

Darlington Transistors

| Type No. | Package type | Applications | Absolute maximum ratings | | | | | | | Electrical characteristics (Ta = 25°C) | | | | | | | |
|----------|--------------|--------------|--------------------------|----------------------|----------------------|--------------------|--------------------|---------------------|--|--|--------------------------|---------------------|--------------------|-------------------------------------|---------------------|--------------------|------|
| | | | V _{CBO} (V) | V _{CEO} (V) | V _{EB0} (V) | I _C (A) | P _C (W) | T _J (°C) | I _{CBO} max @ V _{CB} | | hFE @ V _{CE-IC} | | | f _T @ V _{CE-IC} | | | |
| | | | | | | | | | I _{CBO} max (μA) | V _{CB} (V) | hFE | V _{CE} (V) | I _C (A) | f _T (MHz) | V _{CE} (V) | I _C (A) | |
| 1 | 2SB1234 | CP | General-purpose driver | 80 | 50 | 10 | 0.2 | 0.2 | 150 | 0.1 | 60 | >5000 | 2 | 0.01 | - | - | - |
| 2 | 2SD1851 | CP | General-purpose driver | 80 | 50 | 10 | 0.2 | 0.2 | 150 | 0.1 | 60 | >5000 | 2 | 0.01 | - | - | - |
| 3 | 2SB1235 | SPA | General-purpose driver | 80 | 50 | 10 | 0.2 | 0.3 | 150 | 100 mA | 60 | >5000 | 2 | 0.01 | - | - | - |
| 4 | 2SD1852 | SPA | General-purpose driver | 80 | 50 | 10 | 0.2 | 0.3 | 150 | 0.1 | 60 | >5000 | 2 | 0.01 | - | - | - |
| 5 | 2SB1125 | PCP | General-purpose driver | 80 | 50 | 10 | 0.7 | 1.3* | 150 | 0.1 | 40 | >5000 | 2 | 0.05 | 170 | 5 | 0.05 |
| 6 | 2SB1126 | PCP | General-purpose driver | 80 | 50 | 10 | 1.5 | 1.5* | 150 | 0.1 | 40 | >4000 | 2 | 0.5 | 120 | 10 | 0.05 |
| 7 | 2SD1625 | PCP | General-purpose driver | 80 | 50 | 10 | 0.7 | 1.3* | 150 | 0.1 | 40 | >5000 | 2 | 0.05 | 200 | 5 | 0.05 |
| 8 | 2SD1626 | PCP | General-purpose driver | 80 | 50 | 10 | 1.5 | 1.5* | 150 | 0.1 | 40 | >4000 | 2 | 0.5 | 120 | 10 | 0.05 |
| 9 | 2SD1627 | PCP | General-purpose driver | 30 | 25 | 10 | 2 | 1.5* | 150 | 1.0 | 20 | >4000 | 2 | 0.5 | 120 | 10 | 0.05 |
| 10 | 2SD2176 | PCP | General-purpose driver | 50† | 50† | 6 | 1.2 | 1.3* | 150 | 10 | 40 | >1000 | 3 | 0.5 | - | - | - |
| 11 | 2SD2261 | PCP | General-purpose driver | 80 | 60 | 6 | 2.5 | 1.5* | 150 | 10 | 60 | >2000 | 2 | 1 | - | - | - |
| 12 | 2SB888 | NP | General-purpose driver | 80 | 50 | 10 | 0.7 | 0.6 | 150 | 0.1 | 40 | >5000 | 2 | 0.05 | 170 | 5 | 0.05 |
| 13 | 2SD1111 | NP | General-purpose driver | 80 | 50 | 10 | 0.7 | 0.6 | 150 | 0.1 | 40 | >5000 | 2 | 0.05 | 200 | 5 | 0.05 |
| 14 | 2SD1853 | NP | General-purpose driver | 80 | 60 | 6 | 1.5 | 0.7 | 150 | 10 | 60 | >1000 | 2 | 0.5 | - | - | - |
| 15 | 2SB865 | MP | General-purpose driver | 80 | 50 | 10 | 1.5 | 0.9 | 150 | 0.1 | 40 | >4000 | 2 | 0.5 | 120 | 10 | 0.05 |
| 16 | 2SC4169 | MP | General-purpose driver | 50† | 50† | 6 | 1.2 | 1 | 150 | 10 | 40 | >1000 | 5 | 0.5 | - | - | - |
| 17 | 2SD1153 | MP | General-purpose driver | 80 | 50 | 10 | 1.5 | 0.9 | 150 | 0.1 | 40 | >4000 | 2 | 0.5 | 120 | 10 | 0.05 |
| 18 | 2SD1854 | MP | General-purpose driver | 80 | 60 | 6 | 1.5 | 1 | 150 | 10 | 60 | >1000 | 2 | 0.5 | - | - | - |
| 19 | 2SD1981 | MP | General-purpose driver | 100 | 80 | 6 | 2 | 1 | 150 | 10 | 60 | >1000 | 3 | 0.5 | - | - | - |
| 20 | 2SB1405 | NMP | General-purpose driver | 80 | 50 | 10 | 0.7 | 1 | 150 | 0.1 | 40 | >5000 | 2 | 0.05 | 170 | 5 | 0.05 |
| 21 | 2SB1406 | NMP | General-purpose driver | 80 | 50 | 10 | 1.5 | 1 | 150 | 0.1 | 40 | >4000 | 2 | 0.5 | 120 | 10 | 0.05 |
| 22 | 2SC4491 | NMP | General-purpose driver | 50† | 50† | 6 | 1.2 | 1 | 150 | 10 | 40 | >1000 | 5 | 0.5 | - | - | - |
| 23 | 2SC4671 | NMP | General-purpose driver | 50† | 50† | 6 | 2 | 1 | 150 | 10 | 40 | >1000 | 5 | 1 | - | - | - |
| 24 | 2SC4696 | NMP | General-purpose driver | 80‡ | 80‡ | 6 | 0.8 | 1 | 150 | 10 | 60 | >1000 | 3 | 0.5 | - | - | - |
| 25 | 2SD2116 | NMP | General-purpose driver | 80 | 50 | 10 | 0.7 | 1 | 150 | 0.1 | 40 | >5000 | 2 | 0.05 | 200 | 5 | 0.05 |
| 26 | 2SD2117 | NMP | General-purpose driver | 80 | 50 | 10 | 1.5 | 1 | 150 | 0.1 | 40 | >4000 | 2 | 0.5 | 120 | 10 | 0.05 |
| 27 | 2SD2120 | NMP | General-purpose driver | 100 | 80 | 6 | 2 | 1 | 150 | 10 | 60 | >1000 | 3 | 0.5 | - | - | - |
| 28 | 2SB1214 | TP | General-purpose driver | 80 | 60 | 6 | 3 | 15§ | 150 | 10 | 60 | >2000 | 2 | 1 | - | - | - |
| 29 | 2SD1799 | TP | General-purpose driver | 30 | 25 | 10 | 3 | 15§ | 150 | 1 | 20 | >4000 | 2 | 0.5 | 120 | 10 | 0.05 |
| 30 | 2SD1800 | TP | General-purpose driver | 80 | 50 | 10 | 1.5 | 10§ | 150 | 0.1 | 40 | >4000 | 2 | 0.5 | 120 | 10 | 0.05 |
| 31 | 2SD1817 | TP | General-purpose driver | 80 | 60 | 6 | 3 | 15§ | 150 | 10 | 60 | >2000 | 2 | 1 | - | - | - |
| 32 | 2SB1664V | ZP | General-purpose driver | 110 | 100 | 6 | 8 | 35§ | 150 | 100 | 80 | >1500 | 3 | 4 | 20 | 5 | 4 |
| 33 | 2SD2600V | ZP | General-purpose driver | 110 | 100 | 6 | 8 | 35§ | 150 | 100 | 80 | >1500 | 3 | 4 | 20 | 5 | 4 |
| 34 | 2SB1510 | FLP | General-purpose driver | 80 | 60 | 6 | 3 | 1.5 | 150 | 10 | 60 | >2000 | 2 | 1 | - | - | - |
| 35 | 2SC4737 | FLP | General-purpose driver | 50† | 50† | 6 | 2 | 1.5 | 150 | 10 | 40 | >1000 | 5 | 1 | 180 | 5 | 1 |
| 36 | 2SD2284 | FLP | General-purpose driver | 80 | 60 | 6 | 3 | 1.5 | 150 | 10 | 60 | >2000 | 2 | 1 | - | - | - |
| 37 | 2SD2426 | FLP | General-purpose driver | 100 | 80 | 6 | 2 | 1.5 | 150 | 10 | 60 | >1000 | 3 | 0.5 | - | - | - |
| 38 | 2SC3705 | TO126 | General-purpose driver | 50† | 50† | 6 | 1.2 | 10§ | 150 | 19 | 40 | >1000 | 5 | 0.5 | 180 | 5 | 0.5 |
| 39 | 2SD1953 | TO126 | General-purpose driver | 120 | 120 | 6 | 1.5 | 10§ | 150 | 10 | 100 | >1000 | 3 | 0.5 | - | - | - |
| 40 | 2SD894 | TO126 | General-purpose driver | 30 | 25 | 10 | 1.5 | 10§ | 150 | 1 | 20 | >4000 | 2 | 0.5 | 120 | 10 | 0.05 |
| 41 | 2SC3784 | TO126LP | General-purpose driver | 50† | 50† | 6 | 1.2 | 20§ | 150 | 10 | 40 | >1000 | 5 | 0.5 | 180 | 5 | 0.5 |
| 42 | 2SC3785 | TO126LP | General-purpose driver | 50† | 50† | 6 | 2 | 20§ | 150 | 10 | 40 | >1000 | 5 | 1 | 180 | 5 | 1 |
| 43 | 2SC3786 | TO126LP | General-purpose driver | 50† | 50† | 6 | 3 | 20§ | 150 | 10 | 40 | >1000 | 5 | 1.5 | 180 | 5 | 1.5 |
| 44 | 2SB1471 | TO220MF | General-purpose driver | 70 | 60 | 6 | 4 | 30§ | 150 | 100 | 40 | 5000 | 2 | 2 | 20 | 5 | 2 |
| 45 | 2SB1472 | TO220MF | General-purpose driver | 70 | 60 | 6 | 7 | 35§ | 150 | 100 | 40 | 5000 | 2 | 3.5 | 20 | 5 | 3.5 |
| 46 | 2SD2048 | TO220MF | General-purpose driver | 110 | 100 | 6 | 3 | 30§ | 150 | 100 | 80 | 4000 | 3 | 1.5 | 20 | 5 | 1.5 |
| 47 | 2SD2049 | TO220MF | General-purpose driver | 110 | 100 | 6 | 5 | 35§ | 150 | 100 | 80 | 4000 | 3 | 2.5 | 20 | 5 | 2.5 |
| 48 | 2SD2050 | TO220MF | General-purpose driver | 110 | 100 | 6 | 8 | 40§ | 150 | 100 | 80 | 4000 | 3 | 4 | 20 | 5 | 4 |
| 49 | 2SD2223 | TO220MF | General-purpose driver | 70 | 60 | 6 | 4 | 30§ | 150 | 100 | 40 | 5000 | 2 | 2 | 20 | 5 | 2 |
| 50 | 2SD2224 | TO220MF | General-purpose driver | 70 | 60 | 6 | 7 | 35§ | 150 | 100 | 40 | 5000 | 2 | 3.5 | 20 | 5 | 3.5 |
| 51 | 2SA1258 | TO220 | High-speed driver | 70 | 60 | 5 | 3 | 20§ | 150 | 100 | 40 | 5000 | 2 | 1.5 | 200 | 5 | 1.5 |
| 52 | 2SA1259 | TO220 | High-speed driver | 70 | 60 | 5 | 5 | 30§ | 150 | 100 | 40 | 5000 | 2 | 2.5 | 200 | 5 | 2.5 |
| 53 | 2SB880 | TO220 | General-purpose driver | 70 | 60 | 6 | 4 | 30§ | 150 | 100 | 40 | 5000 | 2 | 2 | 20 | 5 | 2 |
| 54 | 2SB881 | TO220 | General-purpose driver | 70 | 60 | 6 | 7 | 35§ | 150 | 100 | 40 | 5000 | 2 | 3.5 | 20 | 5 | 3.5 |
| 55 | 2SB882 | TO220 | General-purpose driver | 70 | 60 | 6 | 10 | 40§ | 150 | 100 | 40 | 5000 | 2 | 5 | 20 | 5 | 5 |
| 56 | 2SB884 | TO220 | General-purpose driver | 110 | 100 | 6 | 3 | 30§ | 150 | 100 | 80 | 4000 | 3 | 1.5 | 20 | 5 | 1.5 |
| 57 | 2SB885 | TO220 | General-purpose driver | 110 | 100 | 6 | 5 | 35§ | 150 | 100 | 80 | 4000 | 3 | 2.5 | 20 | 5 | 2.5 |
| 58 | 2SB886 | TO220 | General-purpose driver | 110 | 100 | 6 | 8 | 40§ | 150 | 100 | 80 | 4000 | 3 | 4 | 20 | 5 | 4 |
| 59 | 2SC3144 | TO220 | High-speed driver | 70 | 60 | 5 | 3 | 20§ | 150 | 100 | 40 | 5000 | 2 | 1.5 | 200 | 5 | 1.5 |
| 60 | 2SC3145 | TO220 | High-speed driver | 70 | 60 | 5 | 5 | 30§ | 150 | 100 | 40 | 5000 | 2 | 2.5 | 200 | 5 | 2.5 |
| 61 | 2SC4547 | TO220 | General-purpose driver | 85 | 85 | 6 | 3 | 30§ | 150 | 10 | 70 | 6000 | 3 | 5 | 50 | 5 | 1.5 |
| 62 | 2SD1190 | TO220 | General-purpose driver | 70 | 60 | 6 | 4 | 30§ | 150 | 100 | 40 | 5000 | 2 | 2 | 20 | 5 | 2 |
| 63 | 2SD1191 | TO220 | General-purpose driver | 70 | 60 | 6 | 7 | 35§ | 150 | 100 | 40 | 5000 | 2 | 3.5 | 20 | 5 | 3.5 |

| | Type No. | Package type | Applications | Absolute maximum ratings | | | | | | Electrical characteristics (Ta = 25°C) | | | | | | | |
|----|----------|--------------|------------------------|--------------------------|----------|----------|--------|--------|---------|--|---------|--------------|---------|--------|-------------|---------|--------|
| | | | | VCBO (V) | VCEO (V) | VEBO (V) | IC (A) | PC (W) | Tj (°C) | ICBO max @ VCB | | hFE @ VCE-IC | | | fT @ VCE-IC | | |
| | | | | | | | | | | ICBO max (µA) | VCB (V) | hFE | VCE (V) | IC (A) | fT (MHz) | VCE (V) | IC (A) |
| 64 | 2SD1192 | TO220 | General-purpose driver | 70 | 60 | 6 | 10 | 40§ | 150 | 100 | 40 | 5000 | 2 | 5 | 20 | 5 | 5 |
| 65 | 2SD1194 | TO220 | General-purpose driver | 110 | 100 | 6 | 3 | 30§ | 150 | 100 | 80 | 4000 | 3 | 1.5 | 20 | 5 | 1.5 |
| 66 | 2SD1195 | TO220 | General-purpose driver | 110 | 100 | 6 | 5 | 35§ | 150 | 100 | 80 | 4000 | 3 | 2.5 | 20 | 5 | 2.5 |
| 67 | 2SD1196 | TO220 | General-purpose driver | 110 | 100 | 6 | 8 | 40§ | 150 | 100 | 80 | 4000 | 3 | 4 | 20 | 5 | 4 |
| 68 | 2SD1395 | TO220 | General-purpose driver | 50† | 50† | 6 | 5 | 40§ | 150 | 100 | 40 | >1000 | 3 | 2.5 | 20 | 5 | 2.5 |
| 69 | 2SB1223 | TO220ML | General-purpose driver | 70 | 60 | 6 | 4 | 20§ | 150 | 100 | 40 | 5000 | 2 | 2 | 20 | 5 | 2 |
| 70 | 2SB1224 | TO220ML | General-purpose driver | 70 | 60 | 6 | 7 | 25§ | 150 | 100 | 40 | 5000 | 2 | 3.5 | 20 | 5 | 3.5 |
| 71 | 2SB1225 | TO220ML | General-purpose driver | 70 | 60 | 6 | 10 | 30§ | 150 | 100 | 40 | 5000 | 2 | 5 | 20 | 5 | 5 |
| 72 | 2SB1226 | TO220ML | General-purpose driver | 110 | 100 | 6 | 3 | 20§ | 150 | 100 | 80 | 4000 | 3 | 1.5 | 20 | 5 | 1.5 |
| 73 | 2SB1227 | TO220ML | General-purpose driver | 110 | 100 | 6 | 5 | 25§ | 150 | 100 | 80 | 4000 | 3 | 2.5 | 20 | 5 | 2.5 |
| 74 | 2SB1228 | TO220ML | General-purpose driver | 110 | 100 | 6 | 8 | 30§ | 150 | 100 | 80 | 4000 | 3 | 4 | 20 | 5 | 4 |
| 75 | 2SD1825 | TO220ML | General-purpose driver | 70 | 60 | 6 | 4 | 20§ | 150 | 100 | 40 | 5000 | 2 | 2 | 20 | 5 | 2 |
| 76 | 2SD1826 | TO220ML | General-purpose driver | 70 | 60 | 6 | 7 | 25§ | 150 | 100 | 40 | 5000 | 2 | 3.5 | 20 | 5 | 3.5 |
| 77 | 2SD1827 | TO220ML | General-purpose driver | 70 | 60 | 6 | 10 | 30§ | 150 | 100 | 40 | 5000 | 2 | 5 | 20 | 5 | 5 |
| 78 | 2SD1828 | TO220ML | General-purpose driver | 110 | 100 | 6 | 3 | 20§ | 150 | 100 | 80 | 4000 | 3 | 1.5 | 20 | 5 | 1.5 |
| 79 | 2SD1829 | TO220ML | General-purpose driver | 110 | 100 | 6 | 5 | 25§ | 150 | 100 | 80 | 4000 | 3 | 2.5 | 20 | 5 | 2.5 |
| 80 | 2SD1830 | TO220ML | General-purpose driver | 110 | 100 | 6 | 8 | 30§ | 150 | 100 | 80 | 4000 | 3 | 4 | 20 | 5 | 4 |
| 81 | 2SD1838 | TO220ML | General-purpose driver | 50† | 50† | 6 | 5 | 25§ | 150 | 100 | 40 | 4000 | 3 | 2.5 | 20 | 5 | 2.5 |
| 82 | 2SB883 | TO3PB | General-purpose driver | 70 | 60 | 6 | 15 | 70§ | 150 | 100 | 40 | 5000 | 2 | 7 | 20 | 5 | 7 |
| 83 | 2SB887 | TO3PB | General-purpose driver | 110 | 100 | 6 | 10 | 70§ | 150 | 100 | 80 | 4000 | 3 | 5 | 20 | 5 | 5 |
| 84 | 2SB912 | TO3PB | General-purpose driver | 70 | 60 | 6 | 10 | 60§ | 150 | 100 | 40 | 5000 | 2 | 5 | 20 | 5 | 5 |
| 85 | 2SB913 | TO3PB | General-purpose driver | 110 | 100 | 6 | 8 | 60§ | 150 | 100 | 80 | 4000 | 3 | 4 | 20 | 5 | 4 |
| 86 | 2SC3664 | TO3PB | High-voltage switch | 800 | 400 | 5 | 20 | 150§ | 150 | 100 | 800 | >80 | 5 | 20 | - | - | - |
| 87 | 2SD1193 | TO3PB | General-purpose driver | 70 | 60 | 6 | 15 | 70§ | 150 | 100 | 40 | 5000 | 2 | 7 | 20 | 5 | 7 |
| 88 | 2SD1197 | TO3PB | General-purpose driver | 110 | 100 | 6 | 10 | 70§ | 150 | 100 | 80 | 4000 | 3 | 5 | 20 | 5 | 5 |
| 89 | 2SD1229 | TO3PB | General-purpose driver | 70 | 60 | 6 | 10 | 60§ | 150 | 100 | 40 | 5000 | 2 | 5 | 20 | 5 | 5 |
| 90 | 2SD1230 | TO3PB | General-purpose driver | 110 | 100 | 6 | 8 | 60§ | 150 | 100 | 80 | 4000 | 3 | 4 | 20 | 5 | 4 |
| 91 | 2SB1388 | TO3PML | General-purpose driver | 110 | 100 | 6 | 10 | 45§ | 150 | 100 | 80 | 4000 | 3 | 5 | 20 | 5 | 5 |
| 92 | 2SD2093 | TO3PML | General-purpose driver | 110 | 100 | 6 | 10 | 45§ | 150 | 100 | 80 | 4000 | 3 | 5 | 20 | 5 | 5 |
| 93 | 2SC4119 | TO3PBL | High-voltage switch | 1500 | 800 | 5 | 15 | 250§ | 150 | 100 | 800 | >25 | 5 | 15 | - | - | - |

* Mounted on a ceramic board (250 mm²±0.8 mm)
† C-B Zener diode (60 ±10 V)
‡ C-B Zener diode (90 ±10 V)

§ Tc = 25°C
Notes : Listed by package type and arranged in order of Type Number.
For PNP, the minus sign is omitted due to space limitations.
The standard version of the FLP package is available in radial taping form.