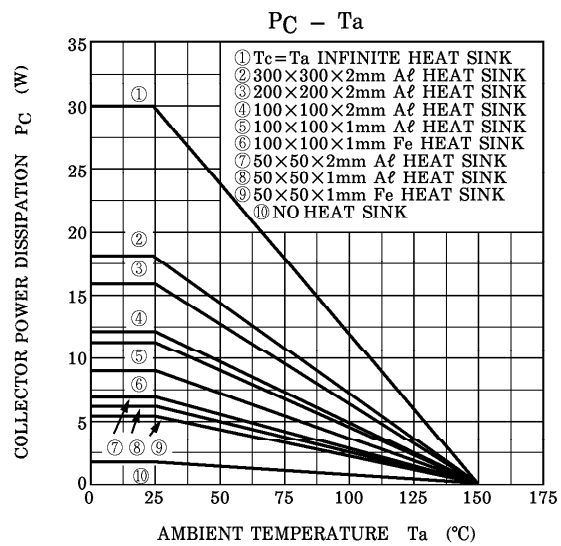
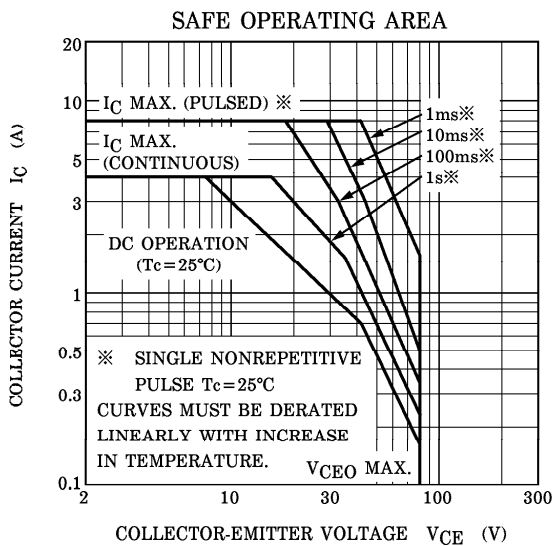
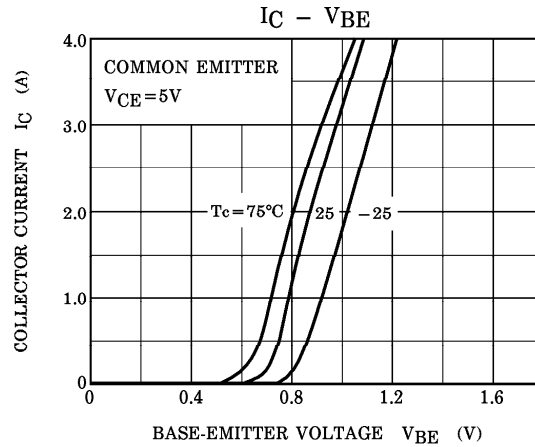
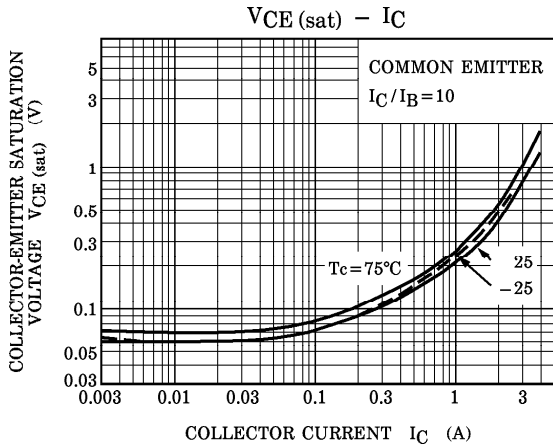
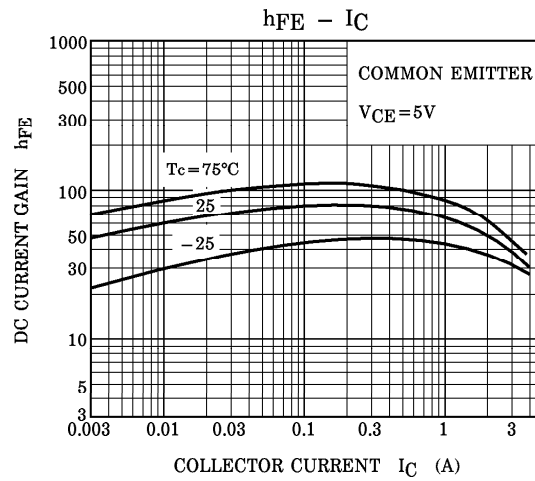
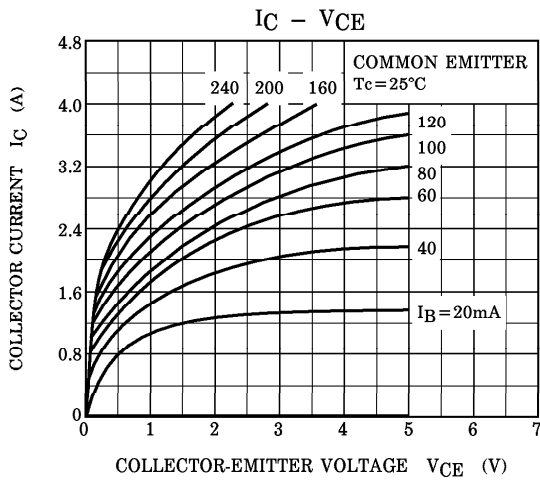
**ELECTRICAL CHARACTERISTICS ( $T_a = 25^\circ C$ )**

| 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  | V       |
|                                      | $h_{FE} (2)$           | $V_{CE}=5V, I_C=3A$         | 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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