Transistors

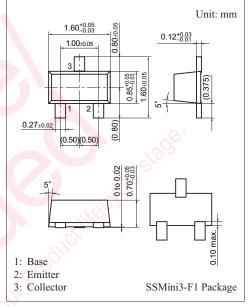
2SA2174J

Silicon PNP epitaxial planar type

For general amplification Complementary to 2SC6054J

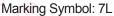
Features

- High forward current transfer ratio h_{FE}
- SS-Mini type package, allowing downsizing of the equipment and automatic insertion through the tape packing.



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

| Parameter | Symbol | Rating | Unit | | | | | |
|---|------------------|-------------|------|--|--|--|--|--|
| Collector-base voltage (Emitter open) | V _{CBO} | -60 | V | | | | | |
| Collector-emitter voltage (Base open) | V _{CEO} | -50 | V | | | | | |
| Emitter-base voltage (Collector open) | V _{EBO} | -7 | v | | | | | |
| Collector current | I _C | -100 | mA | | | | | |
| Peak collector current | I _{CP} | -200 | mA | | | | | |
| Collector power dissipation | P _C | 125 | mW | | | | | |
| Junction temperature | Tj | 125 | °C | | | | | |
| Storage temperature | T _{stg} | -55 to +125 | °C | | | | | |
| | | | | | | | | |
| Electrical Characteristics $T_{r} = 25^{\circ}C + 3^{\circ}C$ | | | | | | | | |



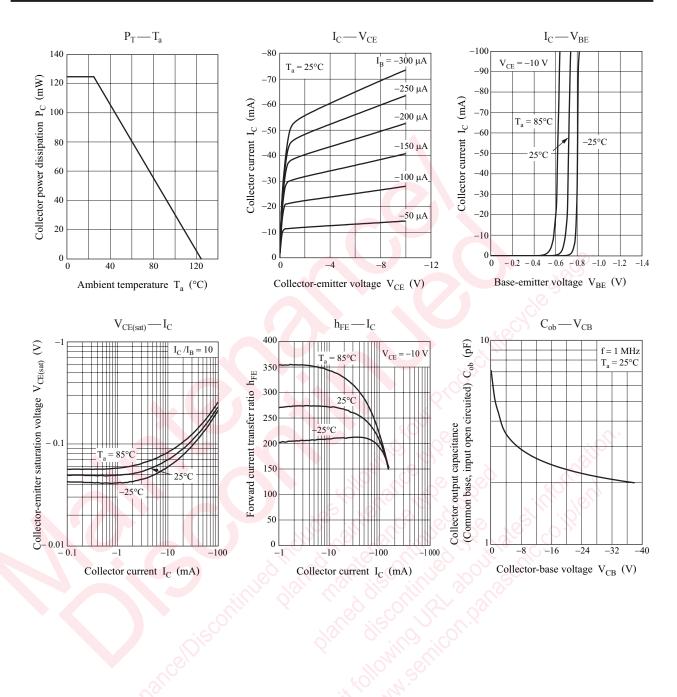
Electrical Characteristics $T_a = 25^{\circ}C \pm 3^{\circ}C$

| Parameter | Symbol | Conditions | Min | Тур | Max | Unit |
|---|----------------------|---|-----|-------|-------|------|
| Collector-base voltage (Emitter open) | V _{CBO} | $I_{\rm C} = -10 \ \mu {\rm A}, I_{\rm E} = 0$ | -60 | | | V |
| Collector-emitter voltage (Base open) | V _{CEO} | $I_{\rm C} = -2 \text{ mA}, I_{\rm B} = 0$ | -50 | | | V |
| Emitter-base voltage (Collector open) | V _{EBO} | $I_{\rm E} = -10 \ \mu \text{A}, I_{\rm C} = 0$ | - 7 | | | V |
| Collector-base cutoff current (Emitter open) | I _{CBO} | $V_{CB} = -20 \text{ V}, I_E = 0$ | | | - 0.1 | μΑ |
| Collector-emitter cutoff current (Base open) | I _{CEO} | $V_{CE} = -10 \text{ V}, I_B = 0$ | | | -100 | μΑ |
| Forward current transfer ratio | h_{FE} | $V_{CE} = -10 \text{ V}, I_C = -2 \text{ mA}$ | 160 | | 460 | |
| Collector-emitter saturation voltage | V _{CE(sat)} | $I_{\rm C} = -100 \text{ mA}, I_{\rm B} = -10 \text{ mA}$ | | - 0.2 | - 0.5 | V |
| Transition frequency | f_{T} | $V_{CB} = -10 \text{ V}, I_E = 1 \text{ mA}, f = 200 \text{ MHz}$ | | 80 | | MHz |
| Collector output capacitance (Common base, input open circuited) | C _{ob} | $V_{CB} = -10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$ | | 2.2 | | pF |

Note) Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

2SA2174J

Panasonic



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