

9097250 TOSHIBA (DISCRETE/OPTO)

56C 07363 07-33-23

**SILICON PNP TRIPLE DIFFUSED TYPE**

# 2SB863

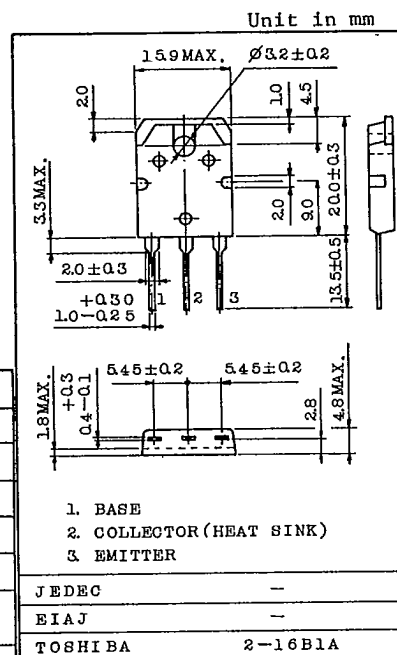
o POWER AMPLIFIER APPLICATIONS.

### FEATURES:

- . Complementary to 2SD1148
- . Recommend for 70W High Fidelity Audio Frequency Amplifier Output Stage.

MAXIMUM RATINGS (Ta=25°C)

| CHARACTERISTIC                           | SYMBOL | RATING    | UNIT |
|------------------------------------------|--------|-----------|------|
| Collector-Base Voltage                   | VCBO   | -140      | V    |
| Collector-Emitter Voltage                | VCEO   | -140      | V    |
| Emitter-Base Voltage                     | VEBO   | -5        | V    |
| Collector Current                        | IC     | -10       | A    |
| Base Current                             | IB     | -1        | A    |
| Collector Power Dissipation<br>(Tc=25°C) | PC     | 100       | W    |
| Junction Temperature                     | Tj     | 150       | °C   |
| Storage Temperature Range                | Tstg   | -55 ~ 150 | °C   |



Weight : 4.6g

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

| CHARACTERISTIC                       | SYMBOL                        | TEST CONDITION                                   | MIN. | TYP.  | MAX. | UNIT |
|--------------------------------------|-------------------------------|--------------------------------------------------|------|-------|------|------|
| Collector Cut-off Current            | ICBO                          | V <sub>CB</sub> =-140V, I <sub>E</sub> =0        | -    | -     | -5.0 | μA   |
| Emitter Cut-off Current              | IEBO                          | V <sub>EB</sub> =-5V, I <sub>C</sub> =0          | -    | -     | -5.0 | μA   |
| Collector-Emitter Breakdown Voltage  | V <sub>(BR)</sub> CEO         | 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        | 25   | -     | -    |      |
| Collector-Emitter Saturation Voltage | V <sub>CE(sat)</sub>          | I <sub>C</sub> =-5A, I <sub>B</sub> =-0.5A       | -    | -0.6  | -2.0 | V    |
| Base-Emitter Voltage                 | V <sub>BE</sub>               | V <sub>CE</sub> =-5V, I <sub>C</sub> =-5A        | -    | -0.96 | -1.5 | V    |
| Transition Frequency                 | f <sub>T</sub>                | V <sub>CE</sub> =-10V, I <sub>C</sub> =-1A       | -    | 15    | -    | MHz  |
| Collector Output Capacitance         | C <sub>ob</sub>               | V <sub>CB</sub> =-10V, I <sub>E</sub> =0, f=1MHz | -    | 400   | -    | pF   |

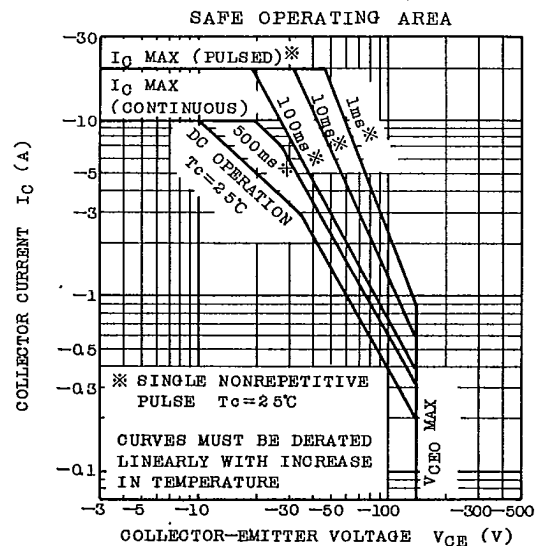
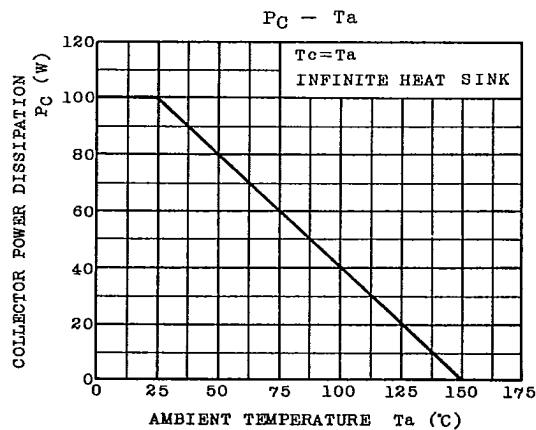
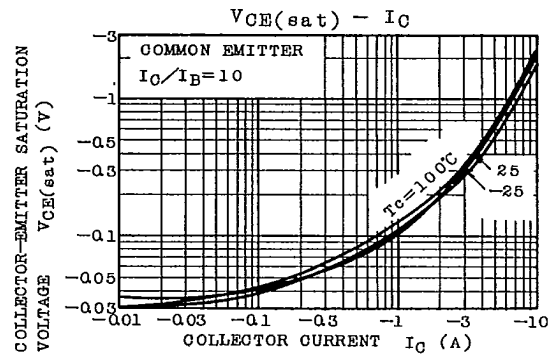
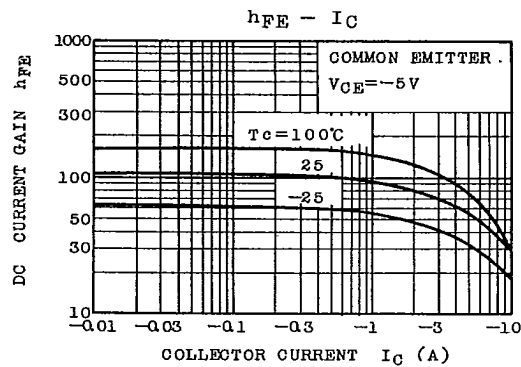
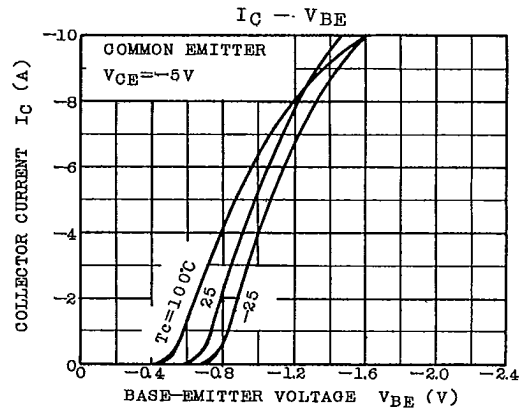
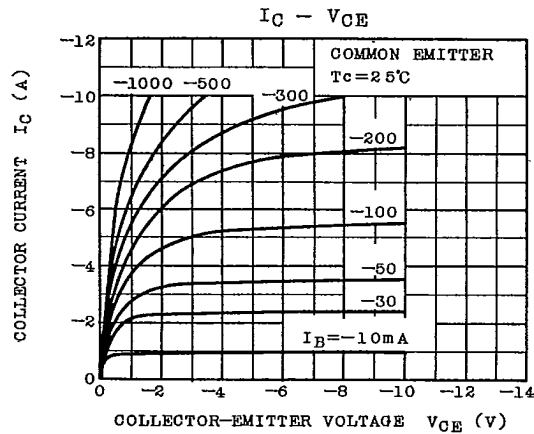
Note: hFE(1) Classification R : 55~110 O : 80~160

**||| TOSHIBA CORPORATION**

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