# imall

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Transistors with Built-in Resistor DRA2114Y0L

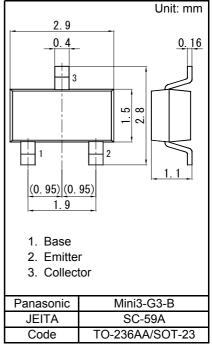
## DRA2114Y0L Silicon PNP epitaxial planar type

For digital circuits Complementary to DRC2114Y

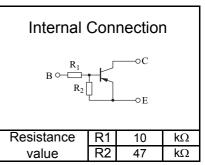
#### Features

- Low collector-emitter saturation voltage Vce(sat)
- Halogen-free / RoHS compliant (EU RoHS / UL-94 V-0 / MSL:Level 1 compliant)
- Marking Symbol: LC
- Packaging

Embossed type (Thermo-compression sealing): 3 000 pcs / reel (standard)



| Parameter                             | Symbol | Rating      | Unit |
|---------------------------------------|--------|-------------|------|
| Collector-base voltage (Emitter open) | VCBO   | -50         | V    |
| Collector-emitter voltage (Base open) | VCEO   | -50         | V    |
| Collector current                     | IC     | -100        | mA   |
| Total power dissipation               | PT     | 200         | mW   |
| Junction temperature                  | Tj     | 150         | °C   |
| Operating ambient temperature         | Topr   | -40 to +85  | °C   |
| Storage temperature                   | Tstg   | -55 to +150 | С°   |



| Electrical Characteristics | Ta = 25 °C ± 3 °C |
|----------------------------|-------------------|
|----------------------------|-------------------|

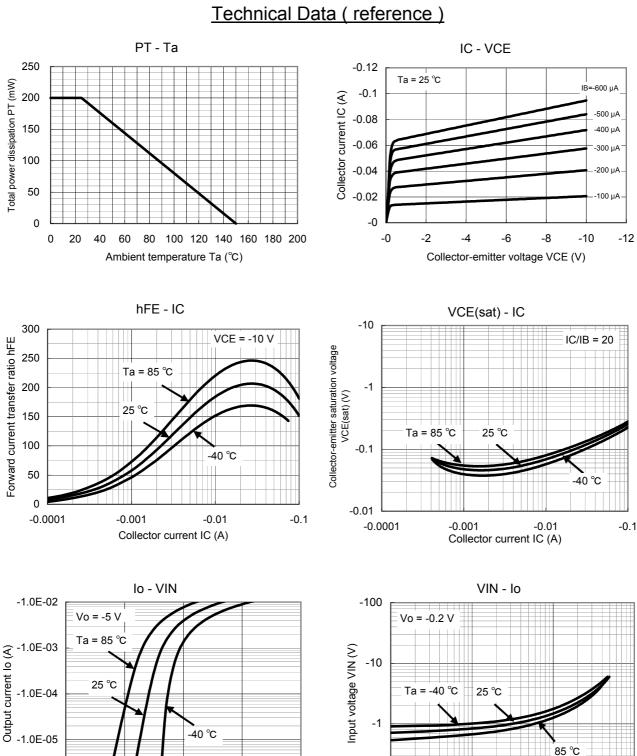
■ Absolute Maximum Ratings Ta = 25 °C

| Parameter                                    | Symbol   | Conditions                | Min  | Typ  | Max   | Unit |
|--|----------|---------------------------|------|------|-------|------|
|  |          |                           |      | Тур  | IVIAX | Unit |
| Collector-base voltage (Emitter open)        | VCBO     | IC = -10 μA, IE = 0       | -50  |      |       | V    |
| Collector-emitter voltage (Base open)        | VCEO     | IC = -2 mA, IB = 0        | -50  |      |       | V    |
| Collector-base cutoff current (Emitter open) | ICBO     | VCB = -50 V, IE = 0       |      |      | -0.1  | μA   |
| Collector-emitter cutoff current (Base open) | ICEO     | VCE = -50 V, IB = 0       |      |      | -0.5  | μA   |
| Emitter-base cutoff current (Collector open) | IEBO     | VEB = -6 V, IC = 0        |      |      | -0.2  | mA   |
| Forward current transfer ratio               | hFE      | VCE = -10 V, IC = -5 mA   | 80   |      |       | -    |
| Collector-emitter saturation voltage         | VCE(sat) | IC = -10 mA, IB = -0.5 mA |      |      | -0.25 | V    |
| Input voltage                                | Vi(on)   | VCE = -0.2 V, IC = -5 mA  | -1.7 |      |       | V    |
|  | Vi(off)  | VCE = -5 V, IC = -100 μA  |      |      | -0.5  | V    |
| Input resistance                             | R1       |                           | -30% | 10   | +30%  | kΩ   |
| Resistance ratio                             | R1/R2    |                           | 0.17 | 0.21 | 0.25  | -    |

Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 Measuring methods for transistors.

**Panasonic** 

Transistors with Built-in Resistor **DRA2114Y0L** 



-0.1

-0.0001

-0.001

Output current Io (A)

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-0.1

-0.01

-1.0E-06

-0

-0.5

-1

Input voltage VIN (V)

-1.5

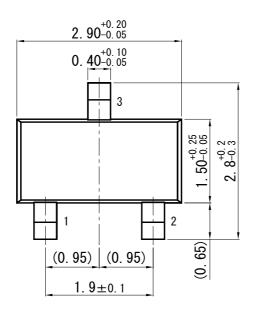
-2

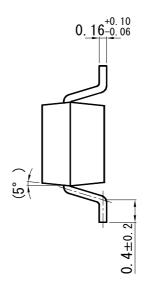


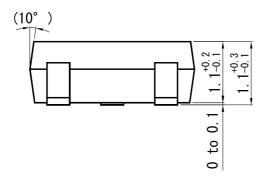
Transistors with Built-in Resistor DRA2114Y0L

# Mini3-G3-B

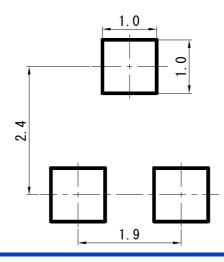
Unit: mm







Land Pattern (Reference) (Unit: mm)



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Established : 2009-10-29 Revised : 2014-01-23

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