

2SC1627

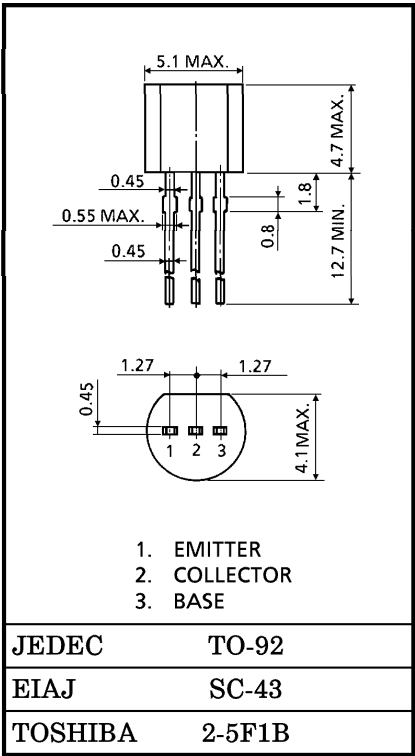
Unit in mm

DRIVER STAGE AMPLIFIER APPLICATIONS  
VOLTAGE AMPLIFIER APPLICATIONS

- Complementary to 2SA817
- Driver Stage Application of 20 to 25 Watts Amplifiers.

MAXIMUM RATINGS (Ta = 25°C)

| CHARACTERISTIC              | SYMBOL           | RATING  | UNIT |
|-----------------------------|------------------|---------|------|
| Collector-Base Voltage      | V <sub>CBO</sub> | 80      | V    |
| Collector-Emitter Voltage   | V <sub>CEO</sub> | 80      | V    |
| Emitter-Base Voltage        | V <sub>EBO</sub> | 5       | V    |
| Collector Current           | I <sub>C</sub>   | 300     | mA   |
| Base Current                | I <sub>B</sub>   | 60      | mA   |
| Collector Power Dissipation | P <sub>C</sub>   | 600     | mW   |
| Junction Temperature        | T <sub>j</sub>   | 150     | °C   |
| Storage Temperature Range   | T <sub>stg</sub> | -55~125 | °C   |

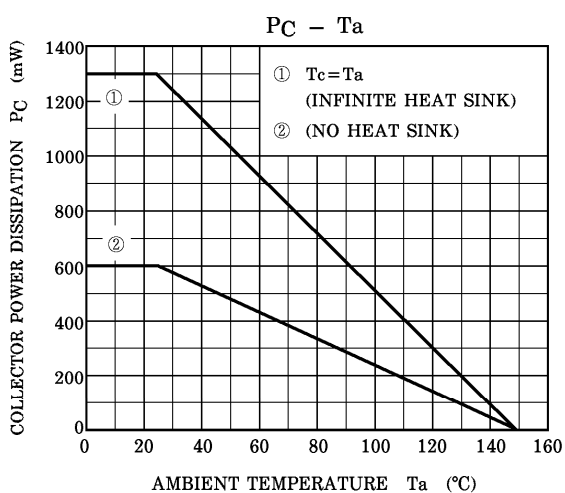
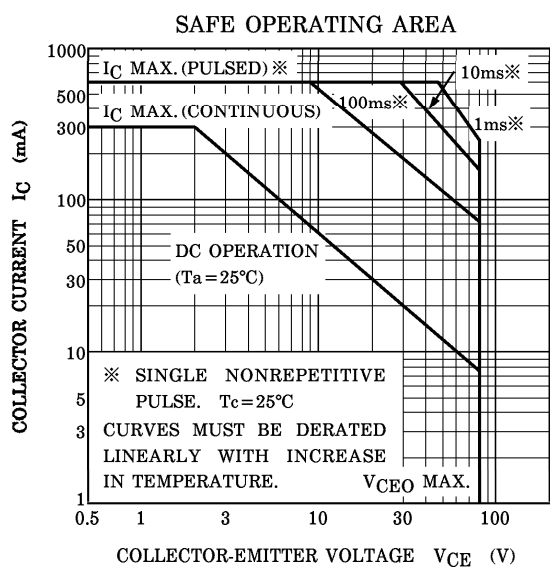
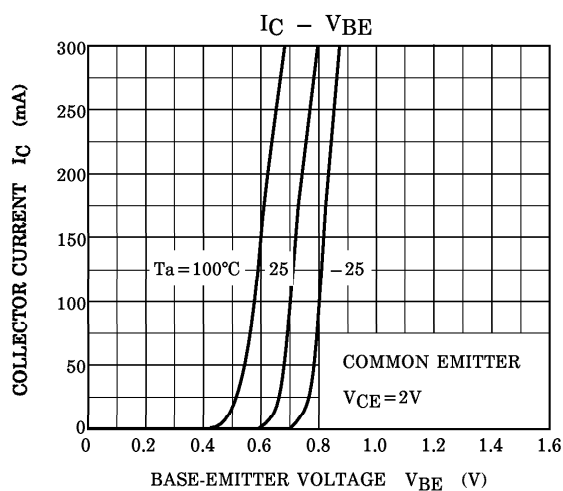
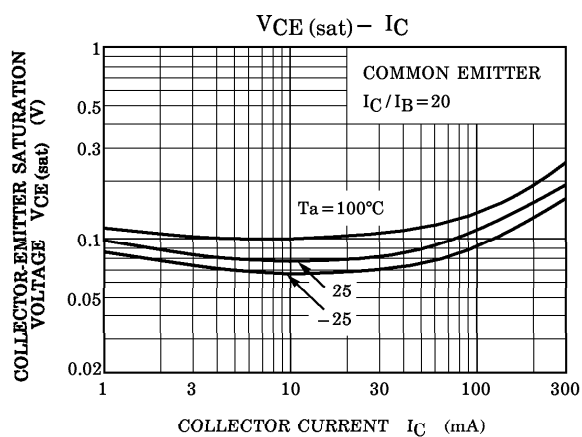
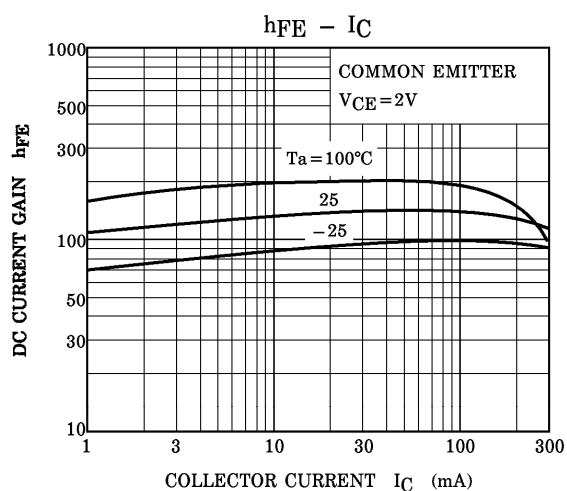
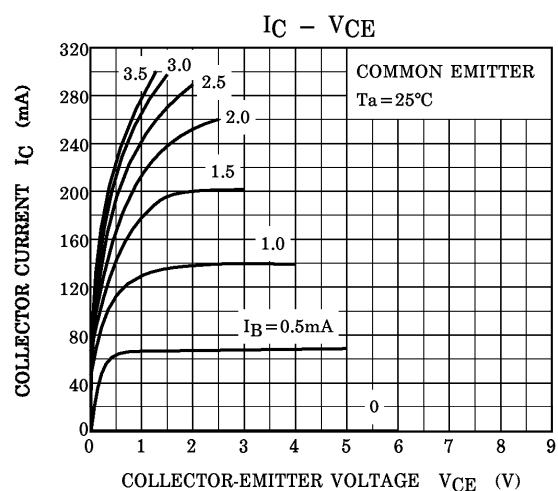


Weight : 0.21g

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

| CHARACTERISTIC                       | SYMBOL                        | TEST CONDITION                                      | MIN. | TYP. | MAX. | UNIT |
|--------------------------------------|-------------------------------|-----------------------------------------------------|------|------|------|------|
| Collector Cut-off Current            | I <sub>CBO</sub>              | V <sub>CB</sub> = 50V, I <sub>E</sub> = 0           | —    | —    | 0.1  | μA   |
| Emitter Cut-off Current              | I <sub>EBO</sub>              | V <sub>EB</sub> = 5V, I <sub>C</sub> = 0            | —    | —    | 0.1  | μA   |
| Collector-Emitter Saturation Voltage | V <sub>(BR) CEO</sub>         | I <sub>C</sub> = 5mA, I <sub>B</sub> = 0            | 80   | —    | —    | V    |
| DC Current Gain                      | h <sub>FE</sub> (1)<br>(Note) | V <sub>CE</sub> = 2V, I <sub>C</sub> = 50mA         | 70   | —    | 240  |      |
|                                      | h <sub>FE</sub> (2)           | V <sub>CE</sub> = 2V, I <sub>C</sub> = 200mA        | 40   | —    | —    |      |
| Collector-Emitter Saturation Voltage | V <sub>CE (sat)</sub>         | I <sub>C</sub> = 200mA, I <sub>B</sub> = 10mA       | —    | —    | 0.5  | V    |
| Base-Emitter Voltage                 | V <sub>BE</sub>               | V <sub>CE</sub> = 2V, I <sub>C</sub> = 5mA          | 0.55 | —    | 0.8  | V    |
| Transition Frequency                 | f <sub>T</sub>                | V <sub>CE</sub> = 10V, I <sub>C</sub> = 10mA        | —    | 100  | —    | MHz  |
| Collector Output Capacitance         | C <sub>ob</sub>               | V <sub>CB</sub> = 10V, I <sub>E</sub> = 0, f = 1MHz | —    | 10   | —    | pF   |

Note : h<sub>FE</sub> (1) Classification    0 : 70~140,    Y : 120~240



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