

T-33-01

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## NPN &amp; PNP HIGH VOLTAGE SILICON HIGH POWER TRANSISTORS

| STI Type | Industry Type | Power Dissipation @ 25 °C (watts) | V <sub>CEV</sub> (volts) | V <sub>CEO</sub> (volts) | I <sub>CEV</sub> |     | h <sub>FE</sub> @ I <sub>C</sub> |     | V <sub>CE</sub> (SAT.) V <sub>BE</sub> (SAT.) @ I <sub>C</sub> |         |     | COB pF | f <sub>T</sub> (MHz) | CASE STYLE        |
|----------|---------------|-----------------------------------|--------------------------|--------------------------|------------------|-----|----------------------------------|-----|----------------------------------------------------------------|---------|-----|--------|----------------------|-------------------|
|          |               |                                   |                          |                          | (volts)          | mA  | (Min.)                           | A   | (volts)                                                        | (volts) | A   |        |                      |                   |
| 2N3902   | 2N3902        | 100                               | 700                      | 400***                   | 700              | 2.5 | 10                               | 2.5 | 2.5                                                            | 2.0     | 2.5 | 150    | 2.8                  | TO-3              |
| 2N4347   | 2N4347        | 100                               | 140                      | 120***                   | 120              | 4.0 | 15                               | 2.0 | 1.7                                                            | 2.0     | 2.0 | 200    | 1.0                  | TO-3              |
| 2N5157   | 2N5157        | 100                               | 700                      | 500                      | 700              | .50 | 10                               | 2.5 | 2.5                                                            | 2.0     | 3.5 | 150    | 2.8                  | TO-3              |
| 2N5239   | 2N5239        | 100                               | 300                      | 225***                   | 300              | 4.0 | 20                               | 2.0 | 5.0                                                            | 3.5     | 4.5 | 150    | 5.0                  | TO-3              |
| 2N5240   | 2N5240        | 100                               | 375                      | 300***                   | 375              | 2.0 | 20                               | 2.0 | 5.0                                                            | 3.5     | 4.5 | 150    | 5.0                  | TO-3              |
| 2N5466   | 2N5466        | 140                               | 500                      | 400                      | 500              | .25 | 15                               | 3.0 | .50                                                            | 1.5     | 3.0 | 200    | 2.5                  | TO-3              |
| 2N5467   | 2N5467        | 140                               | 700                      | 400                      | 700              | .25 | 15                               | 3.0 | .50                                                            | 1.5     | 3.0 | 200    | 2.5                  | TO-3              |
| 2N5685   | 2N5685        | 200                               | 60                       | 60                       | 60               | 2.0 | 5.0                              | 50  | 2.0                                                            | 2.0     | 25  | 1200   | 2.0                  | TO-3 <sup>1</sup> |
| 2N5686   | 2N5686        | 200                               | 80                       | 80                       | 80               | 2.0 | 5.0                              | 50  | 2.0                                                            | 2.0     | 25  | 1200   | 2.0                  | TO-3 <sup>1</sup> |
| 2N5804   | 2N5804        | 110                               | 300                      | 225***                   | 270              | 5.0 | 10                               | 5.0 | 2.0                                                            | 5.0     | 2.0 | 450    | 1.5                  | TO-3              |
| 2N5805   | 2N5805        | 110                               | 375                      | 300***                   | 340              | 5.0 | 10                               | 5.0 | 2.0                                                            | 2.0     | 5.0 | 450    | 1.5                  | TO-3              |
| 2N5838   | 2N5838        | 100                               | 275                      | 250***                   | 265              | 5.0 | 20                               | .50 | 1.0                                                            | 2.0     | 3.0 | 150    | 4.0                  | TO-3              |
| 2N5839   | 2N5839        | 100                               | 300                      | 275***                   | 290              | 2.0 | 20                               | .50 | 1.5                                                            | 2.0     | 2.0 | 150    | 4.0                  | TO-3              |
| 2N5840   | 2N5840        | 100                               | 375                      | 350***                   | 360              | 2.0 | 20                               | .50 | 1.5                                                            | 2.0     | 2.0 | 150    | 4.0                  | TO-3              |
| 2N6032   | 2N6032        | 140                               | 120                      | 90                       | 110              | 12  | 10                               | 50  | 1.3                                                            | 2.0     | 50  | —      | 30                   | TO-3 <sup>1</sup> |
| 2N6033   | 2N6033        | 140                               | 150                      | 120                      | 135              | 10  | 10                               | 40  | 1.0                                                            | 2.0     | 40  | —      | 30                   | TO-3 <sup>1</sup> |
| 2N6249   | 2N6249        | 175                               | 300                      | 200                      | 300              | 5.0 | 10                               | 10  | 1.5                                                            | 2.5     | 10  | —      | 2.5                  | TO-3              |
| 2N6250   | 2N6250        | 175                               | 375                      | 275                      | 375              | 5.0 | 8.0                              | 10  | 1.5                                                            | 2.5     | 10  | —      | 2.5                  | TO-3              |
| 2N6251   | 2N6251        | 175                               | 450                      | 350                      | 450              | 5.0 | 6.0                              | 10  | 1.5                                                            | 2.5     | 10  | —      | 2.5                  | TO-3              |
| 2N6274   | 2N6274        | 250                               | 120                      | 100                      | 120              | .01 | 10                               | 50  | 3.0                                                            | 3.5     | 50  | 600    | 30                   | TO-3 <sup>1</sup> |
| 2N6275   | 2N6275        | 250                               | 140                      | 120                      | 140              | .01 | 10                               | 50  | 3.0                                                            | 3.5     | 50  | 600    | 30                   | TO-3 <sup>1</sup> |
| 2N6276   | 2N6276        | 250                               | 160                      | 140                      | 160              | .01 | 10                               | 50  | 3.0                                                            | 3.5     | 50  | 600    | 30                   | TO-3 <sup>1</sup> |
| 2N6277   | 2N6277        | 250                               | 180                      | 150                      | 180              | .01 | 10                               | 50  | 3.0                                                            | 3.5     | 50  | 600    | 30                   | TO-3 <sup>1</sup> |
| 2N6306   | 2N6306        | 125                               | 500                      | 250                      | 500              | .50 | 15                               | 3.0 | 5.0                                                            | 2.5     | 8.0 | 250    | 5.0                  | TO-3              |
| 2N6307   | 2N6307        | 125                               | 600                      | 300                      | 600              | .50 | 15                               | 3.0 | 5.0                                                            | 2.5     | 8.0 | 250    | 5.0                  | TO-3              |
| 2N6308   | 2N6308        | 125                               | 700                      | 350***                   | 700              | .50 | 12                               | 3.0 | 5.0                                                            | 2.5     | 8.0 | 250    | 5.0                  | TO-3              |
| 2N6322   | 2N6322        | 200                               | 300                      | 200                      | 300              | 2.0 | 12                               | 20  | 1.5                                                            | 2.5     | 20  | —      | 10                   | TO-3              |
| 2N6323   | 2N6323        | 200                               | 400                      | 300                      | 400              | 2.0 | 12                               | 20  | 1.5                                                            | 2.5     | 20  | —      | 10                   | TO-3              |
| 2N6325   | 2N6325        | 200                               | 400                      | 300                      | 400              | 2.0 | 12                               | 20  | 3.0                                                            | 2.5     | 30  | —      | 10                   | TO-3              |
| 2N6510   | 2N6510        | 120                               | 250                      | 250***                   | 250              | 5.0 | 10                               | 3.0 | 1.5                                                            | 1.7     | 3.0 | 200    | 3.0                  | TO-3              |
| 2N6511   | 2N6511        | 120                               | 300                      | 300***                   | 300              | 5.0 | 10                               | 4.0 | 1.5                                                            | 1.7     | 4.0 | 200    | 3.0                  | TO-3              |
| 2N6512   | 2N6512        | 120                               | 350                      | 350***                   | 350              | 5.0 | 10                               | 4.0 | 1.5                                                            | 1.7     | 4.0 | 200    | 3.0                  | TO-3              |
| 2N6513   | 2N6513        | 120                               | 400                      | 400***                   | 400              | 5.0 | 10                               | 4.0 | 1.5                                                            | 1.7     | 4.0 | 200    | 3.0                  | TO-3              |
| 2N6514   | 2N6514        | 120                               | 350                      | 350***                   | 350              | 5.0 | 10                               | 5.0 | 1.5                                                            | 1.7     | 5.0 | 200    | 3.0                  | TO-3              |
| 2N6542   | 2N6542        | 100                               | 350                      | 300                      | 350              | .50 | 7.0                              | 3.0 | 1.0                                                            | 1.4     | 3.0 | 200    | 6.0                  | TO-3              |
| 2N6543   | 2N6543        | 100                               | 450                      | 400                      | 400              | .50 | 7.0                              | 3.0 | 1.0                                                            | 1.4     | 3.0 | 200    | 6.0                  | TO-3              |
| 2N6544   | 2N6544        | 125                               | 650                      | 300                      | 650              | .50 | 7.0                              | 5.0 | 1.5                                                            | 1.6     | 5.0 | 300    | 6.0                  | TO-3              |
| 2N6545   | 2N6545        | 125                               | 850                      | 400                      | 850              | .50 | 7.0                              | 5.0 | 1.5                                                            | 1.6     | 5.0 | 300    | 6.0                  | TO-3              |
| 2N6546   | 2N6546        | 175                               | 650                      | 300                      | 650              | 1.0 | 6.0                              | 10  | 1.5                                                            | 1.6     | 10  | 500    | 6.0                  | TO-3              |
| 2N6547   | 2N6547        | 175                               | 850                      | 400                      | 850              | 1.0 | 6.0                              | 10  | 1.5                                                            | 1.6     | 10  | 500    | 6.0                  | TO-3              |
| 2N6560   | 2N6560        | 220                               | 450                      | 450                      | 450              | 1.0 | 10                               | 10  | .75                                                            | 1.4     | 5.0 | 450    | 10                   | TO-3              |
| 2N6561   | 2N6561        | 220                               | 300                      | 300                      | 300              | 1.0 | 10                               | 10  | 1.5                                                            | 1.8     | 10  | 450    | 15                   | TO-3              |
| 2N6573   | 2N6573        | 125                               | 500                      | 250                      | 500              | .50 | 15                               | 3.0 | 1.5                                                            | 1.6     | 7.0 | 220    | 5.0                  | TO-3              |
| 2N6574   | 2N6574        | 125                               | 600                      | 275                      | 600              | .50 | 20                               | 3.0 | 1.5                                                            | 1.4     | 7.0 | 220    | 5.0                  | TO-3              |
| 2N6575   | 2N6575        | 125                               | 700                      | 300                      | 700              | .50 | 20                               | 3.0 | 1.5                                                            | 1.4     | 7.0 | 220    | 5.0                  | TO-3              |
| 2N6579   | 2N6579        | 125                               | 450                      | 350                      | 450              | .50 | 5.0                              | 3.0 | 1.5                                                            | 1.5     | 5.0 | 250    | 25                   | TO-3              |
| 2N6580   | 2N6580        | 125                               | 500                      | 400                      | 500              | .50 | 5.0                              | 3.0 | 1.5                                                            | 1.5     | 5.0 | 250    | 25                   | TO-3              |
| 2N6581   | 2N6581        | 125                               | 550                      | 450                      | 550              | .50 | 5.0                              | 3.0 | 1.5                                                            | 1.5     | 5.0 | 250    | 25                   | TO-3              |
| 2N6582   | 2N6582        | 125                               | 450                      | 350                      | 450              | .50 | 7.0                              | 3.0 | 1.5                                                            | 1.5     | 7.0 | 250    | 25                   | TO-3              |
| 2N6583   | 2N6583        | 125                               | 500                      | 400                      | 500              | .50 | 7.0                              | 3.0 | 1.5                                                            | 1.5     | 7.0 | 250    | 25                   | TO-3              |
| 2N6584   | 2N6584        | 125                               | 550                      | 450                      | 550              | .50 | 7.0                              | 3.0 | 1.5                                                            | 1.5     | 7.0 | 250    | 25                   | TO-3              |
| 2N6653   | 2N6653        | 150                               | 350                      | 300                      | 350              | .10 | 15                               | 2.0 | .60                                                            | 1.3     | 15  | 300    | 25                   | TO-3              |
| 2N6654   | 2N6654        | 150                               | 400                      | 350                      | 400              | .10 | 15                               | 2.0 | .60                                                            | 1.3     | 15  | 300    | 25                   | TO-3              |
| 2N6655   | 2N6655        | 150                               | 450                      | 400                      | 450              | .10 | 15                               | 2.0 | .80                                                            | 1.3     | 15  | 300    | 25                   | TO-3              |
| 2N6671   | 2N6671        | 150                               | 450                      | 300                      | 450              | .10 | 10                               | 5.0 | 1.5                                                            | 1.6     | 5.0 | 300    | 15                   | TO-3              |

\*DARLINGTON TRANSISTOR

\*PNP

\*\*V<sub>CEO</sub>

\*SPEED UP DIODE

\*\*\*V<sub>CE</sub>

\*PINS .058" ± .002"