

Ordering number:EN3190



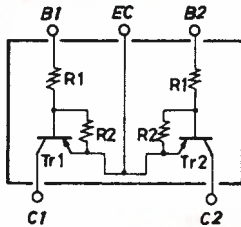
FC121

PNP Epitaxial Planar Silicon Composite Transistor Switching Applications (with Bias Resistance)

Features

- On-chip bias resistances (R1=2.2kΩ, R2=10kΩ).
- Composite type with 2 transistors contained in the CP package currently in use, improving the mounting efficiency greatly.
- The FC121 is formed with two chips, being equivalent to the 2SA1502, placed in one package.
- Excellent in thermal equilibrium and pair capability.

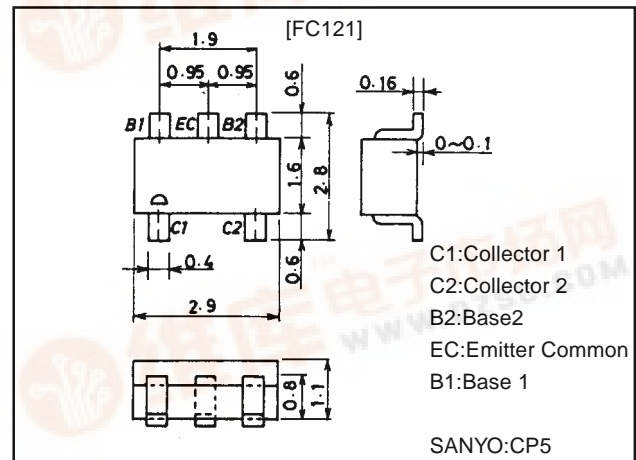
Electrical Connection



Package Dimensions

unit:mm

2066



Specifications

Absolute Maximum Ratings at Ta = 25°C

| Parameter | Symbol | Conditions | Ratings | Unit |
|------------------------------|------------------|------------|-------------|------|
| Collector-to-Base Voltage | V _{CB0} | | -50 | V |
| Collector-to-Emitter Voltage | V _{CEO} | | -50 | V |
| Emitter-to-Base Voltage | V _{EBO} | | -6 | V |
| Collector Current | I _C | | -100 | mA |
| Collector Current (Pulse) | I _{CP} | | -200 | mA |
| Collector Dissipation | P _C | 1 unit | 200 | mW |
| Total Dissipation | P _T | | 300 | mW |
| 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 _{CB0} | V _{CB} =-40V, I _E =0 | | | -0.1 | μA |
| Collector Cutoff Current | I _{CEO} | V _{CE} =-40V, I _B =0 | | | -0.5 | μA |
| Emitter Cutoff Current | I _{EBO} | V _{EB} =-5V, I _C =0 | -315 | -410 | -590 | μA |
| DC Current Gain | h _{FE} | V _{CE} =-5V, I _C =-10mA | 50 | | | |
| Gain-Bandwidth Product | f _T | V _{CE} =-10V, I _C =-5mA | | 200 | | MHz |
| Output Capacitance | C _{ob} | V _{CB} =-10V, f=1MHz | | 5.1 | | pF |
| C-E Saturation Voltage | V _{CE(sat)} | I _C =-10mA, I _B =-0.5mA | | -0.1 | -0.3 | V |
| C-B Breakdown Voltage | V _{(BR)CBO} | I _C =-10μA, I _E =0 | -50 | | | V |
| C-E Breakdown Voltage | V _{(BR)CEO} | I _C =-100μA, R _{BE} =∞ | -50 | | | V |
| Input OFF-State Voltage | V _{I(off)} | V _{CE} =-5V, I _C =-100μA | -0.5 | -0.7 | -0.9 | V |
| Input ON-State Voltage | V _{I(on)} | V _{CE} =-0.2V, I _C =-10mA | -0.7 | -1.0 | -1.8 | V |
| Input Resistance | R1 | | 1.2 | 2.2 | 2.9 | kΩ |
| Resistance Ratio | R1/R2 | | 0.198 | 0.22 | 0.242 | |

Note:The specifications shown above are for each individual transistor.

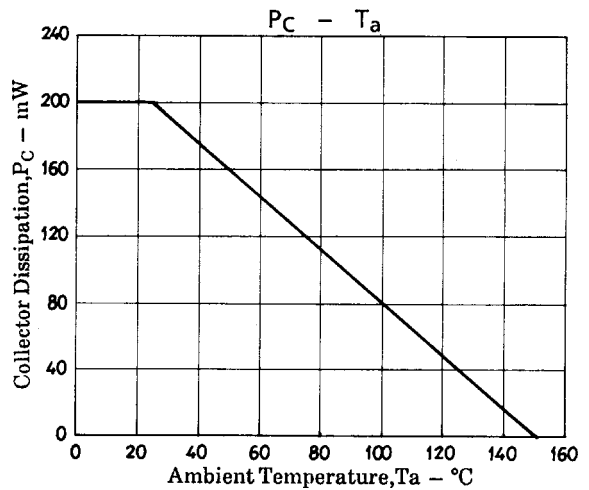
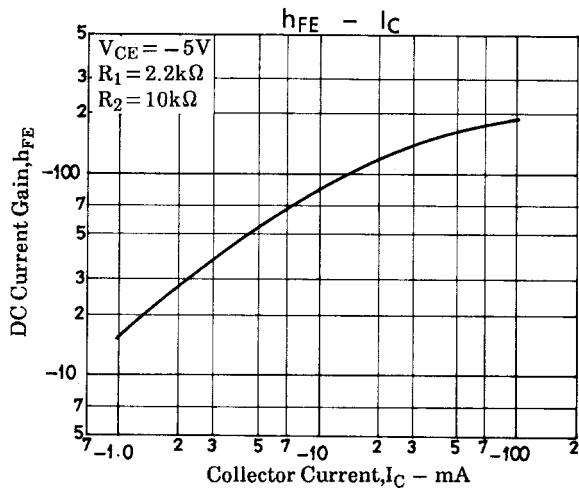
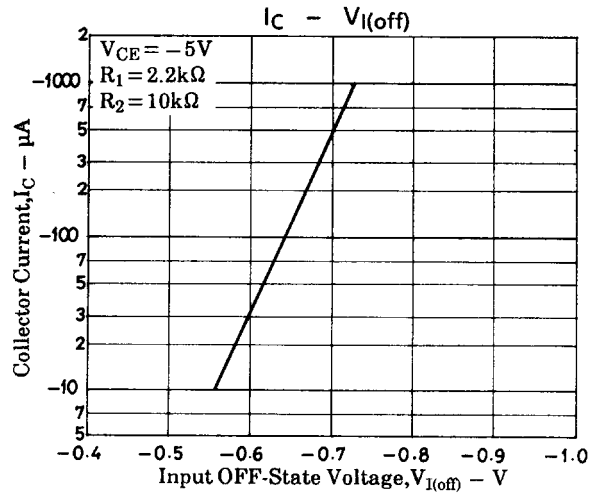
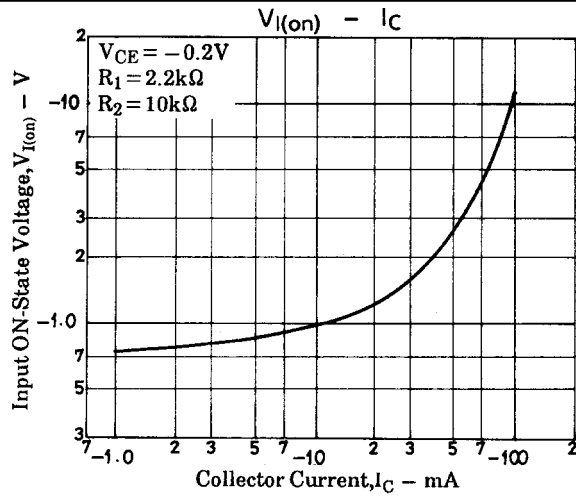
Marking: 121

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FC121



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