O258354 ADVANCED SEMICONDUCTOR

SILICON ADVANCED SEMICONDUCTOR

B2 DE 0258354 0000039 7

TRANSISTORS

| | | P _D @T _C = 25°C | M | AXIMUM | RATINGS | | ELEC | TRICAL CH | IARACT | ERISTICS | |
|---|---------------------------------|---------------------------------------|------------------------------|------------------------------|-----------------------------|-----------------------|----------------------------|------------------------------|---------------------------|-------------------------------|---------------------------------|
| DEVICE TYPE NO. | POLARITY | WATTS | I _c AMPS | ВИсво | BV _{CE} | ВУ∈во | h _{FE} MIN. | l _c AMPS | V _{CE} | f MHZ *KHZ | CASE |
| 2N329A 2N332 2N333 2N334 | PNP NPN NPN NPN | .386 .150 .150 .150 | .050 .025 .025 .025 | 50 45 45 45 | 30 20 20 20 | 20 1 1 | 9 18 18 | .003 .001 .001 .001 | 55555 | *500 4 5 8 | T039 T05 T05 T05 |
| 2N335 2N336 2N337 2N338 | NPN NPN NPN NPN | .150 .150 .125 .125 | .025 .025 .020 .020 | 45 45 45 45 | 20 20 20 20 20 | | 37 78 20 45 | .001 .001 .010 .010 | 5 5 5 5 | 6 7 20 30 | T05 T05 T05 T05 T05 |
| 2N339 2N340 2N341 2N342 | NPN NPN NPN NPN | 1.00 1.00 1.00 1.00 | .020 .020 .020 .020 | 55 85 125 60 | 55 85 85 60 | | 9999 | .005 .005 .005 .005 | 10 10 10 10 | 10 10 10 10 | T039 T039 T039 T039 |
| 2N343 2N478 2N479 2N479A | NPN NPN NPN NPN | 1.00 .200 .200 .200 | .020 .025 .025 .025 | 60 15 30 30 | 60 15 30 30 | 1222 | 29 40 4 40 | .005 .001 .001 .001 | 10 5 5 5 | 10 20 20 20 20 | T039 T05 T05 T05 |
| 2N480 2N480A 2N541 2N542 | NPN NPN NPN NPN | ,200 .200 .200 .200 | .025 .025 .025 .025 | 45 45 15 30 | 45 45 15 30 | 2 2 2 2 | 40 40 80 80 | .001 .001 .001 .001 | 5 5 5 5 | 20 20 10 10 | T05 T05 T05 T05 T05 |
| 2N543 2N545 2N546 2N547 | NPN NPN NPN NPN | .200 .600 .600 | .025 .800 .800 .800 | 50 60 30 60 | 50 60 30 60 | 2666 | 80 15 15 20 | .001 .500 .500 | 5 6 6 | 10 2 2 4 | T05 T05 T05 T05 |
| 2N548 2N549 2N550 2N560 2N656 | NPN NPN NPN NPN NPN | .600 .600 .600 .500 4.00 | .800 .800 .800 .100 | 30 60 30 60 | 30 60 30 60 | 6 6 8 | 20 20 20 20 | .500 .200 .200 .100 | 6 6 5 | 4 4 4 20 | T05 T05 T05 T05 |
| 2N657 2N697 2N697A 2N699 | NPN NPN NPN NPN | 4.00 4.00 .600 .800 | .500 .500 .500 1.00 | 60 100 60 60 120 | 60 100 40 35 80 | 8 8 5 5 | 30 30 40 25 40 | .200 .200 .150 .001 | 10 10 10 5 10 | 50 60 50 50 | T05 T05 T05 T05 T05 |
| 2N699A 2N702 2N703 2N707 | NPN NPN NPN NPN | .800 .800 .300 .300 | .500 .500 .050 .050 | 120 120 25 25 25 | 80 25 25 28 | 5 5 5 5 4 | 40 40 20 40 | .150 .150 .010 .010 | 10 5 5 | 50 50 150 150 400 | T05 T018 T018 T018 |
| 2N707A 2N709A 2N718 2N721 | NPN NPN NPN PNP | .500 .360 .400 | .100 .100 .400 | 70 50 60 50 | 40 20 40 35 | 5 5 5 | 9 40 40 20 | .010 .010 .010 .150 | 10 10 | 70 800 50 50 | T018 T018 T018 T018 |
| 2N722 2N722A 2N727 2N784 | PNP PNP PNP NPN | .400 .400 .300 | .200 .200 .050 | 50 50 50 25 30 | 35 35 20 15 | 5 5 5 | 20 30 30 25 | .150 .150 .150 .010 | 10 10 10 | 60 96 150 200 | T018 T018 T018 T018 |
| 2N784A 2N917 2N918 2N919 | NPN NPN NPN NPN | .360 .200 .200 | .200 .050 .050 .220 | 40 30 30 | 20 15 15 15 | 5 5 3 3 | 25 20 20 20 | .010 .003 .003 .010 | 1 1 | 300 500 600 200 | T018 T072 T072 T018 |
| 2N920 2N921 2N922 2N929 | NPN NPN NPN NPN | .360 .360 360 300 | .220 .200 .200 .030 | 25 25 50 50 45 | 15 20 20 45 | 5 5 5 | 40 20 40 60 | .010 .010 .010 .010 | 1 10 10 5 | 200 400 400 30 | T018 T018 T018 T018 |
| 2N930 2N957 2N988 2N995 | NPN NPN NPN PNP | .300 .250 .300 .360 | .030 -100 .220 .100 | 45 40 20 20 | 45 20 10 | 5 5 3 4 | 15 45 20 35 | .001 .010 .010 | 5 5 1 | 30 200 300 100 | T018 T018 T018 T018 |
| 2N995A 2N996 2N1069 2N1070 | PNP PNP NPN NPN | .360 .360 50.0 50.0 | .100 .100 4.00 4.00 | 20 15 60 60 | 15 12 45 45 | 4 4 9 9 | 35 35 10 10 | .020 .020 1.50 | 1 1 4 | 100 160 1.2 1.2 | T018 T018 T03 T03 |
| 2N1132A 2N1132B 2N1335 | PNP PNP NPN | .600 .600 .800 | .600 .600 .30 <u>0</u> | 60 70 120 | 40 45 90 | 5 6 4 | 25 25 10 | .001 .001 .030 | 5 5 10 | 60 60 70 | T039 T039 T039 |

TRANSISTORS

| | | P _D @ T _C =25°C | M/ | AXIMUM I | RATINGS | | ELEC | TRICAL CH | ARACTE | | |
|---|---------------------------------|---------------------------------------|--------------------------------------|-------------------------------|----------------------------|-----------------------|----------------------------|--------------------------------------|----------------------------|--------------------------------|----------------|
| EVICE YPE O. | POLARITY | WATTS | ا اه AMPS | BV _{C80} | BVc€ | BVEBO | h _{FE} MIN. | I₀ AMPS | Vce | f MHZ *KHZ | CAS |
| N1336 N1337 N1338 | NPN NPN NPN | .800 .800 .800 | .300 .300 .300 | 120 120 80 | 90 90 50 | 4 4 3 | 10 10 10 | .030 .030 .030 | 10 10 10 | 70 70 70 | T0 T0 T0 |
| N1339 N1340 | NPN NPN | .800 .800 | .300 | 120 120 | 100 | 3 | 10 | .030 | 10 10 | 70 70 | T0 T0 T0 |
| N1341 N1342 N1386 | NPN NPN NPN | .800 .800 .300 | .300 .300 .050 | 1120 150 25 | 100 125 25 | 3 5 3 | 10 10 30 | .030 .030 .010 | 10 10 1 | 70 70 25 | TO TO |
| N1387 N1388 N1389 N1390 | NPN NPN NPN NPN | .300 .300 .300 .300 | .050 .050 .050 .050 | 30 45 50 20 | 30 25 50 20 | 3 1.5 1.5 2 | 20 30 4 10 | .010 .001 .001 .001 | 1 6 6 6 | 25 50 20 20 | TC TC TC |
| N1409 N1409A N1410 N1410A | NPN NPN NPN NPN | .600 .800 .600 .800 | .500 .500 .500 .500 | 30 30 45 45 | 25 25 30 30 | 4 4 4 4 | 15 15 30 30 | .150 .150 .150 .150 | 10 10 10 10 | 50 230 50 230 | TC TC |
| N1417 N1418 N1420 N1470 | NPN NPN NPN NPN | .150 .150 .600 55.0 | .050 .050 1.00 3.00 | 15 30 60 60 | 15 30 30 60 | 2 2 5 3 | 30 30 100 15 | .001 .001 .150 1.00 | 6 6 10 5 | 1 1 50 1 | TC TC TC |
| N1491 N1492 N1493 N1505 | NPN NPN NPN NPN NPN | .500 .500 .500 .500 | .100 .100 .100 .500 | 30 60 100 50 | 30 60 100 20 | 1 2 4.5 3 | 50 15 15 7 | .015 .015 .015 .015 | 20 20 20 20 28 | 200 200 200 200 70 | T(T(T(|
| N1506 N1506A N1507 | NPN NPN NPN | .800 .800 .600 | .500 .500 .100 1.00 | 60 80 60 | 20 50 30 50 | 4 5 5 7 | 10 10 100 40 | .100 .100 .150 .150 | 28 28 10 | 140 140 50 60 | T(T(T(|
| N1613 N1613A N1613B N1700 | NPN NPN NPN NPN | .600 1.00 1.00 5.00 | 1.00 1.00 1.00 | 75 75 120 60 | 50 50 40 | 7 7 6 | 40 40 20 | .150 .1 <u>50</u> .100 | 10 10 4 | 60 60 *400 70 | T(|
| N1711 N1711A N1711B N1716 | NPN NPN NPN NPN | .800 .800 .800 .800 | 1.00 1.00 1.00 .750 | 75 75 120 90 | 50 50 50 60 | 7 7 7 6 | 100 100 100 40 | .150 .150 .150 .200 | 10 10 10 5 | 70 70 16 | T(T(|
| N1717 N1838 N1839 N1840 | NPN NPN NPN NPN | .800 .600 .600 .800 | .750 .500 .500 .500 | 150 45 45 25 | 100 20 20 15 | 6 5 4.5 5 | 40 40 12 10 | .200 .100 .100 .150 | 5 10 10 10 | 90 90 90 90 | T0 |
| N1893 N1893A N1973 N1974 | NPN NPN NPN NPN | .800 .800 .800 .800 | .500 .500 .200 .200 | 120 140 100 100 | 80 80 60 60 | 7 7 7 7 | 40 40 76 36 | .150 .150 .001 .001 | 10 10 5 5 | 50 100 60 50 | T(|
| N1975 N1983 N1986 N1987 | NPN NPN NPN NPN | .800 .600 .600 | .200 1.00 .500 .500 | 100 50 50 50 | 25 25 25 25 | 5 5 5 5 | 18 70 60 20 20 | .001 .001 .150 .150 | 5 10 10 | 40 40 40 40 40 | T(T(T(|
| 11988 11989 11990 11991 | NPN NPN NPN PNP | .600 .600 .600 | 1.00 1.00 1.00 .500 1.00 | 100 100 100 30 60 | 45 45 45 20 60 | 5 5 3 5 8 | 10 20 15 50 | .001 .001 .030 .150 .200 | 5 10 10 10 | 40 40 40 40 10 | T(|
| N2017 N2040 N2041 N2049 N2102 | NPN NPN NPN NPN NPN | 1.00 .600 .600 .800 1.00 | 500 .500 .500 .1.00 | 45 75 75 120 | 45 75 50 65 | 4 4 7 7 | 30 30 75 40 | .200 .200 .200 .001 .150 | 6 6 5 10 | 2 2 50 60 | To To |
| N2102 N2107 N2175 N2176 N2177 | NPN PNP PNP PNP | 1.00 1.00 .100 .100 .100 | .500 .050 .050 .050 | 60 6 6 6 | 60 6 6 6 | 8 6 6 | 30 30 30 30 15 | .200 20u 20u 20u 20u | 10 1.5 1.5 1.5 | 15 10 10 8 | T |

T-29-01

O258354 ADVANCED SEMICONDIADVANCED SEMICONDUCTOR

SILICON

B2 DE D258354 D000041 5 TRANSISTORS _____

| DEVICE TYPE NO. P 2N2178 2N2192B 2N2193B 2N21944 2N2194B 2N2194B 2N2194B 2N2218 2N2218A 2N2219 2N2219A 2N2221A 2N2221A 2N2221A 2N2221A 2N2222A 2N2227 2N2237 2N2256 2N2257 2N2270 2N2297 2N2303 2N2309 2N2380 | POLARITY PNP NPN NPN NPN NPN NPN NPN NPN NPN N | WATTS .100 .800 .800 .800 .800 .800 .800 .80 | .050 1.00 1.00 1.00 1.00 1.00 1.00 1.00 | 8Vcso 6 60 80 60 60 60 45 60 75 60 75 60 | BV _{GE} 6 40 50 40 40 25 30 40 30 40 30 40 30 | BV _{EBO} 6 5 8 5 5 5 5 6 5 6 5 6 5 6 6 5 6 6 6 6 | h _{FE} MIN. 15 75 30 15 15 15 20 40 40 100 100 40 | AMPS 20u .010 .010 .010 .010 .010 .150 .150 .150 | V _{CE} 1.5 10 10 10 10 10 10 10 10 10 10 10 10 10 | f MHZ *KHZ 8 50 50 50 50 250 250 250 250 300 | CASI T01 T03 T03 T03 T03 T03 T03 T03 |
|--|--|--|--|---|--|---|---|--|--|--|--|
| 2N2192B 2N2193B 2N21944 2N2194B 2N2194B 2N22188 2N2218 2N22194 2N2219 2N2221A 2N2221A 2N2221A 2N2222 2N2222A 2N2224 2N22257 2N2257 2N2257 2N2297 2N2297 2N2303 2N2309 | NPN | .800 .800 .800 .800 .800 .800 .800 .800 | 1.00 1.00 1.00 1.00 1.00 1.00 .800 .800 | 60 80 60 60 45 60 75 60 75 60 75 | 40 50 40 40 25 30 40 30 40 30 | 585 5555 6565 | 75 30 15 15 15 20 40 40 100 | .010 .010 .010 .010 .010 .150 .150 .150 | 10 10 10 10 10 10 10 10 | 50 50 50 50 50 50 250 250 | T03 T03 T03 T03 T03 T03 T03 T03 |
| 2N2194A 2N2194B 2N2195B 2N2218 2N2218A 2N2219A 2N2219A 2N2221 2N2221 2N2221A 2N2222 2N2222A 2N2224 2N2224 2N2237 2N2256 2N2257 2N2257 2N2257 2N2297 2N2397 2N2399 | NPN | .800 .800 .800 .800 .800 .800 .400 .400 | 1.00 1.00 1.00 .800 .800 .800 .800 .800 | 60 60 45 60 75 60 75 60 75 | 40 40 25 30 40 30 40 30 | 5555 6565 | 15 15 20 40 40 100 100 | .010 .010 .150 .150 .150 .150 | 10 10 10 10 10 10 | 50 50 50 250 250 250 | T03 T03 T03 T03 T03 T03 |
| 2N2218A 2N2219 2N2219A 2N2221A 2N2221A 2N2222A 2N2222A 2N2222A 2N22237 2N2257 2N2257 2N2270 2N2297 2N2397 2N2397 2N2397 2N2399 | NPN | .800 .800 .800 .400 .400 .400 .800 .600 .300 .300 | .800 .800 .800 .800 .800 .800 .800 .500 | 75 60 75 60 75 60 75 | 30 40 30 40 30 40 | 6 5 5 5 | 40 100 100 | .150 .150 .150 | 10 10 10 | 250 250 250 | T03 T03 T03 |
| 2N2221 2N2221A 2N2222 2N2222A 2N2224 2N2237 2N2256 2N2257 2N2270 2N2297 2N2303 2N2309 | NPN | .400 .400 .400 .400 .800 .600 .300 .300 | .800 .800 .800 .800 .500 | 60 75 60 75 | 30 40 | 5 | | | | <u> </u> | |
| 2N2224 2N2237 2N2256 2N2257 2N2270 2N2297 2N2303 2N2309 | NPN NPN NPN NPN NPN NPN PNP NPN | .800 .600 .300 .300 1.00 | .500 .500 | | | 6 5 | 40 100 | .150 .150 .150 | 10 10 10 | 250 250 250 | T03 T01 T01 T01 |
| 2N2257 2N2270 2N2297 2N2303 2N2309 | NPN NPN NPN PNP NPN | .300 1.00 | | 40 | 40 40 20 | 6 5 6 | 100 35 40 | .150 .0001 1.00 | 10 10 | 300 250 100 | T01 T03 T03 |
| 2N2309 | NPN | .800 | .100 1.00 1.00 | 7 7 60 80 | 7 7 45 35 | 1 1 7 | 17 40 50 40 | .010 .010 .150 | 1 1 10 10 | 250 250 100 60 | T01 T01 T03 T03 |
| 2N2380A | NPN NPN | .800 .600 .600 | .500 .500 .500 .500 | 50 30 80 80 | 35 30 40 40 | 555 | 75 40 20 20 | .001 .0002 .150 | 5 4 5 | 60 30 100 | T03 T03 T03 |
| 2N2405 2N2440 2N2443 | NPN NPN NPN | 1.00 .800 .800 | 1.00 .500 .200 | 120 120 120 | 90 80 100 | 5 7 7 | 60 70 30 | .150 .150 .005 .001 | 5 10 10 5 | 100 120 90 50 | T03 T03 T03 T03 |
| 2N2475 2N2476 2N2477 2N2478 | NPN NPN NPN NPN | .600 .600 .600 .600 | .100 .500 .500 .500 | 15 60 60 120 | 6 20 20 40 | 4 5 5 5 | 20 20 40 30 | .050 .150 .150 .150 | .5 .4 .4 1.5 | 600 250 250 200 | T01 T03 T03 T03 |
| 2N2479 2N2483 2N3484 2N2484A | NPN NPN NPN NPN | .600 .360 .360 .360 | .500 .050 .050 .050 | 80 60 60 60 | 40 60 60 60 | 5 6 6 | 30 80 150 150 | .150 .001 .001 .001 | 1.5 5 5 | 150 60 60 15 | TO3 TO1 TO1 TO1 |
| 2N2537 2N2539 2N2586 2N2594 | NPN NPN NPN NPN | .800 .500 .300 1.00 | .800 .800 .030 1.00 | 60 60 60 | 30 30 45 80 | 5 5 6 7 | 20 20 150 | .001 .001 .001 | 10 10 5 | 250 250 45 | T03 T01 T01 |
| 2N2516 2N2616 2N2645 2N2651 | NPN NPN NPN | .300 .300 .500 | .050 .050 .200 | 80 30 30 75 | 15 15 50 | 3 3 7 | 20 20 20 75 | .010 .003 .003 .001 | 5 1 1 5 | 40 500 600 50 | T03 T01 T01 T01 |
| 2N2657 2N2658 2N2696 | NPN NPN NPN PNP | .360 1.20 1.20 .360 | .500 5.00 5.00 .500 | 40 80 100 25 | 20 50 80 25 | 5 7 7 4 | 25 40 40 25 | .010 1.00 1.00 .010 | 1 2 2 10 | 350 20 20 100 | T01 T03 T03 T01 |
| N2708 N2784 N2787 N2788 | NPN NPN NPN NPN | .200 .300 .800 .800 | .020 .020 .800 .800 | 35 15 75 75 | 20 6 35 35 | 3 4 5 5 | 30 40 30 75 | .002 .010 .020 .020 | 15 5 20 20 | 1200 1000 250 250 | T07 T01 T03 T03 |
| N2789 N2790 N2791 N2792 | NPN NPN NPN NPN | .800 .500 .500 .500 | .800 .800 .800 .800 | 75 75 75 75 75 | 35 35 35 35 | 5 5 5 5 | 150 30 75 50 | .020 .020 .020 .020 | 20 20 20 20 20 | 150 250 250 250 250 | TO: TO: TO: TO: |
| N2800 N2801 N2837 | PNP PNP PNP | .800 .800 .500 | .800 .800 .800 | 50 50 50 | 35 35 35 | 5 5 5 | 20 30 20 | 10u 10u 10u | 10 10 10 | 120 120 120 | T03 T03 T01 T01 |
| 2N2838 | PNP | .500 | .800 | 50 | 35 | 5 | 30 | 10u | 10 | 120 | |

TRANSISTORS

| 1.500 60 30 5 30 150 10 350 108 10 | 25, 405 | | P _D @ T _C =25°C | M/ | AXIMUM I | RATINGS | | ELEC | TRICAL CH | ARACTE | RISTICS | |
|--|-------------------------|------------|---------------------------------------|--------------|-----------|-----------|----------|----------|-------------|-------------|---------|----------|
| 1.00 | DEVICE TYPE NO. | POLARITY | WATTS | | ВУсво | BVc∈ | ВVево | | | Vce | | |
| 1.500 60 30 5 40 1.550 10 250 TO 10 3.00 100 80 5 40 1.00 1 30 TO 10 3.00 100 80 5 40 1.00 1 30 TO 10 3.00 100 80 5 40 1.00 1 30 TO 10 3.00 100 80 5 40 1.00 1 30 TO 10 3.00 100 80 5 40 1.00 1 30 TO 10 3.00 100 80 5 40 1.00 1 30 TO 10 3.00 100 80 5 40 1.00 1 30 TO 10 3.00 10 1 1 3.00 TO 1.00 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | N2845 | NPN | .360 .800 | | | | 5 | 30 30 | | | | |
| 3.00 | N2846 N2847 | NPN NPN | .360 | .500 | 60 | 30 | 5 | 40 | .150 | 10 | 250 | T0 |
| 3.00 | N2848 | NPN | .800 | | | | | | | 10 | | |
| 3,00 | N2850-1 N2851-1 | NPN NPN | .850 .850 | | | | 5 | 40 | 1.00 | - | 30 | TO: |
| 3.00 | N2852-1 | NPN | .850 | 3.00 | | | 5 | 20 | | 1 | | TO TO |
| 1 | V2853-1 V2854-1 | NPN NPN | .850 .850 | | | | | | | | | ТО |
| 1.00 | V2855-1 | NPN | .850 | 3.00 | 60 | 40 | 5 | 40 | 1.00 | 1 | 30 | l TO |
| 1.00 | N2856-1 N2863 | NPN NPN | .850 .800 | | 60 | 40 25 | 5 | 20 20 | | 15 | | |
| 1.00 | V2864 | NPN | .800 | 1.00 | 60 | 25 | 5 | 12 | | 15 | | TO |
| 1.300 | V2865 V2868 | NPN NPN | .200 .800 | | 25 | | | 20 | .004 010 | | | I TO |
| 3.00 | V2883 | NPN | .800 | .300 | | 20 | | 20 | 1.00 | 10 | 400 | T0 |
| 1.200 | 12884 | NPN NPN | .800 | | | | | | | | | TO |
| 0 | N2890 N2894A | PNP | .800 .360 | .200 | 12 | 12 | 4.5 | 40 | .030 | .5 | 800 | TO |
| 10 | V2904 | PNP | .600 | | 60 | | | 1 | | | | |
| Second S | V2904A V2405 | PNP PNP | .600 .600 | | | | 5 | | | | | l TC |
| 10 | N2405A | PNP | .600 | .600 | | | 5 | | | | | TO |
| 1.600 | V2406 V2406A | PNP PNP | .400 | _ | | | | | | | | |
| 1.500 | V2407 | PNP | .400 | .600 | 60 | 40 | l 5 | 30 | .001 | 10 | 200 | l TO |
| 1.00 | N2907A N2927 | PNP PNP | .400 .800 | | 60 | | | | | | | TC |
| 10 | V2958 | NPN | .600 | .600 | 60 | 20 | 5 | 40 | .150 | 10 | 250 | TO |
| 1.00 | V2959 V2986 | NPN NPN | .600 1.00 | | | | 5 | | | | | TO |
| 1.00 95 80 7 60 .200 5 30 TO 1.00 1.00 155 100 7 60 .200 5 30 TO 1.00 95 80 7 24 .200 5 30 TO 1.00 1.00 140 80 7 100 .150 10 100 TO 1.00 1.20 120 80 7 40 .010 10 50 TO 1.00 .700 60 40 5 50 .150 10 100 TO 1.00 .700 60 40 5 50 .150 10 100 TO 1.00 .50 TO 1.50 10 100 TO 1.50 10 150 TO 1.50 10 1.50 TO 1.50 10 10 1.50 TO 1.50 10 10 10 10 10 10 10 10 10 10 10 10 10 | N2987 | NPN | 1.00 | 1.00 | 95 | | 7 | 25 | 2.00 | 5 | 30 | TO |
| 1.00 | V2988 | NPN | 1.00 | | | | | 25 | .200 | | | |
| 1.00 | N2989 N2990 | NPN NPN | 1.00 1.00 | | | | | 60 | .200 | 5 | 30 | T(|
| 1.00 | N2991 | NPN | 2.00 | | | | 7 | | | | | |
| 1.20 | N3019 N3020 | NPN NPN | .800 .800 | | | | 7 | | | | | |
| 0 4.00 90 60 7 25 .500 4 3 70 5 15.0 100 70 7 20 4.00 4 2.5 7 0 .500 60 60 4 25 .010 10 130 T0 0 .600 70 50 6 30 .150 10 150 T0 0 1.00 100 60 7 60 .001 10 70 T0 0 1.00 100 60 7 20 .001 10 70 T0 0 1.00 80 40 7 60 .001 10 70 T0 0 1.00 80 40 7 20 .001 10 60 T0 0 1.00 150 150 5 25 .001 5 40 T0 0 1.00 | N3036 | NPN | .800 | 1.20 | 120 | 80 | 7 | 40 | .010 | | l 50 | T(|
| 55 15.0 100 70 7 20 4.00 4 2.5 7 10 .500 60 60 60 4 25 .010 10 130 T0 10 .600 70 50 6 30 .150 10 150 T0 10 1.00 100 60 7 60 .001 10 70 T0 10 1.00 100 60 7 20 .001 10 60 T0 10 1.00 80 40 7 60 .001 10 70 T0 10 1.00 80 40 7 20 .001 10 70 T0 10 1.00 80 40 7 20 .001 10 60 T0 10 1.00 100 100 6 20 .001 5 40 T0 | V3053 V3054 | NPN NPN | 5.00 25.0 | | | | 5 7 | | | | | |
| 0 .600 70 50 6 30 .150 10 150 TO 0 1.00 100 60 7 60 .001 10 70 TO 0 1.00 100 60 7 20 .001 10 60 TO 0 1.00 80 40 7 60 .001 10 70 TO 0 1.00 80 40 7 20 .001 10 70 TO 0 1.00 150 150 5 25 .001 5 40 TO 0 1.00 100 100 6 20 .001 5 60 TO 0 1.00 100 100 6 40 .001 5 80 TO 0 5.00 35 35 6 20 2.00 3 *30 0 20.0 90 | N3055 | NPN | 115 | 15.0 | 100 | 70 | | 20 | 4.00 | 4 | 2.5 | |
| 1.00 | N3073 N3081 | PNP PNP | .360 .600 | | | | | 30 | | | | |
| 0 1.00 100 60 7 20 .001 10 60 TO 0 1.00 80 40 7 60 .001 10 70 TO 0 1.00 80 40 7 20 .001 10 60 TO 0 1.00 150 150 5 25 .001 5 40 TO 0 1.00 100 100 6 20 .001 5 60 TO 0 1.00 100 100 6 40 .001 5 80 TO 0 5.00 35 35 6 20 2.00 3 *30 TO 0 20.0 90 75 5 12 10.0 8 1 1 0 15.0 160 160 8 8.5 10.0 10 2 0 .100 50 | V3107 | NPN | .800 | 1.00 | 100 | 60 | 7 | 60 | .001 | 10 | 70 | TO |
| 0 1.00 80 40 7 20 .001 10 60 TO 0 .200 150 150 5 25 .001 5 40 TO 0 1.00 100 100 6 20 .001 5 60 TO 0 1.00 100 100 6 40 .001 5 80 TO 0 5.00 35 35 6 20 2.00 3 *30 TO 0 20.0 90 75 5 12 10.0 8 1 1 0 15.0 160 160 8 8.5 10.0 10 2 0 1 0 .100 50 40 6 70 .001 5 20 TO 1 0 300 TO 0 0 300 TO 0 0 0 0 0 0< | N3108 N3109 | NPN NPN | .800 .800 | 1.00 | | | | | .001 | | | · T |
| 0 1.00 100 100 6 20 .001 5 60 TO 0 1.00 100 100 6 40 .001 5 80 TO 0 5.00 35 35 6 20 2.00 3 *30 *30 0 20.0 90 75 5 12 10.0 8 1 1 0 15.0 160 160 8 8.5 10.0 10 2 0 10 2 0 TO 001 5 20 TO TO 00 TO 000 | N31109 N3110 | NPN | .800 | 1.00 | 80 | 40 | 7 | 20 | .001 | 10 | 60 | T(|
| 0 1.00 100 100 6 40 .001 5 80 To 0 5.00 35 35 6 20 2.00 3 *30 *30 0 20.0 90 75 5 12 10.0 8 1 0 15.0 160 160 8 8.5 10.0 10 2 0 .100 50 40 6 70 .001 5 20 T 0 .050 40 35 3 40 .002 10 300 T 0 .050 30 25 3 25 .002 10 300 T 0 .800 60 45 5 35 .010 10 250 T | N3114 | NPN | .800 | .200 | 150 | 150 | 5 | 25 | | 5 | | Ţ |
| 0 5.00 35 35 6 20 2.00 3 *30 0 20.0 90 75 5 12 10.0 8 1 0 15.0 160 160 8 8.5 10.0 10 2 0 .100 50 40 6 70 .001 5 20 T 0 .050 40 35 3 40 .002 10 300 T 0 .050 30 25 3 25 .002 10 300 T 0 .800 60 45 5 35 .010 10 250 T | N3224 N3225 | PNP PNP | .700 .700 | 1.00 | 100 | 100 | 6 | 40 | .001 | 5 | i 80 | I T |
| 0 | N3226 | NPN | 75.0 | 5.00 | 35 | 35 | 6 | 20 | 2.00 | | *30 | |
| 0 .100 50 40 6 70 .001 5 20 T 0 .050 40 35 3 40 .002 10 300 T 0 .050 30 25 3 25 .002 10 300 T 0 .800 60 45 5 35 .010 10 250 T | N3237 N3240 | NPN NPN | 200 150 | 20.0 15.0 | 90 160 | 75 160 | 5 8 | 8.5 | | | 1 2 | 1 ' |
| $egin{array}{cccccccccccccccccccccccccccccccccccc$ | N3240 N3306 | PNP | .600 | .100 | 50 | 40 | 6 | 70 | .001 | 5 | 20 | T |
| 0 .800 60 45 5 35 .010 10 250 T | N3307 | PNP PNP | .300 | | | | - | | | | | |
| | N3308 N3326 N3337 | NPN | .800 | .800 | 60 | 45 | 5 | 35 | .010 | 10 | 250 | l T |
| | N3337 N3338 | NPN NPN | .300 .300 | .050 | 40 | | | 30 | | | | T |
| - | N3339 | NPN | .300 | | | | | | | | | |

O258354 ADVANCED SEMICADVANCED SEMICONDUCTOR D T. 29.01
SILICON
B2 DE 0258354 0000043 7

| DE 405 | | Po @ Tc=25°C | M | AXIMUM | RATINGS | | ELEC | TRICAL CI | HARACT | ERISTICS | |
|--------------------------------------|--------------------------|------------------------------|------------------------------|------------------------|-----------------------|-------------------|----------------------------|------------------------------|------------------|-------------------------|--------------------------------------|
| DEVICE TYPE NO. | POLARITY | WATTS | l₅ AMPS | ВУсво | BVce | BVEBO | h _{fe} MIN. | l₀ AMPS | Vce | f MHZ *KHZ | CASE |
| 2N3420 | NPN | 1.00 | 3.00 | 85 | 60 | 8 | 40 | 1.00 | 2 | 40 | T05 |
| 2N3421 | NPN | 1.00 | 3.00 | 125 | 80 | 8 | 40 | 1.00 | 2 | 40 | T05 |
| 2N3439 | NPN | 1.00 | 1.00 | 450 | 350 | 7 | 40 | .020 | 10 | 15 | T039 |
| 2N3440 | NPN | 1.00 | 1.00 | 300 | 250 | 7 | 40 | .020 | 10 | 15 | T039 |
| 2N3442 2N3444 2N3445 2N3446 | NPN NPN NPN NPN | 117 1.00 115 115 | 10.0 1.00 7.50 7.50 | 160 80 80 100 | 140 50 60 80 | 7 5 6 10 | 20 20 20 20 20 | .200 .500 3.00 3.00 | 4 1 5 5 | *80 150 10 10 | T03 T039 T03 T03 T03 |
| 2N3447 2N3448 2N3451 2N3467 | NPN NPN PNP PNP | 115 115 .300 1.00 | 7.50 7.50 .050 1.00 | 80 100 6 40 | 60 80 6 40 | 6 10 4 5 | 40 40 30 40 | 5.00 5.00 .010 .500 | 5 5 .3 | 10 10 300 175 | T03 T03 T018 T039 |
| 2N3468 | PNP | 1.00 | 1.00 | 50 | 50 | 5 | 25 | .500 | 1 | 150 | T039 |
| 2N3469 | NPN | 1.20 | 5.00 | 35 | 25 | 5 | 100 | .500 | 1 | 20 | T039 |
| 2N3478 | NPN | .200 | .050 | 30 | 15 | 2 | 25 | .002 | 8 | 750 | T072 |
| 2N3494 | PNP | .600 | .100 | 80 | 80 | 4.5 | 40 | .010 | 10 | 200 | T039 |
| 2N3495 | PNP | .600 | .100 | 120 | 120 | 4.5 | 40 | .010 | 10 | 150 | T039 |
| 2N3498 | NPN | 1.00 | .500 | 100 | 100 | 6 | 40 | .150 | 10 | 150 | T039 |
| 2N3499 | NPN | 1.00 | .500 | 100 | 100 | 6 | 100 | .150 | 10 | 150 | T039 |
| 2N3500 | NPN | 1.00 | .300 | 150 | 150 | 6 | 40 | .150 | 10 | 150 | T039 |
| 2N3501 | NPN | 1.00 | .300 | 150 | 150 | 6 | 100 | .150 | 10 | 150 | T039 |
| 2N3506 | NPN | 1.00 | 3.00 | 60 | 40 | 5 | 40 | 1.50 | 2 | 60 | T039 |
| 2N3507 | NPN | 1.00 | 3.00 | 80 | 50 | 5 | 30 | .001 | 2 | 60 | T039 |
| 2N3510 | NPN | .360 | .500 | 40 | 10 | 6 | 25 | .015 | 10 | 350 | T018 |
| 2N3511 2N3545 2N3550 2N3554 | NPN PNP PNP NPN | .360 .360 .400 .800 | .500 .200 .100 1.20 | 40 20 60 60 | 15 20 45 30 | 6 5 10 5 | 30 40 200 25 | .150 .001 10 .750 | 1 1 5 1 | 450 250 60 150 | T018 T018 T018 T018 T039 |
| 2N3563 | NPN | .200 | .050 | 30 | 12 | 2 | 20 | .008 | 10 | 600 | T0106 |
| 2N3564 | NPN | .200 | .100 | 30 | 15 | 4 | 20 | .015 | 10 | 400 | T0106 |
| 2N3565 | NPN | .200 | .050 | 30 | 25 | 6 | 120 | .001 | 5 | 40 | T0106 |
| 2N3566 | NPN | .300 | .200 | 40 | 30 | 5 | 80 | .002 | 10 | 40 | T0105 |
| 2N3567 | NPN | .300 | .500 | 80 | 40 | 5 | 40 | .150 | 1 | 60 | T0105 |
| 2N3568 | NPN | .300 | .500 | 80 | 60 | 5 | 40 | .150 | 1 | 60 | T0105 |
| 2N3569 | NPN | .300 | .500 | 80 | 40 | 5 | 100 | .150 | 1 | 1000 | T0105 |
| 2N3572 | NPN | .200 | .050 | 25 | 13 | 3 | 20 | .005 | 6 | 1000 | T072 |
| 2N3576 | PNP | .360 | .200 | 20 | 15 | 5 | 40 | .010 | .5 | 400 | T018 |
| 2N3600 | NPN | .200 | .050 | 30 | 15 | 3 | 20 | .002 | 6 | 850 | T072 |
| 2N3634 | PNP | 1.00 | 1.00 | 140 | 140 | 5 | 50 | .050 | 10 | 150 | T039 |
| 2N3635 | PNP | 1.00 | 1.00 | 140 | 140 | 5 | 100 | .050 | 10 | 200 | T039 |
| 2N3636 | PNP | 1.00 | 1.00 | 175 | 175 | 5 | 50 | .050 | 10 | 150 | T039 |
| 2N3637 | PNP | 1.00 | 1.00 | 175 | 175 | 5 | 100 | .050 | 10 | 200 | T039 |
| 2N3638 | PNP | .300 | .500 | 25 | 25 | 4 | 25 | .010 | 10 | 100 | T0105 |
| 2N3638A | PNP | .300 | .500 | 25 | 25 | 4 | 100 | .010 | 10 | 150 | T0105 |
| 2N3639 | PNP | .200 | .800 | 6 | 6 | 4 | 20 | .050 | 1 | 500 | T0106 |
| 2N3641 | NPN | .350 | .500 | 60 | 30 | 5 | 40 | .150 | 10 | 150 | T0106 |
| 2N3642 | NPN | .350 | .500 | 60 | 45 | 5 | 40 | .150 | 10 | 150 | T0105 |
| 2N3643 | NPN | .350 | .500 | 60 | 30 | 5 | 100 | .150 | 10 | 250 | T0105 |
| 2N3644 | PNP | .300 | .500 | 45 | 45 | 5 | 80 | .001 | 10 | 200 | T0105 |
| 2N3645 | PNP | .300 | .500 | 60 | 60 | 5 | 80 | .001 | 10 | 200 | T0105 |
| 2N3665 | NPN | 5.00 | 1.00 | 120 | 80 | 8 | 40 | .150 | 10 | 60 | T039 |
| 2N3666 | NPN | 5.00 | 1.00 | 120 | 80 | 8 | 100 | .150 | 10 | 60 | T039 |
| 2N3667 | NPN | 117 | 15.0 | 50 | 50 | 5 | 15 | 8.00 | 3 | 0.5 | T03 |
| 2N3671 | PNP | .600 | .600 | 60 | 50 | .5 | 55 | .010 | 10 | 200 | T039 |
| 2N3675 | NPN | 8.80 | 3.00 | 90 | 55 | 7 | 12 | 1.00 | 10 | 1 | T039 |
| 2N3676 | NPN | 8.80 | 3.00 | 90 | 90 | 7 | 12 | 1.00 | 1 | 1 | T039 |
| 2N3678 | NPN | .800 | .800 | 75 | 55 | 6 | 40 | .150 | 10 | 250 | T039 |
| 2N3681 | NPN | .200 | .025 | 10 | 7 | 2 | 20 | .002 | 6 | 1000 | T072 |
| 2N3683 | NPN | .200 | .030 | 30 | 12 | 2 | 30 | .008 | 10 | 1000 | T072 |
| 2N3691 | NPN | .200 | .030 | 35 | 20 | 4 | 40 | .005 | 10 | 200 | T0106 |
| 2N3692 | NPN | .200 | .030 | 35 | 20 | 4 | 100 | .005 | 10 | 200 | T0106 |
| 2N3693 | NPN | .200 | .030 | 45 | 45 | 4 | 40 | .010 | 10 | 200 | T0106 |
| 2N3701 | NPN | .500 | 1.00 | 140 | 80 | 7 | 30 | .001 | 5 | 80 | T018 |
| 2N3712 | NPN | .800 | 2.00 | 140 | 150 | 5 | 25 | .030 | 10 | 40 | T039 |