



2SB883/2SD1193

Driver Applications

Applications

- Motor drivers, printer hammer drivers, relay drivers, voltage regulator control.

Features

- High DC current gain.
- High current capacity and wide ASO.
- Low saturation voltage.

() : 2SB883

Specifications

Absolute Maximum Ratings at Ta = 25°C

| Parameter | Symbol | Conditions | Ratings | Unit |
|------------------------------|-----------|------------------------|-------------|------|
| Collector-to-Base Voltage | V_{CBO} | | (-)70 | V |
| Collector-to-Emitter Voltage | V_{CEO} | | (-)60 | V |
| Emitter-to-Base Voltage | V_{EBO} | | (-)6 | V |
| Collector Current | I_C | | (-)15 | A |
| Collector Current (Pulse) | I_{CP} | | (-)20 | A |
| Collector Dissipation | P_C | $T_c=25^\circ\text{C}$ | 70 | W |
| Junction Temperature | T_J | | 150 | °C |
| Storage Temperature | T_{stg} | | -55 to +150 | °C |

Electrical Characteristics at Ta = 25°C

| Parameter | Symbol | Conditions | Ratings | | | Unit |
|---|---------------|---|---------|--------|--------|------|
| | | | min | typ | max | |
| Collector Cutoff Current | I_{CBO} | $V_{CB}=(-)40\text{V}, I_E=0$ | | | (-)0.1 | mA |
| Emitter Cutoff Current | I_{EBO} | $V_{EB}=(-)5\text{V}, I_C=0$ | | | (-)3 | mA |
| DC Current Gain | h_{FE} | $V_{CE}=(-)2\text{V}, I_C=(-)7\text{A}$ | 2000 | 5000 | | |
| Gain-Bandwidth Product | f_T | $V_{CE}=(-)5\text{V}, I_C=(-)7\text{A}$ | | 20 | | MHz |
| Collector-to-Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C=(-)7\text{A}, I_B=(-)14\text{mA}$ | | 0.9 | (-)1.5 | V |
| | | | | (-)1.0 | | V |
| Base-to-Emitter Saturation Voltage | $V_{BE(sat)}$ | $I_C=(-)7\text{A}, I_B=(-)14\text{mA}$ | | | (-)2.0 | V |
| Collector-to-Base Breakdown Voltage | $V_{(BR)CBO}$ | $I_C=(-)5\text{mA}, I_E=0$ | (-)70 | | | V |
| Collector-to-Emitter Breakdown Voltage | $V_{(BR)CEO}$ | $I_C=(-)50\text{mA}, R_{BE}=\infty$ | (-)60 | | | V |

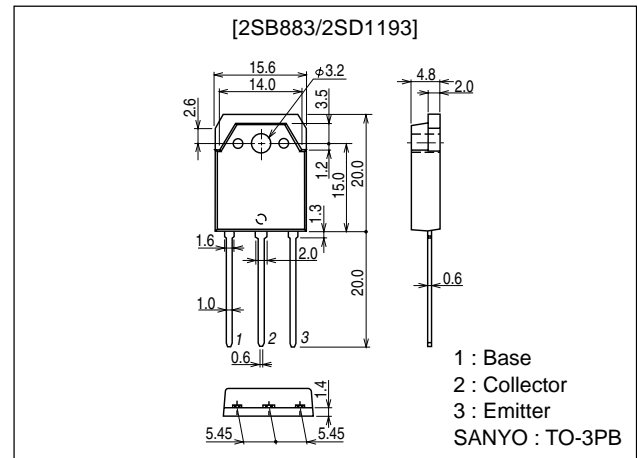
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Package Dimensions

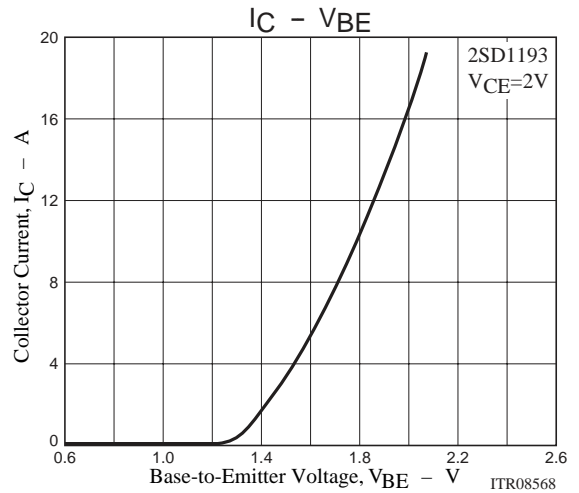
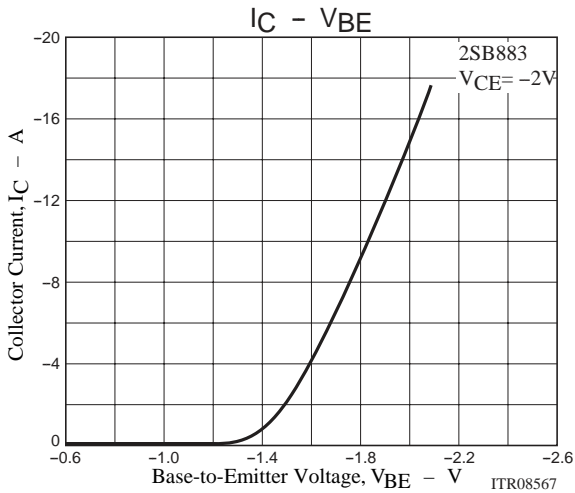
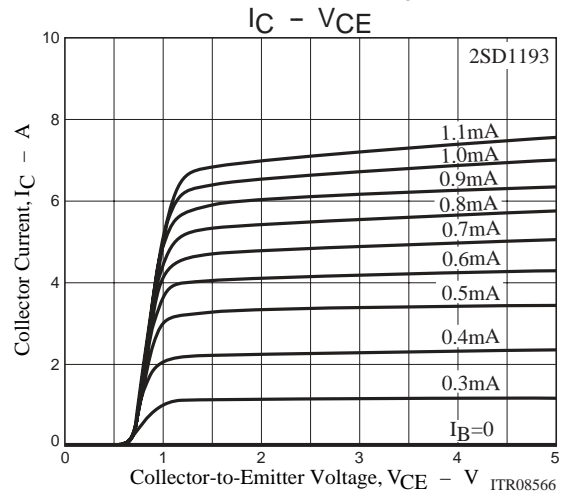
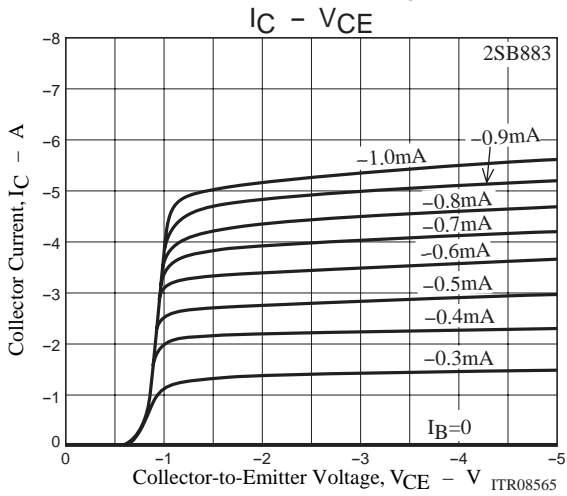
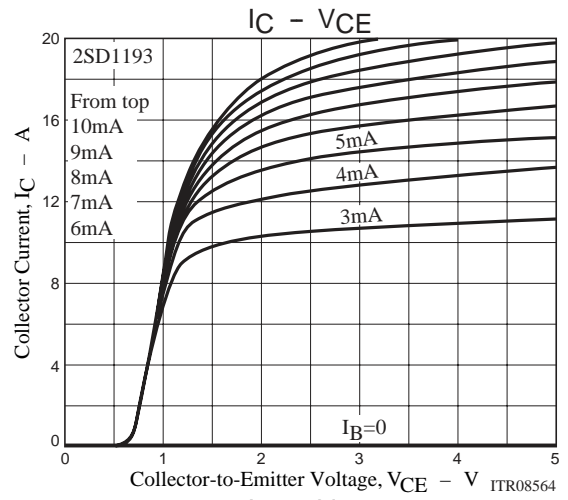
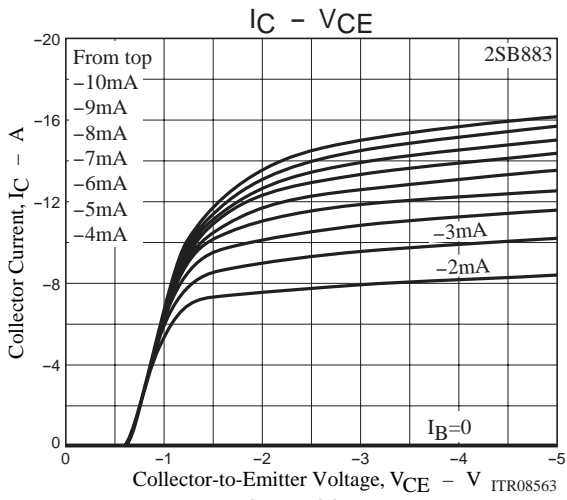
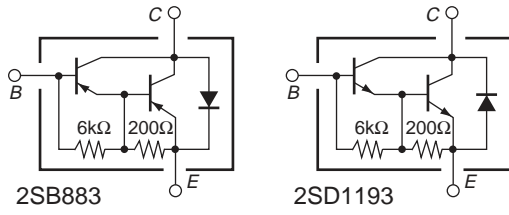
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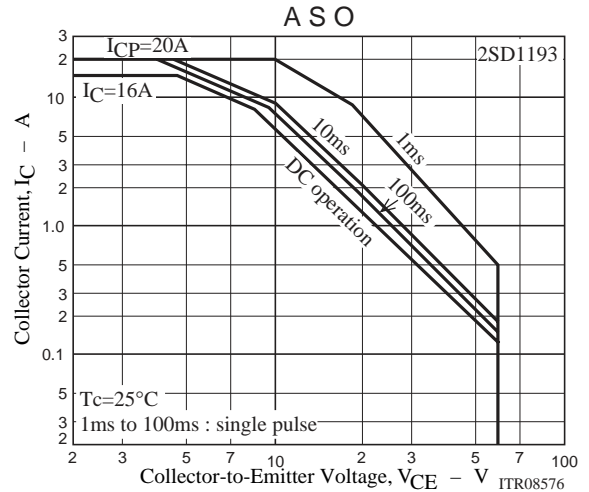
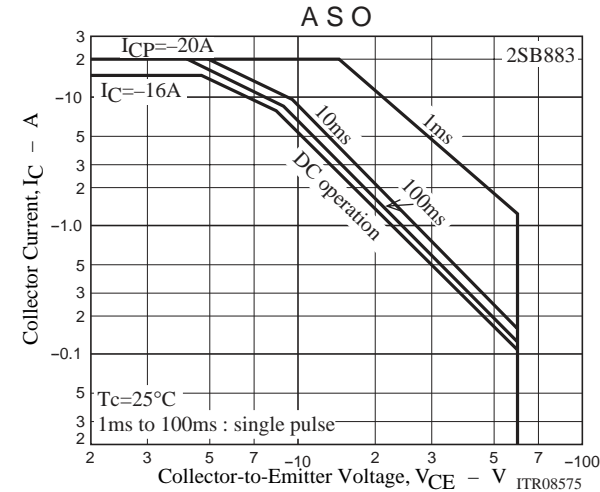
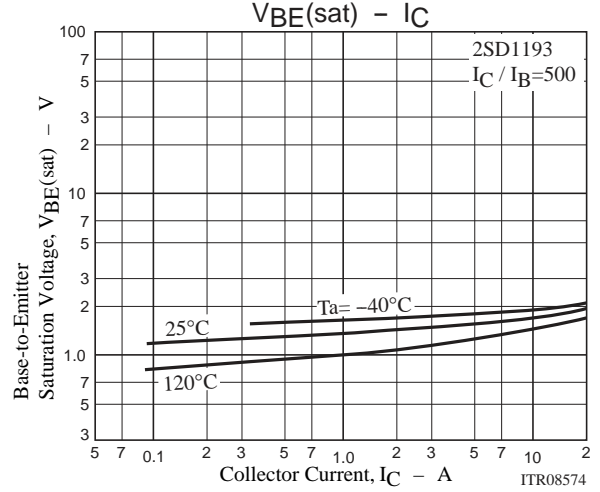
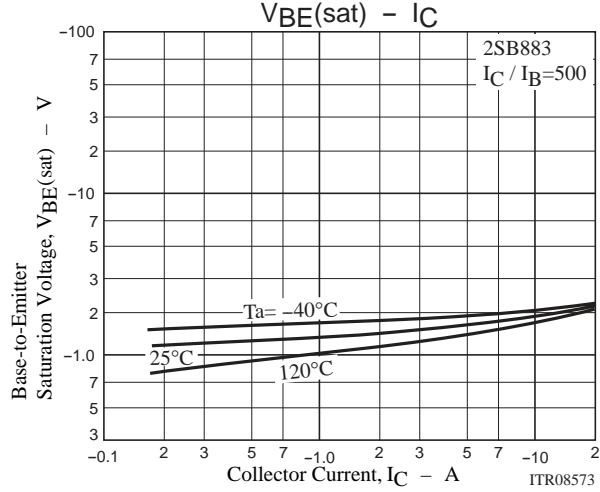
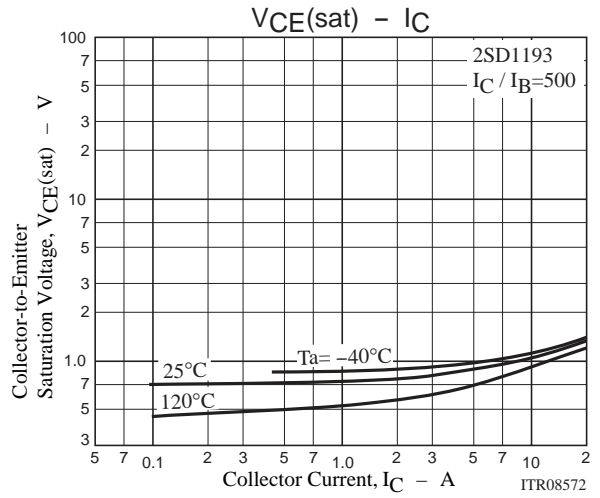
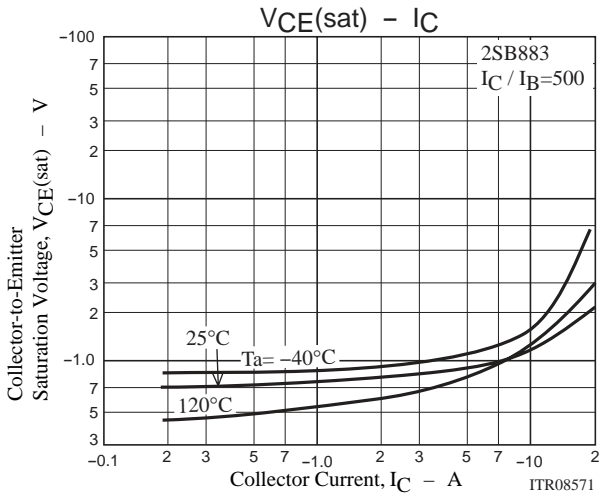
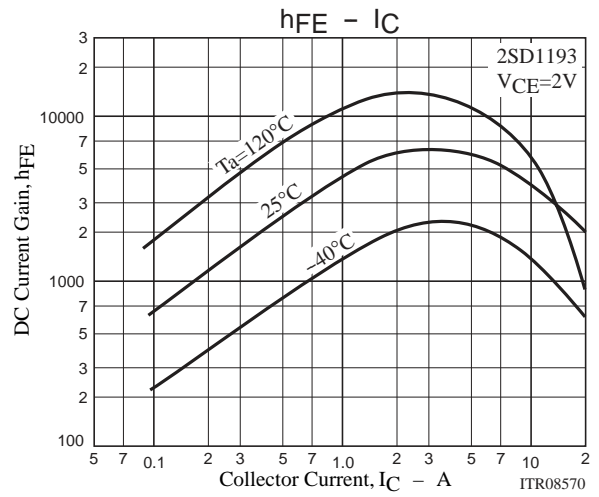
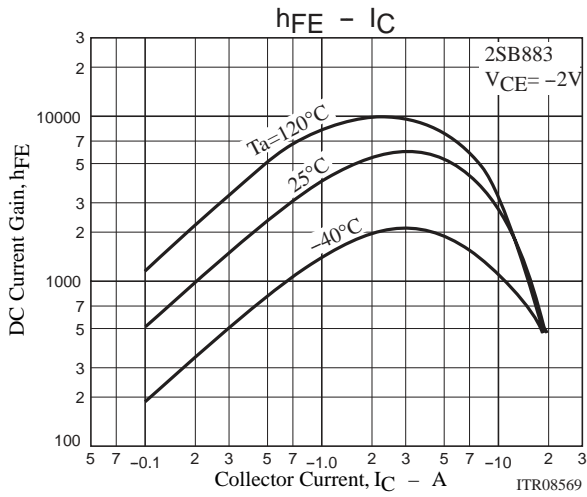


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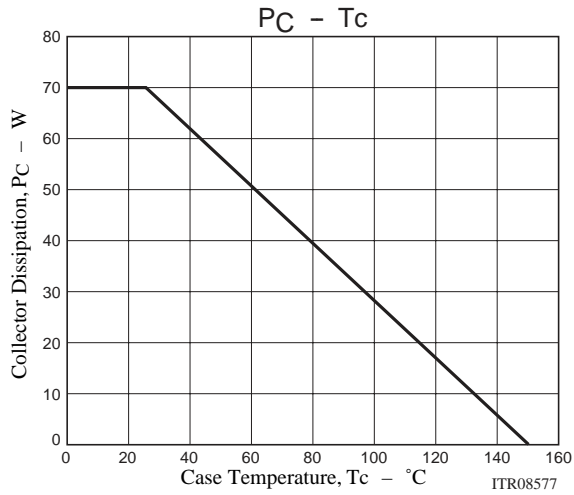
Electrical Connection



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