

JEDEĆ TO-92 CASE (EBC)

| SYMBOL        | TEST CONDITIONS                                                                        | MIN  | MAX | MIN | MAX | UNIT             |
|---------------|----------------------------------------------------------------------------------------|------|-----|-----|-----|------------------|
| $I_{CB0}$     | $V_{CB}=100V$                                                                          |      | 50  |     | 10  | nA               |
| $I_{CB0}$     | $V_{CB}=100V, T_A=65^{\circ}C$                                                         |      | 2.5 |     | 0.5 | $\mu A$          |
| $I_{EB0}$     | $V_{EB}=4.0V$                                                                          |      | 50  |     | 10  | nA               |
| $BV_{CB0}$    | $I_C=100\mu A$                                                                         | 150  |     | 150 |     | V                |
| $BV_{CES}$    | $I_C=100\mu A$                                                                         | 150  |     | 150 |     | V                |
| $BV_{CEO}$    | $I_C=2.0mA$                                                                            | 150  |     | 150 |     | V                |
| $BV_{EBO}$    | $I_E=10\mu A$                                                                          | 6.0  |     | 6.0 |     | V                |
| $V_{CE(SAT)}$ | $I_C=10mA, I_B=1.0mA$                                                                  |      | 0.5 |     | 0.5 | V                |
| $V_{BE(SAT)}$ | $I_C=10mA, I_B=1.0mA$                                                                  |      | 0.9 |     | 0.9 | V                |
| $V_{BE(ON)}$  | $V_{CE}=10V, I_C=1.0mA$                                                                |      | 0.8 |     | 0.7 | V                |
| $h_{FE}$      | $V_{CE}=10V, I_C=100\mu A$                                                             | -    |     | 60  |     |                  |
| $h_{FE}$      | $V_{CE}=10V, I_C=1.0mA$                                                                | 30   |     | 70  |     |                  |
| $h_{FE}$      | $V_{CE}=10V, I_C=10mA$                                                                 | 40   | 400 | 80  | 300 |                  |
| $h_{fe}$      | $V_{CE}=10V, I_C=1.0mA, f=20\text{ MHz}$                                               | 30   | 160 | 40  | 160 | MHz              |
| $f_T$         | $V_{CE}=10V, I_C=1.0mA, f=1.0kHz$                                                      | 30   | 500 | 65  | 400 | kHz              |
| $h_{oe}$      | $V_{CE}=10V, I_C=1.0mA, f=1.0kHz$                                                      | 1.4  | 40  | 3.0 | 25  | $\mu\text{hos}$  |
| $h_{re}$      | $V_{CE}=10V, I_C=1.0mA, f=1.0kHz$                                                      |      | -   |     | 5.0 | $\times 10^{-4}$ |
| $h_{ie}$      | $V_{CE}=10V, I_C=1.0mA, f=1.0kHz$                                                      | 0.75 | 20  | 1.7 | 12  | k $\Omega$       |
| $C_{ob}$      | $V_{CB}=20V, I_E=0, f=1.0MHz$                                                          |      | 4.0 |     | 4.0 | pF               |
| $C_{ib}$      | $V_{EB}=0.5V, I_C=0, f=1.0MHz$                                                         |      | 30  |     | 25  | pF               |
| NF            | $V_{CE}=5.0V, I_C=250\mu A, R_s=1.0k\Omega,$<br>$BW=15.7kHz, f=10Hz \text{ to } 10kHz$ |      | -   |     | 4.0 | dB               |
| NF            | $V_{CE}=5.0V, I_C=30\mu A, R_s=10k\Omega,$<br>$BW=150Hz, f=1.0kHz$                     |      | -   |     | 3.0 | dB               |
| NF            | $V_{CE}=5.0V, I_C=250\mu A, R_s=1.0k\Omega,$<br>$BW=1.5kHz, f=10kHz$                   |      | -   |     | 3.0 | dB               |
| NF            | $V_{CE}=5.0V, I_C=250\mu A, R_s=1.0k\Omega,$<br>$BW=15Hz, f=100Hz$                     |      | -   |     | 10  | dB               |
| NF            | $V_{CE}=10V, I_C=1.0mA, R_s=1.0k\Omega,$<br>$BW=2.0Hz, f=1.0MHz$                       |      | -   |     | 4.0 | dB               |