# Small Signal Transistors

TO-39 Case (Continued)



| TYPE NO. | DESCRIPTION | $V_{CBO}$ (V) | $V_{CEO}$ (V) *$V_{CER}$ | $V_{EBO}$ (V) | $I_{CBO}$ @ (µA) *ICEO **ICES ***ICEV ****ICER | $V_{CB}$ (V) | $h_{FE}$ | | @ $I_C$ (mA) | @ $V_{CE}$ (V) | $V_{CE\ (SAT)}$ (V) | @ $I_C$ (mA) | $f_T$ (MHz) *TYP | $C_{ob}$ (pF) *TYP | $t_{on}$ (ns) *TYP | $t_{off}$ (ns) *TYP | NF (dB) *TYP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MIN | MIN | MIN | | | MIN | MAX | | | MAX | | MIN | MAX | MAX | MAX | MAX |
| **2N3444** | NPN CORE DRIVER | 80 | 50 | 5.0 | 0.50 | 60 | 20 | 60 | 500 | 1.0 | 1.20 | 1,000 | 150 | 12 | 50 | 70 | - - |
| **2N3467** | PNP CORE DRIVER | 40 | 40 | 5.0 | 0.10 | 30 | 40 | 120 | 500 | 1.0 | 0.30 | 150 | 175 | 25 | 40 | 90 | - - |
| **2N3468** | PNP CORE DRIVER | 50 | 50 | 5.0 | 0.10 | 30 | 25 | 75 | 500 | 1.0 | 0.36 | 150 | 150 | 25 | 40 | 90 | - - |
| **2N3494** | PNP AMPL/SWITCH | 80 | 80 | 4.5 | 0.10 | 50 | 40 | - - | 10 | 10 | 0.30 | 10 | 200 | 7.0 | - - | - - | - - |
| **2N3495** | PNP AMPL/SWITCH | 120 | 120 | 4.0 | 0.10 | 90 | 40 | - - | 10 | 10 | 0.35 | 10 | 150 | 6.0 | - - | - - | - - |
| **2N3498** | NPN AMPL/SWITCH | 100 | 100 | 6.0 | 0.50 | 50 | 40 | 120 | 150 | 10 | 0.60 | 300 | 150 | 10 | - - | - - | - - |
| **2N3499** | NPN AMPL/SWITCH | 100 | 100 | 6.0 | 0.50 | 50 | 100 | 300 | 150 | 10 | 0.60 | 300 | 150 | 10 | - - | - - | - - |
| **2N3500** | NPN HIGH VOLTAGE | 150 | 150 | 6.0 | 0.50 | 75 | 40 | 120 | 150 | 10 | 0.40 | 150 | 150 | 8.0 | - - | - - | - - |
| **2N3501** | NPN HIGH VOLTAGE | 150 | 150 | 6.0 | 0.50 | 75 | 100 | 300 | 150 | 10 | 0.40 | 150 | 150 | 8.0 | - - | - - | - - |
| **2N3502** | PNP AMPL/SWITCH | 45 | 45 | 5.0 | 0.01** | 30 | 100 | 300 | 150 | 10 | 0.40 | 150 | 200 | 8.0 | - - | - - | - - |
| **2N3503** | PNP AMPL/SWITCH | 60 | 60 | 5.0 | 0.01** | 50 | 100 | 300 | 150 | 10 | 0.40 | 150 | 200 | 8.0 | - - | - - | - - |
| **2N3506** | NPN AMPL/SWITCH | 60 | 40 | 5.0 | - - | - - | 40 | 200 | 1500 | 2.0 | 0.5 | 500 | 60 | 40 | - - | - - | - - |
| **2N3507** | NPN AMPL/SWITCH | 80 | 50 | 5.0 | - - | - - | 30 | 150 | 1500 | 2.0 | 0.5 | 500 | 60 | 40 | - - | - - | - - |
| **2N3554** | NPN CORE DRIVER | 60 | 30 | 5.0 | - - | - - | 25 | 100 | 750 | 10 | 0.70 | 750 | 150 | 25 | 50 | 105 | - - |
| **2N3634** | PNP AMPL/SWITCH | 140 | 140 | 5.0 | 0.10 | 100 | 50 | 150 | 50 | 10 | 0.50 | 50 | 150 | 10 | 400 | 600 | 3.0 |
| **2N3635** | PNP AMPL/SWITCH | 140 | 140 | 5.0 | 0.10 | 100 | 100 | 300 | 50 | 10 | 0.50 | 50 | 200 | 10 | 400 | 600 | 3.0 |
| **2N3660** | PNP AMPL/SWITCH | 40 | 30 | 5.0 | 1.20 | 500 | 25 | 100 | 500 | 10 | 1.20 | 500 | 30 | 275 | - - | - - | - - |
| **2N3661** | PNP AMPL/SWITCH | 60 | 50 | 5.0 | 0.10 | 100 | 25 | 100 | 500 | 10 | 1.20 | 500 | 30 | 275 | - - | - - | - - |
| **2N3665** | NPN AMPL/SWITCH | 120 | 80 | 6.0 | 0.50 | 60 | 40 | 120 | 150 | 10 | 0.50 | 150 | 60 | 12 | - - | - - | - - |
| **2N3666** | NPN AMPL/SWITCH | 120 | 80 | 6.0 | 0.50 | 60 | 100 | 300 | 150 | 10 | 0.50 | 150 | 60 | 12 | - - | - - | - - |
| **2N3671** | PNP AMPL/SWITCH | 60 | 50 | 5.0 | 0.10 | 30 | 75 | 275 | 150 | 10 | 0.40 | 150 | 200 | 9.0 | - - | - - | - - |
| **2N3678** | NPN AMPL/SWITCH | 75 | 55 | 6.0 | 0.10 | 60 | 40 | 120 | 150 | 10 | 0.40 | 150 | 250 | 8.0 | - - | - - | - - |
| **2N3719** | PNP AMPL/SWITCH | 40 | 40 | 4.0 | 10 | 40 | 25 | 180 | 1,000 | 1.5 | 0.75 | 1,000 | 60 | 120 | - - | - - | - - |
| **2N3720** | PNP AMPL/SWITCH | 60 | 60 | 4.0 | 10 | 60 | 25 | 180 | 1,000 | 1.5 | 0.75 | 1,000 | 60 | 120 | - - | - - | - - |
| **2N3722** | NPN CORE DRIVER | 60 | 60 | 6.0 | - - | - - | 40 | 150 | 100 | 5.0 | 0.22 | 100 | 300 | 10 | 50 | 100 | - - |
| **2N3724A** | NPN CORE DRIVER | 50 | 30 | 6.0 | 0.50 | 40 | 60 | 150 | 100 | 1.0 | 0.20 | 100 | 300 | 12 | 35 | 60 | - - |
| **2N3725A** | NPN CORE DRIVER | 80 | 50 | 6.0 | 0.50 | 60 | 60 | 150 | 100 | 1.0 | 0.40 | 300 | 300 | 10 | 35 | 60 | - - |
| **2N3734** | NPN CORE DRIVER | 50 | 30 | 5.0 | - - | - - | 30 | 120 | 1,000 | 1.5 | 0.50 | 500 | 300 | 9.0 | 48 | 60 | - - |
| **2N3735** | NPN CORE DRIVER | 75 | 50 | 5.0 | 0.20 | 40 | 20 | 80 | 1,000 | 1.5 | 0.50 | 500 | 250 | 9.0 | 48 | 60 | - - |
| **2N3742** | NPN HIGH VOLTAGE | 300 | 300 | 7.0 | 0.20 | 200 | 20 | 200 | 30 | 10 | 1.00 | 30 | 30 | 6.0 | - - | - - | - - |
| **2N3743** | PNP HIGH VOLTAGE | 300 | 300 | 5.0 | 0.30 | 200 | 25 | 250 | 30 | 10 | 5.00 | 10 | 30 | 15 | - - | - - | - - |
| **2N3762** | PNP CORE DRIVER | 40 | 40 | 5.0 | - - | - - | 30 | 100 | 1,000 | 1.5 | 0.90 | 1,000 | 180 | 15 | 45 | 105 | - - |
| **2N3763** | PNP CORE DRIVER | 60 | 60 | 5.0 | - - | - - | 20 | 80 | 1,000 | 1.5 | 0.90 | 1,000 | 150 | 15 | 45 | 105 | - - |
| **2N3764** | PNP CORE DRIVER | 40 | 40 | 5.0 | - - | - - | 30 | 120 | 1,000 | 1.5 | 0.50 | 500 | 180 | 15 | 45 | 115 | - - |
| **2N3830** | NPN CORE DRIVER | 80 | 50 | 5.0 | - - | - - | 30 | - - | 500 | 10 | 0.50 | 200 | 200 | 12 | 60 | 70 | - - |
| **2N3831** | NPN CORE DRIVER | 70 | 40 | 5.0 | - - | - - | 35 | - - | 500 | 10 | 0.50 | 500 | 200 | 12 | 60 | 70 | - - |
| **2N3866** | NPN VHF/UHF OSC | 55 | 30 | 3.5 | 20* | 28 | 10 | 200 | 50 | 5.0 | 1.00 | 100 | 500 | 3.0 | - - | - - | - - |
| **2N3867** | PNP AMPL/SWITCH | 40 | 40 | 4.0 | 1.00*** | 40 | 40 | 200 | 1,500 | 2.0 | 0.75 | 1,500 | 60 | 120 | 100 | 400 | - - |
| **2N3868** | PNP AMPL/SWITCH | 60 | 60 | 4.0 | 1.00*** | 60 | 30 | 150 | 1,500 | 2.0 | 0.75 | 1,500 | 60 | 120 | 100 | 400 | - - |
| **2N3923** | NPN AMPL/SWITCH | 150 | 150 | 6.0 | 0.01 | 100 | 30 | 120 | 25 | 10 | 1.00 | 25 | 40 | 3.5 | - - | - - | - - |
| **2N3945** | NPN AMPL/SWITCH | 70 | 50 | 6.0 | - - | - - | 40 | 250 | 150 | 10 | 0.50 | 150 | 60 | 12 | - - | - - | - - |
| **2N4000** | NPN AMPL/SWITCH | 100 | 80 | 6.0 | 2.00** | 90 | 30 | 120 | 500 | 2.0 | 0.50 | 1,000 | 40 | 60 | - - | - - | - - |
| **2N4001** | NPN AMPL/SWITCH | 120 | 100 | 6.0 | 2.00** | 110 | 40 | 120 | 500 | 2.0 | 0.50 | 1,000 | 40 | 60 | - - | - - | - - |