

# Transistors

## • Darlington Power Transistors

| V <sub>CEO</sub> [V] | I <sub>c</sub> (dc) [A] | Package | 1.5 | 2.0              | 3.0 | 5.0                         | 7.0              | 10                                      | 15                                     | 25                 |
|----------------------|-------------------------|---------|-----|------------------|-----|-----------------------------|------------------|---|--|--------------------|
|                      |                         |         | 60  | TO-126           |     |                             | NTD985<br>NTB794 |   |  |                    |
| 80                   | TO-126                  |         |     | NTD986<br>NTB795 |     |                             |                  | NTD411<br>(TO-3)                        |  |                    |
| 100                  | TO-220AB                |         |     |                  |     | NTD560<br>NTB601            |                  | NTD1210<br>(MP-80)<br>NTB897<br>(MP-80) | 2SD1296<br>(MP-80)<br>NTD412<br>(TO-3) | 2SD1297<br>(MP-80) |
| 400                  | TO-220AB                |         |     |                  |     | NTD987<br>NTD1162<br>(300V) |                  | NTD565<br>(TO-3)<br>2SD1298<br>(MP-80)  |  |                    |

## • Power Transistors

| V <sub>CEO</sub> [V] | I <sub>c</sub> (dc) [A] | Package            | 1.5   | 2.0                | 3.0 | 5.0                  | 7.0                                  | 10                 | 15      |
|----------------------|-------------------------|--------------------|-------|--------------------|-----|----------------------|--------------------------------------|--------------------|---------|
|                      |                         |                    | 30~45 | TO-126             |     |                      | 2SB772<br>2SD882<br>2SB744<br>2SD794 |                    |         |
|                      | TO-220AB                |                    |       |                    |     |                      |                                      | NTA1129<br>NTC2654 |         |
| 60                   | TO-126                  |                    |       | 2SB744A<br>2SD794A |     |                      |                                      |                    |         |
|                      | TO-220AB                |                    |       |                    |     | NTA1069<br>NTC2516   | NTB707<br>NTD568                     | NTD1070<br>(MP-80) |         |
| 80                   | TO-220AB                |                    |       | 2SB703<br>2SD743   |     | NTA1069A<br>NTC2516A | NTB708<br>NTD569                     |                    |         |
| 100~150              | TO-220AB                |                    |       | NTA1008<br>NTC2331 |     | NTC2517              | NTA1010<br>NTC2334                   |                    |         |
|                      | MP-80                   |                    |       |                    |     |                      |                                      |                    | NTC2750 |
|                      | TO-220AB                | 2SA1006<br>2SC2336 |       |                    |     |                      |                                      |                    |         |
| 400                  | TO-220AB                |                    |       | NTC2333            |     |                      | NTC2335                              |                    |         |
|                      | MP-80                   |                    |       |                    |     |                      |                                      | NTC2749            | NTC2751 |

## • Small-Signal Transistors

| V <sub>CEO</sub> [V] | I <sub>c</sub> (dc) [mA] | Package                            | 100            | 200              | 300       | 500              | 700~1000 |
|----------------------|--------------------------|------------------------------------|----------------|------------------|-----------|------------------|----------|
|                      |                          |                                    | 25             | TO-92            |           |                  |          |
| 30                   | TO-92                    |                                    |                |                  | *2SC1280A |                  |          |
| 40                   | TO-92                    |                                    |                |                  |           | 2SC2720, 2SA1153 |          |
|                      | TO-18                    |                                    | 2SC943, 2SA603 |                  |           |                  |          |
| 50                   | TO-92                    | 2SC945, 2SA733<br>2SC2718, 2SA1151 |                |                  |           |                  |          |
|                      | SP-8                     |                                    |                |                  |           | 2SD571, 2SB605   |          |
| 60                   | TO-92                    |                                    |                | 2SC2003, 2SA954  |           |                  |          |
|                      | SP-8                     |                                    |                |                  |           | 2SC2721, 2SA1154 |          |
| 80                   | TO-92                    |                                    |                | 2SC2719, 2SA1152 |           |                  |          |
|                      | SP-8                     |                                    |                |                  |           | 2SD1312, 2SB984  |          |

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## • Mini-Mold Transistors for Hybrid ICs

| Type No. | I <sub>c</sub> [mA] | V <sub>CEO</sub> [V] | P <sub>d</sub> [mW] |
|----------|---------------------|----------------------|---------------------|
| 2SA811A  | -50                 | -120                 | 200                 |
| 2SA812   | -100                | -50                  | 150                 |
| 2SB624   | -700                | -25                  | 200                 |
| 2SB736   | -300                | -60                  | 200                 |
| 2SC1622A | 50                  | 120                  | 200                 |
| 2SC1623  | 100                 | 50                   | 150                 |
| 2SC1654  | 50                  | 160                  | 150                 |
| 2SD596   | 700                 | 25                   | 200                 |
| 2SD780   | 300                 | 60                   | 200                 |

## • Power Mini-Mold Transistors for Hybrid ICs

| NPN No. | V <sub>CEO</sub> [V] | I <sub>c</sub> [A] | P <sub>T</sub> [W] | h <sub>FE</sub> [-] | PNP No. |
|---------|----------------------|--------------------|--------------------|---------------------|---------|
| 2SD1000 | 50                   | 0.7                | 2.0                | 90~400              | 2SB799  |
| 2SD1006 | 100                  | 0.7                | 2.0                | 90~400              | 2SB805  |
| 2SD1007 | 120                  | 0.7                | 2.0                | 90~400              | 2SB806  |
| 2SD999  | 25                   | 1.0                | 2.0                | 90~400              | 2SB798  |
| 2SD1005 | 80                   | 1.0                | 2.0                | 90~400              | 2SB804  |
| 2SD1001 | 50                   | 0.3                | 2.0                | 90~400              | 2SB800  |