

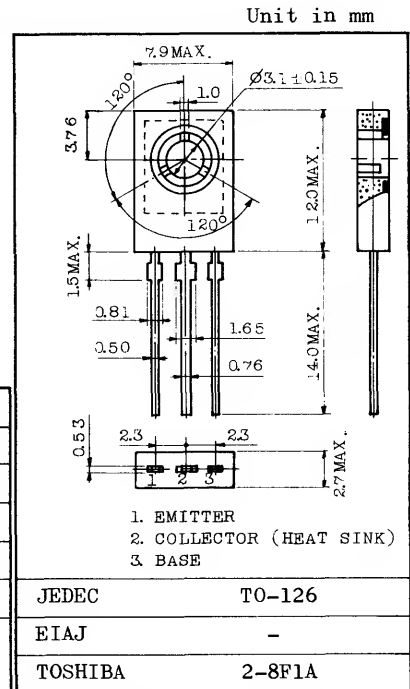
## AUDIO FREQUENCY POWER AMPLIFIER APPLICATIONS.

## FEATURES:

- Complementary to 2SA1184.
- Suitable for driver of 60 to 80 watts audio amplifier.
- High breakdown voltage.

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

| CHARACTERISTIC              |                      | SYMBOL           | RATING  | UNIT |
|-----------------------------|----------------------|------------------|---------|------|
| Collector-Base Voltage      |                      | V <sub>CB0</sub> | 120     | V    |
| Collector-Emitter Voltage   |                      | V <sub>CEO</sub> | 120     | V    |
| Emitter-Base Voltage        |                      | V <sub>EB0</sub> | 5       | V    |
| Collector Current           |                      | I <sub>C</sub>   | 1       | A    |
| Base Current                |                      | I <sub>B</sub>   | 100     | mA   |
| Collector Power Dissipation | T <sub>a</sub> =25°C | P <sub>C</sub>   | 1       | W    |
|                             | T <sub>c</sub> =25°C |                  | 15      |      |
| Junction Temperature        |                      | T <sub>j</sub>   | 150     | °C   |
| Storage Temperature Range   |                      | T <sub>stg</sub> | -55~150 | °C   |



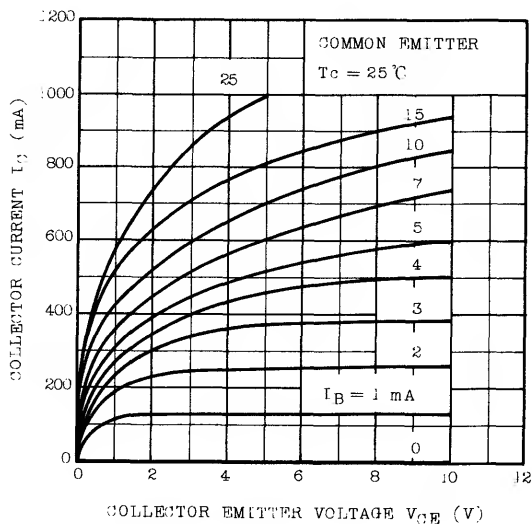
Mounting Kit No. AC46C  
Weight : 0.72g

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

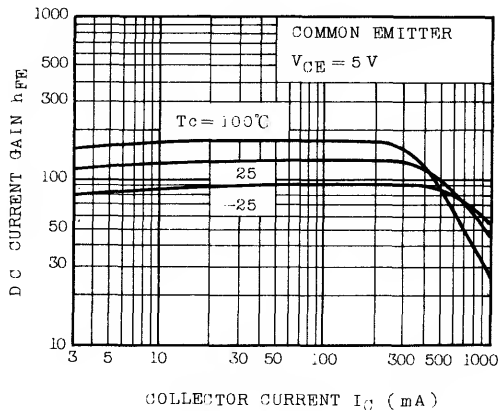
| CHARACTERISTIC                       | SYMBOL             | TEST CONDITION                            | MIN. | TYP. | MAX. | UNIT |
|--------------------------------------|--------------------|-------------------------------------------|------|------|------|------|
| Collector Cut-off Current            | $I_{CB0}$          | $V_{CB}=120\text{V}, I_E=0$               | -    | -    | 100  | nA   |
| Emitter Cut-off Current              | $I_{EB0}$          | $V_{EB}=5\text{V}, I_C=0$                 | -    | -    | 100  | nA   |
| Collector-Emitter Breakdown Voltage  | $V_{(BR)CE0}$      | $I_C=10\text{mA}, I_B=0$                  | 120  | -    | -    | V    |
| Emitter-Base Breakdown Voltage       | $V_{(BR)EB0}$      | $I_E=1\text{mA}, I_C=0$                   | 5    | -    | -    | V    |
| DC Current Gain                      | $h_{FE}$<br>(Note) | $V_{CE}=5\text{V}, I_C=100\text{mA}$      | 80   | -    | 240  |      |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$      | $I_C=500\text{mA}, I_B=50\text{mA}$       | -    | 0.30 | 1.0  | V    |
| Base-Emitter Voltage                 | $V_{BE}$           | $V_{CE}=5\text{V}, I_C=500\text{mA}$      | -    | 0.78 | 1.0  | V    |
| Transition Frequency                 | $f_T$              | $V_{CE}=5\text{V}, I_C=100\text{mA}$      | -    | 120  | -    | MHz  |
| Collector Output Capacitance         | $C_{ob}$           | $V_{CB}=10\text{V}, I_E=0, f=1\text{MHz}$ | -    | 15   | -    | pF   |

Note:  $h_{FE}$  Classification      0:80~160      Y:120~240

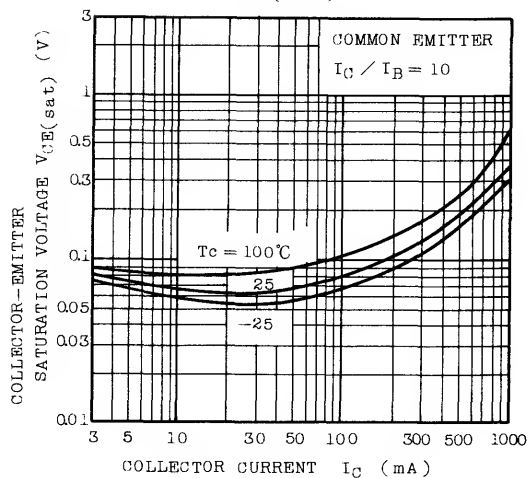
$I_C - V_{CE}$



$h_{FE} - I_C$



$V_{CE(sat)} - I_C$



$I_C - V_{BE}$

