**semitronics** hot linediscrete  
devices**TOLL FREE NUMBER 800-777-3960**

# thyristors and triggers

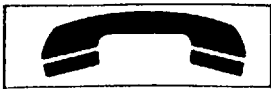
silicon controlled rectifiers

| Type<br>(*Note 1) | Forward<br>Current<br>I <sub>F</sub><br>(Amps) | Max. Forward<br>Max. Reverse<br>Voltage<br>V <sub>FM</sub> /V <sub>RM</sub><br>(volts)<br>(Note 2) | Maximum<br>Junction<br>Temperature<br>T <sub>J</sub><br>(°C) | Max. DC<br>Gate Trigger<br>Current<br>I <sub>GT</sub> (mA) | DC Gate<br>Trigger<br>Voltage<br>V <sub>GT</sub> (volts) | Case<br>Style |
|-------------------|------------------------------------------------|----------------------------------------------------------------------------------------------------|--------------------------------------------------------------|------------------------------------------------------------|----------------------------------------------------------|---------------|
| 2N681             | 25                                             | 25                                                                                                 | 125                                                          | 40                                                         | 2.0                                                      | TO-48         |
| 2N682             | 25                                             | 50                                                                                                 | 125                                                          | 40                                                         | 2.0                                                      | TO-48         |
| 2N683             | 25                                             | 100                                                                                                | 125                                                          | 40                                                         | 2.0                                                      | TO-48         |
| 2N684             | 25                                             | 150                                                                                                | 125                                                          | 40                                                         | 2.0                                                      | TO-48         |
| 2N685             | 25                                             | 200                                                                                                | 125                                                          | 40                                                         | 2.0                                                      | TO-48         |
| 2N686             | 25                                             | 250                                                                                                | 125                                                          | 40                                                         | 2.0                                                      | TO-48         |
| 2N687             | 25                                             | 300                                                                                                | 125                                                          | 40                                                         | 2.0                                                      | TO-48         |
| 2N688             | 25                                             | 400                                                                                                | 125                                                          | 40                                                         | 2.0                                                      | TO-48         |
| 2N689             | 25                                             | 500                                                                                                | 125                                                          | 40                                                         | 2.0                                                      | TO-48         |
| 2N690             | 25                                             | 600                                                                                                | 125                                                          | 40                                                         | 2.0                                                      | TO-48         |
| 2N764*            | 0.20                                           | 30                                                                                                 | 125                                                          | 1.0                                                        | 1.0                                                      | TO-18         |
| 2N765*            | 0.20                                           | 60                                                                                                 | 125                                                          | 1.0                                                        | 1.0                                                      | TO-18         |
| 2N766*            | 0.20                                           | 100                                                                                                | 125                                                          | 1.0                                                        | 1.0                                                      | TO-18         |
| 2N767*            | 0.20                                           | 200                                                                                                | 125                                                          | 1.0                                                        | 1.0                                                      | TO-18         |
| 2N766             | 0.35                                           | 15                                                                                                 | 150                                                          | 0.2                                                        | 0.8                                                      | TO-18         |
| 2N877             | 0.35                                           | 30                                                                                                 | 150                                                          | 0.2                                                        | 0.8                                                      | TO-18         |
| 2N878             | 0.35                                           | 60                                                                                                 | 150                                                          | 0.2                                                        | 0.8                                                      | TO-18         |
| 2N879             | 0.35                                           | 100                                                                                                | 150                                                          | 0.2                                                        | 0.8                                                      | TO-18         |
| 2N880             | 0.35                                           | 150                                                                                                | 150                                                          | 0.2                                                        | 0.8                                                      | TO-18         |
| 2N881             | 0.35                                           | 200                                                                                                | 150                                                          | 0.2                                                        | 0.8                                                      | TO-18         |
| 2N882             | 0.35                                           | 300                                                                                                | 150                                                          | 0.2                                                        | 0.8                                                      | TO-18         |
| 2N883             | 0.35                                           | 400                                                                                                | 150                                                          | 0.2                                                        | 0.8                                                      | TO-18         |
| 2N884             | 0.35                                           | 15                                                                                                 | 150                                                          | 0.02                                                       | 0.6                                                      | TO-18         |
| 2N885             | 0.35                                           | 30                                                                                                 | 150                                                          | 0.02                                                       | 0.6                                                      | TO-18         |
| 2N886             | 0.35                                           | 60                                                                                                 | 150                                                          | 0.02                                                       | 0.6                                                      | TO-18         |
| 2N887             | 0.35                                           | 100                                                                                                | 150                                                          | 0.02                                                       | 0.6                                                      | TO-18         |
| 2N888             | 0.35                                           | 150                                                                                                | 150                                                          | 0.02                                                       | 0.6                                                      | TO-18         |
| 2N889             | 0.35                                           | 200                                                                                                | 150                                                          | 0.02                                                       | 0.6                                                      | TO-18         |
| 2N892*            | 0.250                                          | 15                                                                                                 | 125                                                          | 0.05                                                       | 0.70                                                     | TO-18         |
| 2N893*            | 0.250                                          | 15                                                                                                 | 125                                                          | 0.05                                                       | 0.70                                                     | TO-18         |
| 2N899*            | 0.250                                          | 100/15                                                                                             | 125                                                          | 0.05                                                       | 0.70                                                     | TO-18         |
| 2N900             | 0.250                                          | 200/15                                                                                             | 125                                                          | 0.05                                                       | 0.70                                                     | TO-18         |
| 2N948             | 0.26                                           | 30                                                                                                 | 150                                                          | 0.02                                                       | 1.0                                                      | TO-18         |
| 2N949             | 0.26                                           | 60                                                                                                 | 150                                                          | 0.02                                                       | 1.0                                                      | TO-18         |
| 2N950             | 0.26                                           | 100                                                                                                | 150                                                          | 0.02                                                       | 1.0                                                      | TO-18         |
| 2N951             | 0.26                                           | 200                                                                                                | 150                                                          | 0.02                                                       | 1.0                                                      | TO-18         |
| 2N1595            | 1.6                                            | 50                                                                                                 | 125                                                          | 10                                                         | 3.0                                                      | TO-5          |
| 2N1596            | 1.6                                            | 100                                                                                                | 125                                                          | 10                                                         | 3.0                                                      | TO-5          |
| 2N1597            | 1.6                                            | 200                                                                                                | 125                                                          | 10                                                         | 3.0                                                      | TO-5          |
| 2N1598            | 1.6                                            | 300                                                                                                | 125                                                          | 10                                                         | 3.0                                                      | TO-5          |
| 2N1599            | 1.6                                            | 400                                                                                                | 125                                                          | 10                                                         | 3.0                                                      | TO-5          |
| 2N1600            | 4.0                                            | 50                                                                                                 | 125                                                          | 10                                                         | 3.0                                                      | TO-64         |
| 2N1601            | 4.0                                            | 100                                                                                                | 125                                                          | 10                                                         | 3.0                                                      | TO-64         |
| 2N1602            | 4.0                                            | 200                                                                                                | 125                                                          | 10                                                         | 3.0                                                      | TO-64         |
| 2N1603            | 4.0                                            | 300                                                                                                | 125                                                          | 10                                                         | 3.0                                                      | TO-64         |
| 2N1604            | 4.0                                            | 400                                                                                                | 125                                                          | 10                                                         | 3.0                                                      | TO-64         |
| 2N1686*           | 0.5                                            | 30                                                                                                 | 125                                                          | 1.0                                                        | 1.0                                                      | TO-5          |
| 2N1687*           | 0.5                                            | 60                                                                                                 | 125                                                          | 1.0                                                        | 1.0                                                      | TO-5          |
| 2N1688*           | 0.5                                            | 100                                                                                                | 125                                                          | 1.0                                                        | 1.0                                                      | TO-5          |
| 2N1689*           | 0.5                                            | 200                                                                                                | 125                                                          | 1.0                                                        | 1.0                                                      | TO-5          |
| 2N1770            | 4.7                                            | 25                                                                                                 | 125                                                          | 15                                                         | 2.0                                                      | TO-64         |
| 2N1770A           | 4.7                                            | 25                                                                                                 | 150                                                          | 15                                                         | 2.0                                                      | TO-64         |
| 2N1771            | 4.7                                            | 50                                                                                                 | 125                                                          | 15                                                         | 2.0                                                      | TO-64         |
| 2N1771A           | 4.7                                            | 50                                                                                                 | 150                                                          | 15                                                         | 2.0                                                      | TO-64         |
| 2N1772            | 4.7                                            | 100                                                                                                | 125                                                          | 15                                                         | 2.0                                                      | TO-64         |
| 2N1772A           | 4.7                                            | 100                                                                                                | 150                                                          | 15                                                         | 2.0                                                      | TO-64         |
| 2N1773            | 4.7                                            | 150                                                                                                | 125                                                          | 15                                                         | 2.0                                                      | TO-64         |
| 2N1773A           | 4.7                                            | 150                                                                                                | 150                                                          | 15                                                         | 2.0                                                      | TO-64         |
| 2N1774            | 4.7                                            | 200                                                                                                | 125                                                          | 15                                                         | 2.0                                                      | TO-64         |
| 2N1774A           | 4.7                                            | 200                                                                                                | 150                                                          | 15                                                         | 2.0                                                      | TO-64         |
| 2N1775            | 4.7                                            | 250                                                                                                | 125                                                          | 15                                                         | 2.0                                                      | TO-64         |
| 2N1775A           | 4.7                                            | 250                                                                                                | 150                                                          | 15                                                         | 2.0                                                      | TO-64         |
| 2N1776            | 4.7                                            | 300                                                                                                | 125                                                          | 15                                                         | 2.0                                                      | TO-64         |
| 2N1776A           | 4.7                                            | 300                                                                                                | 150                                                          | 15                                                         | 2.0                                                      | TO-64         |
| 2N1776B           | 4.7                                            | 300                                                                                                | 150                                                          | 15                                                         | 2.0                                                      | TO-64         |
| 2N1777            | 4.7                                            | 400                                                                                                | 125                                                          | 15                                                         | 2.0                                                      | TO-64         |
| 2N1777A           | 7.0                                            | 400                                                                                                | 150                                                          | 15                                                         | 2.0                                                      | TO-64         |
| 2N1842            | 16                                             | 25                                                                                                 | 100                                                          | 80                                                         | 2.0                                                      | TO-48         |
| 2N1842A           | 16                                             | 25                                                                                                 | 125                                                          | 80                                                         | 2.0                                                      | TO-48         |
| 2N1843            | 16                                             | 50                                                                                                 | 100                                                          | 80                                                         | 2.0                                                      | TO-48         |
| 2N1844            | 16                                             | 100                                                                                                | 100                                                          | 80                                                         | 2.0                                                      | TO-48         |
| 2N1845            | 16                                             | 150                                                                                                | 100                                                          | 80                                                         | 2.0                                                      | TO-48         |
| 2N1846            | 16                                             | 200                                                                                                | 100                                                          | 80                                                         | 2.0                                                      | TO-48         |
| 2N1847            | 16                                             | 250                                                                                                | 100                                                          | 80                                                         | 2.0                                                      | TO-48         |
| 2N1848            | 16                                             | 300                                                                                                | 100                                                          | 80                                                         | 2.0                                                      | TO-48         |

## thyristors and triggers cont'd

### silicon controlled rectifiers — (cont'd)

| Type<br>(*Note 1) | Forward<br>Current<br>$I_F$<br>(Amps) | Max. Forward<br>Max. Reverse<br>Voltages<br>$V_{FOM}/V_{ROM}$<br>(volts)<br>(Note 2) | Maximum<br>Junction<br>Temperature<br>$T_J$<br>(°C) | Max. DC<br>Gate Trigger<br>Current<br>$I_{GT}$ (mA) | DC Gate<br>Trigger<br>Voltage<br>$V_{GT}$ (volts) | Case<br>Style |
|-------------------|---------------------------------------|--------------------------------------------------------------------------------------|-----------------------------------------------------|-----------------------------------------------------|---------------------------------------------------|---------------|
| 2N1849            | 16                                    | 400                                                                                  | 100                                                 | 80                                                  | 2.0                                               | TO-48         |
| 2N1850            | 16                                    | 500                                                                                  | 100                                                 | 80                                                  | 2.0                                               | TO-48         |
| 2N1869            | 1.25                                  | 15                                                                                   | 150                                                 | 0.2                                                 | 0.8                                               | TO-5          |
| 2N1869A           | 1.25                                  | 15                                                                                   | 150                                                 | 0.2                                                 | 0.8                                               | TO-5          |
| 2N1870            | 1.25                                  | 30                                                                                   | 150                                                 | 0.2                                                 | 0.8                                               | TO-5          |
| 2N1870A           | 1.25                                  | 30                                                                                   | 150                                                 | 0.2                                                 | 0.8                                               | TO-5          |
| 2N1871            | 1.25                                  | 60                                                                                   | 150                                                 | 0.2                                                 | 0.8                                               | TO-5          |
| 2N1871A           | 1.25                                  | 60                                                                                   | 150                                                 | 0.2                                                 | 0.8                                               | TO-5          |
| 2N1872            | 1.25                                  | 100                                                                                  | 150                                                 | 0.2                                                 | 0.8                                               | TO-5          |
| 2N1872A           | 1.25                                  | 100                                                                                  | 150                                                 | 0.2                                                 | 0.8                                               | TO-5          |
| 2N1873            | 1.25                                  | 150                                                                                  | 150                                                 | 0.2                                                 | 0.8                                               | TO-5          |
| 2N1874            | 1.25                                  | 200                                                                                  | 150                                                 | 0.2                                                 | 0.8                                               | TO-5          |
| 2N1874A           | 1.25                                  | 200                                                                                  | 150                                                 | 0.2                                                 | 0.8                                               | TO-5          |
| 2N1875            | 1.25                                  | 15                                                                                   | 150                                                 | 0.020                                               | 0.6                                               | TO-5          |
| 2N1875A           | 1.25                                  | 15                                                                                   | 150                                                 | 0.020                                               | 0.6                                               | TO-5          |
| 2N1876            | 1.25                                  | 30                                                                                   | 150                                                 | 0.020                                               | 0.6                                               | TO-5          |
| 2N1876A           | 1.25                                  | 30                                                                                   | 150                                                 | 0.020                                               | 0.6                                               | TO-5          |
| 2N1877            | 1.25                                  | 60                                                                                   | 150                                                 | 0.020                                               | 0.6                                               | TO-5          |
| 2N1877A           | 1.25                                  | 60                                                                                   | 150                                                 | 0.020                                               | 0.6                                               | TO-5          |
| 2N1878            | 1.25                                  | 100                                                                                  | 150                                                 | 0.020                                               | 0.6                                               | TO-5          |
| 2N1878A           | 1.25                                  | 100                                                                                  | 150                                                 | 0.020                                               | 0.6                                               | TO-5          |
| 2N1879            | 1.25                                  | 150                                                                                  | 150                                                 | 0.020                                               | 0.6                                               | TO-5          |
| 2N1879A           | 1.25                                  | 150                                                                                  | 150                                                 | 0.020                                               | 0.6                                               | TO-5          |
| 2N1880            | 1.25                                  | 200                                                                                  | 150                                                 | 0.020                                               | 0.6                                               | TO-5          |
| 2N1880A           | 1.25                                  | 200                                                                                  | 150                                                 | 0.020                                               | 0.6                                               | TO-5          |
| 2N1881            | 1.0                                   | 30                                                                                   | 150                                                 | 2.0                                                 | 2.0                                               | TO-5          |
| 2N1882            | 1.0                                   | 60                                                                                   | 150                                                 | 2.0                                                 | 2.0                                               | TO-5          |
| 2N1883            | 1.0                                   | 100                                                                                  | 150                                                 | 2.0                                                 | 2.0                                               | TO-5          |
| 2N1884            | 1.0                                   | 150                                                                                  | 150                                                 | 2.0                                                 | 2.0                                               | TO-5          |
| 2N1885            | 1.0                                   | 200                                                                                  | 150                                                 | 2.0                                                 | 2.0                                               | TO-5          |
| 2N2009            | 1.3                                   | 25                                                                                   | 150                                                 | 0.2                                                 | 1.0                                               | TO-5          |
| 2N2010            | 1.3                                   | 50                                                                                   | 150                                                 | 0.2                                                 | 1.0                                               | TO-5          |
| 2N2011            | 1.3                                   | 100                                                                                  | 150                                                 | 0.2                                                 | 1.0                                               | TO-5          |
| 2N2012            | 1.3                                   | 200                                                                                  | 150                                                 | 0.2                                                 | 1.0                                               | TO-5          |
| 2N2013            | 1.3                                   | 300                                                                                  | 150                                                 | 0.2                                                 | 1.0                                               | TO-5          |
| 2N2014            | 1.3                                   | 400                                                                                  | 150                                                 | 0.2                                                 | 1.0                                               | TO-5          |
| 2N2322            | 1.6                                   | 25                                                                                   | 125                                                 | 0.2                                                 | 0.8                                               | TO-5          |
| 2N2322A           | 1.6                                   | 25                                                                                   | 125                                                 | 0.02                                                | 0.6                                               | TO-5          |
| 2N2323            | 1.6                                   | 50                                                                                   | 125                                                 | 0.2                                                 | 0.8                                               | TO-5          |
| 2N2323A           | 1.6                                   | 50                                                                                   | 125                                                 | 0.02                                                | 0.6                                               | TO-5          |
| 2N2324            | 1.6                                   | 100                                                                                  | 125                                                 | 0.2                                                 | 0.8                                               | TO-5          |
| 2N2324A           | 1.6                                   | 100                                                                                  | 125                                                 | 0.02                                                | 0.6                                               | TO-5          |
| 2N2325            | 1.6                                   | 150                                                                                  | 125                                                 | 0.2                                                 | 0.8                                               | TO-5          |
| 2N2325A           | 1.6                                   | 150                                                                                  | 125                                                 | 0.02                                                | 0.6                                               | TO-5          |
| 2N2326            | 1.6                                   | 200                                                                                  | 125                                                 | 0.2                                                 | 0.8                                               | TO-5          |
| 2N2326A           | 1.6                                   | 200                                                                                  | 125                                                 | 0.02                                                | 0.6                                               | TO-5          |
| 2N2327            | 1.6                                   | 250                                                                                  | 125                                                 | 0.2                                                 | 0.8                                               | TO-5          |
| 2N2327A           | 1.6                                   | 250                                                                                  | 125                                                 | 0.02                                                | 0.6                                               | TO-5          |
| 2N2328            | 1.6                                   | 300                                                                                  | 125                                                 | 0.2                                                 | 0.8                                               | TO-5          |
| 2N2328A           | 1.6                                   | 300                                                                                  | 125                                                 | 0.02                                                | 0.6                                               | TO-5          |
| 2N2329            | 1.6                                   | 400                                                                                  | 125                                                 | 0.2                                                 | 0.8                                               | TO-5          |
| 2N2329A           | 1.6                                   | 400                                                                                  | 125                                                 | 0.02                                                | 0.6                                               | TO-5          |
| 2N2679            | 0.35                                  | 30                                                                                   | 150                                                 | 0.02                                                | 0.7                                               | TO-18         |
| 2N2679A           | 0.35                                  | 30                                                                                   | 150                                                 | 0.02                                                | 0.7                                               | TO-18         |
| 2N2680            | 0.35                                  | 60                                                                                   | 150                                                 | 0.02                                                | 0.7                                               | TO-18         |
| 2N2680A           | 0.35                                  | 60                                                                                   | 150                                                 | 0.02                                                | 0.7                                               | TO-18         |
| 2N2681            | 0.35                                  | 100                                                                                  | 150                                                 | 0.02                                                | 0.70                                              | TO-18         |
| 2N2681A           | 0.35                                  | 100                                                                                  | 150                                                 | 0.02                                                | 0.70                                              | TO-18         |
| 2N2682            | 0.35                                  | 200                                                                                  | 150                                                 | 0.02                                                | 0.7                                               | TO-18         |
| 2N2682A           | 0.35                                  | 200                                                                                  | 150                                                 | 0.02                                                | 0.70                                              | TO-18         |
| 2N2683            | 0.28                                  | 30                                                                                   | 125                                                 | 0.02                                                | 0.8                                               | TO-18         |
| 2N2683A           | 0.28                                  | 30                                                                                   | 125                                                 | 0.02                                                | 0.80                                              | TO-18         |
| 2N2684            | 0.28                                  | 60                                                                                   | 125                                                 | 0.02                                                | 0.8                                               | TO-18         |
| 2N2684A           | 0.28                                  | 60                                                                                   | 125                                                 | 0.02                                                | 0.80                                              | TO-18         |
| 2N2685            | 0.28                                  | 100                                                                                  | 125                                                 | 0.02                                                | 0.8                                               | TO-18         |
| 2N2685A           | 0.28                                  | 100                                                                                  | 125                                                 | 0.02                                                | 0.80                                              | TO-18         |
| 2N2686            | 0.28                                  | 200                                                                                  | 125                                                 | 0.02                                                | 0.8                                               | TO-18         |
| 2N2686A           | 0.28                                  | 200                                                                                  | 125                                                 | 0.02                                                | 0.80                                              | TO-18         |
| 2N2687            | 0.28                                  | 30                                                                                   | 125                                                 | 0.2                                                 | 1.0                                               | TO-18         |
| 2N2688            | 0.28                                  | 60                                                                                   | 125                                                 | 0.2                                                 | 1.0                                               | TO-18         |
| 2N2689            | 0.28                                  | 100                                                                                  | 125                                                 | 0.2                                                 | 1.0                                               | TO-18         |
| 2N2690            | 0.28                                  | 200                                                                                  | 125                                                 | 0.2                                                 | 1.0                                               | TO-18         |
| 2N3001            | 0.35                                  | 30                                                                                   | 150                                                 | 0.02                                                | 0.7                                               | TO-18         |

**semitronics** hot linediscrete  
devices

thyristors and triggers cont'd

800-777-3960

| Type   | Forward<br>Current<br>$I_F$ (Amps) | Max. For. & Max. Rev.<br>Voltages<br>$V_{FOM}/V_{ROM}$ (Volts) | Max. Junction<br>Temperature<br>$T_J$ (°C) | Max. DC Gate<br>Trigger Current<br>$I_{GT}$ (mA) | DC Gate<br>Trigger Voltage<br>$V_{GT}$ (Volts) | Case<br>Style |
|--------|------------------------------------|----------------------------------------------------------------|--------------------------------------------|--------------------------------------------------|------------------------------------------------|---------------|
| 2N3002 | 0.35                               | 60                                                             | 150                                        | 0.02                                             | 0.7                                            | TO-18         |
| 2N3003 | 0.35                               | 100                                                            | 150                                        | 0.02                                             | 0.7                                            | TO-18         |
| 2N3004 | 0.35                               | 200                                                            | 150                                        | 0.02                                             | 0.7                                            | TO-18         |
| 2N3005 | 0.35                               | 30                                                             | 150                                        | 0.2                                              | 0.8                                            | TO-18         |
| 2N3006 | 0.35                               | 60                                                             | 150                                        | 0.2                                              | 0.8                                            | TO-18         |
| 2N3007 | 0.35                               | 100                                                            | 150                                        | 0.2                                              | 0.8                                            | TO-18         |
| 2N3008 | 0.35                               | 200                                                            | 150                                        | 0.2                                              | 0.8                                            | TO-18         |
| 2N3228 | 3.2                                | 200                                                            | 100                                        | 15                                               | 2.0                                            | TO-66         |
| 2N3525 | 3.2                                | 400                                                            | 100                                        | 15                                               | 2.0                                            | TO-66         |
| 2N3555 | 1.6                                | 30                                                             | 150                                        | 0.020                                            | 0.7                                            | TO-5          |
| 2N3556 | 1.6                                | 60                                                             | 150                                        | 0.020                                            | 0.7                                            | TO-5          |
| 2N3557 | 1.6                                | 100                                                            | 150                                        | 0.020                                            | 0.7                                            | TO-5          |
| 2N3558 | 1.6                                | 200                                                            | 150                                        | 0.020                                            | 0.7                                            | TO-5          |
| 2N3559 | 1.6                                | 30                                                             | 150                                        | 0.20                                             | 0.8                                            | TO-5          |
| 2N3560 | 1.6                                | 60                                                             | 150                                        | 0.20                                             | 0.8                                            | TO-5          |
| 2N3561 | 1.6                                | 100                                                            | 150                                        | 0.20                                             | 0.8                                            | TO-5          |
| 2N3562 | 1.6                                | 200                                                            | 150                                        | 0.20                                             | 0.8                                            | TO-5          |
| 2N3870 | 35                                 | 100                                                            | 100                                        | 40                                               | 1.6                                            | Press-Fit     |
| 2N3871 | 35                                 | 200                                                            | 100                                        | 40                                               | 1.6                                            | Press-Fit     |
| 2N3872 | 35                                 | 400                                                            | 100                                        | 40                                               | 1.6                                            | Press-Fit     |
| 2N3873 | 35                                 | 600                                                            | 100                                        | 40                                               | 1.6                                            | Press-Fit     |
| 2N3896 | 35                                 | 100                                                            | 100                                        | 40                                               | 1.6                                            | Stud          |
| 2N3897 | 35                                 | 200                                                            | 100                                        | 40                                               | 1.6                                            | Stud          |
| 2N3898 | 35                                 | 300                                                            | 100                                        | 40                                               | 1.6                                            | Stud          |
| 2N3899 | 35                                 | 400                                                            | 100                                        | 40                                               | 1.6                                            | Stud          |
| 2N4144 | 0.250                              | 15                                                             | 150                                        | 1.0                                              | 0.8                                            | TO-52         |
| 2N4145 | 0.250                              | 30                                                             | 150                                        | 1.0                                              | 0.8                                            | TO-52         |
| 2N4146 | 0.250                              | 60                                                             | 150                                        | 1.0                                              | 0.8                                            | TO-52         |
| 2N4147 | 0.250                              | 100                                                            | 150                                        | 1.0                                              | 0.8                                            | TO-52         |
| 2N4148 | 0.250                              | 150                                                            | 150                                        | 1.0                                              | 0.8                                            | TO-52         |
| 2N4149 | 0.250                              | 200                                                            | 150                                        | 1.0                                              | 0.8                                            | TO-52         |
| 2N4320 | 0.250                              | 30                                                             | 125                                        | 0.5                                              | 1.0                                            | TO-18         |
| 2N4321 | 0.250                              | 60                                                             | 125                                        | 0.5                                              | 1.0                                            | TO-18         |
| 2N4322 | 0.250                              | 100                                                            | 125                                        | 0.5                                              | 1.0                                            | TO-18         |
| 2N4323 | 0.250                              | 150                                                            | 125                                        | 0.5                                              | 1.0                                            | TO-18         |
| 2N4324 | 0.250                              | 200                                                            | 125                                        | 0.5                                              | 1.0                                            | TO-18         |
| 2N4325 | 0.250                              | 250                                                            | 125                                        | 0.5                                              | 1.0                                            | TO-18         |
| 2N4326 | 0.390                              | 30                                                             | 100                                        | 0.5                                              | 1.0                                            | TO-18         |
| 2N4327 | 0.390                              | 60                                                             | 100                                        | 0.5                                              | 1.0                                            | TO-18         |
| 2N4328 | 0.390                              | 100                                                            | 100                                        | 0.5                                              | 1.0                                            | TO-18         |
| 2N4329 | 0.390                              | 150                                                            | 100                                        | 0.5                                              | 1.0                                            | TO-18         |
| 2N4330 | 0.390                              | 200                                                            | 100                                        | 0.5                                              | 1.0                                            | TO-18         |
| 2N4331 | 0.390                              | 250                                                            | 100                                        | 0.5                                              | 1.0                                            | TO-18         |
| 2N4332 | 0.390                              | 30                                                             | 125                                        | 0.01                                             | 0.8                                            | TO-52         |
| 2N4333 | 0.390                              | 60                                                             | 125                                        | 0.01                                             | 0.8                                            | TO-52         |
| 2N4334 | 0.390                              | 100                                                            | 125                                        | 0.01                                             | 0.8                                            | TO-52         |
| 2N4335 | 0.390                              | 150                                                            | 125                                        | 0.01                                             | 0.8                                            | TO-52         |
| 2N4336 | 0.390                              | 200                                                            | 125                                        | 0.01                                             | 0.8                                            | TO-52         |
| 2N4337 | 0.390                              | 250                                                            | 125                                        | 0.01                                             | 0.8                                            | TO-52         |
| 2N5060 | 0.8                                | 30                                                             | 125                                        | 0.2                                              | 0.8                                            | TO-92         |
| 2N5061 | 0.8                                | 60                                                             | 125                                        | 0.2                                              | 0.8                                            | TO-92         |
| 2N5062 | 0.8                                | 100                                                            | 125                                        | 0.2                                              | 0.8                                            | TO-92         |
| 2N5063 | 0.8                                | 150                                                            | 125                                        | 0.2                                              | 0.8                                            | TO-92         |
| 2N5064 | 0.8                                | 200                                                            | 125                                        | 0.2                                              | 0.8                                            | TO-92         |
| 2N5164 | 20                                 | 50                                                             | 100                                        | 40                                               | 1.5                                            | Press-Fit     |
| 2N5165 | 20                                 | 200                                                            | 100                                        | 40                                               | 1.5                                            | Press-Fit     |
| 2N5166 | 20                                 | 400                                                            | 100                                        | 40                                               | 1.5                                            | Press-Fit     |
| 2N5167 | 20                                 | 600                                                            | 100                                        | 40                                               | 1.5                                            | Press-Fit     |
| 2N5168 | 20                                 | 50                                                             | 100                                        | 40                                               | 1.5                                            | Stud          |
| 2N5169 | 20                                 | 200                                                            | 100                                        | 40                                               | 1.5                                            | Stud          |
| 2N5170 | 20                                 | 400                                                            | 100                                        | 40                                               | 1.5                                            | Stud          |
| 2N5171 | 20                                 | 600                                                            | 100                                        | 40                                               | 1.5                                            | Stud          |
| 2N6167 | 20                                 | 100                                                            | 100                                        | 40                                               | 1.5                                            | ISO-Stud      |
| 2N6168 | 20                                 | 200                                                            | 100                                        | 40                                               | 1.5                                            | ISO-Stud      |
| 2N6169 | 20                                 | 400                                                            | 100                                        | 40                                               | 1.5                                            | ISO-Stud      |
| 2N6170 | 20                                 | 600                                                            | 100                                        | 40                                               | 1.5                                            | ISO-Stud      |
| 2N6171 | 35                                 | 100                                                            | 100                                        | 40                                               | 1.6                                            | ISO-Stud      |
| 2N6172 | 35                                 | 200                                                            | 100                                        | 40                                               | 1.6                                            | ISO-Stud      |
| 2N6173 | 35                                 | 400                                                            | 100                                        | 40                                               | 1.6                                            | ISO-Stud      |
| 2N6174 | 35                                 | 600                                                            | 100                                        | 40                                               | 1.6                                            | ISO-Stud      |
| 2N6236 | 4                                  | 30                                                             | 100                                        | 0.2                                              | .8                                             | TO-126        |
| 2N6237 | 4                                  | 50                                                             | 100                                        | 0.2                                              | .8                                             | TO-202        |
| 2N6238 | 4                                  | 100                                                            | 100                                        | 0.2                                              | .8                                             | TO-202        |
| 2N6239 | 4                                  | 200                                                            | 100                                        | 0.2                                              | .8                                             | TO-202        |
| 2N6240 | 4                                  | 400                                                            | 100                                        | 0.2                                              | .8                                             | TO-202        |
| 2N6241 | 4                                  | 600                                                            | 100                                        | 0.2                                              | .8                                             | TO-202        |
| 2N6394 | 12                                 | 50                                                             | 125                                        | 30                                               | 1.5                                            | TO-220        |
| 2N6395 | 12                                 | 100                                                            | 125                                        | 30                                               | 1.5                                            | TO-220        |
| 2N6396 | 12                                 | 200                                                            | 125                                        | 30                                               | 1.5                                            | TO-220        |
| 2N6397 | 12                                 | 400                                                            | 125                                        | 30                                               | 1.5                                            | TO-220        |
| 2N6398 | 12                                 | 600                                                            | 125                                        | 30                                               | 1.5                                            | TO-220        |
| 2N6399 | 12                                 | 800                                                            | 125                                        | 30                                               | 1.5                                            | TO-220        |
| 2N6400 | 16                                 | 50                                                             | 125                                        | 30                                               | 1.5                                            | TO-220        |
| 2N6401 | 16                                 | 100                                                            | 125                                        | 30                                               | 1.5                                            | TO-220        |
| 2N6402 | 16                                 | 200                                                            | 125                                        | 30                                               | 1.5                                            | TO-220        |
| 2N6403 | 16                                 | 400                                                            | 125                                        | 30                                               | 1.5                                            | TO-220        |
| 2N6404 | 16                                 | 600                                                            | 125                                        | 30                                               | 1.5                                            | TO-220        |
| 2N6405 | 16                                 | 800                                                            | 125                                        | 30                                               | 1.5                                            | TO-220        |

## high current silicon controlled rectifiers

TO-83 1/2" Stud. Flag Terminals  
110 Amperes @ Tc Noted

| TYPE   | PRV<br>and<br>VBO | Tc for<br>RATED<br>CURRENT | 1 CYCLE<br>CURRENT<br>SURGE<br>(PEAK<br>AMPS) | MAX. REQ'D.<br>GATE SIGNAL<br>@ Tj(°C) |
|--------|-------------------|----------------------------|-----------------------------------------------|----------------------------------------|
| 2N1792 | 50                | 65                         | 1000                                          | 3V, 103mA, -40                         |
| 2N1793 | 100               | 65                         | 1000                                          | 3V, 130mA, -40                         |
| 2N1794 | 150               | 65                         | 1000                                          | 3V, 130mA, -40                         |
| 2N1795 | 200               | 65                         | 1000                                          | 3V, 130mA, -40                         |
| 2N1796 | 250               | 65                         | 1000                                          | 3V, 130mA, -40                         |
| 2N1797 | 300               | 65                         | 1000                                          | 3V, 130mA, -40                         |
| 2N1798 | 400               | 65                         | 1000                                          | 3V, 130mA, -40                         |
| 2N1799 | 500               | 65                         | 1000                                          | 3V, 130mA, -40                         |
| 2N1800 | 600               | 65                         | 1000                                          | 3V, 130mA, -40                         |
| 2N1801 | 700               | 65                         | 1000                                          | 3V, 130mA, -40                         |
| 2N1802 | 800               | 65                         | 1000                                          | 3V, 130mA, -40                         |
| 2N1803 | 900               | 65                         | 1000                                          | 3V, 200mA, -40                         |
| 2N1804 | 1000              | 65                         | 1000                                          | 3V, 200mA, -40                         |
| 2N1805 | 500               | 62                         | 1000                                          | 3V, 130mA, -40                         |
| 2N1806 | 600               | 62                         | 1000                                          | 3V, 130mA, -40                         |
| 2N1807 | 700               | 62                         | 1000                                          | 3V, 130mA, -40                         |

TO-94 Outline 1/2" Stud. Flexible leads  
110 Amperes

| TYPE   | PRV<br>and<br>VBO | Tc for<br>RATED<br>CURRENT | 1 CYCLE<br>CURRENT<br>SURGE<br>(PEAK<br>AMPS) | MAX. REQ'D.<br>GATE SIGNAL<br>@ Tj(°C) |
|--------|-------------------|----------------------------|-----------------------------------------------|----------------------------------------|
| 2N1909 | 25                | 62                         | 1000                                          | 3V, 130mA, -40                         |
| 2N1910 | 50                | 62                         | 1000                                          | 3V, 130mA, -40                         |
| 2N1911 | 100               | 62                         | 1000                                          | 3V, 130mA, -40                         |
| 2N1912 | 150               | 62                         | 1000                                          | 3V, 130mA, -40                         |
| 2N1913 | 200               | 62                         | 1000                                          | 3V, 130mA, -40                         |
| 2N1914 | 250               | 62                         | 1000                                          | 3V, 130mA, -40                         |
| 2N1915 | 300               | 62                         | 1000                                          | 3V, 130mA, -62                         |
| 2N1916 | 400               | 62                         | 1000                                          | 3V, 130mA, -62                         |
| 2N2023 | 25                | 85                         | 1000                                          | 3V, 150mA, -65                         |
| 2N2024 | 50                | 85                         | 1000                                          | 3V, 150mA, -65                         |
| 2N2025 | 100               | 85                         | 1000                                          | 3V, 150mA, -65                         |
| 2N2026 | 150               | 85                         | 1000                                          | 3V, 150mA, -65                         |
| 2N2027 | 200               | 85                         | 1000                                          | 3V, 150mA, -65                         |
| 2N2028 | 250               | 85                         | 1000                                          | 3V, 150mA, -65                         |
| 2N2029 | 300               | 85                         | 1000                                          | 3V, 150mA, -65                         |
| 2N2030 | 400               | 85                         | 1000                                          | 3V, 150mA, -65                         |
| 2N2031 | 50                | 60                         | 1000                                          | 3V, 130mA, -40                         |
| 2N3081 | 600               | 62                         | 1000                                          | 3V, 200mA, -40                         |
| 2N3082 | 700               | 62                         | 1000                                          | 3V, 200mA, -40                         |
| 2N3093 | 800               | 62                         | 1000                                          | 3V, 200mA, -40                         |
| 2N3094 | 900               | 62                         | 1000                                          | 3V, 200mA, -40                         |
| 2N3095 | 1000              | 62                         | 1000                                          | 3V, 200mA, -40                         |
| 2N3096 | 1100              | 62                         | 1000                                          | 3V, 200mA, -40                         |
| 2N3097 | 1200              | 62                         | 1000                                          | 3V, 200mA, -40                         |
| 2N3098 | 1300              | 62                         | 1000                                          | 3V, 200mA, -40                         |
| 2N3099 | 600               | 62                         | 1000                                          | 3V, 200mA, -40                         |
| 2N3100 | 700               | 62                         | 1000                                          | 3V, 200mA, -40                         |
| 2N3101 | 800               | 62                         | 1000                                          | 3V, 200mA, -40                         |
| 2N3102 | 900               | 62                         | 1000                                          | 3V, 200mA, -40                         |
| 2N3103 | 1000              | 62                         | 1000                                          | 3V, 200mA, -40                         |
| 2N3104 | 1100              | 62                         | 1000                                          | 3V, 200mA, -40                         |
| 2N3105 | 1200              | 62                         | 1000                                          | 3V, 200mA, -40                         |
| 2N3106 | 1300              | 62                         | 1000                                          | 3V, 200mA, -40                         |
| 2N4361 | 100               | 82                         | 1600                                          | 5V, 250mA, -40                         |
| 2N4362 | 200               | 82                         | 1600                                          | 5V, 250mA, -40                         |

TO-94 Outline 1/2" Stud. Flexible leads  
110 Amperes

| TYPE   | PRV<br>and<br>VBO | Tc for<br>RATED<br>CURRENT | 1 CYCLE<br>CURRENT<br>SURGE<br>(PEAK<br>AMPS) | MAX. REQ'D.<br>GATE SIGNAL<br>@ Tj(°C) |
|--------|-------------------|----------------------------|-----------------------------------------------|----------------------------------------|
| 2N4363 | 400               | 82                         | 1600                                          | 5V, 250mA, -40                         |
| 2N4364 | 600               | 82                         | 1600                                          | 5V, 250mA, -40                         |
| 2N4365 | 800               | 82                         | 1600                                          | 5V, 250mA, -40                         |
| 2N4366 | 1000              | 82                         | 1600                                          | 5V, 250mA, -40                         |
| 2N4367 | 1200              | 82                         | 1600                                          | 5V, 250mA, -40                         |
| 2N4368 | 1400              | 82                         | 1600                                          | 5V, 250mA, -40                         |
| 2N4371 | 100               | 82                         | 1600                                          | 5V, 250mA, -40                         |
| 2N4372 | 200               | 82                         | 1600                                          | 5V, 250mA, -40                         |
| 2N4373 | 400               | 82                         | 1600                                          | 5V, 250mA, -40                         |
| 2N4374 | 600               | 82                         | 1600                                          | 5V, 250mA, -40                         |
| 2N4375 | 800               | 82                         | 1600                                          | 5V, 250mA, -40                         |
| 2N4376 | 1000              | 82                         | 1600                                          | 5V, 250mA, -40                         |
| 2N4377 | 1200              | 82                         | 1600                                          | 5V, 250mA, -40                         |
| 2N4378 | 1400              | 82                         | 1600                                          | 5V, 250mA, -40                         |

TO-93 3/4" stud. flexible leads  
235 AMPS @ Tc Noted

| TYPE   | PRV<br>and<br>VBO | Tc for<br>RATED<br>CURRENT | 1 CYCLE<br>CURRENT<br>SURGE<br>(PEAK<br>AMPS) | MAX. REQ'D.<br>GATE SIGNAL<br>@ Tj(°C) |
|--------|-------------------|----------------------------|-----------------------------------------------|----------------------------------------|
| 2N2503 | 50                | 80                         | 3500                                          | 3V, 150mA, -40                         |
| 2N2504 | 100               | 80                         | 3500                                          | 3V, 150mA, -40                         |
| 2N2505 | 200               | 80                         | 3500                                          | 3V, 150mA, -40                         |
| 2N2506 | 300               | 80                         | 3500                                          | 3V, 150mA, -40                         |
| 2N2507 | 400               | 80                         | 3500                                          | 3V, 150mA, -40                         |
| 2N2508 | 500               | 80                         | 3500                                          | 3V, 150mA, -40                         |

275 AMPS @ Tc Noted

| TYPE   | PRV<br>and<br>VBO | Tc for<br>RATED<br>CURRENT | 1 CYCLE<br>CURRENT<br>SURGE<br>(PEAK<br>AMPS) | MAX. REQ'D.<br>GATE SIGNAL<br>@ Tj(°C) |
|--------|-------------------|----------------------------|-----------------------------------------------|----------------------------------------|
| 2N3884 | 50                | 80                         | 4500                                          | 4V, 400mA, -40                         |
| 2N3885 | 100               | 80                         | 4500                                          | 4V, 400mA, -40                         |
| 2N3886 | 200               | 80                         | 4500                                          | 4V, 400mA, -40                         |
| 2N3887 | 300               | 80                         | 4500                                          | 4V, 400mA, -40                         |
| 2N3888 | 400               | 80                         | 4500                                          | 4V, 400mA, -40                         |
| 2N3889 | 500               | 80                         | 4500                                          | 4V, 400mA, -40                         |
| 2N3890 | 600               | 80                         | 4500                                          | 4V, 400mA, -40                         |
| 2N3891 | 700               | 80                         | 4500                                          | 4V, 400mA, -40                         |
| 2N3892 | 800               | 80                         | 4500                                          | 4V, 400mA, -40                         |
| 2N3893 | 900               | 80                         | 4500                                          | 4V, 400mA, -40                         |
| 2N3894 | 1000              | 80                         | 4500                                          | 4V, 400mA, -40                         |
| 2N3895 | 1200              | 80                         | 4500                                          | 4V, 400mA, -40                         |