

No.927E

2SB885/2SD1195

PNP/NPN Planar Silicon Darlington Transistors

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.

() : 2SB885

Absolute Maximum Ratings at Ta = 25°C

| | | | unit |
|------------------------------|------------------|-------------|------|
| Collector-to-Base Voltage | V _{CB0} | (-)110 | V |
| Collector-to-Emitter Voltage | V _{CEO} | (-)100 | V |
| Emitter-to-Base Voltage | V _{EBO} | (-)6 | V |
| Collector Current | I _C | (-)5 | A |
| Collector Current (Pulse) | I _{CP} | (-)8 | A |
| Collector Dissipation | P _C | 1.75 | W |
| | | 35 | W |
| Junction Temperature | T _j | 150 | °C |
| Storage Temperature | T _{stg} | -55 to +150 | °C |

T_c = 25°C

Electrical Characteristics at Ta = 25°C

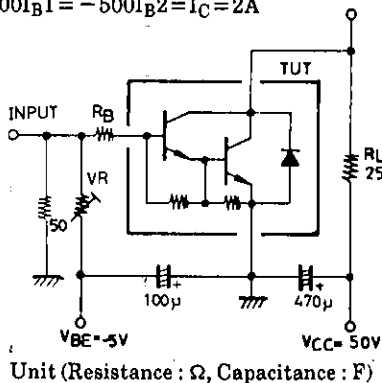
| | | | min | typ | max | unit |
|--------------------------|----------------------|---|----------|-----------|--------|------|
| Collector Cutoff Current | I _{CBO} | V _{CB} = (-)80V, I _E = 0 | | | (-)0.1 | mA |
| Emitter Cutoff Current | I _{EBO} | V _{EB} = (-)5V, I _C = 0 | | | (-)3.0 | mA |
| DC Current Gain | h _{FE} | V _{CE} = (-)3V, I _C = (-)2.5A | 1500 | 4000 | | |
| Gain Bandwidth Product | f _T | V _{CE} = (-)5V, I _C = (-)2.5A | | 20 | | MHz |
| C-E Saturation Voltage | V _{CE(sat)} | I _C = (-)2.5A, I _B = (-)5mA | | 0.9(-)1.5 | | V |
| | | | | | (-1.0) | |
| B-E Saturation Voltage | V _{BE(sat)} | I _C = (-)2.5A, I _B = (-)5mA | | | (-)2.0 | V |
| C-B Breakdown Voltage | V _{(BR)CBO} | I _C = (-)5mA, I _E = 0 | (-)110 | | | V |
| C-E Breakdown Voltage | V _{(BR)CEO} | I _C = (-)50mA, R _{BE} = ∞ | (-)100 | | | V |
| Rise Time | t _{on} | See specified Test Circuit. | (0.7)0.6 | | | μs |
| Storage Time | t _{stg} | " | (1.3)4.8 | | | μs |
| Fall Time | t _f | " | (1.5)1.6 | | | μs |

Specified Test Circuit

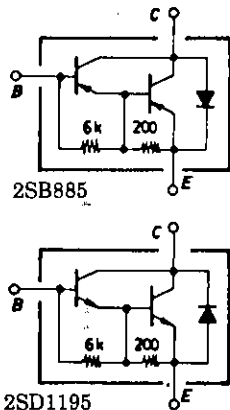
(For PNP, the polarity is reversed.)

PW = 50μs, Duty Cycle ≤ 1%

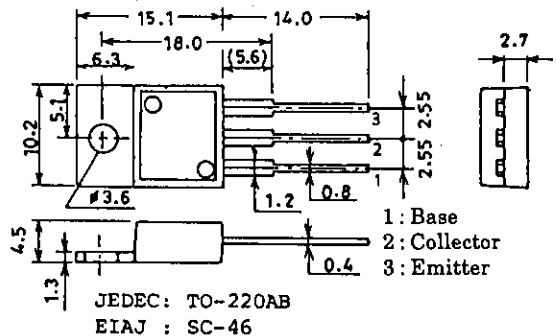
500I_{B1} = -500I_{B2} = I_C = 2A



Electrical Connection

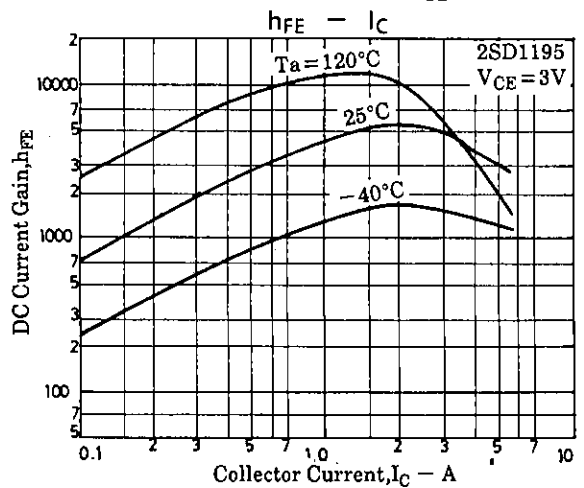
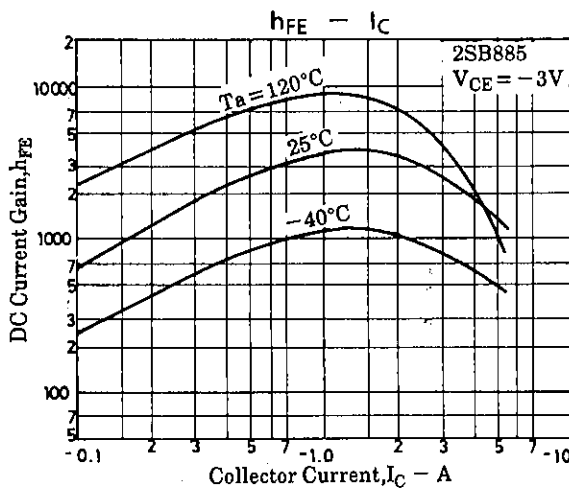
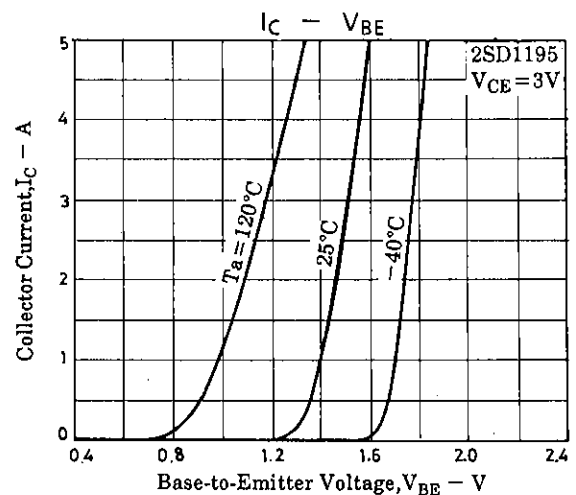
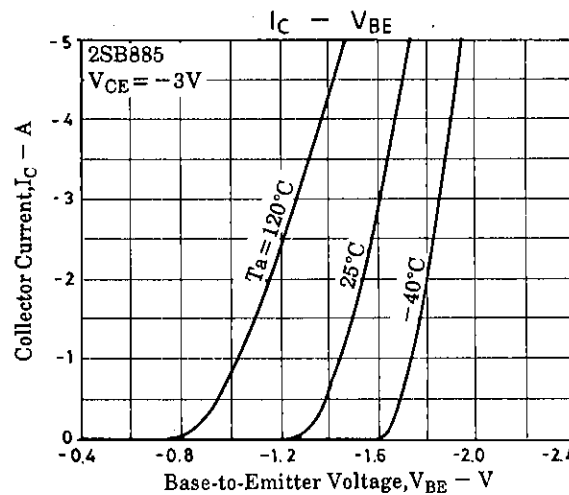
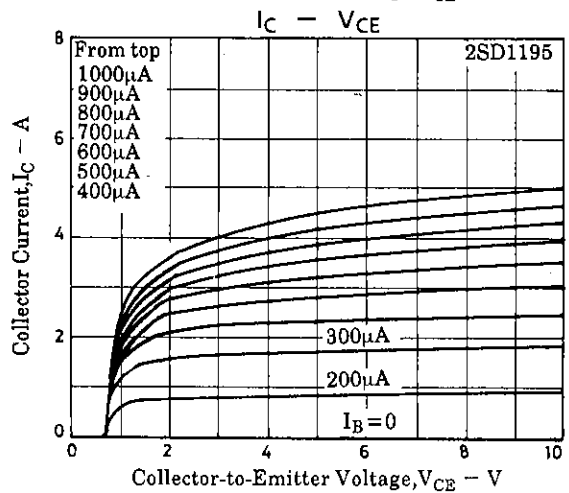
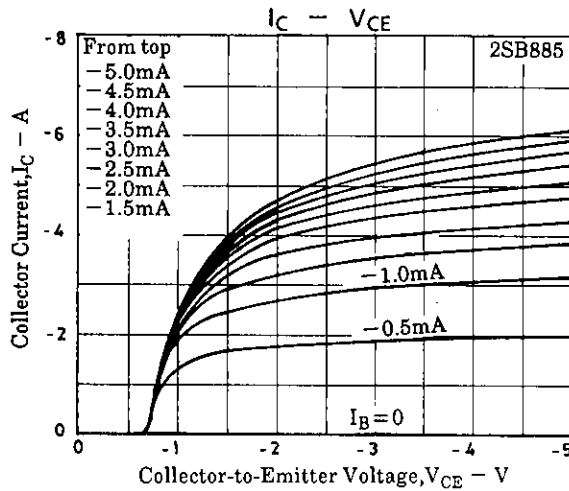
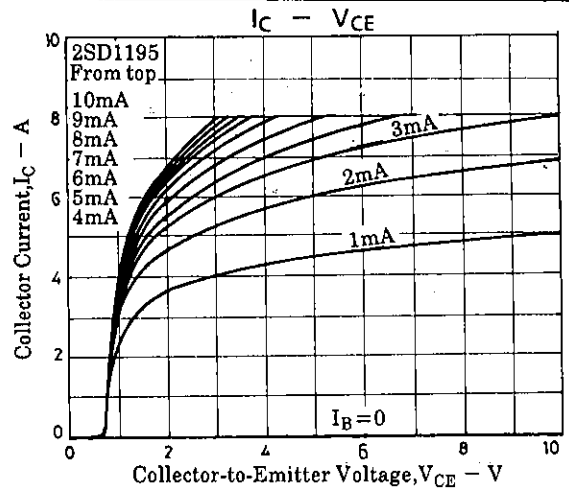
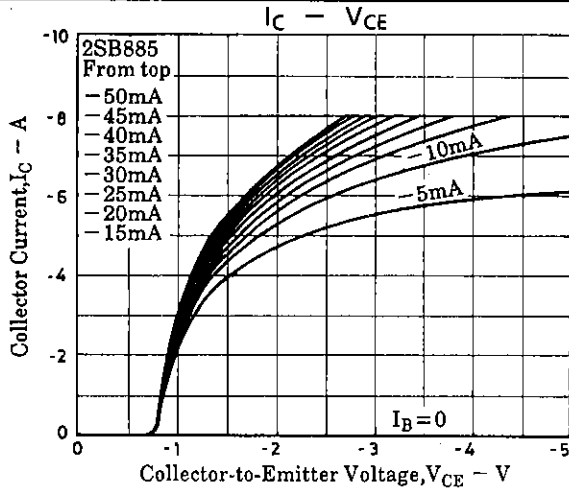


Package Dimensions 2010C
(unit : mm)

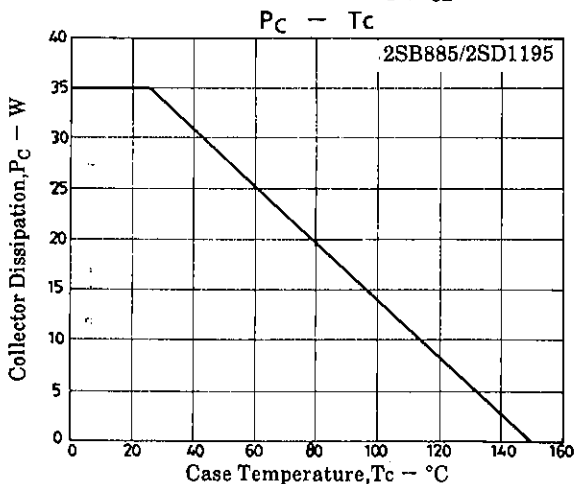
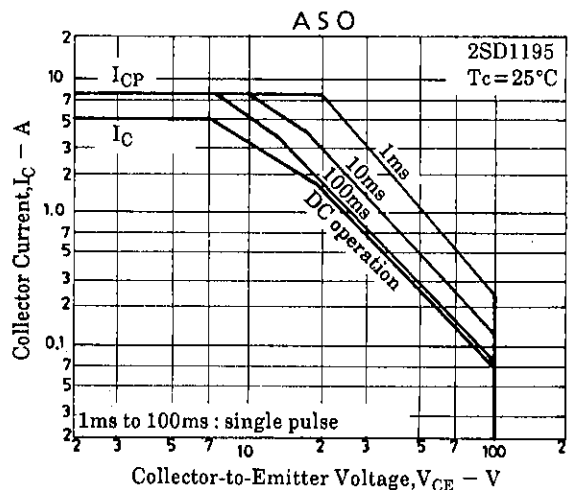
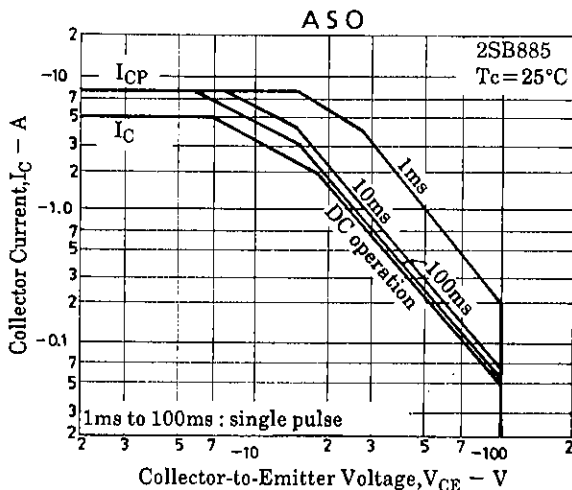
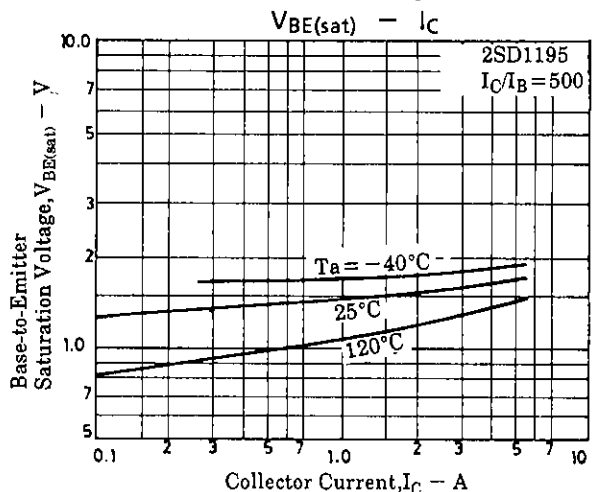
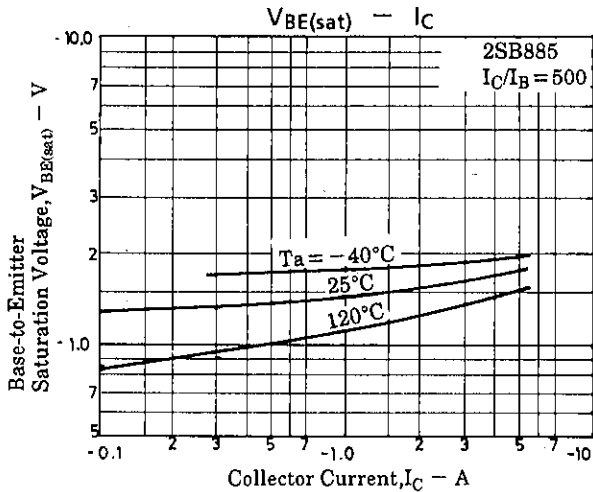
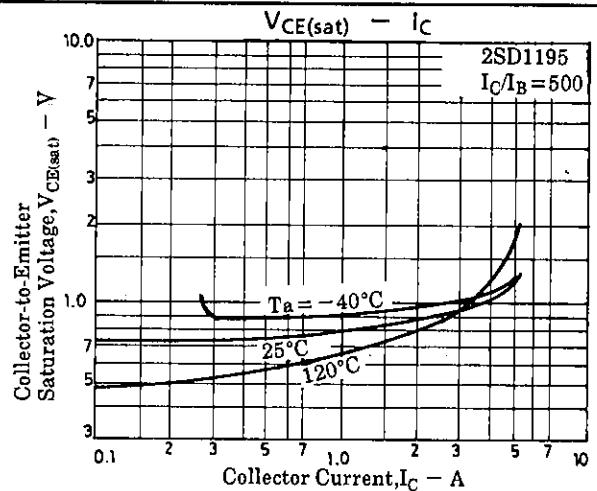
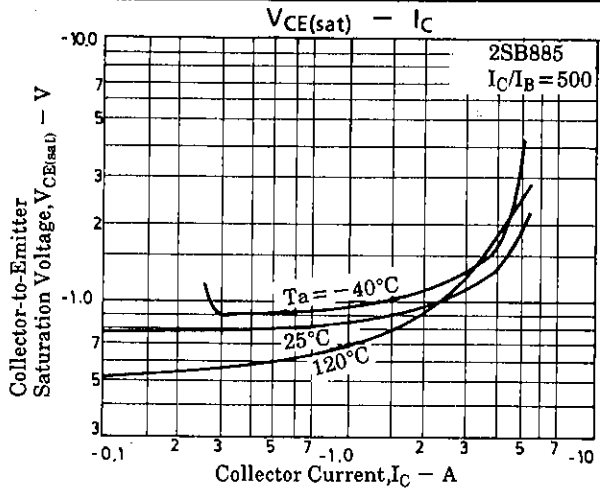


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