

# FOR USE BY ELECTRICIANS OVERSEAS:

**最新トランジスタ規格表** (New Transistor Manual) lists all the transistors registered with the Electronic Industries Association of Japan (EIAJ), arranged in a manner easy to look up. We hope that you will make full use of the data provided in this manual by referring to the Japanese-English translation key given below.

| 型名 | 社名 | 用途 | 構造 | 最大定格 ( $T_a=25^{\circ}\text{C}$ ) |                  |               |               |                                 | 電気的特性 ( $T_a=25^{\circ}\text{C}$ ) |             |                                |                     |                        |                                        |                                                |                                             |                                            |                  | 備考                                                   |
|----|----|----|----|-----------------------------------|------------------|---------------|---------------|---------------------------------|------------------------------------|-------------|--------------------------------|---------------------|------------------------|----------------------------------------|------------------------------------------------|---------------------------------------------|--------------------------------------------|------------------|------------------------------------------------------|
|    |    |    |    | $V_{ceo}$<br>(V)                  | $V_{cso}$<br>(V) | $I_c$<br>(mA) | $P_c$<br>(mW) | $T_j$<br>( $^{\circ}\text{C}$ ) | $I_{cso}$ 最大値<br>( $\mu\text{A}$ ) | $V_{ce(V)}$ | 直流又はパルス $h_{FE}$<br>$I_c$ (mA) | バイアス<br>$V_{ce(V)}$ | $h_{FE}$<br>$h_{FE}$ * | $h_{ie}$<br>$h_{ie}$ *<br>( $\Omega$ ) | $h_{re}$<br>$h_{re}$ *<br>( $\times 10^{-4}$ ) | $h_{oe}$<br>$h_{oe}$ *<br>( $\mu\text{S}$ ) | $f_{\alpha b}$<br>$f_{\alpha b}$ *<br>(Mc) | $C_{ob}$<br>(pF) | $r_{bb'}$<br>$h_{ie}(\text{real})$ *<br>( $\Omega$ ) |
| 1  | 2  | 3  | 4  | 5                                 |                  |               |               |                                 | 6                                  | 7           | 8                              |                     |                        |                                        |                                                | 9                                           | 10                                         | 11               | 12                                                   |

- 1 TYPE NUMBER
- 2 ORIGINAL MANUFACTURER
- 3 USES
- 4 MATERIAL AND STRUCTURE
- 5 MAXIMUM RATINGS
- 6  $I_{cso}$  MAXIMUM VALUE AND  $V_{ce}$  VALUE (CRITERIA FOR MEASURING  $I_{cso}$ )
- 7 STANDARD VALUE OF DC/PULSE  $h_{FE}$  AND  $V_{ce}$ ,  $I_c$  (CRITERIA FOR MEASURING DC/PULSE  $h_{FE}$ )
- 8 STANDARD VALUE OF  $h$  PARAMETERS AND BIAS  $V_{ce}$ ,  $I_c$  (CRITERIA FOR MEASURING  $h$  PARAMETERS)

\* INDICATES VALUE IN GROUNDED-BASE OPERATION, OTHERWISE VALUE IN EMITTER-GROUNDED OPERATION.

- 9  $f_{\alpha b}$  OF RF CHARACTERISTIC, EXCEPT IN CASE OF \* WHICH INDICATES VALUE OF  $f_T$ .
- 10  $C_{ob}$  AND  $r_{bb'}$  OF RF CHARACTERISTICS EXCEPT IN CASE OF \* IN  $r_{bb'}$  COLUMN WHICH INDICATES VALUE OF  $h_{ie}(\text{real})$
- 11 OUTLINE
- 12 REMARKS

: とコンプリ: COMPLEMENTARY TO .....

| 型 名     | 社 名  | 用 途        | 構 造    | 最大 定 格 (T <sub>a</sub> = 25℃) |                         |                        |                                |                       | 電 気 的 特 性 (T <sub>a</sub> = 25℃) |                     |             |      |                 |                                             |                                                              |                                              |                                                                            |                         |                                                   |       |                         |                        | 外 形              | 備 考             |
|---------|------|------------|--------|-------------------------------|-------------------------|------------------------|--------------------------------|-----------------------|----------------------------------|---------------------|-------------|------|-----------------|---------------------------------------------|--------------------------------------------------------------|----------------------------------------------|----------------------------------------------------------------------------|-------------------------|---------------------------------------------------|-------|-------------------------|------------------------|------------------|-----------------|
|         |      |            |        | V <sub>CB0</sub><br>(V)       | V <sub>EB0</sub><br>(V) | I <sub>C</sub><br>(mA) | P <sub>C</sub><br>(mW)         | T <sub>J</sub><br>(℃) | I <sub>CB0</sub> 最大値<br>(μA)     | V <sub>CB</sub> (V) | 直流又はパルス hFE | バイアス | h <sub>FE</sub> | h <sub>ie</sub><br>h <sub>ie</sub> *<br>(Ω) | h <sub>re</sub><br>h <sub>re</sub> *<br>(×10 <sup>-4</sup> ) | h <sub>oe</sub><br>h <sub>oe</sub> *<br>(μU) | f <sub>αβ</sub><br>f <sub>T</sub><br>(Mc)                                  | C <sub>ob</sub><br>(pF) | r <sub>bb</sub><br>h <sub>ie</sub> (real)*<br>(Ω) |       |                         |                        |                  |                 |
| 2SA743  | 日 立  | RF. PA     | Si. E  | -50                           | -4                      | -1A                    | 8 W<br>(T <sub>c</sub> =25℃)   | 150                   | -1mA                             | -50                 | 120         | -4   | -50             | -4                                          | 30                                                           |                                              |                                                                            |                         | 120 *                                             | 30    |                         | 160                    | 2SC1212<br>とコンプリ |                 |
| " 744   | サンケン | PA         | Si.TMe | -80                           | -6                      | -8A                    | 70W<br>(T <sub>c</sub> =25℃)   | 150                   | -1mA                             | -80                 | 60          | -4   | -3A             | -12                                         | 500                                                          |                                              |                                                                            |                         | 15 *                                              | 220   | 10 *                    | 102                    | 2SC1402<br>とコンプリ |                 |
| " 745   | "    | "          | "      | -100                          | -6                      | -8A                    | 70W<br>(T <sub>c</sub> =25℃)   | 150                   | -1mA                             | -100                | 60          | -4   | -3A             | -12                                         | 500                                                          |                                              |                                                                            |                         | 15 *                                              | 220   | 10 *                    | 102                    | 2SC1403<br>とコンプリ |                 |
| " 746   | "    | "          | "      | -80                           | -6                      | -10A                   | 100W<br>(T <sub>c</sub> =25℃)  | 150                   | -1mA                             | -80                 | 60          | -4   | -3A             | -12                                         | 500                                                          |                                              |                                                                            |                         | 15 *                                              | 255   | 10 *                    | 102                    | 2SC1115<br>とコンプリ |                 |
| " 747   | "    | "          | "      | -120                          | -6                      | -10A                   | 100W<br>(T <sub>c</sub> =25℃)  | 150                   | -1mA                             | -120                | 60          | -4   | -3A             | -12                                         | 500                                                          |                                              |                                                                            |                         | 15 *                                              | 255   | 10 *                    | 102                    | 2SC1116<br>とコンプリ |                 |
| " 748   | 松 下  | RF. PA     | Si. EP | -70                           | -5                      | -2A                    | 15W<br>(T <sub>c</sub> =25℃)   | 150                   | -1                               | -40                 | 130         | -5   | -1A             | -5                                          | 500                                                          |                                              |                                                                            |                         | 150 *                                             | 50    | 3 *                     | 268                    | 2SC1398<br>とコンプリ |                 |
| ★ " 749 | "    | SW         | "      | -100                          | -5                      | -50                    | 250                            | 125                   | -0.1                             | -50                 | 80          | -1   | -20             | -10                                         | 10                                                           |                                              | t <sub>r</sub> < 350nS, t <sub>f</sub> < 150nS<br>t <sub>sig</sub> < 200nS | >40 *                   | 3.5                                               |       | 138                     |                        |                  |                 |
| ★ " 750 | 日 電  | RF. AF. LN | Si. E  | -50                           | -5                      | -50                    | 250                            | 125                   | -0.05                            | -50                 | 450         | -3   | -0.5            | -6                                          | 1                                                            | 450                                          | 11k                                                                        | 15                      | 50                                                | 100 * | 8                       | 20 *                   | 138              |                 |
| ★ " 751 | 松 下  | PA         | Si. EP | -30                           | -5                      | -1A                    | 1 W                            | 135                   | -0.1                             | -20                 | 160         | -10  | -500            | -10                                         | 50                                                           |                                              |                                                                            |                         | 200 *                                             | 20    | 3.5 *                   | 173                    | 2SC1406<br>とコンプリ |                 |
| " 752   | "    | "          | "      | -60                           | -5                      | -1A                    | 1 W                            | 135                   | -0.1                             | -20                 | 160         | -10  | -500            | -10                                         | 50                                                           |                                              |                                                                            |                         | 200 *                                             | 20    | 3.5 *                   | 173                    | 2SC1407<br>とコンプリ |                 |
| ★ " 753 | 日 立  | "          | Si. T  | -140                          | -5                      | -10A                   | 100W<br>(T <sub>c</sub> =25℃)  | 150                   | -1mA                             | -30                 | 30~200      | -5   | -1A             | -5                                          | 1 A                                                          |                                              |                                                                            |                         | 20 *                                              | 220   |                         | 102                    | 2SC1343<br>とコンプリ |                 |
| ★ " 754 | "    | "          | "      | -50                           | -4                      | -2A                    | 20W                            | 150                   | -100                             | -20                 | 35~200      | -4   | -1A             |                                             |                                                              |                                              |                                                                            |                         |                                                   |       | 267                     | 2SC1418<br>とコンプリ       |                  |                 |
| " 755   | "    | "          | "      | -50                           | -4                      | -2A                    | 20W<br>(T <sub>c</sub> =25℃)   | 150                   | -100                             | -20                 | 35~200      | -4   | -1A             | -4                                          | 500                                                          |                                              |                                                                            |                         | 50 *                                              |       |                         | 268                    | 2SC1419<br>とコンプリ |                 |
| ★ " 756 | "    | "          | "      | -100                          | -6                      | -6A                    | 50W<br>(T <sub>c</sub> =25℃)   | 150                   | -1mA                             | -30                 | 80          | -5   | -1A             | -5                                          | 1 A                                                          |                                              |                                                                            |                         | 20 *                                              | 240   |                         | 102                    | 2SC1030<br>とコンプリ |                 |
| ★ " 757 | "    | "          | "      | -120                          | -6                      | -7A                    | 60W<br>(T <sub>c</sub> =25℃)   | 150                   | -1mA                             | -30                 | 25~200      | -5   | -1A             | -5                                          | 1 A                                                          |                                              |                                                                            |                         | 24 *                                              | 250   |                         | 102                    | 2SC497<br>とコンプリ  |                 |
| ★ " 758 | "    | "          | "      | -130                          | -5                      | -7A                    | 80W<br>(T <sub>c</sub> =25℃)   | 150                   | -1mA                             | -30                 | 25~200      | -5   | -1A             | -5                                          | 1 A                                                          |                                              |                                                                            |                         | 20 *                                              | 250   | 10 *                    | 102                    | 2SC698<br>とコンプリ  |                 |
| " 759   | 日 電  | RF. PA     | Si. E  | -60                           | -5                      | -200                   | 150                            | 125                   | -0.1                             | -45                 | 180         | -1   | -50             | -10                                         | 10                                                           |                                              |                                                                            |                         | 200 *                                             | 8.5   | 20                      | 176                    |                  |                 |
| " 760   | "    | "          | "      | -50                           | -5                      | -30                    | 150                            | 125                   | -0.1                             | -40                 | 350         | -3   | -0.5            | -3                                          | 1                                                            |                                              |                                                                            |                         | 100 *                                             | 8     | 20 *                    | 176                    |                  |                 |
| " 761   | ソニー  | "          | Si. EP | -110                          | -5                      | -2A                    | 6.3 W<br>(T <sub>c</sub> =25℃) | 120                   | -10                              | -50                 | 100         | -2   | -400            | -2                                          | 200                                                          |                                              |                                                                            |                         | 80 *                                              | 55    | C <sub>ob</sub> = 98pS  | 181                    |                  |                 |
| " 762   | "    | "          | "      | -110                          | -5                      | -2A                    | 1.5 W                          | 150                   | -10                              | -50                 | 100         | -2   | -400            | -2                                          | 200                                                          |                                              |                                                                            |                         | 80 *                                              | 50    | C <sub>ob</sub> = 95pS  | 99                     |                  |                 |
| " 763   | 新日無  | RF. AF. LN | "      | -30                           | -5                      | -50                    | 200                            | 125                   | -50nA                            | -20                 | 250         | -6   | -1              | -6                                          | 0.3                                                          | 190                                          | 21 k                                                                       | 3.4                     | 6.2                                               | 120 * | 3                       | C <sub>ob</sub> = 55pS | 138              | 2SC949<br>とコンプリ |
| " 764   | サンケン | PA         | Si.Eme | -60                           | -6                      | -6A                    | 40W<br>(T <sub>c</sub> =25℃)   | 150                   | -1mA                             | -60                 | 80          | -4   | -1A             | -10                                         | 500                                                          |                                              |                                                                            |                         | 10 *                                              | 90    | 8 *                     | 99                     | 2SC1444<br>とコンプリ |                 |
| " 765   | "    | "          | "      | -80                           | -6                      | -6A                    | 40W<br>(T <sub>c</sub> =25℃)   | 150                   | -1mA                             | -80                 | 80          | -4   | -1A             | -10                                         | 500                                                          |                                              |                                                                            |                         | 10 *                                              | 90    | 8 *                     | 99                     | 2SC1445<br>とコンプリ |                 |
| ★ " 766 | 松 下  | "          | Si. Me | -150                          | -5                      | -400                   | 20W<br>(T <sub>c</sub> =80℃)   | 150                   | -30                              | -60                 | 60          | -5   | -100            | -10                                         | 100                                                          |                                              |                                                                            |                         | 15 *                                              | 100   | 25                      | 99                     | 2SC1450<br>とコンプリ |                 |
| ★ " 767 | 東 芝  | RF         | Si. EP | -55                           | -5                      | -100                   | 200                            | 150                   | -0.1                             | -30                 | 120         | -1   | -10             | -10                                         | 1                                                            |                                              |                                                                            |                         | 150 *                                             | 5     | 20                      | 195                    |                  |                 |
| " 768   | サンケン | PA         | Si.Eme | -60                           | -6                      | -4 A                   | 30W<br>(T <sub>c</sub> =25℃)   | 150                   | -1mA                             | -60                 | 60          | -4   | -1A             | -10                                         | 200                                                          |                                              |                                                                            |                         | 10 *                                              | 60    | 12 *                    | 298                    | 2SC1826<br>とコンプリ |                 |
| " 769   | "    | "          | "      | -80                           | -6                      | -4 A                   | 30W<br>(T <sub>c</sub> =25℃)   | 150                   | -1mA                             | -80                 | 60          | -4   | -1A             | -10                                         | 200                                                          |                                              |                                                                            |                         | 10 *                                              | 60    | 12 *                    | 298                    | 2SC1827<br>とコンプリ |                 |
| " 770   | "    | "          | "      | -60                           | -6                      | -6 A                   | 40W<br>(T <sub>c</sub> =25℃)   | 150                   | -1mA                             | -60                 | 80          | -4   | -1A             | -12                                         | 500                                                          |                                              | t <sub>r</sub> = 0.9μS, t <sub>f</sub> = 0.1μS<br>t <sub>sig</sub> = 1μS   |                         | 10 *                                              | 120   | 30                      | 298                    | 2SC1985<br>とコンプリ |                 |
| " 771   | "    | "          | "      | -80                           | -6                      | -6 A                   | 40W<br>(T <sub>c</sub> =25℃)   | 150                   | -1mA                             | -80                 | 80          | -4   | -1A             | -12                                         | 500                                                          |                                              | t <sub>r</sub> = 0.9μS, t <sub>f</sub> = 0.1μS<br>t <sub>sig</sub> = 1μS   |                         | 10 *                                              | 120   | 30                      | 298                    | 2SC1986<br>とコンプリ |                 |
| " 772   | ソニー  | RF. PA     | Si. EP | -16                           | -6                      | -2A                    | 750                            | 120                   | -0.2                             | -16                 | 350         | -2   | -100            | -2                                          | -10                                                          |                                              |                                                                            |                         | 80 *                                              | 50    | C <sub>ob</sub> = 600pS | 259                    | 2SC1474<br>とコンプリ |                 |