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|  | No.3259 | <h2 style="margin: 0;">2SB1230/2SD1840</h2> <p style="margin: 0;">2SB1230 : PNP Epitaxial Planar Silicon Transistor 2SD1840 : NPN Triple Diffused Planar Silicon Transistor</p> <h3 style="margin: 0;">100V/4A Switching Applications</h3> |
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Features

- Large current capacity and wide ASO
- Low saturation voltage

Applications

- Motor drivers, relay drivers, converters, and other general high-current switching applications

() : 2SB1230

Absolute Maximum Ratings at Ta = 25°C

| | | | unit |
|------------------------------|------------------|-------------|------|
| Collector-to-Base Voltage | V _{CB0} | (-)110 | V |
| Collector-to-Emitter Voltage | V _{CE0} | (-)100 | V |
| Emitter-to-Base Voltage | V _{EBO} | (-)6 | V |
| Collector Current | I _C | (-)15 | A |
| Collector Current (Pulse) | I _{CP} | (-)25 | A |
| Base Current | I _B | (-)5 | A |
| Collector Dissipation | P _C | 3.0 | W |
| | | 100 | W |
| Junction Temperature | T _j | 150 | °C |
| Storage Temperature | T _{stg} | -55 to +150 | °C |

T_c = 25°C

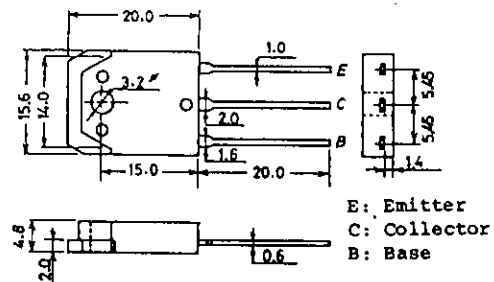
Electrical Characteristics at Ta = 25°C

| | | | min | typ | max | unit |
|--------------------------|----------------------|---|--------|-----|--------|------|
| Collector Cutoff Current | I _{CB0} | V _{CB} = (-)100V, I _E = 0 | | | (-)0.1 | mA |
| Emitter Cutoff Current | I _{EBO} | V _{EB} = (-)5V, I _C = 0 | | | (-)0.1 | mA |
| DC Current Gain | h _{FE} (1) | V _{CE} = (-)2V, I _C = (-)1.5A | 50※ | | 140※ | |
| | h _{FE} (2) | V _{CE} = (-)2V, I _C = (-)6A | 20 | | | |
| C-E Saturation Voltage | V _{CE(sat)} | I _C = (-)6A, I _B = (-)0.6A | | | (-)0.8 | V |
| B-E Saturation Voltage | V _{BE(sat)} | I _C = (-)6A, I _B = (-)0.6A | | | (-)1.5 | V |
| C-B Breakdown Voltage | V _{(BR)CBO} | I _C = (-)1mA, I _E = 0 | (-)110 | | | V |
| C-E Breakdown Voltage | V _{(BR)CEO} | I _C = (-)5mA, R _{BE} = ∞ | (-)100 | | | V |
| E-B Breakdown Voltage | V _{(BR)EBO} | I _E = (-)1mA, I _C = 0 | (-)6 | | | V |

※ : For the h_{FE}(1) of the 2SB1230/2SD1840, specify two ranks or more in principle.

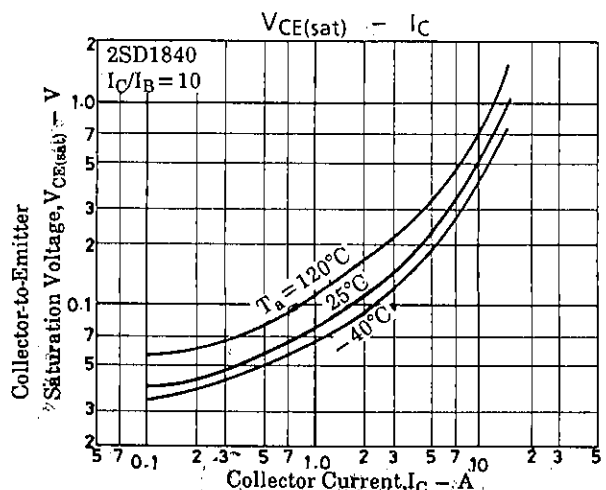
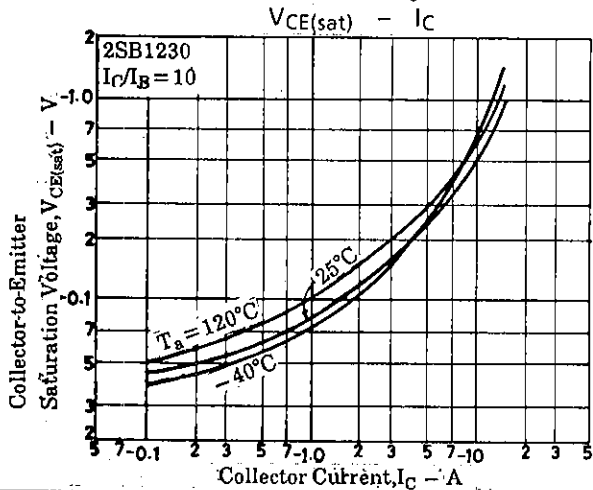
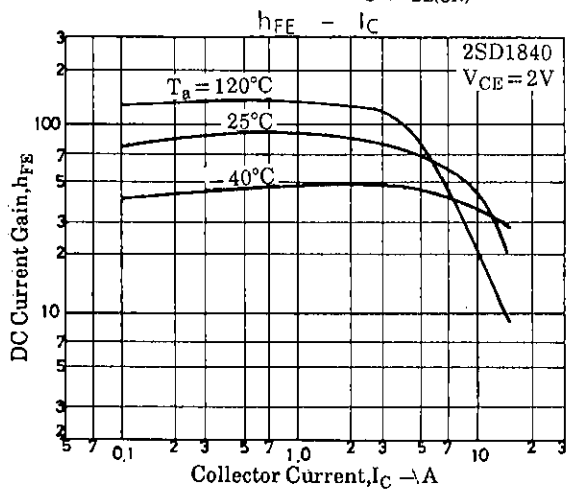
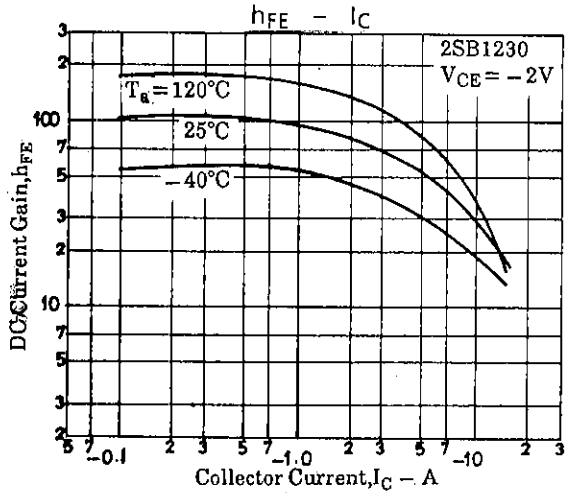
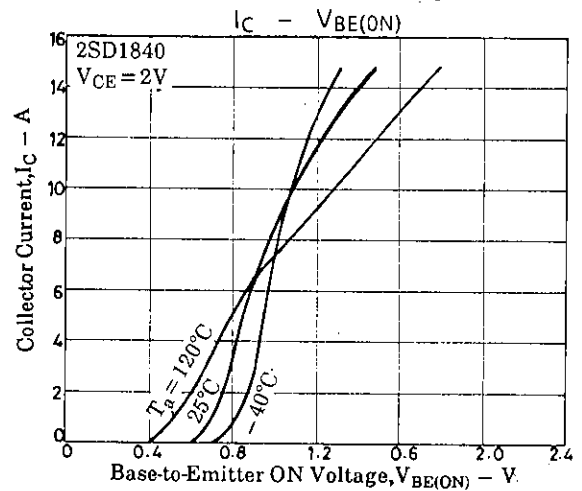
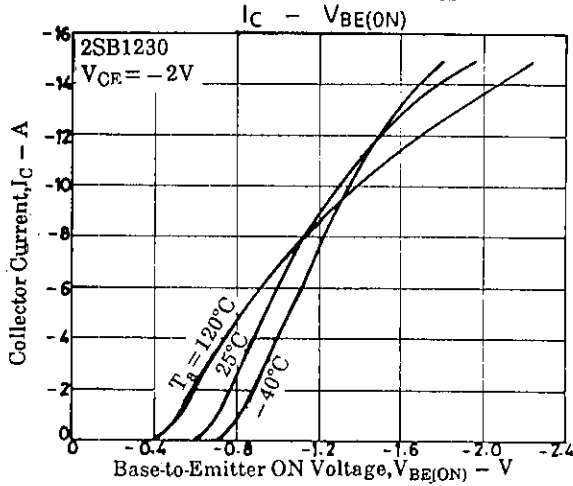
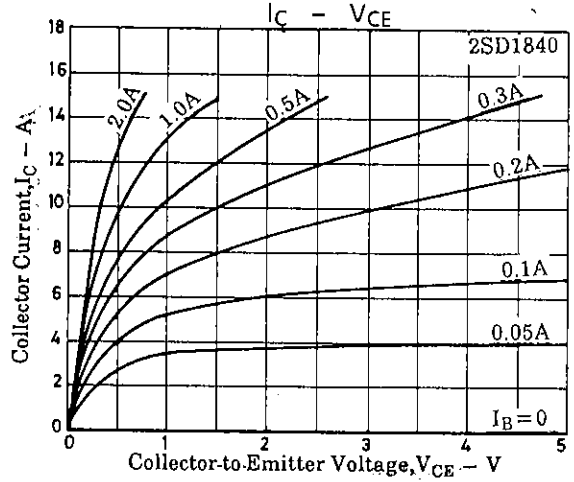
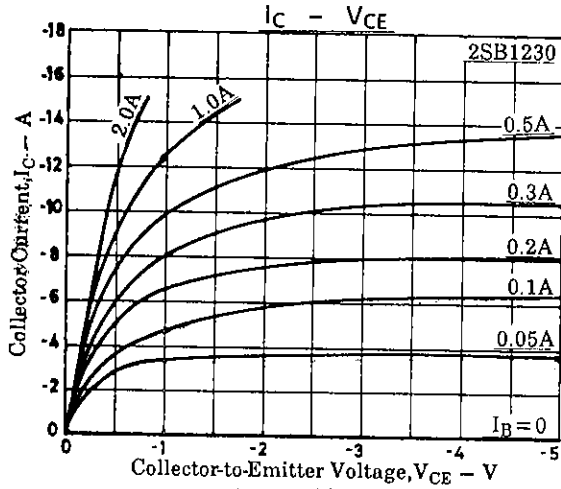
| | | |
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| 50 P 100 | 70 Q 140 | |
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Package Dimensions 2022
(unit : mm)

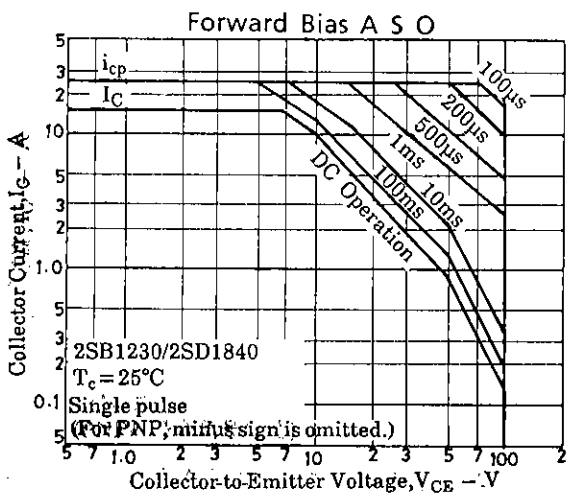
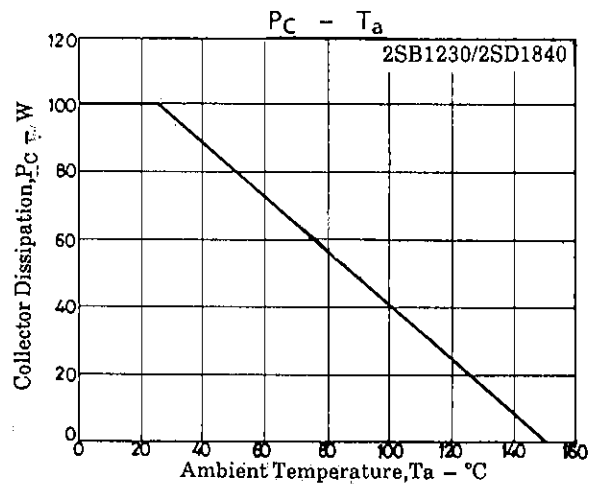
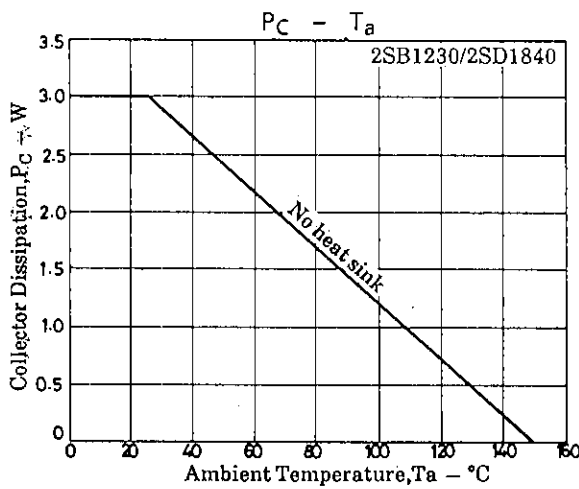
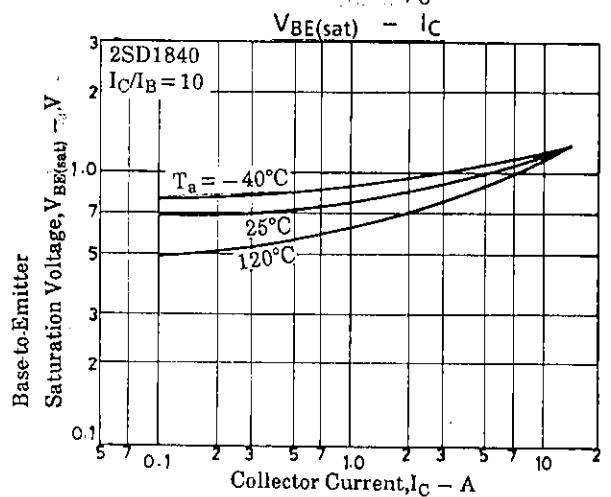
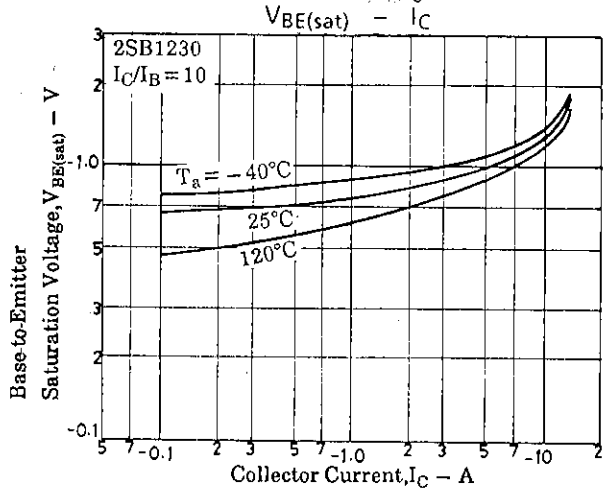
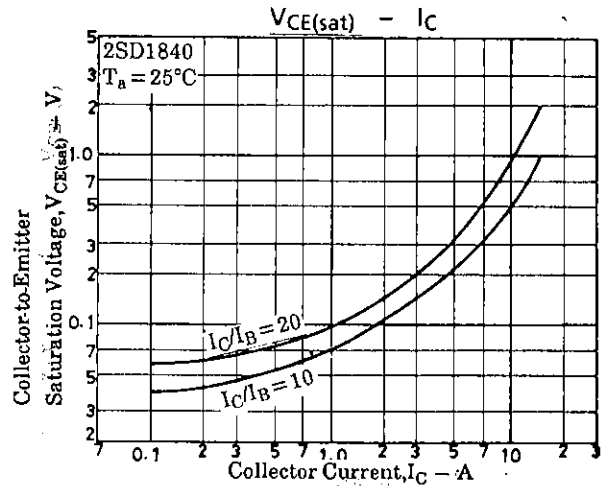
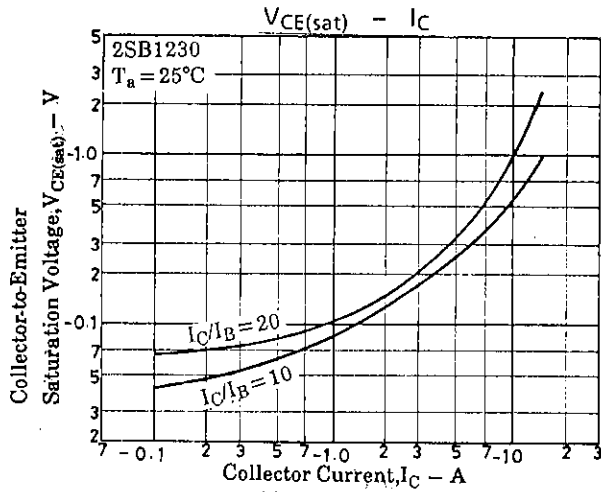


SANYO: TO3PB

2SB1230/2SD1840



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