



# DRC5115T0L

Silicon NPN epitaxial planar type

For digital circuits

Complementary to DRA5115T

DRC2115T in SMini3 type package

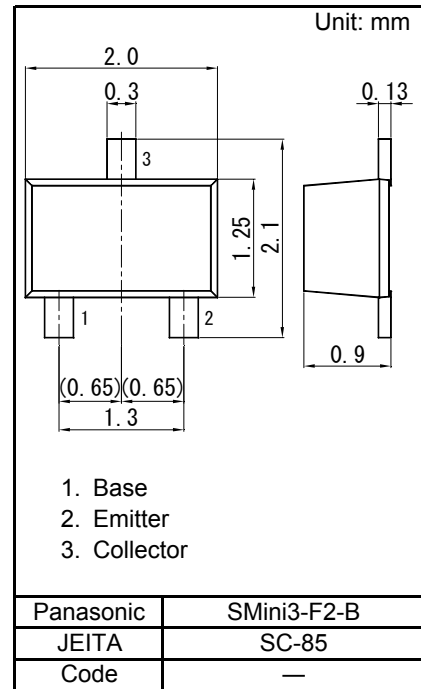
■ Features

- High forward current transfer ratio hFE with excellent linearity
- Low collector-emitter saturation voltage Vce(sat)
- Halogen-free / RoHS compliant  
 (EU RoHS / UL-94 V-0 / MSL:Level 1 compliant)

■ Marking Symbol: NT

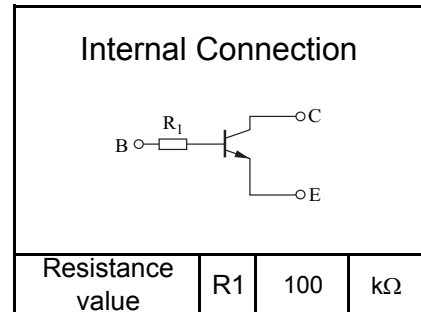
■ Packaging

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



■ Absolute Maximum Ratings Ta = 25 °C

| 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     | 150         | mW   |
| Junction temperature                  | Tj     | 150         | °C   |
| Operating ambient temperature         | Topr   | -40 to +85  | °C   |
| Storage temperature                   | Tstg   | -55 to +150 | °C   |

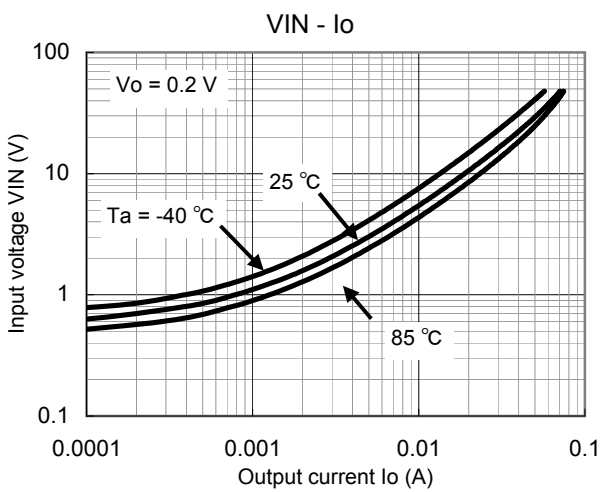
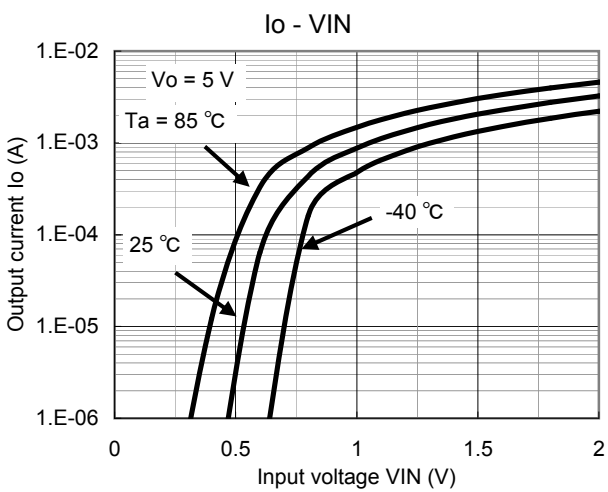
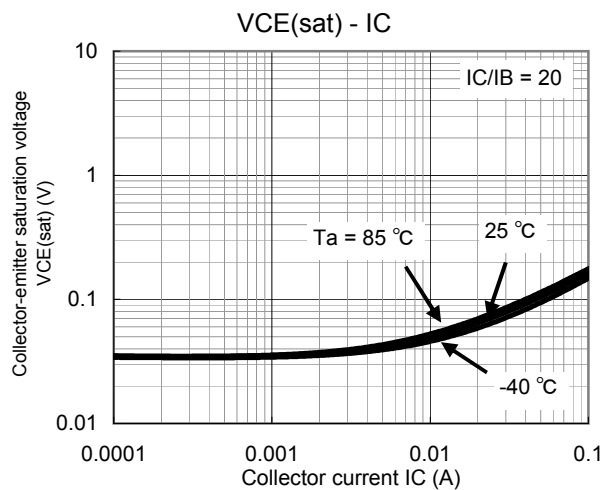
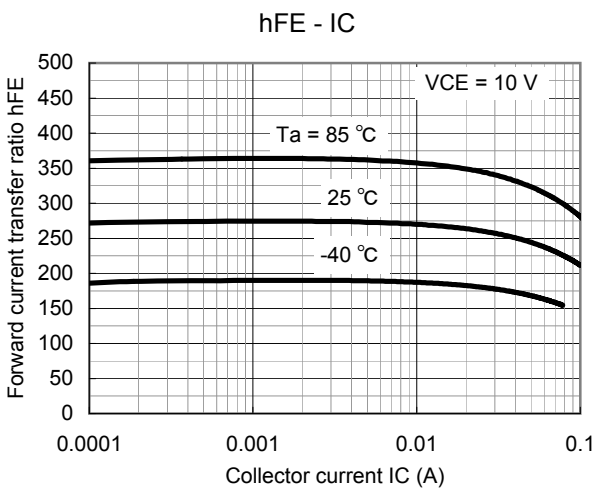
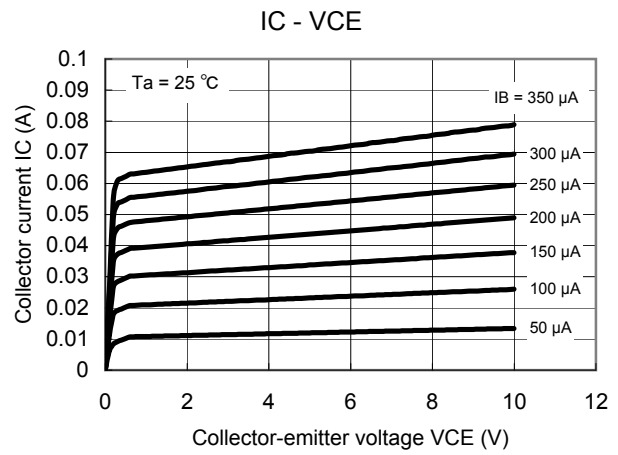
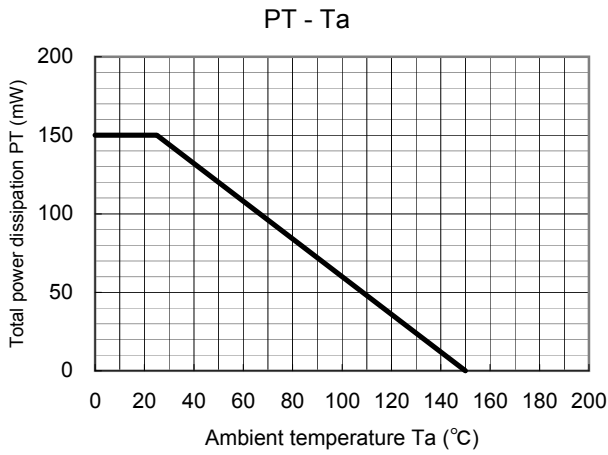


■ Electrical Characteristics Ta = 25 °C ± 3 °C

| Parameter                                    | Symbol   | Conditions              | Min  | Typ | Max  | 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       |      |     | 0.01 | mA   |
| Forward current transfer ratio               | hFE      | VCE = 10 V, IC = 5 mA   | 160  |     | 460  | -    |
| 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  | 4.3  |     |      | V    |
|  | Vi(off)  | VCE = 5 V, IC = 100 μA  |      |     | 0.4  | V    |
| Input resistance                             | R1       |                         | -30% | 100 | +30% | kΩ   |

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

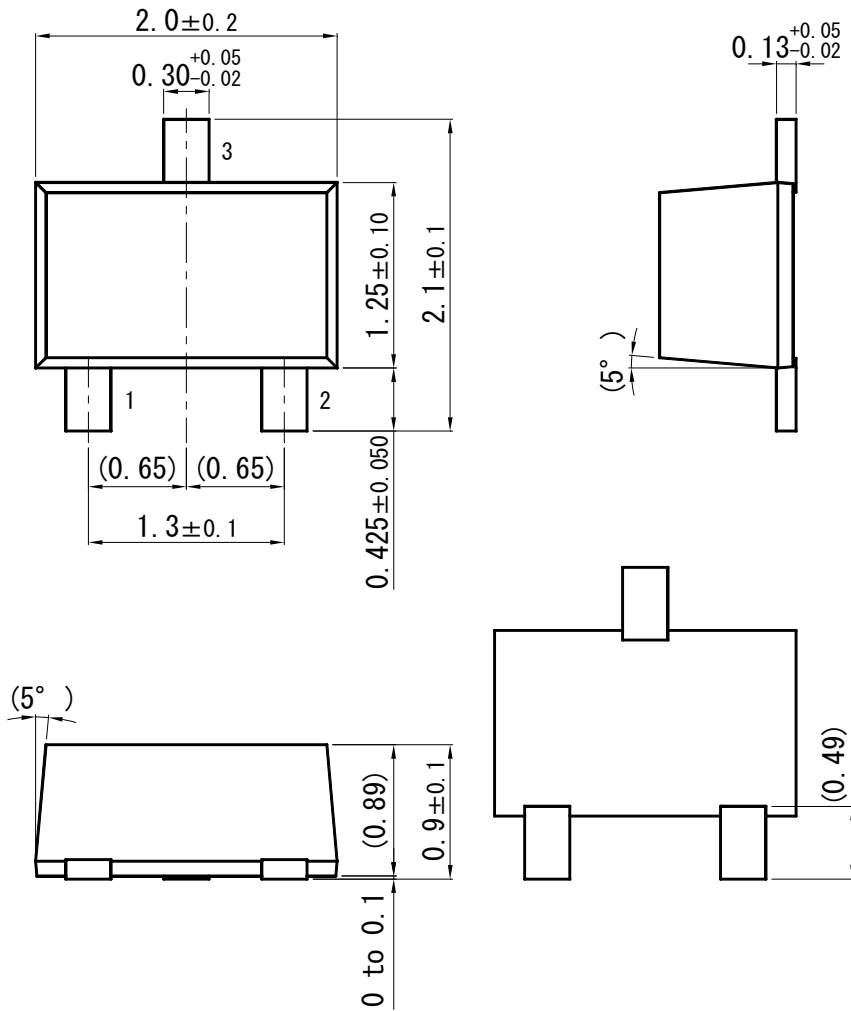
Technical Data ( reference )



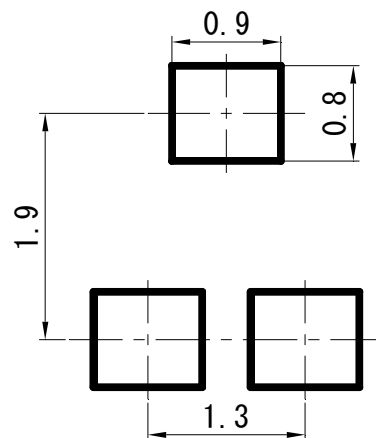


### SMini3-F2-B

Unit: mm



#### ■ Land Pattern (Reference) (Unit: mm)



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