

Transistors (Selection Guide by Applications and Functions)

■ Silicon Small Signal Transistors

● General-use Low Frequency Amplifiers and Others

| Application Functions | Package (No.) | | | | | | | | | | | | V _{CE0} ¹⁾ (V) | I _C (mA) | f _T (MHz) | | |
|-----------------------------------------------------------|------------------------|------------------------------------|----------------------|------------------------|------------------------|----------------------------------|------------------------------------|------------------------|----------------------------------|------------------------|------------------------|----------------------------|---------------------------------------|------------------------|-----------------------------------------------------|---------------------------------------------|--------------|
| | SS Mini Type (D1) | S Mini Type (D5) | Mini Type (D10) | T Mini Type (D19) | New S Type (D39) | TO-92 (D49) | M Type (D40) | TO-92NL (D51) | TO-92L (D50) | Mini Power Type (D16) | MT1 Type (D42) | MT2 Type (D43) | | | ● f _T +NV(mV) *V _{CE} (V) | ● f _T +I _C (mA) | |
| General-use low freq. amplifier | (2SB1462 2SD2216) | (2SB1218A 2SD1819A) | (2SB709A 2SD601A) | | (2SA1309A 2SC3311A) | (2SB642 2SD637) | | | | | (2SB1320A 2SD1991A) | (2SB1376 2SD2070) | 50 | 100 | ● 160 ~ 460 | *2 | |
| | | (2SB1219A 2SD1820A) | (2SB710A 2SD602A) | (Δ2SB1582 ⊙2SD2432) | (2SB1030A 2SD1423A) | (2SA719 / 730 2SC1317 / 1318) | (2SB643 / 644 Δ 2SC638 / 639 Δ) | (2SA1619A 2SC4208A) | | | | (2SB1371A Δ 2SD1982A Δ) | (2SB1377 2SD2071) | 25/50 | 500 | ● 85 ~ 340 | *150 Δ*10 |
| | | | | | | (2SA720A 2SC1318A) | (2SA1762 2SC4606) | (2SA1533 2SC3939) | (2SA777 2SC1509) | (2SB767 2SD875) | | | | 70 | 500 | ● 130 ~ 330 (e.g.) | *150 |
| | | | | | (2SB1587 2SD2455) | (2SB621A 2SD592A) | (2SB793A 2SD973A) | (2SA1534A 2SC3940A) | (2SA693 / 694 2SC1383 / 1384) | (2SB766A 2SD874A) | | (2SB1322A 2SD1994A) | | 25/50 | 1A | ● 85 ~ 340 | *500 |
| | | (2SA1791 2SC4656) | (2SA1748 2SC4562) | (2SA1747 2SC4561) | | | | | | | | | | 50 | 50 | ● 200 ~ 500 (f _T 250) | *2 |
| | | | | | | | | | | (2SB1440 2SD2185) | | (2SB1434 2SD2177) | | 50 | 2A | ● 120 ~ 340 | *200 |
| | | | | | | | | | | | | (2SB1446 2SD2179) | | 50 | 5A | ● 120 ~ 340 | *500 |
| | | | | | | | (2SB819 2SD1051) | | | (2SB1599 2SD2457) | | (2SB1598 2SD2456) | | 40 | 1.5A | ● 80 ~ 220 | *1A |
| | | | | | | | | | | (2SA1890 2SC5026) | | (2SA1674 2SC4391) | | 80 | 1A | ● 120 ~ 340 | *100 |
| | | | | | | | | | | (2SB1600 2SD2458) | | | | 100 | 1A | ● 120 ~ 340 | *100 |
| High-h _f _T (High V _{EB0}) | | | 2SB902 | | | (2SB774 2SD889) | | | | | | | | | | | |
| | 2SD2345 | 2SD1823 | 2SD1030 | Δ2SD2433 | 2SD1424 | 2SD1010 | 2SD1199 | | | | 2SD1995 | 2SD2073 | 40 | 50 | ● 400 ~ 2000 | *2 | |
| | | | | | 2SD2460 | | 2SD1458 | | | 2SD1483 | | 2SD2259 | 20 | 700 | ● 1000 ~ 2500 | *150 | |
| | | | | | | 2SC2925 | | | | | | | 50 | 700 | ● 400 ~ 1000 | *150 | |
| Darlington | | | 2SD1478A | Δ 2SD2434 | | 2SD892/A | 2SD1205/A | | | | | | 25/50 | 500 | ● 2000 ~ 2000 | *500 | |
| | | | | | | 2SD893/A | 2SD1198/A | | | 2SD1511 | 2SD2258 | | 25/50 | 1A | ● 4000 ~ 4000 | *1A | |
| | | | | | | | | | | | 2SD2067 | | 100 | 2A | ● 4000 ~ 4000 | *1A | |
| Low freq. low noise amplifier | | | | | | | | | | | | | | | | | |
| | (2SB1463 2SD2240A) | (2SB1220 2SD1821A) | (2SB792A 2SD814A) | Δ2SB1583 | (2SA1816 2SC4715) | (2SA1123 2SC2631) | | | | (2SA1124 2SC2632) | | | 150/ 185 | 50 | *150 | — | |
| | (2SA1531A 2SC3929A) | (2SA1034 / 1035 2SC2405 / 2406) | | (2SA1310 2SC3312) | (2SA1127 2SC2634) | (2SB745A 2SD661A) | | | | | 2SD1993 | 2SD2072 | 35/55 | 50 | *150 | — | |
| Low V _{CE(sat)} | | | 2SB970 | Δ 2SB1585 | 2SB1207 | | | | | | | | 10 | 500 | * < 0.3 | *400 | |
| | | | 2SD1328 | Δ2SD2436 | 2SD1450 | 2SD1302 | 2SD1330 | | | | 2SD2210 | 2SD1996 | 2SD2074 | 20 | 500 | * < 0.4 | *500 |
| | | | 2SB779 | Δ2SB1584 | 2SA1512 | 2SA1128 | 2SB790 | | | | | 2SB1378 | | 20 | 500 | * < 0.4 | *500 |
| | | 2SD1979 | 2SD1938 | | 2SD1915 | | | | | | | | | 20 | 300 | V _{BE(sat)} 25V ● 500 ~ 2500 | *4 |
| | | (Δ2SB1618 Δ2SD2482) | | | | | | | | | | | | 10 | 500 | * < 0.17 | *250 |
| | | | | | | | | | | (2SB1537 2SD2357) | | (2SB1538 2SD2358) | | 10 | 1A | * < 0.15 | *500 |
| | | (Δ2SB1619 Δ2SD2483) | | | | | | | | | | | | 20 | 500 | * < 0.2 | *250 |
| | | | | | | | | | | (2SB1539 2SD2359) | | (2SB1540 2SD2360) | | 20 | 1A | * < 0.2 | — |
| | | | | | | | 2SB835 | | 2SC1518 | (2SB956 2SD1280) | | | | 18 | 1A | * < 0.5 | *50 |
| | | | | | | | | | | (Δ2SB1589 Δ2SD2441) | | | | 10 | 1.5A | * < 0.25 | *1A |
| Built-in Zener | | | | | | | | | | | | | | | | | |
| | | | 2SD1304 | Δ2SD2435 | | | | | | | | | | 20 ± 3 | 100 | ● 160 ~ 460 | 2 |
| | | | 2SD1679 | | | | | | | | | | | 18 ± 5 | 500 | ● 200 ~ 800 | 500 |

Δ Preliminary (: Complementary pair

Transistors (Selection Guide by Applications and Functions)

● General-use Low Frequency Amplifiers and Others (continued)

| Application Functions | Package (No.) | | | | | | | | | | V _{CEO} (V) | I _C (mA) | f _r (MHz) | |
|-------------------------|------------------|-----------------|-------------------|-----------------------|----------------------|----------------------|-------------------------|-----------------------|----------------------|----------------|----------------------|---------------------|-------------------------------------------------|-------------------------------------|
| | S Mini Type (D5) | Mini Type (D10) | T Mini Type (D19) | TO-92 (D49) | M Type (D40) | TO-92NL (D51) | TO-92L (D50) | Mini Power Type (D16) | MT1 Type (D42) | MT2 Type (D43) | | | ● f _{FE} +NV(mV) ※V _{CE(sat)} | I _E +I _C (mA) |
| High break-down voltage | | | | | | | (2SB789/A 2SD968/A) | | | | 100/ 120 | 500 | ● 65 ~ 330 | *150 |
| | | | | | | (2SB1297 2SD1937) | (2SB987 2SD1211) | | (2SB1473 2SD2225) | | 120 | 500 | ● 90 ~ 330 | *150 |
| | | | | | (2SB1209 2SD1385) | | | 2SD2413 | | | 400 | 100 | ● 40 ~ | * 30 |
| | | | | | 2SD1350/A | | | | | | 400/ 500 | 500 | ● 30 ~ | *30 |
| | | | | | | | | | | 2SB1488 | 400 | 500 | ● 80 ~ 280 | *50 |
| Display | 2SC4417 | 2SC4444 | △ 2SC4971 | | 2SC2188 | | | | | | 35 | 50 | 500 | 10 |
| | | | | | | | 2SC1360/A | | | 2SC4787 | | | | |
| | | | | | | | | | | 2SC4502 | 45/ 60 | 50 | 500 | 10 |
| TV chroma output | | | | (2SA1018 2SC1473) | (2SB1264 2SD662) | 2SB1221 | (2SA879 2SC1573/A/B) | | | | 200/ 300/ 400 | 70 | 80 | 10 |
| | | | | (2SA1767 2SC1473A) | 2SD662B | 2SA1858 2SC3941 | | | | | 300/ 400 | 70 | 50 80 | 10 |
| | | | | 2SC3187 | | 2SC3965 | | | | | 300 | 100 | 140 | 20 |
| | | | | | | | | | | | | | | |

△ Preliminary (: Complementary pair

● High Speed Switch · VCO and High Frequency Type

| Application Functions | Package (No.) | | | | | V _{CEO} V _{CE(s)} ¹⁾ (V) | I _C (mA) | t _s (ns) |
|-------------------------|-------------------|------------------|-----------------|-------------------|-------------|----------------------------------------------------------|---------------------|---------------------|
| | SS Mini Type (D1) | S Mini Type (D5) | Mini Type (D10) | T Mini Type (D19) | TO-92 (D49) | | | |
| High speed switch | 2SA1806 | 2SA1739 | 2SA1738 | | | 15 | 50 | 19 |
| VCO and high freq. type | | | 2SC4894 | △ 2SC4970 | | 20 ¹⁾ | 130 | 7 |
| | 2SC4691 | 2SC3938 | 2SC3757 | △ 2SC4969 | 2SC3811 | 40 ¹⁾ | 100 | 10 |
| | | 2SC4755 | 2SC4782 | | | 20 ¹⁾ | 200 | 7 |

△ Preliminary

● High Frequency Amplifiers and Others

| Functions | Package (No.) | | | | | | | | | | V _{CEO} (V) | I _C (mA) | f _r (MHz) | |
|----------------------------|----------------------|----------------------|---------------------------------|-------------------|-----------------------|----------------------|---------------------|----------------------|------------------|-------------------------------------|----------------------|---------------------|----------------------|-----|
| | SS Mini Type (D1) | S Mini Type (D5) | Mini Type (D10) *4 pin (D11) | T Mini Type (D19) | Mini Power Type (D16) | New S Type (D39) | TO-92 (D49) | M Type (D40) | Cross Pack (D36) | I _E +I _C (mA) | | | | |
| AM · Mix. amp. | 2SC4655 | 2SC3936 | 2SC2778 | 2SC4972 | | 2SC3313 | 2SC829 | 2SC2647 | | | 20 | 30 | 230 | 1 |
| FM Amp. | (2SA1790 2SC4626) | (2SA1532 2SC3930) | (2SA1022 2SC2295) | △ 2SA1888 | | (2SA1323 2SC3314) | (2SA838 2SC1359) | (2SA1254 2SC2206) | | 2SC2188 | 20 | 30 | 250 | 1 |
| Video IF FM RF amp. | | | | | | | ◆ 2SC1687 | | | | 35 | 50 | 500 | 10 |
| | | | | | | | ◆ 2SC1688 | | | | 25 | 30 | 550 | 5 |
| | | 2SC4627 △ 2SC5021 | 2SC3931 △ 2SC5020 | 2SC2404 | △ 2SC4973 | | 2SC3315 | 2SC1047 | 2SC2377 | | 20 | 15 | 650 | 1 |
| V H F Osc. amp. | | | | | | 2SC4716 | | | | | 18 | 50 | 980 | 10 |
| | | 2SC3932 | 2SC2480 | △ 2SC4974 | | 2SC3354 | 2SC1215 | 2SC2636 | | | 20 | 50 | 1200 | D15 |
| U H F Mix. | | 2SC4670 | 2SC4238 | | | | | | | | 15 | 50 | 1300 | 15 |
| | | | | △ 2SC5016 | | | | | | | 8 | 50 | 1300 | 15 |
| U H F RF Osc. | | 2SC3933 | 2SC3077 | △ 2SC4975 | | | | | 2SC2360(H) | | 20 | 20 | 1100 | 3 |
| | | 2SC4780 | 2SC2845 | | | | ◇ 2SC2671(H) | | | | 12 | 70 | 4500 | 20 |
| Micro tuner | | 2SC4809 | 2SC3935 | 2SC3130 | | | | | | | 10 | 50 | 1900 | 5 |
| | | | 2SC4239 | | | | | | | | 10 | 50 | 2000 | 5 |
| 1V RF amp. | | 2SC4068 | | | | | | | | | 20 | 20 | 1500 | 1.8 |
| | | 2SC4410 | 2SC3707 | | | | | | | | 7 | 10 | 4000 | 1 |
| Wide band amp. SHF IF amp. | | 2SC4661 | | | | | | | | | 9 | 35 | 5000 | 1 |
| | | 2SC3934 | 2SC3110 | | | | | | | | 12 | 30 | 4500 | 10 |
| | | 2SC3937 | 2SC3704 | | | | ◇ 2SC2671(F) | | | | 14 | 80 | 5500 | 40 |
| | | 2SC4808 | 2SC4835 | 2SC3829 | | △ 2SC5019 | 2SC4968 | | | | 10 | 80 | 7600 | 30 |
| | | | | *2SC4516 | | | | | | | 10 | 80 | 8000 | *20 |
| | | | 2SC4805 | 2SC3904 | | | | | | | 10 | 65 | 9000 | 20 |
| | | | *2SC4515 | | | | | | | 10 | 50 | 7000 | *10 | |

◆ Center Emitter (1:C 2:E 3:B) ◇ Center Emitter (1:B 2:E 3:C) (: Complementary pair

Transistors (Selection Guide by Applications and Functions)

● High Frequency Silicon Transistors for Transmitters

| Frequency Band Application | Type No. | V _{CEO} (V) | I _c (A) | P _o min. (W) | f _r min. (MHz) | Package | | |
|-------------------------------|----------|-------------------------|-----------------------|----------------------------|------------------------------|---------|-----------|-----|
| | | | | | | | No. | |
| V H F | 175MHz | 2SC2851 | 16 | 0.3 | 0.6 | 1500 | TO-92L | D48 |
| | | 2SC4767 | 16 | 0.3 | 0.6 | 1500 | TO-92NL | D51 |
| | | 2SC4893 | 16 | 0.3 | 0.6 | 1500 | MT3 | D45 |
| | | 2SC2988 | 16 | 0.5 | 1.8 | 600 | TO-126(b) | D53 |

● High Frequency Silicon Transistors for Tuners (FETs included)

| Band | Application | Package (No.) | | | | | | | | | | |
|--------------|-------------|--------------------------|---------------------|-----------------|------------------------------------|--------------------------------------------------|---------------------------------|------------------------------------------|--------------------------------|------------------------------------------|--------------------------------------------------------------|---------------------------------|
| | | TO-92 (D49) | New S Type (D39) | M Type (D40) | Cross Pack (D36) | Cross Pack (Ceramic) (D37(a), D37(b):*) | SS Mini Type (3 pin) (D1) | S Mini Type (3 pin) (D5) | S Mini Type (4 pin) (D6) | Mini Type (3 pin) (D10) | Mini Type (4 pin) (D10(a)) | T Mini Type (3 pin) (D19) |
| V H F | RF amp. | 2SC1215 | | | | | | | 3SK268 | | 3SK144 3SK202 3SK241 | |
| | Mix | 2SC1215 | 2SC3354 | 2SC2636 | | | | 2SC4670 | | 2SC2480 2SC4238 | 3SK169 | |
| | Osc. | 2SC1215 | 2SC4716 2SC3354 | 2SC2636 | | | | 2SC3932 | | 2SC2480 | | △ 2SC4974 |
| | IF amp. | 2SC1215 | 2SC3354 | 2SC2636 | | | | | | 2SC2480 | | △ 2SC4974 |
| U H F | RF amp. | | | | 2SC2360(H) 3SK183 ²⁾ | | | 2SC3933 2SC4068 2SC4780 | | 2SC3077 2SC2845 | 3SK143 3SK184 ²⁾ 3SK241 ²⁾ | △ 2SC4975 |
| | Mix. | | | | 2SC2360(H) | | | 2SC3937 2SC3933 | | 2SC3077 | | △ 2SC4975 |
| | Osc. | | | | | 2SC4809 | 2SC3935 2SC4239 | | 2SC3130 | | | |
| S H F | RF amp. | | | | | | | | | | | |
| | Osc. | | | | | | | | | | | |
| | IF amp. | 2SC2671(H) 2SC2671(F) | | | | | | | 2SC3934 2SC3937 2SC4805 | 2SC3904 2SC3704 2SC3829 2SC3110 | △ 2SC5019 (Mini power type) | |
| Wide band | RF amp. | 2SC2671(H) 2SC2671(F) | | | | | 2SC4808 | 2SC3934 2SC3937 2SC4805 2SC4835 | 3SK269 3SK270 3SK271 | 2SC3110 2SC3704 | 3SK139 3SK219 3SK227 △ 3SK247 2SC4516 2SC4515 | |

△ Preliminary 1)HEMT 2)MES FET

■ Silicon Medium Power Transistors

| Application Function | Package (No.) | | | | | | | | V _{CEO} (V) | I _c (A) | V _{CE(sat)} | | h _{FE} | | |
|-------------------------------------------|-----------------|------------------------|------------------------|--------------------|--------------------|---------------------|--------------------|---------------------|-------------------------|-----------------------|----------------------|-----------------------|------------------------|-------------------------|-----------------------|
| | U Type (D41) | TO-126 (D52*, D53) | MT2L Type (D44) | MT3 Type (D45) | MT4 Type (D46) | TO-202 (D54) | TO-220(a) (D56) | TO-220F(a) (D59) | | | typ. (V) | I _c (A) | I _b (mA) | f _r (MHz) | I _c (A) |
| General -use low freq. amplifier | | | | | | 2SA699 2SC1226 | | | 32 | 1.5 | 0.4 | -1.5 2 | -150 200 | 50 ~ 220 | 1 |
| | | 2SA885 2SC1846 | | | 2SB1413 2SD2133 | | | | 35 | 1 | < 0.5 | 0.5 | 50 | 85 ~ 340 | 0.5 |
| | | 2SB968 2SD1295 | 2SA886 2SC1847 | | | 2SA699A 2SC1226A | | | 40 | 1.5 | 0.4 | -1.5 2 | -150 200 | 50 ~ 220 | 1 |
| | | | 2SA963* 2SC2209* | | | | | | 40 | 1.5 | < 1.0 | 1.5 | 150 | 30 ~ 220 | 1 |
| | | | | | 2SC4545 | | | | 40 | 1.5 | 1.0 | 2.0 | 200 | 30 ~ 220 | 1 |
| | | | 2SB1541 2SD2361 | | | | | | 50 | 1 | < 0.4 | 0.5 | 50 | 85 ~ 340 | 0.5 |
| | | | 2SA1096/A 2SC2497/A | | | | 2SA748 2SC1398 | | 50/60 | 2 | < 1.0 | 1.5 | 150 | 50 ~ 220 | 1 |
| | | △ 2SB1574 △ 2SD2408 | | 2SB1542 2SD2362 | 2SB1435 2SD2178 | | | | 50 | 2 | < 0.3 | 1.0 | 50 | 120 ~ 340 | 0.2 |
| | | △ 2SB1575 △ 2SD2409 | | | 2SB1447 2SD2180 | | | | 50 | 3 | < 0.3 | 2.0 | 100 | 120 ~ 340 | 0.5 |

(: Complementary pair

Transistors (Selection Guide by Applications and Functions)

■ Silicon Medium Power Transistors (continued)

| Application Functions | Package (No.) | | | | | | | | V _{CEO} (V) | I _C (A) | V _{CE(sat)} | | | h _{FE} ● f _r (MHz) | I _C *I _E (A) | |
|---------------------------------|------------------------|-------------------------|----------------------|--------------------|----------------------|--------------|-------------------------|--------------------------|----------------------|--------------------|----------------------|--------------------|---------------------|----------------------------------------|------------------------------------|-------|
| | U Type (D41) | TO-126 (D52*, D53) | MT2L Type (D44) | MT3 Type (D45) | MT4 Type (D46) | TO-202 (D54) | TO-220(a) (D56) | TO-220F (D59) | | | typ. (V) | I _C (A) | I _B (mA) | | | |
| General-use low freq. amplifier | | | | | | | 2SC1398A | | 50/70 | 2 | 0.6 | 1.0 | 100 | 50 ~ 160 | 1 | |
| | △ 2SB1573 △ 2SD2407 | | (2SB1543 2SD2363 | 2SB1416 2SD2136 | (2SB1417 2SD2137 | | (2SB941/A 2SD1266/A | | 60 | 3 | < 1.2 | 3.0 | 375 | 40 ~ 250 | 1 | |
| | | | | | 2SB1553 | | | | 60 | 3 | < 1 | 2.0 | 50 | 300 ~ 700 | 0.5 | |
| | | | (2SB1544 2SD2364 | | | | | | 80 | 1 | < 0.3 | 0.5 | 50 | 120 ~ 340 | 0.1 | |
| | | (2SA794/A 2SC1567/A | | | | | | | 100/120 | 0.5 | 0.2 | 0.5 | 50 | 65 ~ 330 | 0.15 | |
| | | | | 2SB1439 2SD2183 | | | | | 100 | 2 | < 0.3 | 1.0 | 50 | 120 ~ 340 | 0.2 | |
| | | | (2SB1545 2SD2365 | | | | | | 150 | 1 | < 0.3 | 0.5 | 25 | 120 ~ 340 | 0.5 | |
| | | | | 2SD2341 | | | | | 180 | 2 | < 1 | 0.5 | 50 | 60 ~ 240 | 0.15 | |
| | | 2SA1698 | | | | | | | 200 | 0.07 | < -1.5 | -0.05 | -5 | ● 80 | *0.01 | |
| | △ 2SD2412 | | | | | | | 300 | 0.75 | < 1 | 1.0 | 200 | 40 ~ 250 | 0.3 | | |
| Audio drive | | (2SA1110 2SC2590 | | | | | | | 120 | 0.5 | 1.0 | 0.3 | 30 | 65 ~ 330 | 0.15 | |
| | | | | 2SB1414 2SD2134 | | | (2SA1111/2 2SC2592 | (2SA1535/A 2SC3944/A | 150/180 | 1 | 0.5 | 0.5 | 50 | 90 ~ 330 | 0.15 | |
| Low V _{CE(sat)} | 2SB967 | | | | | | | | 18 | 5 | < 1 | 3 | 100 | 90 ~ 625 | 2 | |
| | | (2SA900 2C1568 | | | | | | | 18 | 1 | 0.3 | 1.0 | 50 | 90 ~ 360 | 0.5 | |
| | | | | △ 2SB1593 | | | | | 20 | 3 | 0.3 | 2.6 | 40 | — | — | |
| | | 2SC2594* | | | | | | | 20 | 5 | 0.7 | 3.0 | 100 | 140 ~ 450 | 0.15 | |
| | | | 2SB1536 | | | | | 20 | 5 | < 1.0 | 3.0 | 100 | 90 ~ 625 | 2 | | |
| Pre-amp. | | (2SA914 2SC1953 | | | | | | | 150 | 0.05 | < 1.0 | 0.03 | 3.0 | 90 ~ 450 | 0.01 | |
| Darlington | | 2SD946/A/B | | 2SD2220 (80V) | | | | | 30/60/ 100 | 1 | < 1.8 | 1.0 | 1 | 4000 ~ 40000 | 1 | |
| | 2SD2404 | | | | | | | | 80 | 1.5 | < 1.8 | 1.0 | 1 | 4000 ~ 40000 | 1 | |
| | | | | 2SB1526 | (2SB1418 2SD2138 | | (2SB949 2SD1275 | | 60 | 2 | < 2.5 | 2.0 | 8 | 1000 ~ 10000 | 2 | |
| | | | | 2SB1504 | | | | | 60 | 8 | < 1.5 | 4 | 8 | 1000 ~ 10000 | 4 | |
| | | 2SD1640 | | △ 2SD2479 | | | | | 100 | 2 | < 1.5 | 1.0 | 1 | 4000 ~ 40000 | 1 | |
| | | 2SD1645 | | | | | 2SD2051 | | 60 ± 10 | 1 | < 1.8 | 1.0 | 1 | 4000 ~ 40000 | 1 | |
| | | 2SD2018 | 2SD2326 | 2SD2135 | | | | | 60 ± 10 | 1 | < 1.8 | 1.0 | 1 | 6500 ~ 40000 | 1 | |
| | | △ 2SB1576 | | | | | | | 100 | 2 | < 2.5 | 1 | 4 | 1000 ~ 10000 | 1 | |
| | | △ 2SD2410 | | | | | | | 200 | 2 | < 2.5 | 1.5 | 6 | 1000 ~ 10000 | 0.7 | |
| | | | | 2SD2242/A | | 2SD1276/A | | 60/80 | 4 | < 2.0 | 3.0 | 12 | 1000 ~ 10000 | 3 | | |
| High breakdown voltage | | (2SA914 2SC1953 | | | | | | | 150 | 0.05 | < 1.0 | 0.03 | 3 | 90 ~ 450 | 0.01 | |
| | | 2SB1011 | | | | | | | 400 | 0.1 | < 2.5 | 0.05 | 5 | 30 ~ | 0.03 | |
| | | | 2SB1546 | | | | | | 400 | 0.5 | < 1.5 | 0.2 | 40 | 80 ~ 280 | 0.05 | |
| | | | 2SD2366 | | | | | | 400 | 0.5 | < 1.5 | 0.25 | 50 | 30 ~ | 0.03 | |
| Display | | 2SC3611 | | | | | | 2SC3943 | V _{CE(sat)} | 0.15 | < 0.5 | 0.15 | 15 | ● 350 | *0.11 | |
| | | | | | | | | 2SC4190 | | 40 | < 0.3 | 0.05 | 5 | ● 2000 | *0.05 | |
| T V | Chroma input | | | | | 2SA1605 | | | 200 | 0.07 | < -1.5 | -0.05 | -5 | ● 80 | *0.01 | |
| | | | 2SC2258 | | | | | | 250 | 0.1 | < 1.2 | 0.05 | 5 | ● 100 | *0.01 | |
| | | | 2SC3063 | | | | 2SC2923 | 2SC4714 | 2SC3942 | 300 | 0.1 | < 1.5 | 0.03 | 3 | ● 140 | *0.02 |
| | | | | | | | | | 2SA1817 | 300 | 0.1 | < 1.5 | 0.03 | 3 | ● 350 | 0.01 |
| | | | | | | | | | 2SC4717 | 300 | 0.1 | < 0.45 | 0.03 | 3 | ● 350 | 0.01 |
| | | | | | | | | | 2SC3945 | 300 | 0.1 | < 1.5 | 0.05 | 5 | ● 100 | *0.02 |
| | | | 2SA1375 | | | | | | | 200 | 0.07 | < 1.5 | 0.05 | 5 | ● 80 | *0.01 |
| | | 2SC2924 | | | | | | | 300 | 0.1 | < 1.5 | 0.03 | 3 | ● 140 | *0.02 | |
| Horizontal drive | 2SD1112 | | | | | 2SC2653(H) | 2SC1905(H) | 2SC3946 | 300 | 0.2 | < 1.0 | 0.05 | 5 | ● 70 | *0.01 | |
| High h _{FE} | | | | △ 2SB1630 | | | | | 60 | 3 | < 1.0 | 2.0 | 50 | 350 ~ 625 | 0.5 | |
| | △ 2SD2453 | | | | 2SD2139 | | | 2SD1273 | 60 | 3 | < 1.0 | 2.0 | 50 | 500 ~ 2500 | 0.5 | |
| | △ 2SD2443 | | | | | | | | 20 | 0.7 | < 0.4 | 0.5 | 50 | 1000 ~ 2500 | 0.15 | |

△ Preliminary (: Complementary pair