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| SANYO | No.1049D | 2SA1253/2SC3135 |
| | | PNP/NPN Epitaxial Planar Silicon Transistors |
| High-h_{FE}, AF Amp Applications | | |

Features

- High V_{EBO}
- Wide ASO and high durability against breakdown

() : 2SA1253

Absolute Maximum Ratings/T_a = 25°C

| | | | unit |
|------------------------------|------------------|-------------|------|
| Collector to base voltage | V _{CB0} | (-)60 | V |
| Collector to emitter voltage | V _{CEO} | (-)50 | V |
| Emitter to base voltage | V _{EBO} | (-)15 | V |
| Collector current | I _C | (-)200 | mA |
| Collector Current(Pulse) | I _{CP} | (-)400 | mA |
| Collector dissipation | P _C | 250 | mW |
| Junction temperature | T _j | 150 | °C |
| Storage temperature | T _{stg} | -55 to +150 | °C |

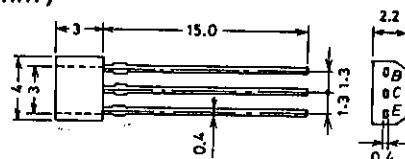
Electrical Characteristics/T_a = 25°C

| | | | min | typ | max | unit |
|---|----------------------|---|-------|--------|--------|------|
| Collector cutoff current | I _{CBO} | V _{CB} = (-)40V, I _E = 0 | | | (-)0.1 | μA |
| Emitter cutoff current | I _{EBO} | V _{EB} = (-)10V, I _C = 0 | | | (-)0.1 | μA |
| DC current gain | h _{FE} | V _{CE} = (-)6V, I _C = (-)1mA | 100* | | 560* | |
| Gain-bandwidth product | f _T | V _{CE} = (-)6V, I _C = (-)1mA | | 100 | | MHz |
| Common base output capacitance | c _{ob} | V _{CB} = (-)6V, f = 1MHz | | (3.8) | | pF |
| Collector to emitter saturation voltage | V _{CE(sat)} | I _C = (-)50mA, I _B = (-)5mA | | (-0.2) | (-)0.5 | V |
| Collector to base breakdown voltage | V _{(BR)CBO} | I _C = (-)10μA, I _E = 0 | (-)60 | | | V |
| Collector to emitter breakdown voltage | V _{(BR)CEO} | I _C = (-)1mA, R _{BE} = ∞ | (-)50 | | | V |
| Emitter to base breakdown voltage | V _{(BR)EBO} | I _E = (-)10μA, I _C = 0 | (-)15 | | | V |

* The 2SA1253/2SC3135 are classified by 1 mA h_{FE} as follows:

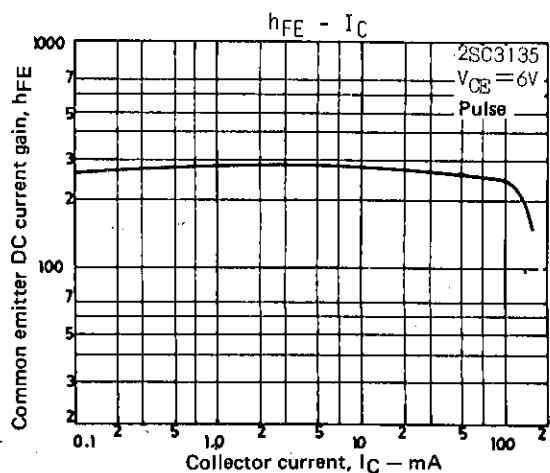
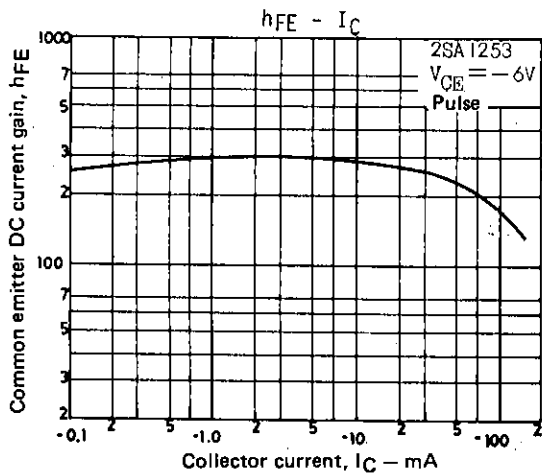
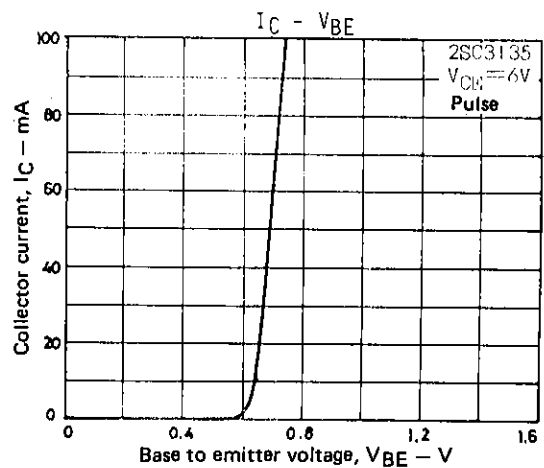
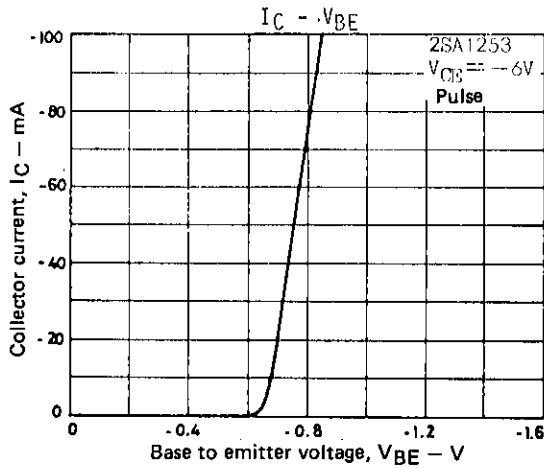
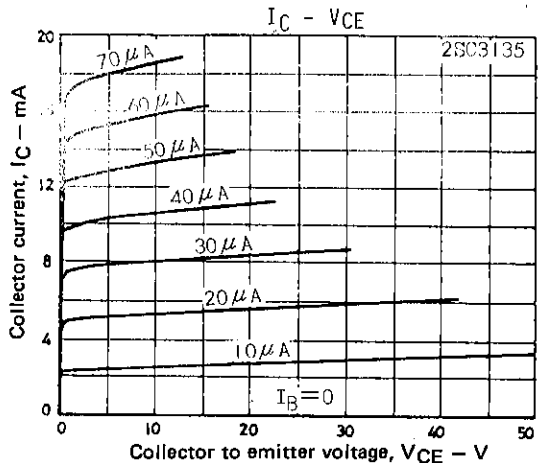
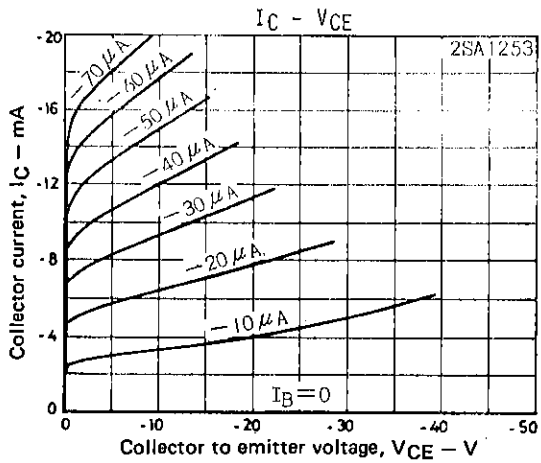
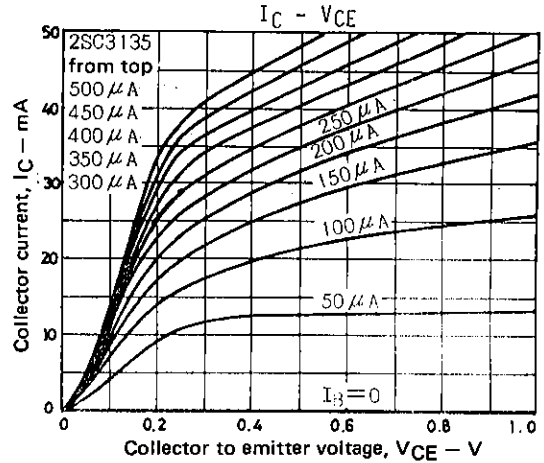
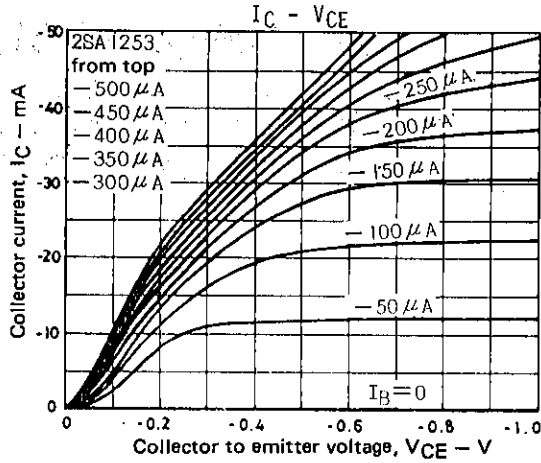
| | | | | | | | |
|-------|-----|-------|-----|-------|-----|-------|-----|
| 100 R | 200 | 140 S | 280 | 200 T | 400 | 280 U | 560 |
|-------|-----|-------|-----|-------|-----|-------|-----|

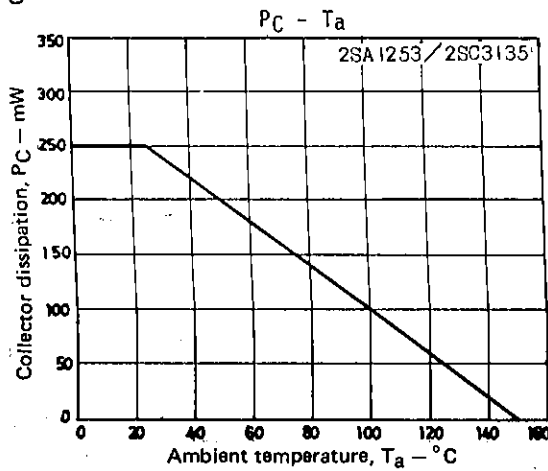
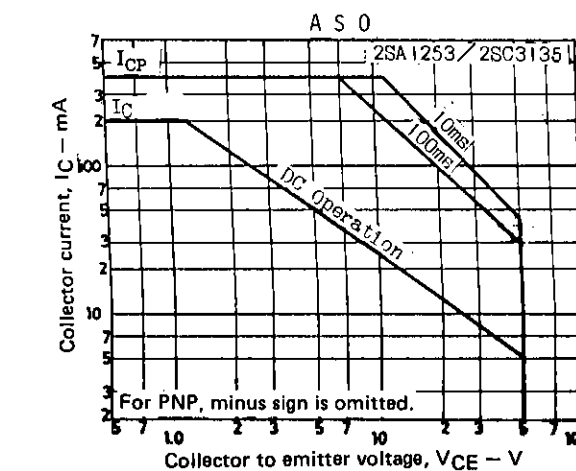
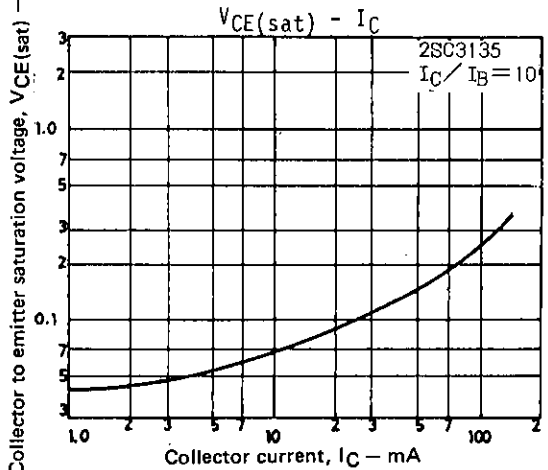
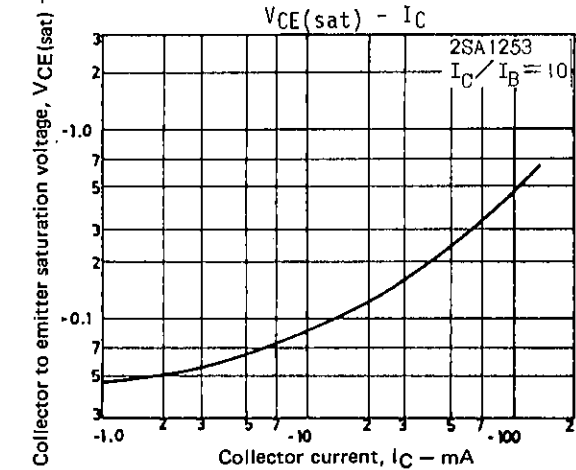
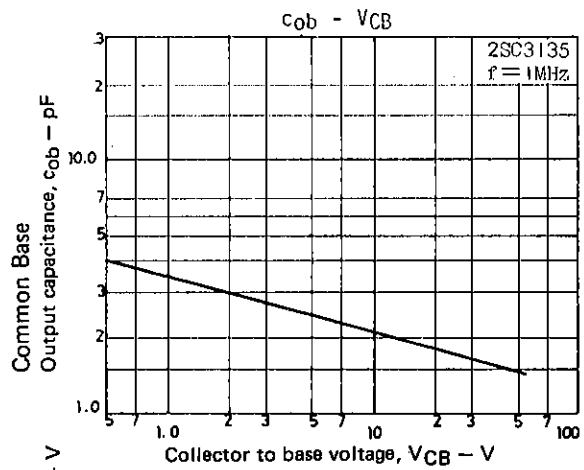
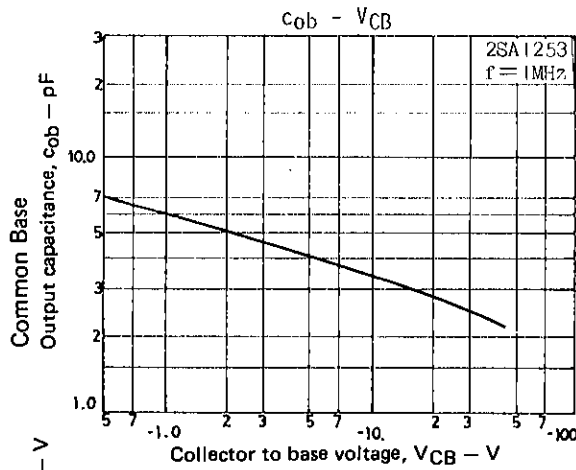
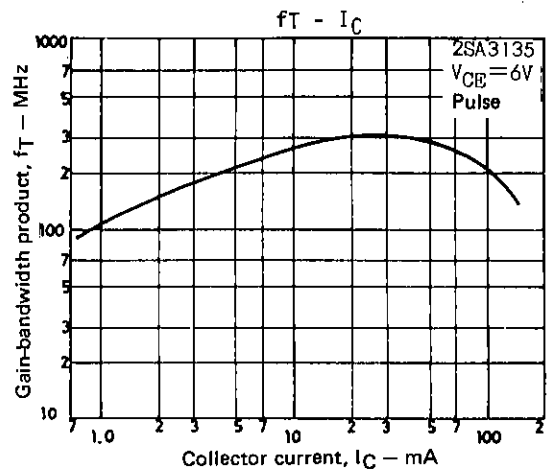
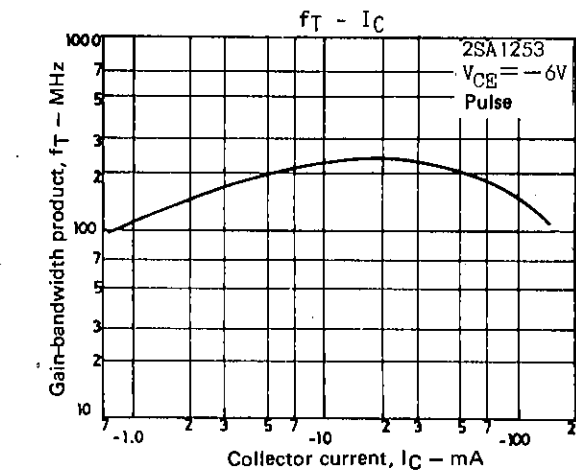
Package Dimensions 2033
(unit: mm)



B: Base
C: Collector
E: Emitter

SANYO: SPA





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