

# Small Signal Transistors

## TO-92 Case (Continued)



| TYPE NO. | DESCRIPTION      | LEAD CODE | V <sub>CBO</sub> | V <sub>CEO</sub>           | V <sub>EBO</sub> | I <sub>CBO</sub> @         | V <sub>CB</sub> | h <sub>FE</sub> |     | @ V <sub>CE</sub> | @ I <sub>C</sub> | V <sub>CE</sub> (SAT) @ I <sub>C</sub> |      | C <sub>ob</sub>         | f <sub>T</sub> | NF   | t <sub>off</sub> |
|----------|------------------|-----------|------------------|----------------------------|------------------|----------------------------|-----------------|-----------------|-----|-------------------|------------------|--|------|-------------------------|----------------|------|------------------|
|          |                  |           | (V)              | (V)                        | (V)              | (nA)                       | (V)             | MIN             | MAX | (V)               | (mA)             | (V)                                    | (mA) | (pF)                    | (MHz)          | (dB) |                  |
|          |                  |           | MIN              | *V <sub>CE(S)</sub><br>MIN | MIN              | *I <sub>CE(S)</sub><br>MAX | MIN             | MIN             | MAX | MIN               | MAX              | MIN                                    | MAX  | *C <sub>rb</sub><br>MAX | *TYP<br>MIN    | MAX  | MAX              |
| MPSA25   | NPN DARLINGTON   | EBC       | 40               | 40*                        | 10               | 100                        | 30              | 10,000          | --  | 5.0               | 100              | 1.50                                   | 100  | 125                     | --             | --   | --               |
| MPSA26   | NPN DARLINGTON   | EBC       | 50               | 50*                        | 10               | 100                        | 40              | 10,000          | --  | 5.0               | 100              | 1.50                                   | 100  | 125                     | --             | --   | --               |
| MPSA27   | NPN DARLINGTON   | EBC       | 60               | 60*                        | 10               | 100                        | 50              | 10,000          | --  | 5.0               | 100              | 1.50                                   | 100  | 125                     | --             | --   | --               |
| MPSA28   | NPN DARLINGTON   | EBC       | 80               | 80*                        | 12               | 100                        | 60              | 10,000          | --  | 5.0               | 100              | 1.50                                   | 100  | 8.0                     | 125            | --   | --               |
| MPSA29   | NPN DARLINGTON   | EBC       | 100              | 100                        | 12               | 100                        | 80              | 10,000          | --  | 5.0               | 100              | 1.50                                   | 100  | 8.0                     | 125            | --   | --               |
| MPSA42   | NPN HIGH VOLTAGE | EBC       | 300              | 300                        | 6.0              | 100                        | 200             | 40              | --  | 10                | 30               | 0.50                                   | 20   | 3.0                     | 50             | --   | --               |
| MPSA44   | NPN HIGH VOLTAGE | EBC       | 500              | 400                        | 6.0              | 100                        | 400             | 50              | 200 | 10                | 10               | 0.75                                   | 50   | 6.0                     | 20             | --   | --               |
| MPSA45   | NPN HIGH VOLTAGE | EBC       | 400              | 350                        | 6.0              | 100                        | 320             | 50              | 200 | 10                | 10               | 0.75                                   | 50   | 6.0                     | 20             | --   | --               |
| MPSA55   | PNP AMPL/SWITCH  | EBC       | 60               | 60                         | 4.0              | 100                        | 60              | 50              | --  | 1.0               | 100              | 0.25                                   | 100  | --                      | 50             | --   | --               |
| MPSA56   | PNP AMPL/SWITCH  | EBC       | 80               | 80                         | 4.0              | 100                        | 80              | 50              | --  | 1.0               | 100              | 0.25                                   | 100  | --                      | 50             | --   | --               |
| MPSA62   | PNP DARLINGTON   | EBC       | 20               | 20*                        | 10               | 100                        | 15              | 20,000          | --  | 5.0               | 10               | 1.0                                    | 10   | --                      | 125            | --   | --               |
| MPSA63   | PNP DARLINGTON   | EBC       | 30               | 30*                        | 10               | 100                        | 30              | 10,000          | --  | 5.0               | 100              | 1.50                                   | 100  | --                      | 125            | --   | --               |
| MPSA64   | PNP DARLINGTON   | EBC       | 30               | 30*                        | 10               | 100                        | 30              | 20,000          | --  | 5.0               | 100              | 1.50                                   | 100  | --                      | 125            | --   | --               |
| MPSA65   | PNP DARLINGTON   | EBC       | 30               | 30*                        | 8.0              | 100                        | 30              | 20,000          | --  | 5.0               | 100              | 1.50                                   | 100  | --                      | 100            | --   | --               |
| MPSA66   | PNP DARLINGTON   | EBC       | 30               | 30*                        | 8.0              | 100                        | 30              | 40,000          | --  | 5.0               | 100              | 1.50                                   | 100  | --                      | 100            | --   | --               |
| MPSA70   | PNP LOW NOISE    | EBC       | --               | 40                         | 4.0              | 100                        | 30              | 40              | 400 | 10                | 5.0              | 0.25                                   | 10   | 4.0                     | 125            | --   | --               |
| MPSA75   | PNP DARLINGTON   | EBC       | 40               | 40*                        | 10               | 100                        | 30              | 10,000          | --  | 5.0               | 100              | 1.50                                   | 100  | --                      | 125            | --   | --               |
| MPSA76   | PNP DARLINGTON   | EBC       | 50               | 50*                        | 10               | 100                        | 40              | 10,000          | --  | 5.0               | 100              | 1.50                                   | 100  | --                      | 125            | --   | --               |
| MPSA77   | PNP DARLINGTON   | EBC       | 60               | 60*                        | 10               | 100                        | 50              | 10,000          | --  | 5.0               | 100              | 1.50                                   | 100  | --                      | 125            | --   | --               |
| MPSA92   | PNP HIGH VOLTAGE | EBC       | 300              | 300                        | 5.0              | 250                        | 200             | 25              | --  | 10                | 30               | 0.5                                    | 20   | 6.0                     | 50             | --   | --               |
| MPSA94   | PNP HIGH VOLTAGE | EBC       | 500              | 400                        | 6.0              | 100                        | 400             | 50              | 200 | 10                | 10               | 0.75                                   | 50   | 6.0                     | 20             | --   | --               |
| MPSD04   | NPN DARLINGTON   | EBC       | --               | 25*                        | 10               | 1,000                      | 20              | 1,000           | --  | 5.0               | 300              | 1.0                                    | 100  | --                      | 100            | --   | --               |
| MPSD54   | PNP DARLINGTON   | EBC       | --               | 25*                        | 10               | 1,000                      | 20              | 1,000           | --  | 5.0               | 100              | 1.0                                    | 100  | --                      | 100            | --   | --               |
| MPSH10   | NPN RF OSC       | BEC       | 30               | 25                         | 3.0              | 100                        | 25              | 60              | --  | 10                | 4.0              | 0.50                                   | 4.0  | 0.65*                   | 650            | --   | --               |
| MPSH11   | NPN RF OSC       | BEC       | 30               | 25                         | 3.0              | 100                        | 25              | 60              | --  | 10                | 4.0              | 0.50                                   | 4.0  | 0.90*                   | 650            | --   | --               |
| MPSL01   | NPN HIGH VOLTAGE | EBC       | 140              | 120                        | 5.0              | 1,000                      | 75              | 50              | 300 | 5.0               | 10               | 0.30                                   | 50   | 8.0                     | 60             | --   | --               |
| MPSL51   | PNP HIGH VOLTAGE | EBC       | 100              | 100                        | 4.0              | 1,000                      | 50              | 40              | 250 | 5.0               | 50               | 0.30                                   | 50   | 8.0                     | 60             | --   | --               |
| PN918    | NPN RF OSC       | EBC       | 30               | 15                         | 3.0              | 10                         | 15              | 20              | --  | 1.0               | 3.0              | 0.40                                   | 10   | 1.7                     | 600            | 6.0  | --               |
| PN2222A  | NPN AMPL/SWITCH  | EBC       | 75               | 40                         | 6.0              | 10                         | 60              | 100             | 300 | 10                | 150              | 1.0                                    | 500  | 8.0                     | 300            | 4.0  | 285              |
| PN2369A  | NPN SAT SWITCH   | EBC       | 40               | 15                         | 4.5              | 400                        | 20              | 40              | 120 | 0.35              | 10               | 0.50                                   | 100  | 4.0                     | 500            | --   | 18               |
| PN2484   | NPN LOW NOISE    | EBC       | 60               | 60                         | 6.0              | 10                         | 45              | 250             | --  | 5.0               | 1.0              | 0.30                                   | 1.0  | 6.0                     | --             | 3.0  | --               |
| PN2906   | PNP AMPL/SWITCH  | EBC       | 60               | 40                         | 5.0              | 20                         | 50              | 40              | 120 | 10                | 150              | 1.60                                   | 500  | 8.0                     | 200            | --   | 100              |
| PN2906A  | PNP AMPL/SWITCH  | EBC       | 60               | 60                         | 5.0              | 10                         | 50              | 40              | 120 | 10                | 150              | 1.60                                   | 500  | 8.0                     | 200            | --   | 100              |
| PN2907   | PNP AMPL/SWITCH  | EBC       | 60               | 40                         | 5.0              | 20                         | 50              | 100             | 300 | 10                | 150              | 1.60                                   | 500  | 8.0                     | 200            | --   | 100              |
| PN2907A  | PNP AMPL/SWITCH  | EBC       | 60               | 60                         | 5.0              | 10                         | 50              | 100             | 300 | 10                | 150              | 1.60                                   | 500  | 8.0                     | 200            | --   | 100              |
| PN3563   | NPN RF OSC       | EBC       | 30               | 12                         | 2.0              | 50                         | 15              | 20              | 200 | 10                | 8.0              | --                                     | --   | 1.7                     | 600            | --   | --               |
| PN3564   | NPN RF OSC       | EBC       | 30               | 15                         | 4.0              | 50                         | 15              | 20              | 200 | 10                | 15               | 0.30                                   | 20   | 3.5                     | 400            | --   | --               |
| PN3565   | NPN LOW NOISE    | EBC       | 30               | 25                         | 6.0              | 50                         | 25              | 150             | 600 | 10                | 1.0              | 0.35                                   | 1.0  | 4.0                     | 40             | --   | --               |
| PN3566   | NPN AMPL/SWITCH  | EBC       | 40               | 30                         | 5.0              | 50                         | 20              | 150             | 600 | 10                | 10               | 1.0                                    | 100  | 25                      | 40             | --   | --               |
| PN3567   | NPN AMPL/SWITCH  | EBC       | 80               | 40                         | 5.0              | 50                         | 40              | 40              | 120 | 1.0               | 150              | 0.25                                   | 150  | 20                      | 60             | --   | --               |
| PN3568   | NPN AMPL/SWITCH  | EBC       | 80               | 60                         | 5.0              | 50                         | 40              | 40              | 120 | 1.0               | 150              | 0.25                                   | 150  | 20                      | 60             | --   | --               |
| PN3569   | NPN AMPL/SWITCH  | EBC       | 80               | 40                         | 5.0              | 50                         | 40              | 100             | 300 | 1.0               | 150              | 0.25                                   | 150  | 20                      | 60             | --   | --               |
| PN3638A  | PNP AMPL/SWITCH  | EBC       | 25               | 25                         | 4.0              | 35*                        | 15              | 100             | --  | 1.0               | 50               | 1.0                                    | 300  | 10                      | 150            | --   | 170              |
| PN3639   | PNP SAT SWITCH   | EBC       | 6.0              | 6.0                        | 4.0              | 10*                        | 3.0             | 30              | 120 | 0.30              | 10               | 0.50                                   | 50   | 3.5                     | 500            | --   | 60               |
| PN3640   | PNP SAT SWITCH   | EBC       | 12               | 12                         | 4.0              | 10*                        | 6.0             | 30              | 120 | 0.30              | 10               | 0.60                                   | 50   | 3.5                     | 500            | --   | 75               |