

9097250 TOSHIBA (DISCRETE/OPTO)

56C 07650 D T-33-13

SILICON NPN TRIPLE DIFFUSED TYPE

**2SC3182**

## POWER AMPLIFIER APPLICATIONS.

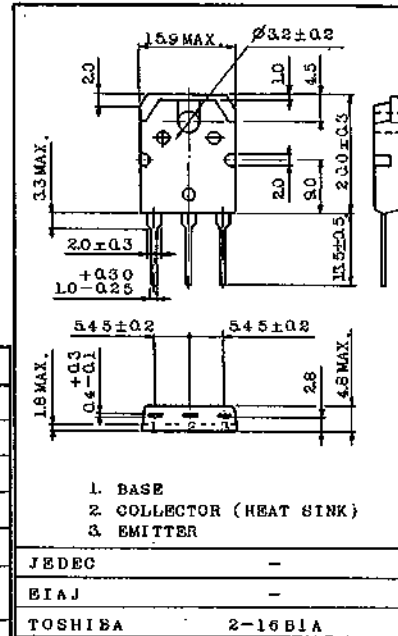
## FEATURES:

- Complementary to 2SA1265
- Recommend for 70W High Fidelity Audio Frequency Amplifier Output Stage

## MAXIMUM RATINGS (Ta=25°C)

| CHARACTERISTIC                        | SYMBOL           | RATING  | UNIT |
|---------------------------------------|------------------|---------|------|
| Collector-Base Voltage                | V <sub>CB0</sub> | 140     | V    |
| Collector-Emitter Voltage             | V <sub>CE0</sub> | 140     | V    |
| Emitter-Base Voltage                  | V <sub>EB0</sub> | 5       | V    |
| Collector Current                     | I <sub>C</sub>   | 10      | A    |
| Base Current                          | I <sub>B</sub>   | 1       | A    |
| Collector Power Dissipation (Tc=25°C) | P <sub>C</sub>   | 100     | W    |
| Junction Temperature                  | T <sub>j</sub>   | 150     | °C   |
| Storage Temperature Range             | T <sub>stg</sub> | -55~150 | °C   |

Unit in mm



1. BASE
2. COLLECTOR (HEAT SINK)
3. EMITTER

JEDEC

EIAJ

TOSHIBA

2-16 B1A

Weight : 4.6g

## ELECTRICAL CHARACTERISTICS (Ta=25°C)

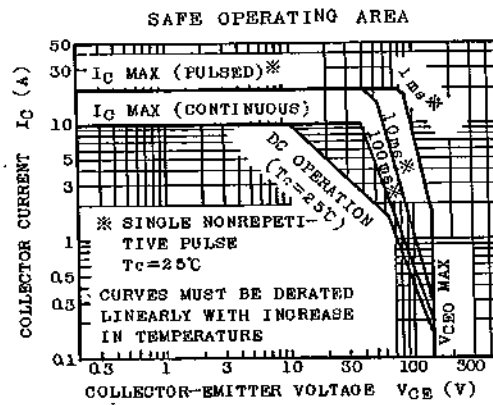
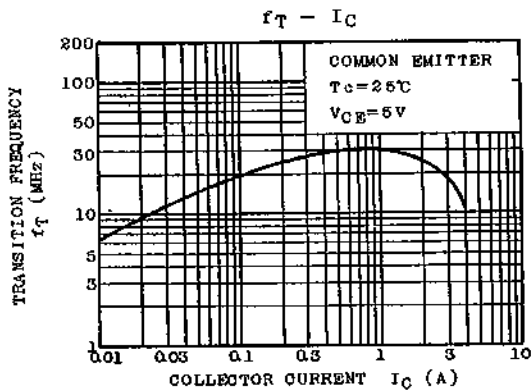
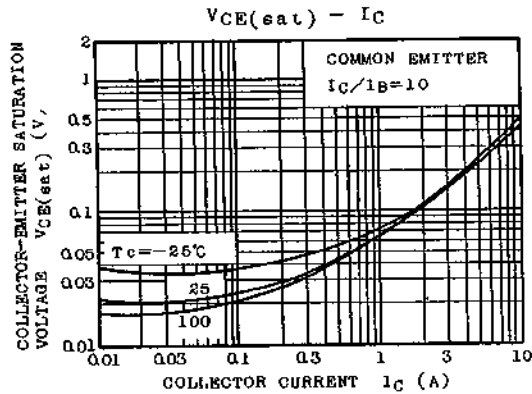
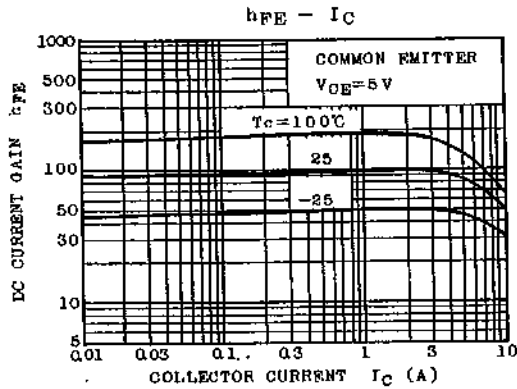
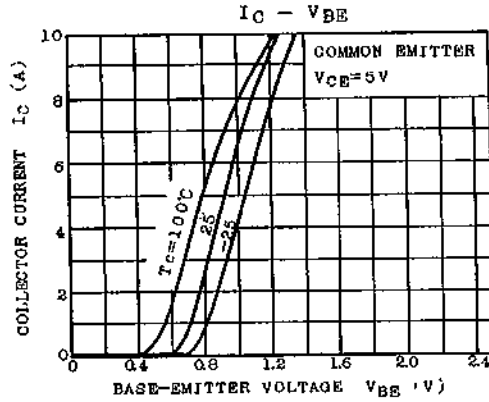
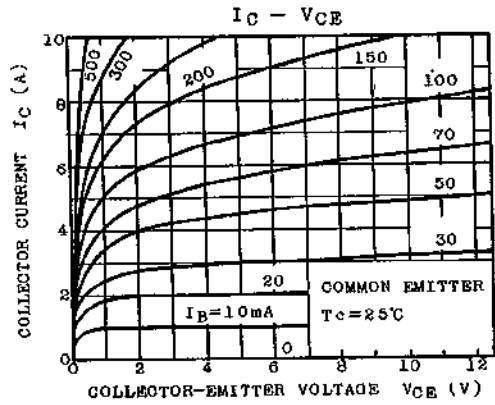
| CHARACTERISTIC                       | SYMBOL                        | TEST CONDITION                                  | MIN. | TYP. | MAX. | UNIT |
|--------------------------------------|-------------------------------|---|------|------|------|------|
| Collector Cut-off Current            | I <sub>CB0</sub>              | V <sub>CB</sub> =140V, I <sub>E</sub> =0        | -    | -    | 5.0  | μA   |
| Emitter Cut-off Current              | I <sub>EB0</sub>              | V <sub>EB</sub> =5V, I <sub>C</sub> =0          | -    | -    | 5.0  | μA   |
| Collector-Emitter Breakdown Voltage  | V(BR)CE0                      | I <sub>C</sub> =50mA, I <sub>B</sub> =0         | 140  | -    | -    | V    |
| DC Current Gain                      | h <sub>FE</sub> (1)<br>(Note) | V <sub>CE</sub> =5V, I <sub>C</sub> =1A         | 55   | -    | 160  |      |
|                                      | h <sub>FE</sub> (2)           | V <sub>CE</sub> =5V, I <sub>C</sub> =5A         | 35   | 83   | -    |      |
| Collector-Emitter Saturation Voltage | V <sub>CE(sat)</sub>          | I <sub>C</sub> =7A, I <sub>B</sub> =0.7A        | -    | 0.3  | 2.0  | V    |
| Base-Emitter Voltage                 | V <sub>BE</sub>               | V <sub>CE</sub> =5V, I <sub>C</sub> =5A         | -    | 0.9  | 1.5  | V    |
| Transition Frequency                 | f <sub>T</sub>                | V <sub>CE</sub> =5V, I <sub>C</sub> =1A         | -    | 30   | -    | MHz  |
| Collector Output Capacitance         | C <sub>ob</sub>               | V <sub>CB</sub> =10V, I <sub>E</sub> =0, f=1MHz | -    | 220  | -    | pF   |

Note : h<sub>FE</sub>(1) Classification R : 55~110, O : 80~160

TOSHIBA CORPORATION

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