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|--------------|---------|---|
| SANYO | No.3197 | 2SA1753/2SC4577 |
| | | PNP/NPN Epitaxial Planar Silicon Transistors Low-Frequency General-Purpose Amp Applications |

Features

- Small-sized package permitting the 2SA1753/2SC4577-applied sets to be made small and slim.
- Low collector-to-emitter saturation voltage.

(): 2SA1753

Absolute Maximum Ratings at Ta = 25°C

| | | | unit |
|------------------------------|------------------|---------------|------|
| Collector to Base Voltage | V _{CB0} | (-)20 | V |
| Collector to Emitter Voltage | V _{CEO} | (-)15 | V |
| Emitter to Base Voltage | V _{EBO} | (-)5 | V |
| Collector Current | I _C | (-)500 | mA |
| Collector Current(Pulse) | I _{CP} | (-)1 | A |
| Collector Dissipation | P _C | 200 | mW |
| Junction Temperature | T _j | 150 | °C |
| Storage Temperature | T _{stg} | - 55 to + 150 | °C |

Electrical Characteristics at Ta = 25°C

| | | | min | typ | max | unit |
|--------------------------|--------------------------|---|--------|----------|---------|------|
| Collector Cutoff Current | I _{CB0} | V _{CB} = (-)15V, I _E = 0 | | | (-)0.1 | μA |
| Emitter Cutoff Current | I _{EBO} | V _{EB} = (-)4V, I _C = 0 | | | (-)0.1 | μA |
| DC Current Gain | h _{FE} (1) | V _{CE} = (-)2V, I _C = (-)10mA | 135* | | 600* | |
| | h _{FE} (2) | V _{CE} = (-)2V, I _C = (-)400mA | (70)80 | | | |
| Gain-Bandwidth Product | f _T | V _{CE} = (-)2V, I _C = (-)50mA | | 300 | | MHz |
| | | | | (400) | | |
| Output Capacitance | c _{ob} | V _{CB} = (-)10V, f = 1MHz | | (6.5)4.0 | | pF |
| C-E Saturation Voltage | V _{CE(sat)} (1) | I _C = (-)5mA, I _B = (-)0.5mA | | (-)15 | (-35)30 | mV |
| | V _{CE(sat)} (2) | I _C = (-)200mA, I _B = (-)10mA | | 160 | 300 | mV |
| B-E Saturation Voltage | V _{BE(sat)} | I _C = (-)200mA, I _B = (-)10mA | | (-)0.95 | (-)1.2 | V |
| C-B Breakdown Voltage | V _{(BR)CBO} | I _C = (-)10μA, I _E = 0 | (-)20 | | | V |
| C-E Breakdown Voltage | V _{(BR)CEO} | I _C = (-)1mA, R _{BE} = ∞ | (-)15 | | | V |
| E-B Breakdown Voltage | V _{(BR)EBO} | I _E = (-)10μA, I _C = 0 | (-)5 | | | V |

* : The 2SA1753/2SC4577 are classified by 10mA h_{FE} as follows :

| | | | | | | | | |
|-----|---|-----|-----|---|-----|-----|---|-----|
| 135 | 5 | 270 | 200 | 6 | 400 | 300 | 7 | 600 |
|-----|---|-----|-----|---|-----|-----|---|-----|

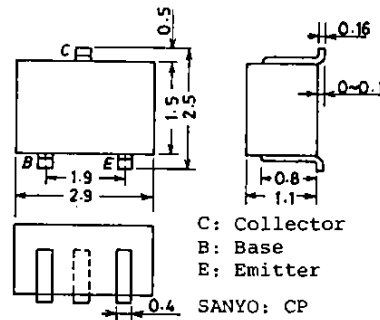
Marking 2SA1753 : ES

2SC4577 : UT

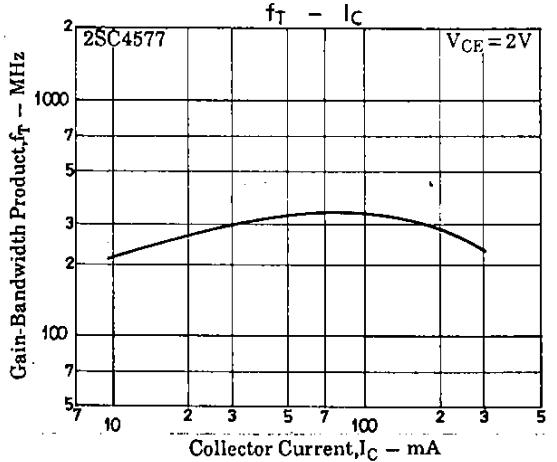
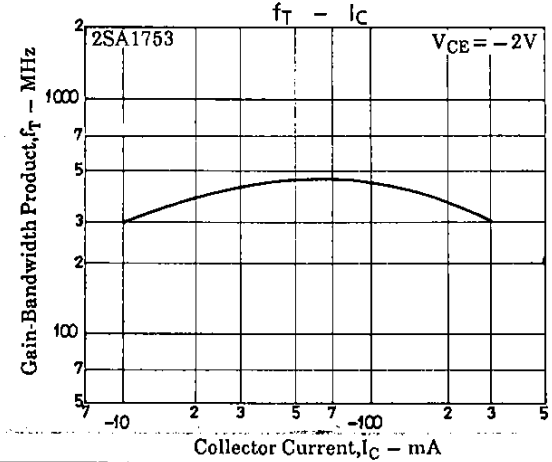
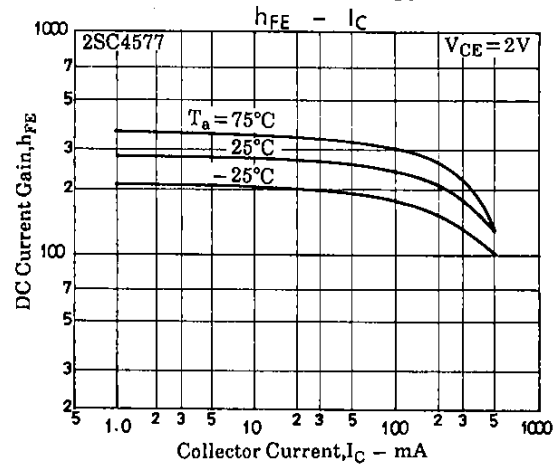
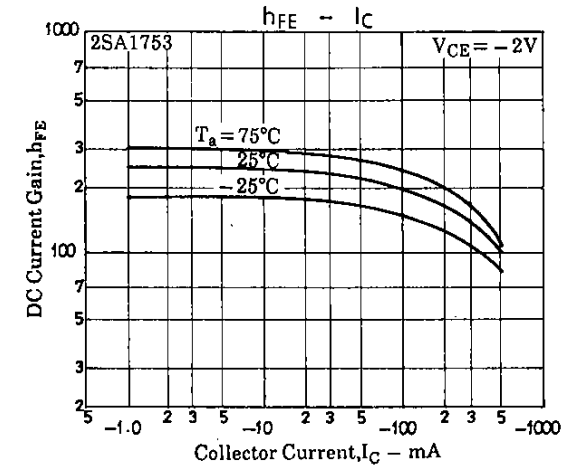
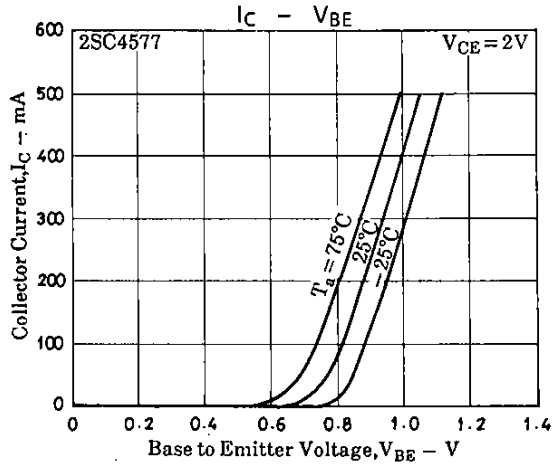
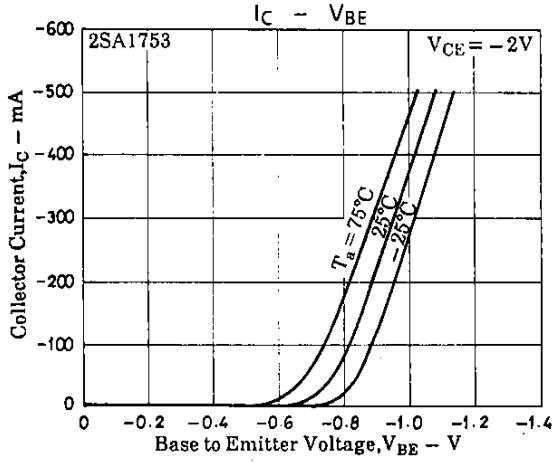
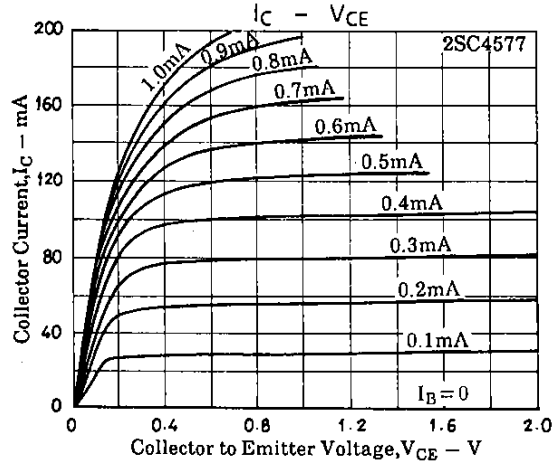
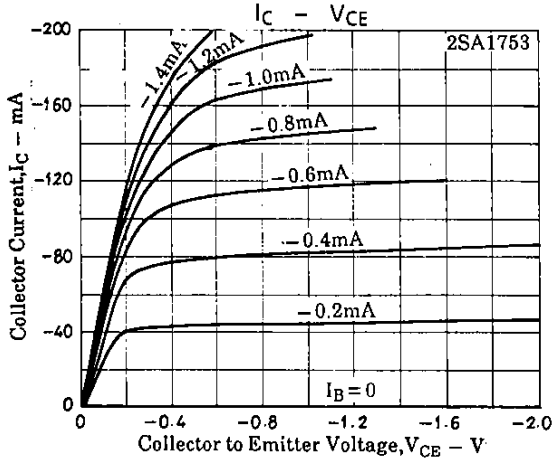
h_{FE} rank : 5,6,7

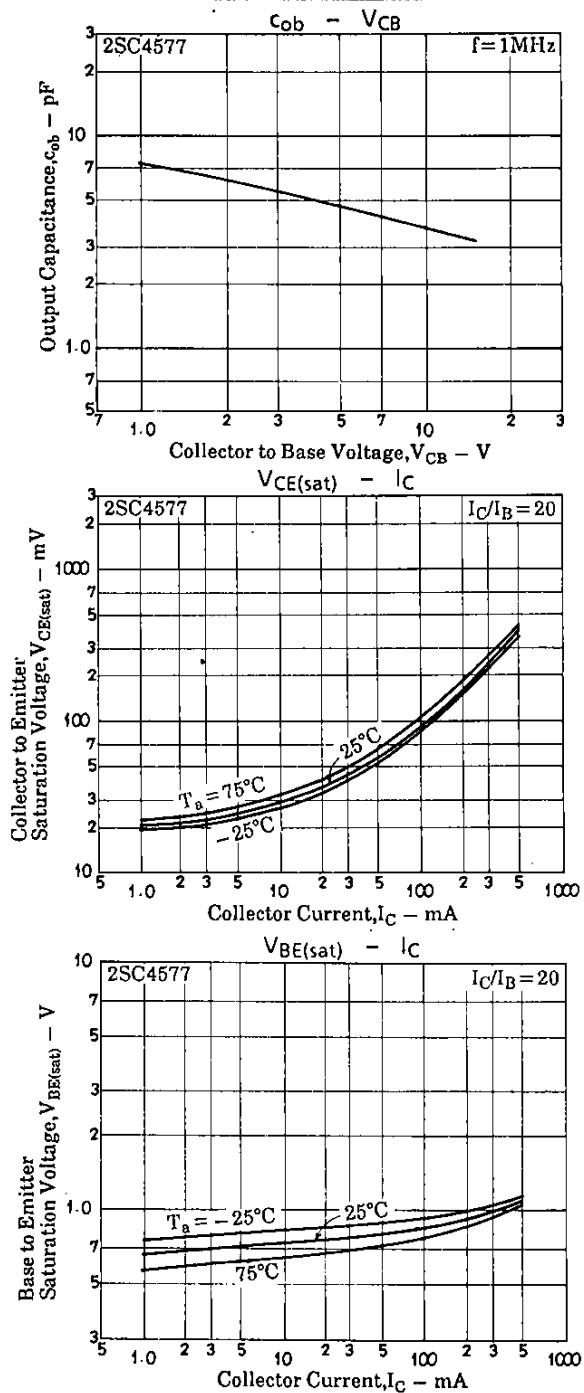
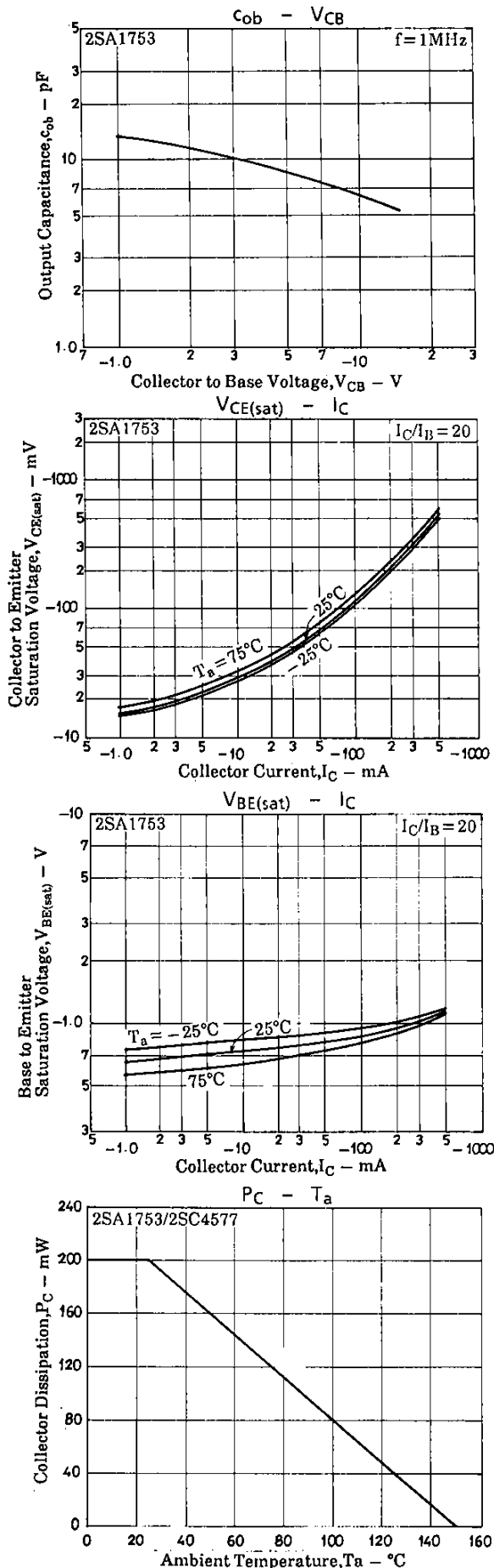
Package Dimensions 2018A

(unit : mm)



2SA1753/2SC4577





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