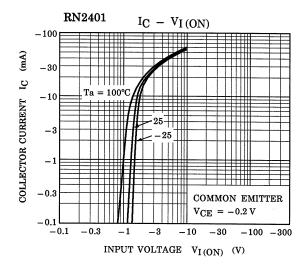
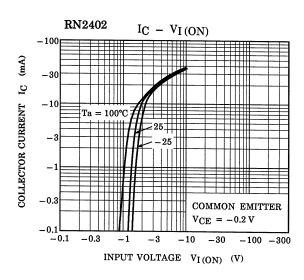
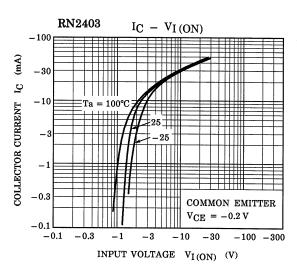


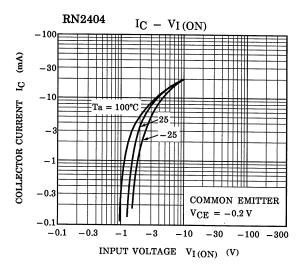
## Electrical Characteristics (Ta = 25°C)

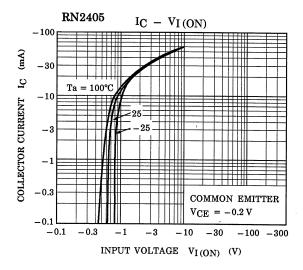
| Characteristic                       |                | Symbol                | Test<br>Circuit | Test Condition   | Min    | Тур.   | Max    | Unit |
|--------------------------------------|----------------|-----------------------|-----------------|--|--------|--------|--------|------|
| Collector cut-off current            | RN2401 to 2406 | I <sub>CBO</sub>      | _               | $V_{CB} = -50 \text{ V}, I_{E} = 0$                      | _      |        | -100   | nA   |
|                                      |                | ICEO                  | _               | $V_{CE} = -50 \text{ V}, I_B = 0$                        | _      | -      | -500   |      |
| Emitter cut-off current              | RN2401         | - I <sub>EBO</sub>    | _               | V <sub>EB</sub> = -10 V, I <sub>C</sub> = 0              | -0.82  | ı      | -1.52  | mA   |
|                                      | RN2402         |                       | _               |  | -0.38  | -      | -0.71  |      |
|                                      | RN2403         |                       | _               |  | -0.17  | -      | -0.33  |      |
|                                      | RN2404         |                       | _               |  | -0.082 | ı      | -0.15  |      |
|                                      | RN2405         |                       | _               | V <sub>EB</sub> = -5 V, I <sub>C</sub> = 0               | -0.078 | ı      | -0.145 |      |
|                                      | RN2406         |                       | _               |  | -0.074 | _      | -0.138 |      |
| DC current gain                      | RN2401         | h <sub>FE</sub>       | _               | V <sub>CE</sub> = -5 V,<br>I <sub>C</sub> = -10 mA       | 30     | _      | _      | _    |
|                                      | RN2402         |                       | _               |  | 50     | _      | _      |      |
|                                      | RN2403         |                       | _               |  | 70     | _      | _      |      |
|                                      | RN2404         |                       | _               |  | 80     | _      | _      |      |
|                                      | RN2405         |                       | _               |  | 80     | _      | _      |      |
|                                      | RN2406         |                       | _               |  | 80     | _      | _      |      |
| Collector-emitter saturation voltage | RN2401 to 2406 | V <sub>CE</sub> (sat) | _               | $I_C = -5 \text{ mA},$<br>$I_B = -0.25 \text{ mA}$       | _      | -0.1   | -0.3   | ٧    |
| Input voltage (ON)                   | RN2401         | VI (ON)               | _               | V <sub>CE</sub> = -0.2 V,<br>I <sub>C</sub> = -5 mA      | -1.1   | _      | -2.0   | V    |
|                                      | RN2402         |                       | _               |  | -1.2   | _      | -2.4   |      |
|                                      | RN2403         |                       | _               |  | -1.3   | _      | -3.0   |      |
|                                      | RN2404         |                       | _               |  | -1.5   | _      | -5.0   |      |
|                                      | RN2405         |                       | _               |  | -0.6   | _      | -1.1   |      |
|                                      | RN2406         |                       | _               |  | -0.7   | _      | -1.3   |      |
| Input voltage (OFF)                  | RN2401 to 2404 | VI (OFF)              | _               | V <sub>CE</sub> = -5 V,<br>I <sub>C</sub> = -0.1 mA      | -1.0   | _      | -1.5   | V    |
|                                      | RN2405, 2406   |                       | _               |  | -0.5   | -      | -0.8   |      |
| Transition frequency                 | RN2401 to 2406 | f <sub>T</sub>        | _               | V <sub>CE</sub> = -10 V,<br>I <sub>C</sub> = -5 mA       | _      | 200    | _      | MHz  |
| Collector output capacitance         | RN2401 to 2406 | C <sub>ob</sub>       | _               | V <sub>CB</sub> = -10 V, I <sub>E</sub> = 0<br>f = 1 MHz | _      | 3      | 6      | pF   |
| Input resistor                       | RN2401         | R1                    | _               | _  | 3.29   | 4.7    | 6.11   | - kΩ |
|                                      | RN2402         |                       | _               |  | 7      | 10     | 13     |      |
|                                      | RN2403         |                       | _               |  | 15.4   | 22     | 28.6   |      |
|                                      | RN2404         |                       | _               |  | 32.9   | 47     | 61.1   |      |
|                                      | RN2405         |                       | _               |  | 1.54   | 2.2    | 2.86   |      |
|                                      | RN2406         |                       | _               |  | 3.29   | 4.7    | 6.11   |      |
| Resistor ratio                       | RN2401 to 2404 | R1/R2                 | _               | _  | 0.9    | 1.0    | 1.1    | _    |
|                                      | RN2405         |                       | _               |  | 0.0421 | 0.0468 | 0.0515 |      |
|                                      | RN2406         |                       | _               |  | 0.09   | 0.1    | 0.11   |      |

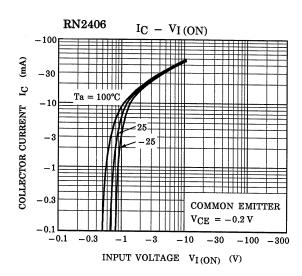


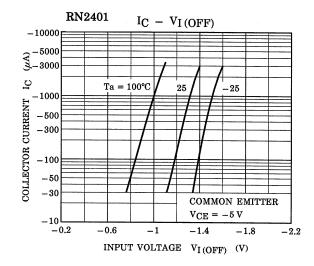


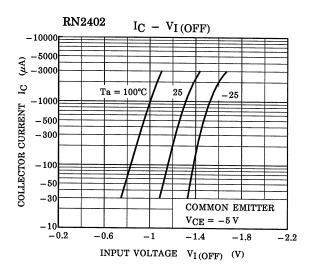


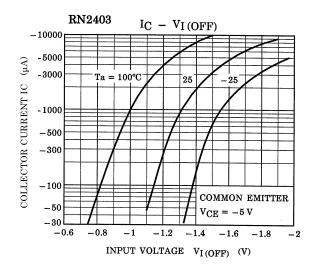


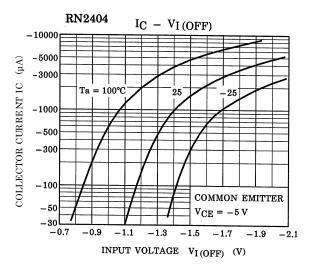


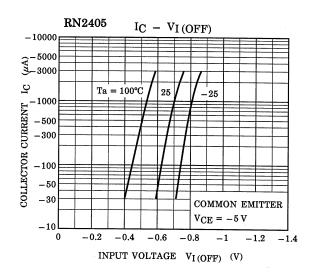


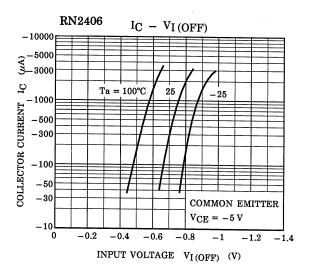


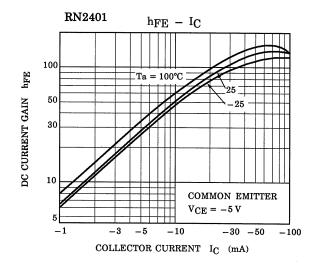


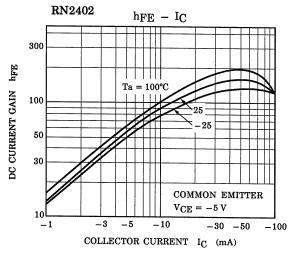


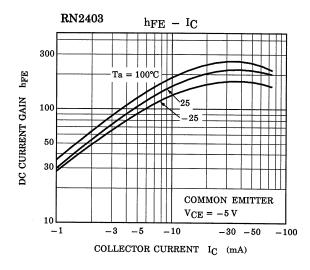


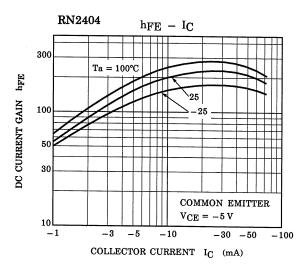


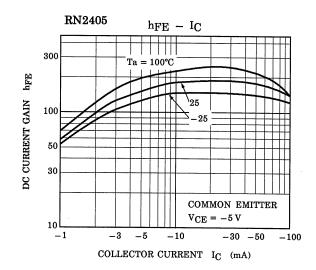


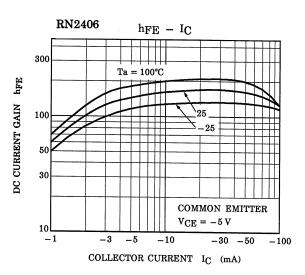




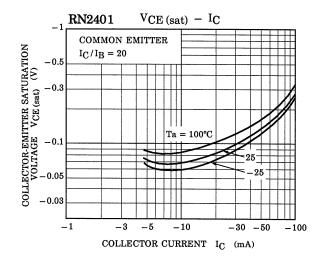


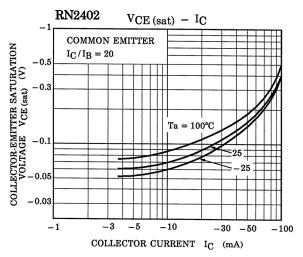


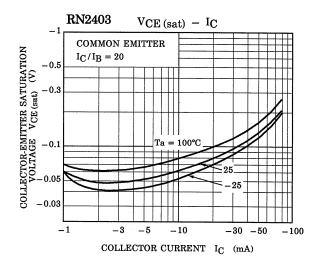


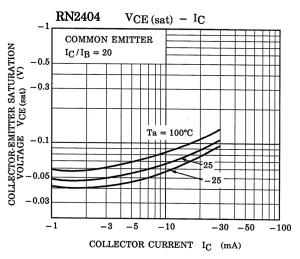


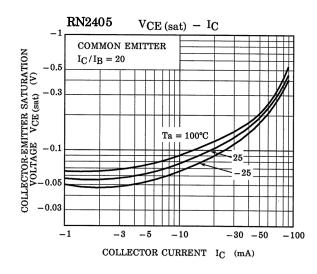
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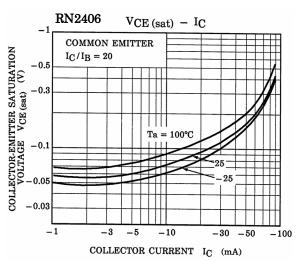














| Type Name | Marking        |
|-----------|----------------|
| RN2401    | Type Name Y A  |
| RN2402    | Type Name  Y B |
| RN2403    | Type Name Y C  |
| RN2404    | Type Name Y D  |
| RN2405    | Type Name YE   |
| RN2406    | Type Name  Y F |

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