



SANYO Semiconductors

DATA SHEET

CPH6074 — For VHF frequency conversion, local oscillation

PNP Epitaxial Planar Silicon Transistor

Features

- High cut-off frequency ($f_T=1.2\text{GHz}$ typ).
- Low Cob (Cob=1.2pF typ).
- The two chips contained are equivalent to the 2SA1778.
- Composite type with 2 devices contained in one package, facilitating high-density mounting.

Specifications

Absolute Maximum Ratings at $T_a=25^\circ\text{C}$

| Parameter | Symbol | Conditions | Ratings | Unit |
|------------------------------|-----------|---|-------------|------------------|
| Collector-to-Base Voltage | V_{CBO} | | -15 | V |
| Collector-to-Emitter Voltage | V_{CEO} | | -15 | V |
| Emitter-to-Base Voltage | V_{EBO} | | -3 | V |
| Collector Current | I_C | | -50 | mA |
| Collector Dissipation | P_C | When mounted on glass epoxy substrate 1unit | 300 | mW |
| Total Power Dissipation | P_T | When mounted on glass epoxy substrate | 500 | mW |
| Junction Temperature | T_J | | 150 | $^\circ\text{C}$ |
| Storage Temperature | T_{stg} | | -55 to +150 | $^\circ\text{C}$ |

Electrical Characteristics at $T_a=25^\circ\text{C}$

| Parameter | Symbol | Conditions | Ratings | | | Unit |
|------------------------------|-----------|---|---------|-----|------|---------------|
| | | | min | typ | max | |
| Collector Cutoff Current | I_{CBO} | $V_{CB} = -15\text{V}, I_E = 0\text{A}$ | | | -0.1 | μA |
| Emitter Cutoff Current | I_{EBO} | $V_{EB} = -2\text{V}, I_C = 0\text{A}$ | | | -0.1 | μA |
| DC Current Gain | h_{FE} | $V_{CE} = -10\text{V}, I_C = -5\text{mA}$ | 60 | | 120 | |
| Gain-Bandwidth Product | f_T | $V_{CE} = -10\text{V}, I_C = -5\text{mA}$ | 0.6 | 1.2 | | GHz |
| Output Capacitance | Cob | $V_{CB} = -10\text{V}, f = 1\text{MHz}$ | | 1.2 | 1.7 | pF |
| Reverse Transfer Capacitance | C_{re} | $V_{CB} = -10\text{V}, f = 1\text{MHz}$ | | 0.9 | | pF |

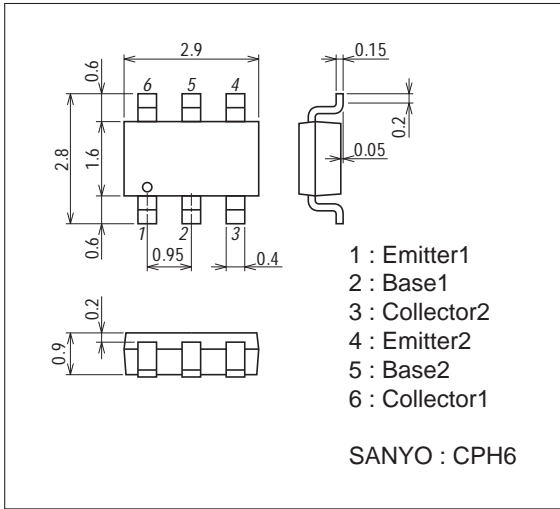
Marking : GQ

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

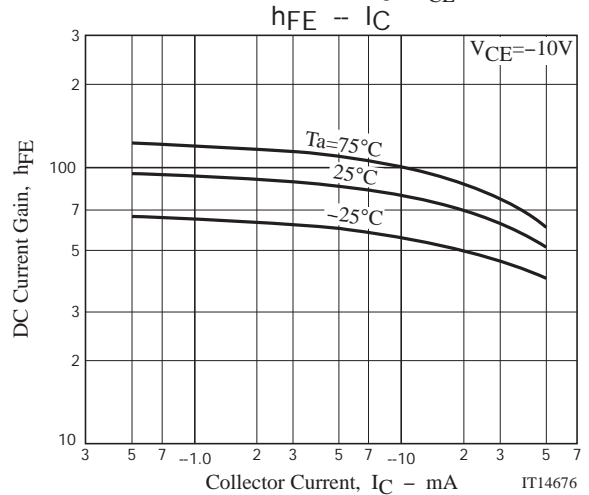
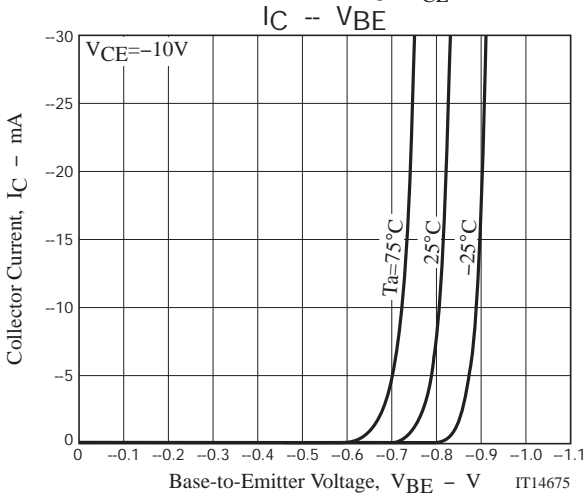
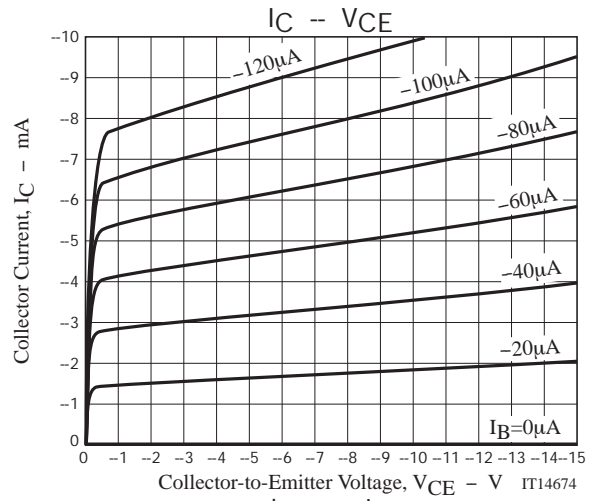
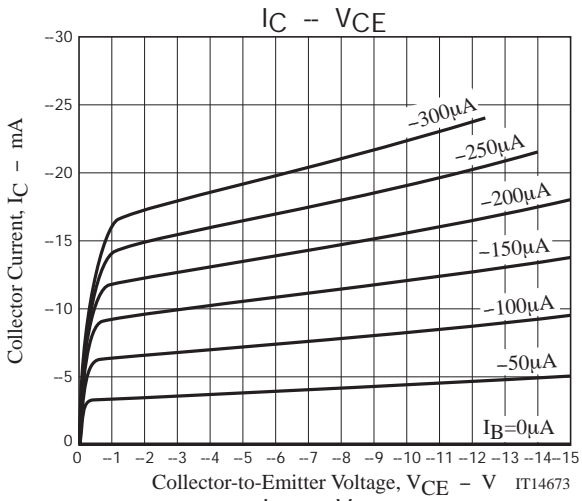
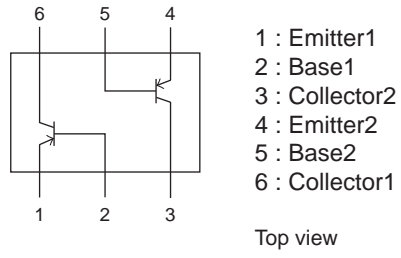
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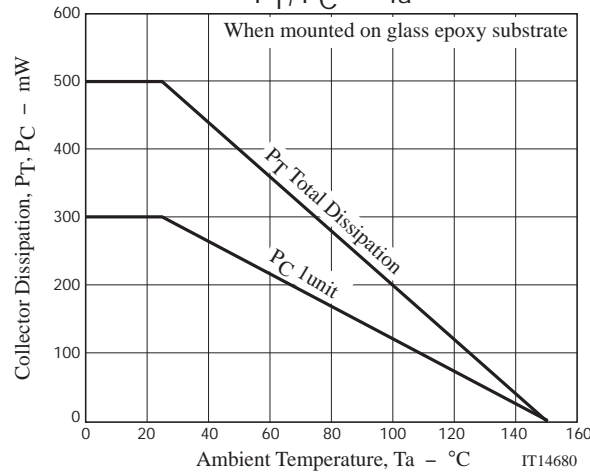
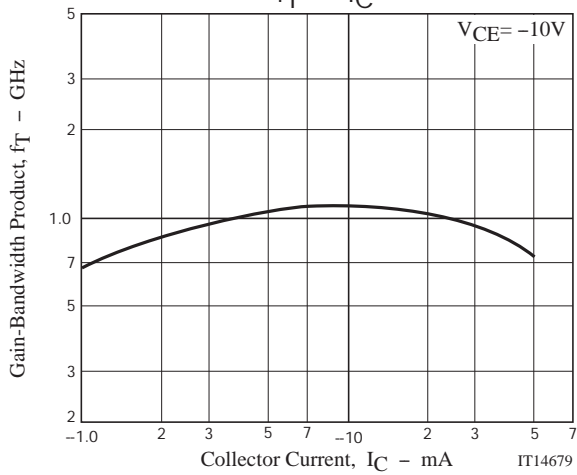
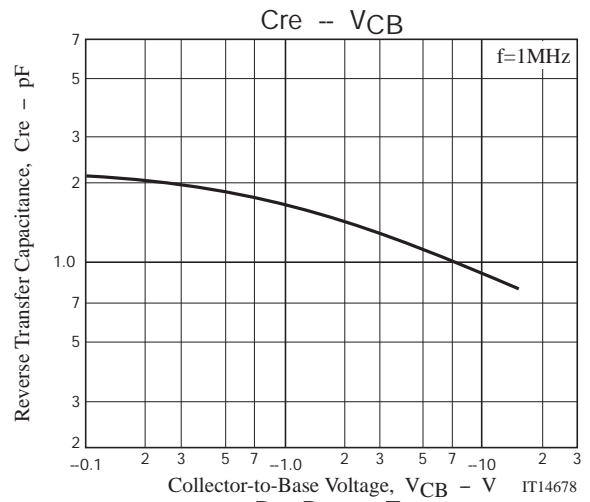
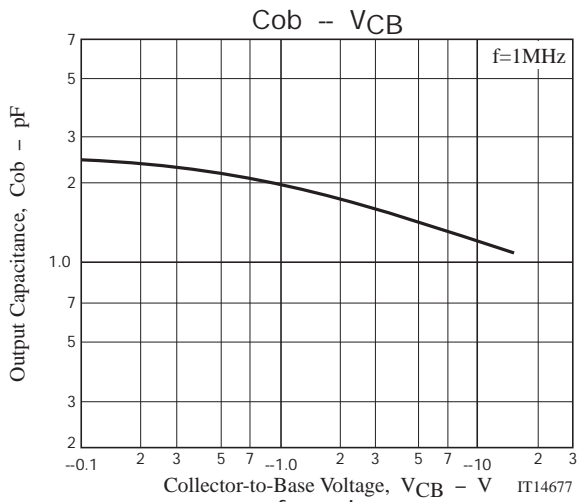
Package Dimensions

unit : mm (typ)
7018A-006



Electrical Connection





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