

Silicon NPN transistor epitaxial type C5955

[Applications]

General purpose amplifier

[Feature]

Low saturation voltage $V_{CE(sat)} = 0.5V$ (Max.) at $I_C = 500mA$, $I_B = 50mA$
 PNP complementary pair with A5955

[Absolute maximum ratings (Ta=25C)]

| Characteristic | Symbol | Maximum ratings | Unit |
|---------------------------|--------|-----------------|------|
| Collector-base voltage | VCBO | 120 | V |
| Collector-emitter voltage | VCEO | 100 | V |
| Emitter-base voltage | VEBO | 6 | V |
| Collector current | IC | 1 | A |
| Junction temperature | Tj | 150 | C |
| Storage temperature | Tstg | -55 to 150 | C |

[Electrical characteristics (Ta=25C)]

| Characteristic | Symbol | Min. | Typ. | Max. | Unit | Conditions |
|--------------------------------------|---------------|------|------|------|------|--|
| Collector-base breakdown voltage | BVCBO | 120 | - | - | V | $I_C = 100\mu A$ |
| Collector-emitter breakdown voltage | BVCEO | 100 | - | - | V | $I_C = 10mA$ |
| Emitter-base breakdown voltage | BVEBO | 6 | - | - | V | $I_E = 100\mu A$ |
| Collector cut-off current | ICBO | - | - | 500 | nA | $V_{CB} = 120V$ |
| Emitter cut-off current | IEBO | - | - | 500 | nA | $V_{EB} = 6V$ |
| DC current gain 1 | hFE 1 | 140 | 220 | 330 | - | $V_{CE} = 2V$, $I_C = 150mA$ |
| DC current gain 2 | hFE 2 | 40 | - | - | - | $V_{CE} = 5V$, $I_C = 1A$ |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | - | - | 0.5 | V | $I_C = 500mA$, $I_B = 50mA$ |
| Base-emitter saturation voltage | $V_{BE(sat)}$ | - | - | 1.1 | V | $I_C = 500mA$, $I_B = 50mA$ |
| Transition frequency | fT | 100 | - | - | MHz | $V_{CE} = 5V$, $I_E = -50mA$ |
| Collector output capacitance | Cob | - | - | 10 | pF | $V_{CB} = 10V$, $f = 1MHz$, $I_E = 0A$ |

Notice 1) These are measured data of transistors assembled by PHENITEC SEMICONDUCTOR Corp. and are for reference only.

Notice 2) The contents described herein are subject to change without notice.

