

RT1P14BX SERIES

〈Transistor〉

Transistor With Resistor

For Switching Application

Silicon PNP Epitaxial Type

DESCRIPTION

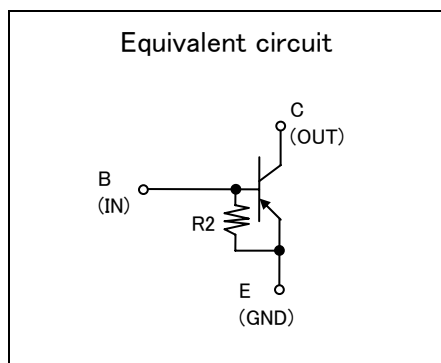
RT1P14BX is a one chip transistor with built-in bias resistor, NPN type is RT1N14BX.

FEATURE

- Built-in bias resistor ($R2=10k\Omega$).

APPLICATION

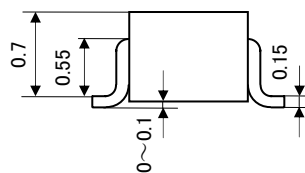
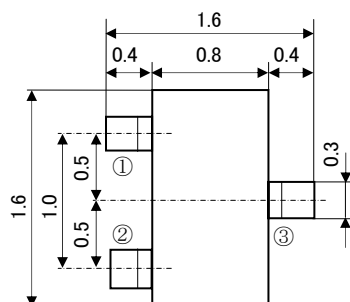
Inverted circuit, switching circuit, interface circuit, driver circuit.



OUTLINE DRAWING

UNIT : mm

RT1P14BU

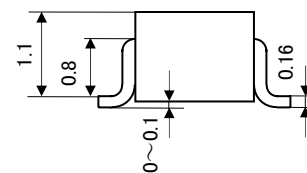
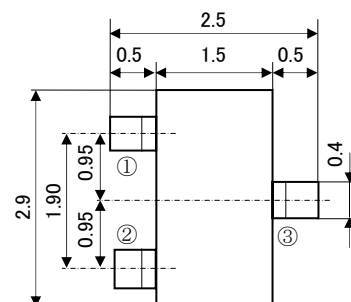


JEITA: —
JEDEC: —

Terminal Connector

- ①: Base
- ②: Emitter
- ③: Collector

RT1P14BC

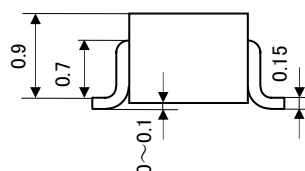
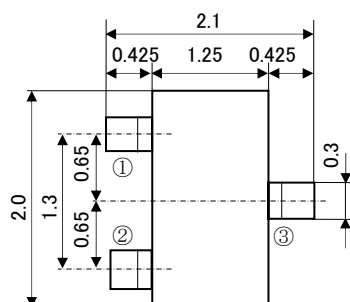


JEITA: SC-59
JEDEC: Similar to TO-236

Terminal Connector

- ①: Base
- ②: Emitter
- ③: Collector

RT1P14BM

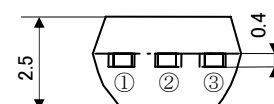
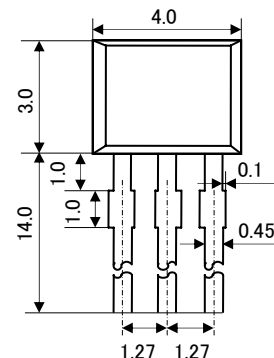


JEITA: SC-70
JEDEC: —

Terminal Connector

- ①: Base
- ②: Emitter
- ③: Collector

RT1P14BS



JEITA: —
JEDEC: —

Terminal Connector

- ①: Emitter
- ②: Collector
- ③: Base

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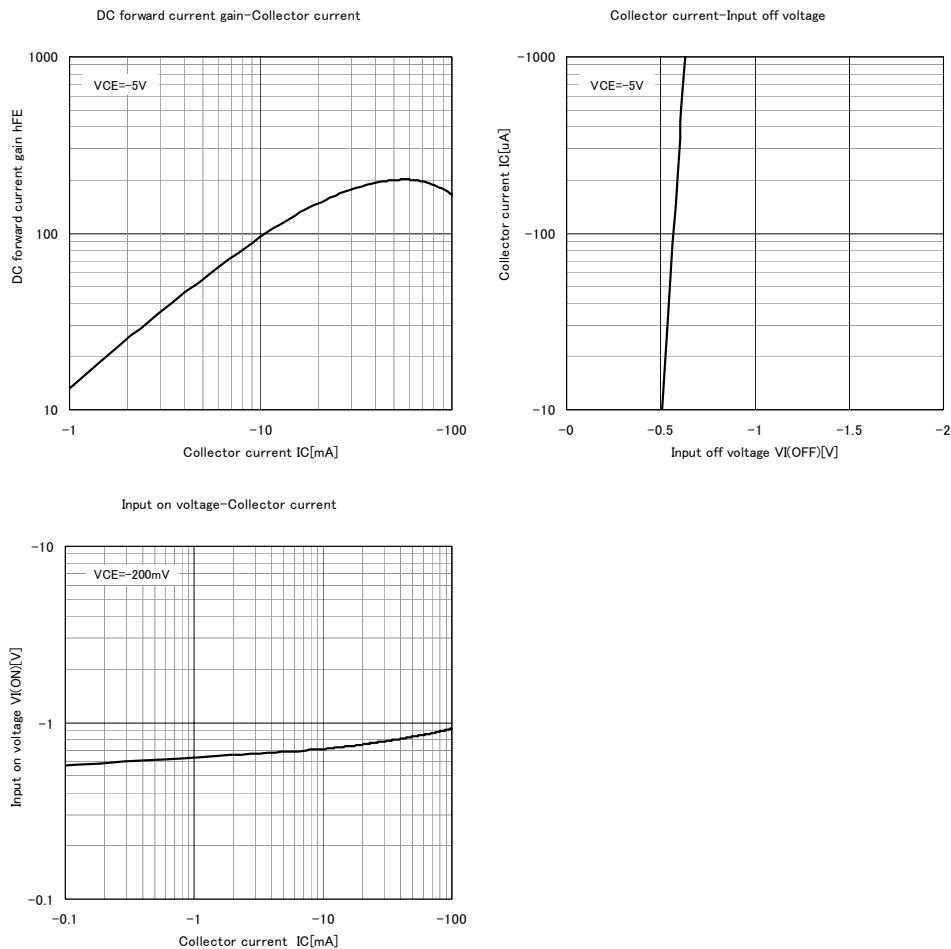
MAXIMUM RATING (Ta=25°C)

| SYMBOL | PARAMETER | RATING | | | | UNIT |
|-----------|--------------------------------|----------|----------|----------|----------|------|
| | | RT1P14BU | RT1P14BM | RT1P14BC | RT1P14BS | |
| V_{CBO} | Collector to Base voltage | -50 | | | | V |
| V_{EBO} | Emitter to Base voltage | -6 | | | | V |
| V_{CEO} | Collector to Emitter voltage | -50 | | | | V |
| I_C | Collector current | -100 | | | | mA |
| I_{CM} | Peak Collector current | -200 | | | | mA |
| P_C | Collector dissipation(Ta=25°C) | 150 | 200 | 450 | mW | |
| T_j | Junction temperature | +150 | +150 | | | °C |
| T_{stg} | Storage temperature | -55~+150 | | -55~+150 | | °C |

ELECTRICAL CHARACTERISTICS (Ta=25°C)

| SYMBOL | PARAMETER | TEST CONDITION | LIMIT | | | UNIT |
|---------------|---------------------------|-------------------------------------|-------|-----|------|-----------|
| | | | MIN | TYP | MAX | |
| $V_{(BR)CEO}$ | C to E break down voltage | $I_C = -100 \mu A, R_{BE} = \infty$ | -50 | | | V |
| I_{CBO} | Collector cut off current | $V_{CB} = -50V, I_E = 0$ | | | -0.1 | μA |
| h_{FE} | DC forward current gain | $V_{CE} = -5V, I_C = -5mA$ | 30 | | | — |
| $V_{CE(sat)}$ | C to E saturation voltage | $I_C = -10mA, I_B = -0.5mA$ | | | -0.3 | V |
| R_2 | Emitter-base resistance | | 7 | 10 | 13 | $k\Omega$ |
| f_T | Gain band width product | $V_{CE} = -6V, I_E = 10mA$ | | 150 | | MHz |

TYPICAL CHARACTERISTICS





Marketing division, Marketing planning department

6-41 Tsukuba, Isahaya, Nagasaki, 854-0065 Japan

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