

TOSHIBA TRANSISTOR SILICON NPN EPITAXIAL TYPE (PCT PROCESS)

# 2SC3266

POWER AMPLIFIER APPLICATIONS

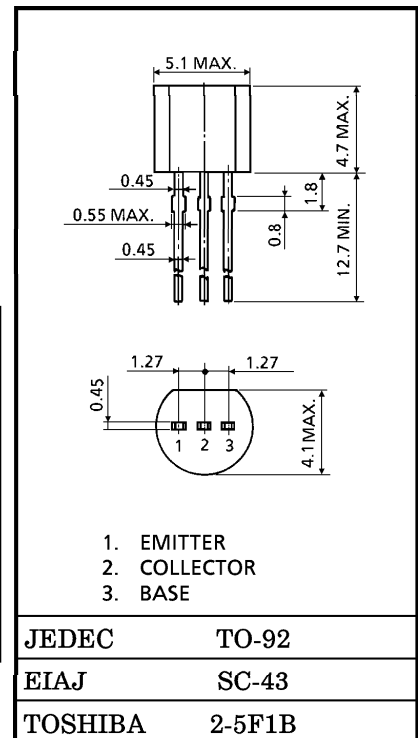
POWER SWITCHING APPLICATIONS

- Low Saturation Voltage :  $V_{CE(sat)} = 0.5V$  (Max.) ( $I_C = 2A$ )
- Complementary to 2SA1296

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

| CHARACTERISTIC              | SYMBOL    | RATING  | UNIT       |
|-----------------------------|-----------|---------|------------|
| Collector-Base Voltage      | $V_{CBO}$ | 20      | V          |
| Collector-Emitter Voltage   | $V_{CEO}$ | 20      | V          |
| Emitter-Base Voltage        | $V_{EBO}$ | 6       | V          |
| Collector Current           | $I_C$     | 2       | A          |
| Base Current                | $I_B$     | 0.5     | A          |
| Collector Power Dissipation | $P_C$     | 750     | mW         |
| Junction Temperature        | $T_j$     | 150     | $^\circ C$ |
| Storage Temperature Range   | $T_{stg}$ | -55~150 | $^\circ C$ |

Unit in mm



Weight : 0.21g

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## ELECTRICAL CHARACTERISTICS (Ta = 25°C)

| CHARACTERISTIC                       | SYMBOL                | TEST CONDITION                    | MIN. | TYP. | MAX. | UNIT    |
|--------------------------------------|-----------------------|-----------------------------------|------|------|------|---------|
| Collector Cut-off Current            | $I_{CBO}$             | $V_{CB} = 20V, I_E = 0$           | —    | —    | 0.1  | $\mu A$ |
| Emitter Cut-off Current              | $I_{EBO}$             | $V_{EB} = 6V, I_C = 0$            | —    | —    | 0.1  | $\mu A$ |
| Collector-Emitter Breakdown Voltage  | $V_{(BR)CEO}$         | $I_C = 10mA, I_B = 0$             | 20   | —    | —    | V       |
| Emitter-Base Breakdown Voltage       | $V_{(BR)EBO}$         | $I_E = 0.1mA, I_C = 0$            | 6    | —    | —    | V       |
| DC Current Gain                      | $h_{FE(1)}$<br>(Note) | $V_{CE} = 2V, I_C = 0.1A$         | 120  | —    | 700  |         |
|                                      | $h_{FE(2)}$           | $V_{CE} = 2V, I_C = 2A$           | 75   | —    | —    |         |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$         | $I_C = 2A, I_B = 0.1A$            | —    | —    | 0.5  | V       |
| Base-Emitter Voltage                 | $V_{BE}$              | $V_{CE} = 2V, I_C = 0.1A$         | —    | —    | 0.85 | V       |
| Transition Frequency                 | $f_T$                 | $V_{CE} = 2V, I_C = 0.5A$         | —    | 120  | —    | MHz     |
| Collector Output Capacitance         | $C_{ob}$              | $V_{CB} = 10V, I_E = 0, f = 1MHz$ | —    | 30   | —    | pF      |

Note :  $h_{FE(1)}$  Classification    Y : 120~240,    GR : 200~400,    BL : 350~700

