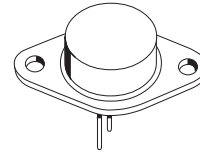


# Power Transistors

## TO-3 Case (Continued)



| TYPE NO.  |           | I <sub>C</sub> | P <sub>D</sub> | BV <sub>CBO</sub> | BV <sub>CEO</sub> | h <sub>FE</sub> |        | @ I <sub>C</sub> | V <sub>CE(SAT)</sub> | @ I <sub>C</sub> | f <sub>T</sub>       |
|-----------|-----------|----------------|----------------|-------------------|-------------------|-----------------|--------|------------------|----------------------|------------------|----------------------|
| NPN       | PNP       | (A)<br>MAX     | (W)            | (V)<br>MIN        | (V)<br>MIN        | *TYP<br>MIN     | MAX    | (A)              | (V)<br>MAX           | (A)              | *TYP<br>(MHz)<br>MIN |
| BUY69C    |           | 10             | 100            | 500               | 200               | 15              | --     | 2.5              | 3.3                  | 8.0              | 10*                  |
| MJ802     | MJ4502    | 30             | 200            | 100               | 90                | 25              | 100    | 7.5              | 0.8                  | 7.5              | 2.0                  |
| MJ1000    | MJ 900    | 8.0            | 90             | 60                | 60                | 1,000           | --     | 3.0              | 4.0                  | 8.0              | 6.0                  |
| MJ1001    | MJ 901    | 8.0            | 90             | 80                | 80                | 1,000           | --     | 3.0              | 4.0                  | 8.0              | 6.0                  |
| MJ3000    | MJ2500    | 10             | 150            | 60                | 60                | 1,000           | --     | 5.0              | 4.0                  | 10               | --                   |
| MJ3001    | MJ2501    | 10             | 150            | 80                | 80                | 1,000           | --     | 5.0              | 4.0                  | 10               | --                   |
| MJ4033    | MJ4030    | 16             | 150            | 60                | 60                | 1,000           | --     | 10               | 4.0                  | 16               | --                   |
| MJ4034    | MJ4031    | 16             | 150            | 80                | 80                | 1,000           | --     | 10               | 4.0                  | 16               | --                   |
| MJ4035    | MJ4032    | 16             | 150            | 100               | 100               | 1,000           | --     | 10               | 4.0                  | 16               | --                   |
| MJ10012   |           | 10             | 175            | 600               | 400               | 100             | 2,000  | 6.0              | 2.5                  | 10               | --                   |
| MJ10023†  |           | 40             | 250            | --                | 400               | 50              | 600    | 10               | 5.0                  | 40               | --                   |
| MJ11012   | MJ11011   | 30             | 200            | 60                | 60                | 1,000           | --     | 20               | 4.0                  | 30               | 4.0                  |
| MJ11014   | MJ11013   | 30             | 200            | 90                | 90                | 1,000           | --     | 20               | 4.0                  | 30               | 4.0                  |
| MJ11016   | MJ11015   | 30             | 200            | 120               | 120               | 1,000           | --     | 20               | 4.0                  | 30               | 4.0                  |
| PMD10K40  | PMD11K40  | 12             | 150            | 40                | 40                | 800             | 20,000 | 6.0              | 2.0                  | 12               | 4.0                  |
| PMD10K60  | PMD11K60  | 12             | 150            | 60                | 60                | 800             | 20,000 | 6.0              | 2.0                  | 6.0              | 4.0                  |
| PMD10K80  | PMD11K80  | 12             | 150            | 80                | 80                | 800             | 20,000 | 6.0              | 2.0                  | 6.0              | 4.0                  |
| PMD10K100 | PMD11K100 | 12             | 150            | 100               | 100               | 800             | 20,000 | 6.0              | 2.0                  | 6.0              | 4.0                  |
| PMD12K40  | PMD13K40  | 8.0            | 100            | 40                | 40                | 800             | 20,000 | 4.0              | 2.0                  | 4.0              | 4.0                  |
| PMD12K60  | PMD13K60  | 8.0            | 100            | 60                | 60                | 800             | 20,000 | 4.0              | 2.0                  | 4.0              | 4.0                  |
| PMD12K80  | PMD13K80  | 8.0            | 100            | 80                | 80                | 800             | 20,000 | 4.0              | 2.0                  | 4.0              | 4.0                  |
| PMD12K100 | PMD13K100 | 8.0            | 100            | 100               | 100               | 800             | 20,000 | 4.0              | 2.0                  | 4.0              | 4.0                  |
| PMD1601K  | PMD1701K  | 20             | 180            | 60                | 60                | 750             | 20,000 | 10               | 2.0                  | 10               | 4.0                  |
| PMD1602K  | PMD1702K  | 20             | 180            | 80                | 80                | 750             | 20,000 | 10               | 2.0                  | 10               | 4.0                  |
| PMD1603K  | PMD1703K  | 20             | 180            | 100               | 100               | 750             | 20,000 | 10               | 2.0                  | 10               | 4.0                  |
| PMD16K60  | PMD17K60  | 20             | 200            | 60                | 60                | 800             | 20,000 | 10               | 2.0                  | 10               | 4.0                  |
| PMD16K80  | PMD17K80  | 20             | 200            | 80                | 80                | 800             | 20,000 | 10               | 2.0                  | 10               | 4.0                  |
| PMD16K100 | PMD17K100 | 20             | 200            | 100               | 100               | 800             | 20,000 | 10               | 2.0                  | 10               | 4.0                  |
| PMD18K60  | PMD19K60  | 30             | 225            | 60                | 60                | 800             | 20,000 | 15               | 2.0                  | 15               | 4.0                  |
| PMD18K80  | PMD19K80  | 30             | 225            | 80                | 80                | 800             | 20,000 | 15               | 2.0                  | 15               | 4.0                  |
| PMD18K100 | PMD19K100 | 30             | 225            | 100               | 100               | 800             | 20,000 | 15               | 2.0                  | 15               | 4.0                  |
| SE9303    | SE9403    | 10             | 100            | 60                | 60                | 1,000           | --     | 7.5              | 2.5                  | 7.5              | 1.0                  |
| SE9304    | SE9404    | 10             | 100            | 80                | 80                | 1,000           | --     | 7.5              | 2.5                  | 7.5              | 1.0                  |
| SE9305    | SE9405    | 10             | 100            | 100               | 100               | 1,000           | --     | 7.5              | 2.5                  | 7.5              | 1.0                  |

Shaded areas indicate Darlington.

† Uses 60 mil leads.

See mechanical specifications on page 209