

# POWER SILICON NPN

| Item Number                     | Part Number | Manufacturer | I <sub>C</sub> Max (A) | V <sub>(BR)CEO</sub> (V) | h <sub>FE</sub> |     | f <sub>T</sub> (Hz) | I <sub>CSO</sub> Max (A) | t <sub>r</sub> Max (s) | t <sub>f</sub> Max (s) | P <sub>D</sub> Max (W) | T <sub>Oper</sub> Max (°C) | Package Style |
|---------------------------------|-------------|--------------|------------------------|--------------------------|-----------------|-----|---------------------|--------------------------|------------------------|------------------------|------------------------|----------------------------|---------------|
|                                 |             |              |                        |                          | Min             | Max |                     |                          |                        |                        |                        |                            |               |
| <b>I(C) &gt;= 5 A, (Cont'd)</b> |             |              |                        |                          |                 |     |                     |                          |                        |                        |                        |                            |               |
| -                               | SML1623A    | Semelab      | 5.0                    | 80                       |                 |     | 2.5M                |                          |                        |                        | 105                    | 175 J                      | TO-3          |
| -                               | SML1633A    | Semelab      | 5.0                    | 80                       |                 |     | 2.5M                |                          |                        |                        | 105                    | 175 J                      | TO-3          |
| -                               | SML1643     | Semelab      | 5.0                    | 80                       |                 |     | 2.5M                |                          |                        |                        | 53                     | 175 J                      | TO-66         |
| -                               | SML1653     | Semelab      | 5.0                    | 80                       |                 |     | 2.5M                |                          |                        |                        | 53                     | 175 J                      | TO-66         |
| 5                               | SML7413     | Semelab      | 5.0                    | 80                       |                 |     | 15M                 |                          |                        |                        | 9.0                    | 175 J                      | TO-39         |
| -                               | SML7416     | Semelab      | 5.0                    | 80                       |                 |     | 15M                 |                          |                        |                        | 9.0                    | 175 J                      | TO-39         |
| -                               | SML7419     | Semelab      | 5.0                    | 80                       |                 |     | 15M                 |                          |                        |                        | 9.0                    | 175 J                      | TO-39         |
| -                               | SML4452     | Semelab      | 5.0                    | 80                       |                 |     | 20M                 |                          |                        |                        | 4.0                    | 175 J                      | TO-39         |
| -                               | SML4454     | Semelab      | 5.0                    | 80                       |                 |     | 20M                 |                          |                        |                        | 4.0                    | 175 J                      | TO-39         |
| 10                              | SML4456     | Semelab      | 5.0                    | 80                       |                 |     | 20M                 |                          |                        |                        | 4.0                    | 175 J                      | TO-39         |
| -                               | SML3403     | Semelab      | 5.0                    | 80                       |                 |     | 40M                 |                          |                        |                        | 30                     | 175 J                      | TO-111        |
| -                               | SML3423     | Semelab      | 5.0                    | 80                       |                 |     | 40M                 |                          |                        |                        | 5.0                    | 140 J                      | TO-39         |
| -                               | SML85503    | Semelab      | 5.0                    | 80                       |                 |     | 40M                 |                          |                        |                        | 5.0                    | 140 J                      | TO-39         |
| -                               | SML85508    | Semelab      | 5.0                    | 80                       |                 |     | 40M                 |                          |                        |                        | 5.0                    | 140 J                      | TO-39         |
| 15                              | 2N6736      | Space Power  | 5.0                    | 80                       | 4.0             | 120 | 200n                | 300n                     |                        |                        | 35                     | 175 J                      | TO-228AA      |
| -                               | 2N6736      | Solitron     | 5.0                    | 80                       | 4.0             | 120 | 200n                | 300n                     |                        |                        | 35                     | 175 J                      | TO-228AA      |
| -                               | 2N6736      | CrimsonSemi  | 5.0                    | 80                       | 4.0             | 120 | 200n                | 300n                     |                        |                        | 35                     | 175 J                      | TO-228AA      |
| -                               | 2N2908      | SemiconTech  | 5.0                    | 80                       | 12              | 20  | 1.0M                |                          |                        |                        | 45                     | 175 C                      | TO-53         |
| -                               | 2N2908      | Space Power  | 5.0                    | 80                       | 12              | 20  | 1.0M                |                          |                        |                        | 45                     | 175 C                      | TO-53         |
| 20                              | ST7200      | SemiconTech  | 5.0                    | 80                       | 12              | 20  | 8.0M                | 20m                      |                        |                        | 45                     | 175 A                      | TO-61         |
| -                               | 2SD772      | Matsushita   | 5.0                    | 80                       | 14              |     | 40M                 | 1.0m                     | 1.0u                   |                        | 40                     | 140 J                      | TO-220        |
| -                               | 2SD1274     | Matsushita   | 5.0                    | 80                       | 14              |     | 40M                 | 1.0m                     | 1.0u                   |                        | 40                     | 140 J                      | SOT-186       |
| -                               | 2SD1274A    | Matsushita   | 5.0                    | 80                       | 14              |     | 40M                 | 1.0m                     | 1.0u                   |                        | 40                     | 140 J                      | SOT-186       |
| -                               | 2SD1274B    | Matsushita   | 5.0                    | 80                       | 14              |     | 40M                 | 1.0m                     | 1.0u                   |                        | 40                     | 140 J                      | SOT-186       |
| 25                              | 2SD772A     | Matsushita   | 5.0                    | 80                       | 14              |     | 40M                 | 1.0m                     | 1.0u                   |                        | 40                     | 140 J                      | TO-220AB      |
| -                               | 2SD772B     | Matsushita   | 5.0                    | 80                       | 14              |     | 40M                 | 1.0m                     | 1.0u                   |                        | 40                     | 140 J                      | TO-220AB      |
| -                               | CX702       | Advncd Semi  | 5.0                    | 80                       | 15              | 70  |                     |                          |                        |                        | 40                     |                            | TO-220AB      |
| -                               | CX702       | Semi Inc     | 5.0                    | 80                       | 15              | 70  |                     |                          |                        |                        | 40                     |                            | TO-220AB      |
| -                               | 2N1211      | See Index    | 5.0                    | 80                       | 15              | 75  | 3.0M                | 10m                      |                        |                        | 60                     | 175 S                      | TO-53         |
| 30                              | 2N1617      | See Index    | 5.0                    | 80                       | 15              | 75  | 3.0M                | 10m                      |                        |                        | 60                     | 175 S                      | TO-61         |
| -                               | 2SC647      | Elec Trans   | 5.0                    | 80                       | 20              | 30  | 300k                | 10m                      |                        |                        | 50                     | 140 J                      | TO-3          |
| -                               | 2SC647      | Solid StInc  | 5.0                    | 80                       | 20              | 30  | 300k                | 10m                      |                        |                        | 50                     | 140 J                      | TO-3          |
| -                               | 2N5979      | See Index    | 5.0                    | 80                       | 20              | 120 | 2.0M                | 1.0m                     |                        |                        | 75                     | 140 J                      | TO-127var     |
| 35                              | SDT1613     | Solitron     | 5.0                    | 80                       | 20              | 60  | 2.5M                | 10u                      | 400n                   |                        | 105                    | 175 J                      | TO-3          |
| -                               | SDT1613     | PPC Product  | 5.0                    | 80                       | 20              | 60  | 2.5M                | 10u                      | 400n                   |                        | 105                    | 175 J                      | TO-3          |
| -                               | SDT1643     | Solitron     | 5.0                    | 80                       | 20              | 60  | 2.5M                | 10u                      | 400n                   |                        | 52                     | 175 J                      | TO-66         |
| -                               | SDT1643     | PPC Product  | 5.0                    | 80                       | 20              | 60  | 2.5M                | 10u                      | 400n                   |                        | 52                     | 175 J                      | TO-66         |
| -                               | BD951       | PhilipsElec  | 5.0                    | 80                       | 20              | 30  | 3.0M                | 100u                     |                        |                        | 40                     | 140 J                      | TO-220AB      |
| -                               | BD951       | NthAmerSemi  | 5.0                    | 80                       | 20              | 30  | 3.0M                | 100u                     |                        |                        | 40                     | 140 J                      | TO-220AB      |
| 40                              | 2N5069      | See Index    | 5.0                    | 80                       | 20              | 80  | 4.0M                | 1.0m                     |                        |                        | 88                     | 175 J                      | TO-3          |
| -                               | 2N5870      | See Index    | 5.0                    | 80                       | 20              | 100 | 4.0M                | 100u                     | 700n                   | 800n                   | 87                     | 175 J                      | TO-3          |
| -                               | BLX16       | Solitron     | 5.0                    | 80                       | 20              | 120 | 10M                 |                          |                        |                        | 18                     | 175 J                      | TO-5          |
| -                               | BLX16       | NthAmerSemi  | 5.0                    | 80                       | 20              | 120 | 10M                 |                          |                        |                        | 18                     | 175 J                      | TO-5          |
| 45                              | BLX19       | Solitron     | 5.0                    | 80                       | 20              | 120 | 10M                 |                          |                        |                        | 87                     | 175 J                      | TO-61         |
| -                               | 2N1722      | See Index    | 5.0                    | 80                       | 20              | 90  | 10M                 | 500u                     |                        |                        | 3.0                    | 175 J                      | TO-53         |
| -                               | 2N1724      | See Index    | 5.0                    | 80                       | 20              | 90  | 10M                 | 500u                     |                        |                        | 3.0                    | 175 J                      | TO-61         |
| -                               | SDT7413     | Sld St Dvcs  | 5.0                    | 80                       | 20              | 60  | 15M                 | 1.0u                     |                        |                        | 9.0                    | 175 J                      | TO-5          |
| -                               | SDT7413     | Solitron     | 5.0                    | 80                       | 20              | 60  | 15M                 | 1.0u                     |                        |                        | 9.0                    | 175 J                      | TO-5          |
| -                               | SDT7413     | PPC Product  | 5.0                    | 80                       | 20              | 60  | 15M                 | 1.0u                     |                        |                        | 9.0                    | 175 J                      | TO-5          |
| 50                              | SDT4452     | See Index    | 5.0                    | 80                       | 20              | 60  | 20M                 | 1.0u                     |                        |                        | 7.0                    | 175 J                      | TO-5          |
| -                               | SDT6012     | Sld St Dvcs  | 5.0                    | 80                       | 20              | 60  | 30M                 | 1.0u                     |                        |                        | 40                     | 175 J                      | SIR-10        |
| -                               | SDT6012     | CrimsonSemi  | 5.0                    | 80                       | 20              | 60  | 30M                 | 1.0u                     |                        |                        | 40                     | 175 J                      | SIR-10        |
| -                               | SDT6310     | See Index    | 5.0                    | 80                       | 20              | 60  | 30M                 | 1.0u                     |                        |                        | 52                     | 175 J                      | TO-111        |
| -                               | SDT6410     | PPC Product  | 5.0                    | 80                       | 20              | 60  | 30M                 | 1.0u                     |                        |                        | 52                     | 175 J                      | TO-111        |
| 55                              | SDT6410     | Sld St Dvcs  | 5.0                    | 80                       | 20              | 60  | 30M                 | 1.0u                     |                        |                        | 52                     | 175 J                      | TO-111        |
| -                               | SDT6410     | Solitron     | 5.0                    | 80                       | 20              | 60  | 30M                 | 1.0u                     |                        |                        | 52                     | 175 J                      | TO-111        |
| -                               | SDT6419     | PPC Product  | 5.0                    | 80                       | 20              | 60  | 30M                 |                          |                        |                        | 52                     |                            | TO-111        |
| -                               | SDT6419     | Solitron     | 5.0                    | 80                       | 20              | 60  | 30M                 |                          |                        |                        | 52                     |                            | TO-111        |
| -                               | 2N2879      | See Index    | 5.0                    | 80                       | 20              | 60  | 30M                 | 100n                     | 120n                   | 80n                    | 30                     | 175 J                      | TO-111        |
| 60                              | 2N3746      | See Index    | 5.0                    | 80                       | 20              | 60  | 30M                 | 100n                     | 120n                   | 80n                    | 30                     | 175 J                      | SIR-10        |
| -                               | SDT3407     | Sld St Dvcs  | 5.0                    | 80                       | 20              | 60  | 40M                 | 10u                      | 500n                   | 300n                   | 52                     | 175 J                      | TO-111        |
| -                               | SDT3407     | Solitron     | 5.0                    | 80                       | 20              | 60  | 40M                 | 10u                      | 500n                   | 300n                   | 52                     | 175 J                      | TO-111        |
| -                               | SDT3407     | PPC Product  | 5.0                    | 80                       | 20              | 60  | 40M                 | 10u                      | 500n                   | 300n                   | 52                     | 175 J                      | TO-111        |
| 65                              | SDT3427     | PPC Product  | 5.0                    | 80                       | 20              | 60  | 40M                 | .01m                     | .50u                   |                        | 9.0                    |                            | TO-5          |
| -                               | SDT3427     | Solitron     | 5.0                    | 80                       | 20              | 60  | 40M                 | .01m                     | .50u                   |                        | 9.0                    |                            | TO-5          |
| -                               | SDT3427     | Sld St Dvcs  | 5.0                    | 80                       | 20              | 60  | 40M                 | .01m                     | .50u                   |                        | 9.0                    |                            | TO-5          |
| -                               | 2SD189      | Solid StInc  | 5.0                    | 80                       | 20              | 160 | 40M                 | 10m                      |                        |                        | 50                     | 140 J                      | TO-3          |
| -                               | 2SD189      | Elec Trans   | 5.0                    | 80                       | 20              | 160 | 40M                 | 10m                      |                        |                        | 50                     | 140 J                      | TO-3          |
| -                               | BLY70       | NthAmerSemi  | 5.0                    | 80                       | 20              | 60  | 70M                 | 10u                      |                        |                        | 33                     | 140 J                      | TO-3          |
| 70                              | BD160       | NthAmerSemi  | 5.0                    | 80                       | 25              | 100 | 1.0m                | 1.3u                     |                        |                        | 30                     | 140 J                      | TO-3          |
| -                               | 2N4915      | See Index    | 5.0                    | 80                       | 25              | 100 | 4.0M                | 10u                      |                        |                        | 88                     | 175 J                      | TO-3          |
| -                               | BD539B      | NthAmerSemi  | 5.0                    | 80                       | 30              | 30  | 3.0M                | 200u                     | 300n                   |                        | 45                     | 140 J                      | TO-220AB      |
| -                               | BD539B      | TexInstLtd   | 5.0                    | 80                       | 30              | 30  | 3.0M                | 200u                     | 300n                   |                        | 45                     | 140 J                      | TO-220AB      |
| 75                              | 2N3851      | See Index    | 5.0                    | 80                       | 30              | 90  | 20M                 | 100n                     | 150n                   | 200n                   | 30                     | 175 C                      | TO-59         |
| -                               | SDT5635     | Solitron     | 5.0                    | 80                       | 30              | 90  | 30M                 |                          |                        |                        | 44                     |                            | TO-111        |
| -                               | 2N2892      | See Index    | 5.0                    | 80                       | 30              | 90  | 30M                 | 100n                     | 300n                   | 1.5u                   | 30                     | 175 J                      | TO-59         |
| -                               | 2N5336      | See Index    | 5.0                    | 80                       | 30              | 120 | 30M                 | 10u                      | 100n                   | 200n                   | 6.0                    | 175 J                      | TO-39         |
| -                               | 2N5729      | See Index    | 5.0                    | 80                       | 30              | 300 | 30M                 | 1.0m                     | 200n                   | 500n                   | 10                     | 175 J                      | TO-5          |
| -                               | UPT613      | Unitrode     | 5.0                    | 80                       | 30              | 30  | 40M                 | 10u                      | 250n                   | 500n                   | 5.0                    | 175 J                      | TO-5          |
| 80                              | 2N3996      | See Index    | 5.0                    | 80                       | 30              | 30  | 40M                 | 5.0u                     | 300n                   | 1.5u                   | 2.0                    | 175 J                      | SIR-10        |
| -                               | 2N3998      | See Index    | 5.0                    | 80                       | 30              | 30  | 40M                 | 5.0u                     | 300n                   | 1.5u                   | 2.0                    | 175 J                      | SIR-10        |
| -                               | 2N5002      | See Index    | 5.0                    | 80                       | 30              | 90  | 60M                 | 1.0m                     |                        |                        | 50                     | 175 J                      | TO-59         |
| -                               | 2N5152S     | Semelab      | 5.0                    | 80                       | 30              | 90  | 60M                 |                          |                        |                        | 10                     | 175 J                      | TO-39         |
| 85                              | 2N5284      | See Index    | 5.0                    | 80                       | 30              | 90  | 60M                 | 1.0m                     |                        |                        | 50                     | 175 J                      | TO-59         |
| -                               | 2N5608      | See Index    | 5.0                    | 80                       | 30              | 90  | 60M                 | 1.0m                     |                        |                        | 25                     | 175 J                      | TO-66         |
| -                               | 2N5616      | See Index    | 5.0                    | 80                       | 30              | 90  | 60M                 | 1.0m                     |                        |                        | 50                     | 175 J                      | TO-3          |
| -                               | BCX40       | See Index    | 5.0                    | 80                       | 40              | 250 |                     |                          |                        |                        | 10                     | 175 J                      | TO-39         |
| -                               | 2N4310      | See Index    | 5.0                    | 80                       | 40              | 120 |                     | 10u                      | 90n                    | 100n                   | 4.0                    | 175 C                      | SIT-8         |
| 90                              | 2SC2516AM   | NEC Corp JA  | 5.0                    | 80                       | 40              | 80  |                     | 10u                      | 0.5u                   | 0.5u                   | 30                     | 140 J                      | TO-220AB      |
| -                               | PTC167      | Mallory      | 5.0                    | 80                       | 40              | 40  | 2.0M                | 1.0m                     |                        |                        | 75                     |                            | TO-220        |
| -                               | SDT1623     | Solitron     | 5.0                    | 80                       | 40              | 120 | 2.5M                | 10u                      | 400n                   |                        | 105                    | 175 J                      | TO-3          |
| -                               | SDT1623     | PPC Product  | 5.0                    | 80                       | 40              | 120 | 2.5M                | 10u                      | 400n                   |                        | 105                    | 175 J                      | TO-3          |
| -                               | SDT1653     | Solitron     | 5.0                    | 80                       | 40              | 120 | 2.5M                | 10u                      | 400n                   |                        | 52                     | 175 J                      | TO-66         |
| 95                              | SDT1653     | PPC Product  | 5.0                    | 80                       | 40              | 120 | 2.5M                | 10u                      | 400n                   |                        | 52                     | 175 J                      | TO-66         |
| -                               | BD951F      | PhilipsElec  | 5.0                    | 80                       | 40              | 40  | 3.0M                |                          |                        |                        | 40                     |                            | SOT-186       |
| -                               | 2SD812      | Matsushita   | 5.0                    | 80                       | 40              | 200 | 7M                  | 50u                      |                        |                        | 40                     | 140 J                      | TO-220AB      |
| -                               | SDT7403     | Sld St Dvcs  | 5.0                    | 80                       | 40              | 120 | 15M                 | 1.0u                     |                        |                        | 9.0                    | 175 J                      | TO-5          |