

# Small Signal Transistors

TO-92 Case (Continued)



| TYPE NO. | DESCRIPTION     | LEAD CODE | V <sub>CB0</sub> | V <sub>CEO</sub>         | V <sub>EBO</sub> | I <sub>CB0</sub> @                            | V <sub>CB</sub> | h <sub>FE</sub> |        | @ V <sub>CE</sub> | @ I <sub>C</sub> | V <sub>CE (SAT)</sub> @ 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>CES</sub><br>MIN | MAX              | *I <sub>CES</sub><br>*I <sub>CEV</sub><br>MAX |                 |                 |        |                   |                  |                                        |      | *C <sub>rb</sub><br>MAX | *TYP<br>MIN    | MAX  | MAX              |
| MPS3710  | NPN LOW NOISE   | EBC       | 30               | 30                       | 6.0              | 100                                           | 20              | 90              | 330    | 5.0               | 1.0              | 1.0                                    | 10   | --                      | --             | --   | --               |
| MPS3711  | NPN LOW NOISE   | EBC       | 30               | 30                       | 6.0              | 100                                           | 20              | 180             | 660    | 1.0               | 1.0              | 1.0                                    | 10   | --                      | --             | --   | --               |
| MPS3721  | NPN LOW NOISE   | EBC       | 18               | 18                       | 5.0              | 500                                           | 18              | 60              | 660    | 10                | 2.0              | --                                     | --   | 3.5                     | --             | --   | --               |
| MPS3826  | NPN AMPL/SWITCH | EBC       | 60               | 45                       | 4.0              | 100                                           | 30              | 40              | 160    | 10                | 10               | --                                     | --   | 3.5                     | 200            | --   | --               |
| MPS3827  | NPN AMPL/SWITCH | EBC       | 60               | 45                       | 4.0              | 100                                           | 30              | 100             | 400    | 10                | 10               | --                                     | --   | 3.5                     | 200            | --   | --               |
| MPS5172  | NPN LOW NOISE   | EBC       | 25               | 25                       | 5.0              | 100                                           | 25              | 100             | 500    | 10                | 10               | 0.25                                   | 10   | 10                      | 120*           | --   | --               |
| MPS5306  | NPN DARLINGTON  | EBC       | 25               | 25                       | 12               | 100                                           | 25              | 7,000           | 70,000 | 5.0               | 2.0              | 1.40                                   | 200  | 10                      | 60             | --   | --               |
| MPS5308  | NPN DARLINGTON  | EBC       | 40               | 40                       | 12               | 100                                           | 40              | 7,000           | 70,000 | 5.0               | 2.0              | 1.40                                   | 200  | 10                      | 60             | --   | --               |
| MPS6507  | NPN RF OSC      | EBC       | 30               | 20                       | 3.0              | 50                                            | 15              | 25              | --     | 10                | 2.0              | --                                     | --   | 2.5                     | 700            | --   | --               |
| MPS6511  | NPN RF OSC      | EBC       | 30               | 20                       | 3.0              | 50                                            | 15              | 25              | --     | 10                | 10               | --                                     | --   | 2.5                     | --             | --   | --               |
| MPS6512  | NPN AMPL/SWITCH | EBC       | 40               | 30                       | 4.0              | 50                                            | 30              | 50              | 100    | 10                | 2.0              | 0.50                                   | 50   | 3.5                     | --             | --   | --               |
| MPS6513  | NPN AMPL/SWITCH | EBC       | 40               | 30                       | 4.0              | 50                                            | 30              | 90              | 180    | 10                | 2.0              | 0.50                                   | 50   | 3.5                     | --             | --   | --               |
| MPS6514  | NPN AMPL/SWITCH | EBC       | 40               | 25                       | 4.0              | 50                                            | 30              | 150             | 300    | 10                | 2.0              | 0.50                                   | 50   | 3.5                     | --             | --   | --               |
| MPS6515  | NPN AMPL/SWITCH | EBC       | 40               | 25                       | 4.0              | 50                                            | 30              | 250             | 500    | 10                | 2.0              | 0.50                                   | 50   | 3.5                     | --             | --   | --               |
| MPS6516  | PNP AMPL/SWITCH | EBC       | 40               | 40                       | 4.0              | 50                                            | 30              | 50              | 100    | 10                | 2.0              | 0.50                                   | 50   | 4.0                     | --             | --   | --               |
| MPS6517  | PNP AMPL/SWITCH | EBC       | 40               | 40                       | 4.0              | 50                                            | 30              | 90              | 180    | 10                | 2.0              | 0.50                                   | 50   | 4.0                     | --             | --   | --               |
| MPS6518  | PNP AMPL/SWITCH | EBC       | 40               | 40                       | 4.0              | 50                                            | 30              | 150             | 300    | 10                | 2.0              | 0.50                                   | 50   | 4.0                     | --             | --   | --               |
| MPS6519  | PNP AMPL/SWITCH | EBC       | 25               | 25                       | 4.0              | 50                                            | 20              | 250             | 500    | 10                | 2.0              | 0.50                                   | 50   | 4.0                     | --             | --   | --               |
| MPS6520  | NPN LOW NOISE   | EBC       | 40               | 25                       | 4.0              | 50                                            | 30              | 200             | 400    | 10                | 2.0              | 0.50                                   | 50   | 3.5                     | --             | 3.0  | --               |
| MPS6521  | NPN LOW NOISE   | EBC       | 40               | 25                       | 4.0              | 50                                            | 30              | 300             | 600    | 10                | 2.0              | 0.50                                   | 50   | 3.5                     | --             | 3.0  | --               |
| MPS6522  | PNP LOW NOISE   | EBC       | 25               | 25                       | 4.0              | 50                                            | 20              | 200             | 400    | 10                | 2.0              | 0.50                                   | 50   | 3.5                     | --             | 3.0  | --               |
| MPS6523  | PNP LOW NOISE   | EBC       | 25               | 25                       | 4.0              | 50                                            | 20              | 300             | 600    | 10                | 2.0              | 0.50                                   | 50   | 3.5                     | --             | 3.0  | --               |
| MPS6531  | NPN AMPL/SWITCH | EBC       | 60               | 40                       | 5.0              | 50                                            | 40              | 90              | 270    | 1.0               | 100              | 0.30                                   | 100  | 5.0                     | --             | --   | --               |
| MPS6532  | NPN AMPL/SWITCH | EBC       | 50               | 30                       | 5.0              | 100                                           | 30              | 30              | --     | 1.0               | 100              | 0.50                                   | 100  | 5.0                     | --             | --   | --               |
| MPS6534  | PNP AMPL/SWITCH | EBC       | 40               | 40                       | 4.0              | 50                                            | 30              | 90              | 270    | 1.0               | 100              | 0.30                                   | 100  | 7.0                     | --             | --   | --               |
| MPS6535  | PNP AMPL/SWITCH | EBC       | 30               | 30                       | 4.0              | 50                                            | 30              | 30              | --     | 1.0               | 100              | 0.50                                   | 100  | 7.0                     | --             | --   | --               |
| MPS6560  | NPN AMPL/SWITCH | EBC       | 25               | 25                       | 5.0              | 100                                           | 20              | 50              | 200    | 1.0               | 500              | 0.50                                   | 500  | 30                      | 60             | --   | --               |
| MPS6561  | NPN AMPL/SWITCH | EBC       | 20               | 20                       | 4.0              | 100                                           | 20              | 50              | 200    | 1.0               | 350              | 0.50                                   | 350  | 30                      | 60             | --   | --               |
| MPS6562  | PNP AMPL/SWITCH | EBC       | 25               | 25                       | 5.0              | 100                                           | 20              | 50              | 200    | 1.0               | 500              | 0.50                                   | 500  | 30                      | 60             | --   | --               |
| MPS6563  | PNP AMPL/SWITCH | EBC       | 20               | 20                       | 4.0              | 100                                           | 20              | 50              | 200    | 1.0               | 350              | 0.50                                   | 350  | 30                      | 60             | --   | --               |
| MPS6564  | NPN AMPL/SWITCH | EBC       | --               | 45                       | 5.0              | 500                                           | 40              | 25              | --     | 5.0               | 40               | 0.50                                   | 10   | 4.0                     | --             | --   | --               |
| MPS6566  | NPN AMPL/SWITCH | EBC       | 60               | 45                       | 4.0              | 100                                           | 30              | 100             | 400    | 10                | 10               | 0.40                                   | 10   | 3.5                     | --             | --   | --               |
| MPS6601  | NPN AMPL/SWITCH | EBC       | 25               | 25                       | 4.0              | 100                                           | 25              | 50              | --     | 1.0               | 500              | 0.60                                   | 1000 | 50                      | 100            | --   | --               |
| MPS6602  | NPN AMPL/SWITCH | EBC       | 40               | 40                       | 4.0              | 100                                           | 30              | 50              | --     | 1.0               | 500              | 0.60                                   | 1000 | 50                      | 100            | --   | --               |
| MPS6651  | PNP AMPL/SWITCH | EBC       | 25               | 25                       | 4.0              | 100                                           | 25              | 50              | --     | 1.0               | 500              | 0.60                                   | 1000 | 50                      | 100            | --   | --               |
| MPS6652  | PNP AMPL/SWITCH | EBC       | 40               | 40                       | 4.0              | 100                                           | 30              | 50              | --     | 1.0               | 500              | 0.60                                   | 1000 | 50                      | 100            | --   | --               |
| MPS8097  | NPN LOW NOISE   | EBC       | 60               | 40                       | 6.0              | 30                                            | 40              | 250             | 5.0    | 0.10              | --               | --                                     | --   | 4.0                     | --             | 2.0  | --               |
| MPS8098  | NPN AMPL/SWITCH | EBC       | 60               | 60                       | 6.0              | 100                                           | 60              | 100             | 300    | 5.0               | 1.0              | 0.30                                   | 100  | 6.0                     | 150            | --   | --               |
| MPS8099  | NPN AMPL/SWITCH | EBC       | 80               | 80                       | 6.0              | 100                                           | 80              | 100             | 300    | 5.0               | 1.0              | 0.30                                   | 100  | 6.0                     | 150            | --   | --               |
| MPS8598  | PNP AMPL/SWITCH | EBC       | 60               | 60                       | 5.0              | 100                                           | 60              | 100             | 300    | 5.0               | 1.0              | 0.30                                   | 100  | 8.0                     | 150            | --   | --               |
| MPS8599  | PNP AMPL/SWITCH | EBC       | 80               | 80                       | 5.0              | 100                                           | 80              | 100             | 300    | 5.0               | 1.0              | 0.30                                   | 100  | 8.0                     | 150            | --   | --               |
| MPSA05   | NPN AMPL/SWITCH | EBC       | 60               | 60                       | 4.0              | 100                                           | 60              | 50              | --     | 1.0               | 100              | 0.25                                   | 100  | --                      | 100            | --   | --               |
| MPSA06   | NPN AMPL/SWITCH | EBC       | 80               | 80                       | 4.0              | 100                                           | 80              | 50              | --     | 1.0               | 100              | 0.25                                   | 100  | --                      | 100            | --   | --               |
| MPSA13   | NPN DARLINGTON  | EBC       | 30               | 30*                      | 10               | 100                                           | 30              | 10,000          | --     | 5.0               | 100              | 1.50                                   | 100  | --                      | 125            | --   | --               |
| MPSA14   | NPN DARLINGTON  | EBC       | 30               | 30*                      | 10               | 100                                           | 30              | 20,000          | --     | 5.0               | 100              | 1.50                                   | 100  | --                      | 125            | --   | --               |
| MPSA18   | NPN LOW NOISE   | EBC       | 45               | 45                       | 6.5              | 50                                            | 30              | 500             | 1,500  | 5.0               | 10               | --                                     | --   | 3.0                     | 100            | 1.5  | --               |
| MPSA20   | NPN AMPL/SWITCH | EBC       | --               | 40                       | 4.0              | 100                                           | 30              | 40              | 400    | 10                | 5.0              | 0.25                                   | 10   | 4.0                     | 125            | --   | --               |

Devices are available lead formed.  
See pages 216 thru 219 for details.  
Also available in Ammopack or Tape & Reel.  
See pages 230 thru 235 for details.

**Central**  
Semiconductor Corp.  
www.centrasemi.com

(6-December 2004)

# AMEYA360

Components Supply Platform

Authorized Distribution Brand :



Website :

Welcome to visit [www.ameya360.com](http://www.ameya360.com)

Contact Us :

➤ Address :

401 Building No.5, JiuGe Business Center, Lane 2301, Yishan Rd  
Minhang District, Shanghai , China

➤ Sales :

Direct     +86 (21) 6401-6692  
  
Email       amall@ameya360.com  
  
QQ         800077892  
  
Skype      ameyasales1 ameyasales2

➤ Customer Service :

Email       service@ameya360.com

➤ Partnership :

Tel         +86 (21) 64016692-8333  
  
Email      mkt@ameya360.com