

|              |         |  |
|--------------|---------|--|
| <b>SANYO</b> | No.4633 | <b>2SA1882/2SC4984</b>   |
|              |         | PNP/NPN Epitaxial Planar Silicon Transistor<br><b>Low-Frequency General-Purpose Amp Applications</b> |

**Applications**

- Low-frequency power amp applications.
- Medium-speed switching.
- Small-sized motor drivers.

**Features**

- Large current capacity.
- Low collector-to-emitter saturation voltage.

( ) : 2SA1882

**Absolute Maximum Ratings at Ta = 25°C**

|                              |                  |  | unit                  |
|------------------------------|------------------|--|-----------------------|
| Collector-to-Base Voltage    | V <sub>CB0</sub> | (-) <b>15</b>  | V                     |
| Collector-to-Emitter Voltage | V <sub>CE0</sub> | (-) <b>15</b>  | V                     |
| Emitter-to-Base Voltage      | V <sub>EBO</sub> | (-) <b>5</b>   | V                     |
| Collector Current            | I <sub>C</sub>   | (-) <b>1.5</b>   | A                     |
| Collector Current (Pulse)    | I <sub>CP</sub>  | (-) <b>3</b>   | A                     |
| Base Current                 | I <sub>B</sub>   | (-) <b>300</b>   | mA                    |
| Collector Dissipation        | P <sub>C</sub>   | Mounted on ceramic board<br>(250mm <sup>2</sup> × 0.8mm) | <b>1.3</b> W          |
| Junction Temperature         | T <sub>j</sub>   |  | <b>150</b> °C         |
| Storage Temperature          | T <sub>stg</sub> |  | <b>-55 to +150</b> °C |

**Electrical Characteristics at Ta = 25°C**

|                          |                          |   | min          | typ             | max                           | unit |
|--------------------------|--------------------------|---|--------------|-----------------|-------------------------------|------|
| Collector Cutoff Current | I <sub>CB0</sub>         | V <sub>CB</sub> = (-)12V, I <sub>E</sub> = 0        |              |                 | (-) <b>100</b>                | nA   |
| Emitter Cutoff Current   | I <sub>EBO</sub>         | V <sub>EB</sub> = (-)4V, I <sub>C</sub> = 0         |              |                 | (-) <b>100</b>                | nA   |
| DC Current Gain          | h <sub>FE</sub> (1)      | V <sub>CE</sub> = (-)2V, I <sub>C</sub> = (-)50mA   | <b>140</b> ※ |                 | <b>560</b> ※                  |      |
|                          | h <sub>FE</sub> (2)      | V <sub>CE</sub> = (-)2V, I <sub>C</sub> = (-)1A     | <b>70</b>    |                 |                               |      |
| Gain-Bandwidth Product   | f <sub>T</sub>           | V <sub>CE</sub> = (-)2V, I <sub>C</sub> = (-)50mA   |              | <b>(300)200</b> |                               | MHz  |
| C-E Saturation Voltage   | V <sub>CE(sat)</sub> (1) | I <sub>C</sub> = (-)5mA, I <sub>B</sub> = (-)0.5mA  |              |                 | (-) <b>10</b> (-) <b>25</b>   | mV   |
|                          | V <sub>CE(sat)</sub> (2) | I <sub>C</sub> = (-)500mA, I <sub>B</sub> = (-)25mA |              |                 | (-) <b>120</b> (-) <b>240</b> | mV   |
| B-E Saturation Voltage   | V <sub>BE(sat)</sub>     | I <sub>C</sub> = (-)500mA, I <sub>B</sub> = (-)25mA |              |                 | (-) <b>0.9</b> (-) <b>1.2</b> | V    |
| Output Capacitance       | C <sub>ob</sub>          | V <sub>CB</sub> = (-)10V, f = 1MHz                  |              | <b>(15)10</b>   |                               | pF   |
| C-B Breakdown Voltage    | V <sub>(BR)CBO</sub>     | I <sub>C</sub> = (-)10μA, I <sub>E</sub> = 0        |              |                 | (-) <b>15</b>                 | V    |
| C-E Breakdown Voltage    | V <sub>(BR)CEO</sub>     | I <sub>C</sub> = (-)1mA, R <sub>BE</sub> = ∞        |              |                 | (-) <b>15</b>                 | V    |
| E-B Breakdown Voltage    | V <sub>(BR)EBO</sub>     | I <sub>E</sub> = (-)10μA, I <sub>C</sub> = 0        |              |                 | (-) <b>5</b>                  | V    |

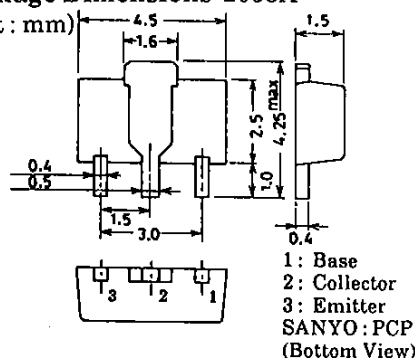
※ The 2SA1882/2SC4984 is classified by 50mA h<sub>FE</sub> as follows:

|           |           |           |
|-----------|-----------|-----------|
| 140 S 280 | 200 T 400 | 280 U 560 |
|-----------|-----------|-----------|

Marking: 2SA1882 : AI  
 : 2SC4984 : CT

**Package Dimensions 2038A**

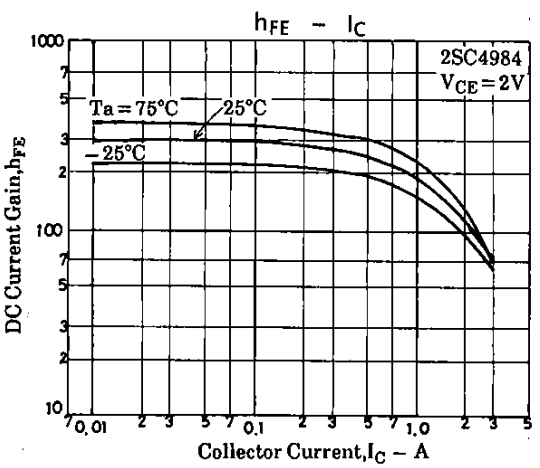
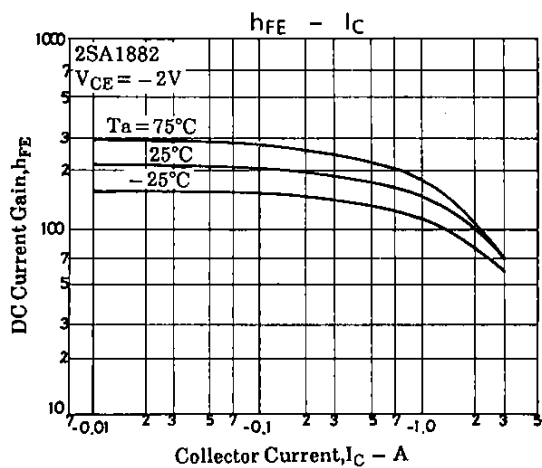
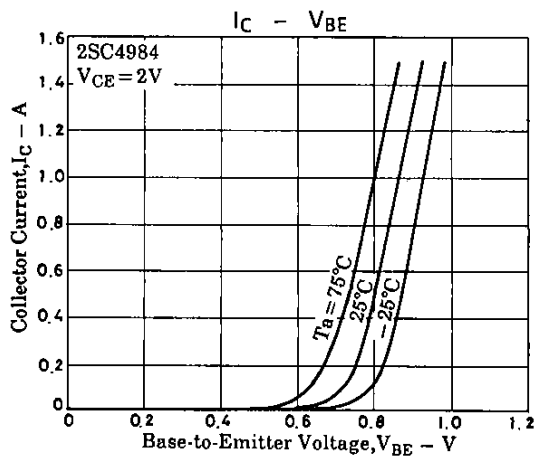
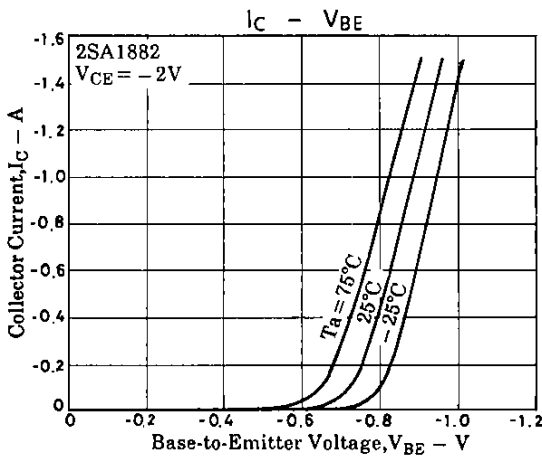
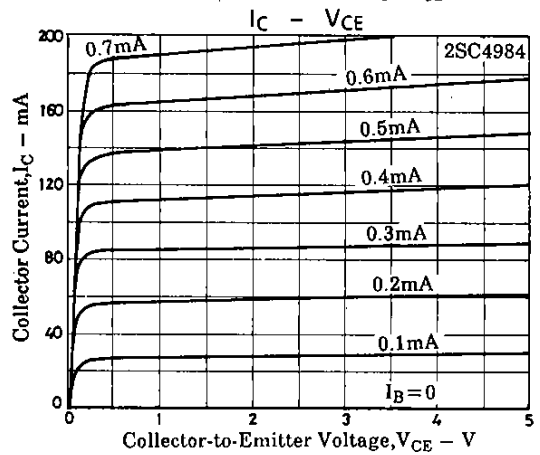
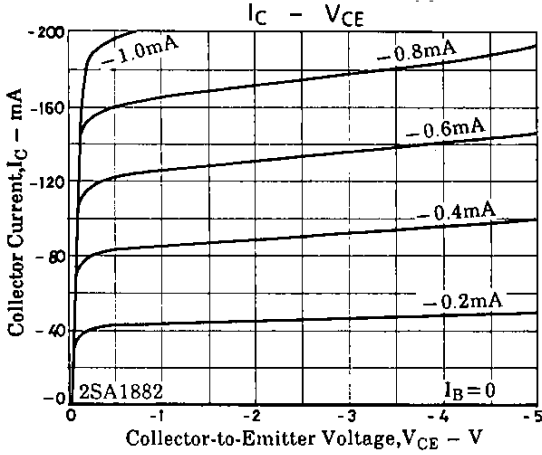
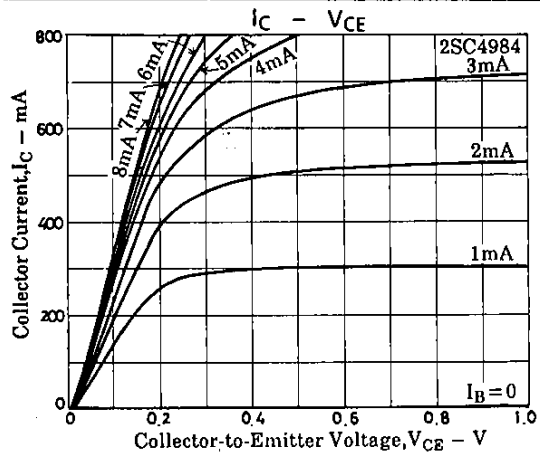
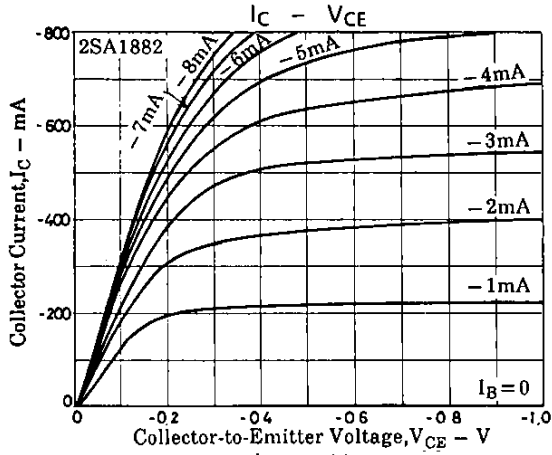
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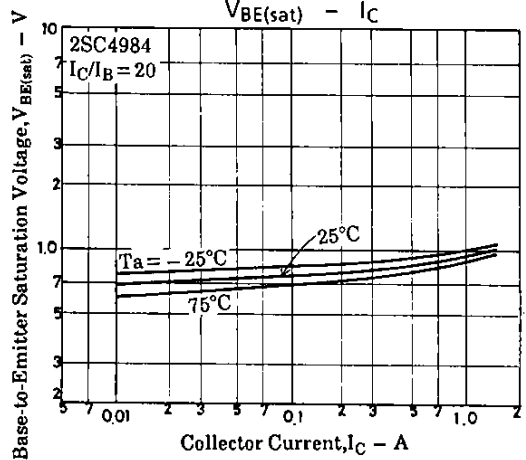
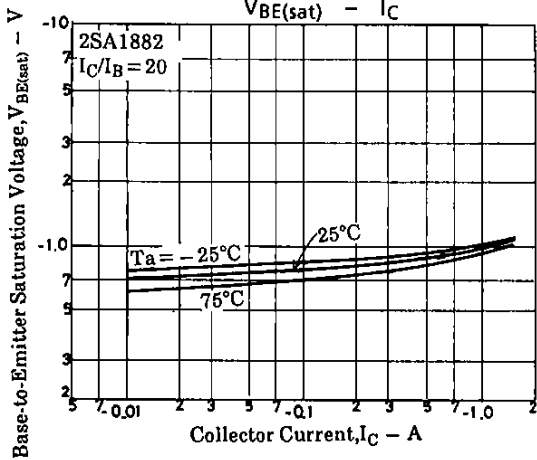
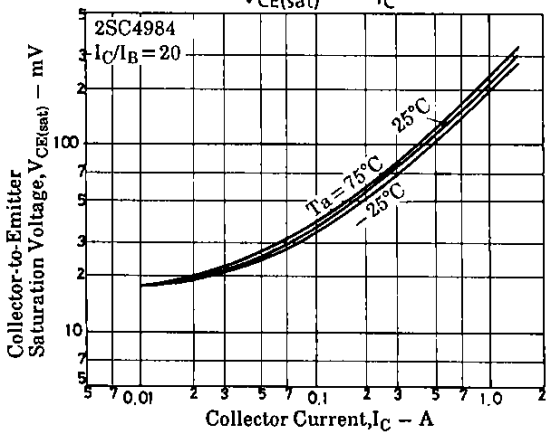
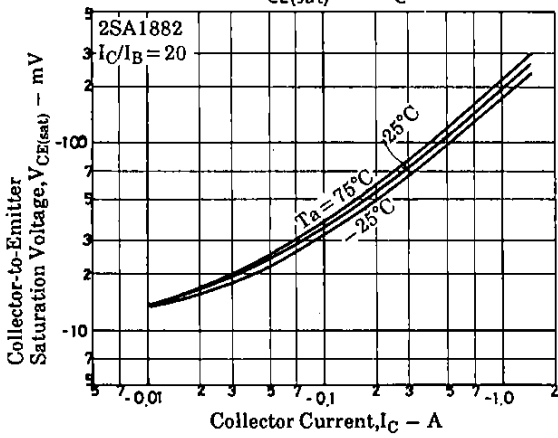
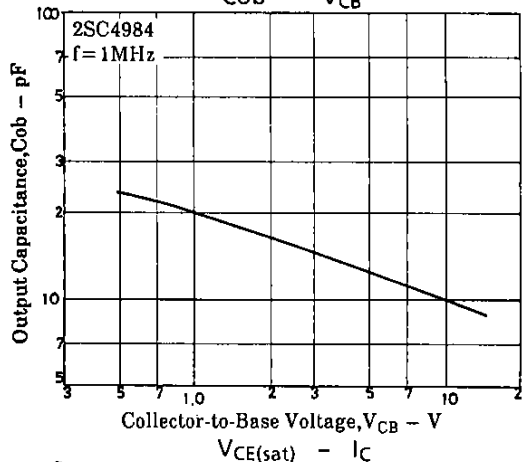
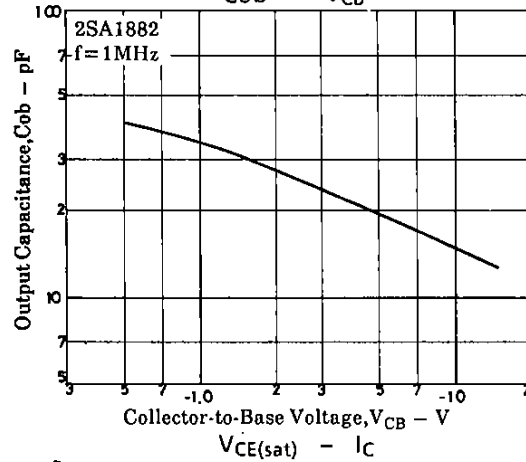
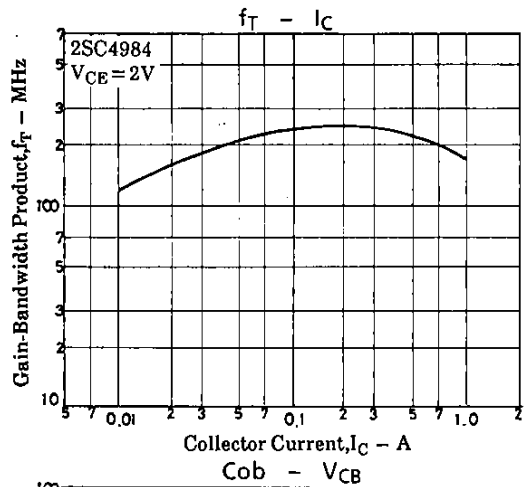
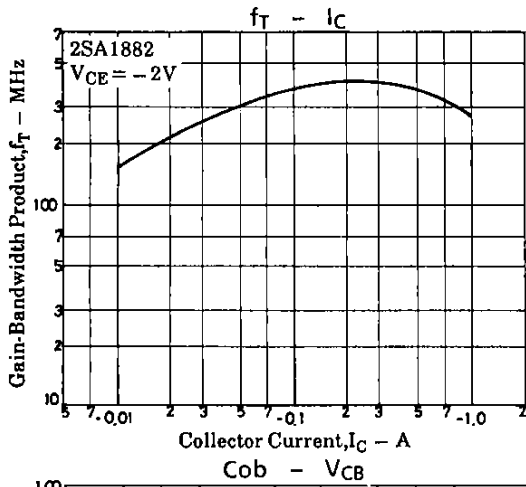


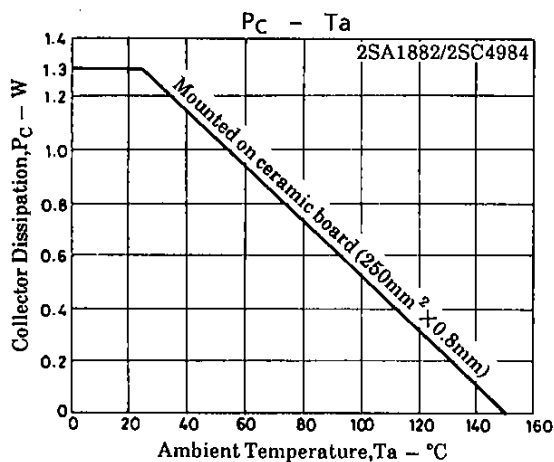
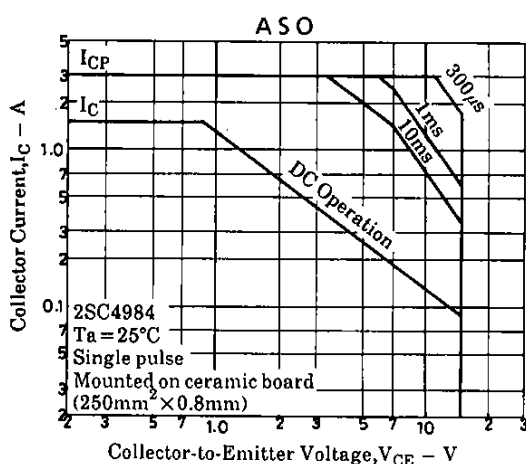
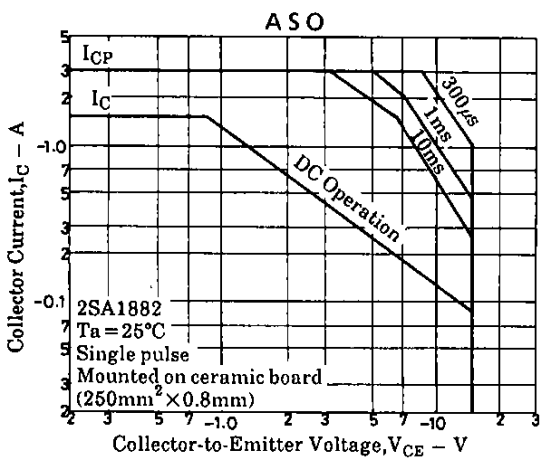
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2SA1882/2SC4984







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