

# N - Channel Junction Field Effect Transistors

## SWITCHING/CHOPPING

| TYPE NO. | CASE    | MAXIMUM RATINGS     |                       | I <sub>DSS</sub> (mA) |     | V <sub>GS(off)</sub> (V) |     | r <sub>ds(on)</sub> (ohms) | C <sub>iss</sub> (pF) | C <sub>rss</sub> (pF) | t <sub>on</sub> (ns) | t <sub>off</sub> (ns) |
|----------|---------|---------------------|-----------------------|-----------------------|-----|--------------------------|-----|----------------------------|-----------------------|-----------------------|----------------------|-----------------------|
|          |         | P <sub>d</sub> (mW) | BV <sub>GSS</sub> (V) | min                   | max | min                      | max | max                        | max                   | max                   | max                  | max                   |
| J111     | TO-92DD | 625                 | 35                    | 20                    | -   | 3                        | 10  | 30                         | 10                    | 5                     | 13                   | 35                    |
| J112     | TO-92DD | 625                 | 35                    | 5                     | -   | 1                        | 5   | 50                         | 10                    | 5                     | 13                   | 35                    |
| J113     | TO-92DD | 625                 | 35                    | 2                     | -   | 0.5                      | 3   | 100                        | 10                    | 5                     | 13                   | 35                    |
| NF510    | TO-18   | 500                 | 30                    | 5                     | -   | 0.5                      | 10  | 100                        | 15+                   | -                     | 20                   | 80                    |
| 2N3966   | TO-72DH | 300□                | 30                    | 2                     | -   | 4                        | 6   | 220                        | 6                     | 1.5                   | 120                  | 100                   |
| 2N3970   | TO-18   | 1800□               | 40                    | 50                    | 150 | 4                        | 10  | 30                         | 25                    | 6                     | 20                   | 30                    |
| 2N3971   | TO-18   | 1800□               | 40                    | 25                    | 75  | 2                        | 5   | 60                         | 25                    | 6                     | 20                   | 60                    |
| 2N3972   | TO-18   | 1800□               | 40                    | 5                     | 30  | 0.5                      | 3   | 100                        | 25                    | 6                     | 80                   | 100                   |
| 2N4091   | TO-18   | 1800□               | 40                    | 30                    | -   | 5                        | 10  | 30                         | 16                    | 5                     | 25                   | 40                    |
| 2N4092   | TO-18   | 1800□               | 40                    | 15                    | -   | 2                        | 7   | 50                         | 16                    | 5                     | 35                   | 60                    |
| 2N4093   | TO-18   | 1800□               | 40                    | 8                     | -   | 1                        | 5   | 80                         | 16                    | 5                     | 60                   | 80                    |
| 2N4391   | TO-18   | 1800□               | 40                    | 50                    | 150 | 4                        | 10  | 30                         | 14                    | 3.5                   | 15                   | 20                    |
| 2N4392   | TO-18   | 1800□               | 40                    | 25                    | 75  | 2                        | 5   | 60                         | 14                    | 3.5                   | 15                   | 35                    |
| 2N4393   | TO-18   | 1800□               | 40                    | 5                     | 30  | 0.5                      | 3   | 100                        | 14                    | 3.5                   | 15                   | 50                    |
| 2N4856   | TO-18   | 360                 | 40                    | 50                    | -   | 4                        | 10  | 25                         | 18                    | 8                     | 9                    | 25                    |
| 2N4856A  | TO-18   | 360                 | 40                    | 50                    | -   | 4                        | 10  | 25                         | 10                    | 4                     | 8                    | 20                    |
| 2N4857   | TO-18   | 360                 | 40                    | 20                    | 100 | 2                        | 6   | 40                         | 18                    | 8                     | 10                   | 50                    |
| 2N4857A  | TO-18   | 360                 | 40                    | 20                    | 100 | 2                        | 6   | 40                         | 10                    | 3.5                   | 10                   | 40                    |
| 2N4858   | TO-18   | 360                 | 40                    | 8                     | 80  | 0.8                      | 4   | 60                         | 18                    | 8                     | 20                   | 100                   |
| 2N4858A  | TO-18   | 360                 | 40                    | 8                     | 80  | 0.8                      | 4   | 60                         | 10                    | 3.5                   | 16                   | 80                    |
| 2N4859   | TO-18   | 360                 | 30                    | 50                    | -   | 4                        | 10  | 25                         | 18                    | 8                     | 9                    | 25                    |
| 2N4859A  | TO-18   | 360                 | 30                    | 50                    | -   | 4                        | 10  | 25                         | 10                    | 4                     | 8                    | 20                    |
| 2N4860   | TO-18   | 360                 | 30                    | 20                    | 100 | 2                        | 6   | 40                         | 18                    | 8                     | 10                   | 50                    |
| 2N4860A  | TO-18   | 360                 | 30                    | 20                    | 100 | 2                        | 6   | 40                         | 10                    | 3.5                   | 10                   | 40                    |
| 2N4861   | TO-18   | 360                 | 30                    | 8                     | 80  | 0.8                      | 4   | 60                         | 18                    | 8                     | 20                   | 100                   |
| 2N4861A  | TO-18   | 360                 | 30                    | 8                     | 80  | 0.8                      | 4   | 60                         | 10                    | 3.5                   | 16                   | 80                    |
| 2N5555   | TO-92DD | 310                 | 25                    | 15                    | -   | -                        | -   | 150                        | 5                     | 1.2                   | 5                    | 15                    |
| 2N5638   | TO-92DD | 310                 | 30                    | 50                    | -   | -                        | -   | 150                        | 10                    | 4                     | 9                    | 15                    |
| 2N5639   | TO-92DD | 310                 | 30                    | 25                    | -   | -                        | -   | 60                         | 10                    | 4                     | 14                   | 30                    |
| 2N5640   | TO-92DD | 310                 | 30                    | 5                     | -   | -                        | -   | 100                        | 10                    | 4                     | 18                   | 45                    |
| 2N5653   | TO-92DD | 310                 | 30                    | 40                    | -   | -                        | -   | 50                         | 10                    | 3.5                   | 9                    | 15                    |
| 2N5654   | TO-92DD | 310                 | 30                    | 15                    | -   | -                        | -   | 100                        | 10                    | 3.5                   | 14                   | 30                    |

□ Tc=25°C + typical value