

TO-92 Plastic Package Transistors (NPN)

| Maximum Ratings | | | | | | | Electrical Characteristics (Ta=25°C, Unless Otherwise Specified) | | | | | | | | | | | | | | | | | | | |
|-----------------|----------------------|----------------------|----------------------|--------------------|--------------------|-----------------------|--|-----------------------|---------------------|-----------------|-----|---------------------------------------|--------------------------|--------------------------|---------------------|----------------------|----------------------|-----|---------------------|----------------------|---------------------|-----|------------|----------------------|-----------------|---------|
| Type No. | V _{CBO} (V) | V _{CEO} (V) | V _{EBO} (V) | P _D (W) | I _C (A) | I _{CBO} (μA) | V _{CB} (V) | I _{CES} (μA) | V _{CE} (V) | h _{FE} | β | I _C & V _{CE} (mA) | V _{CE(SAT)} (V) | V _{BE(SAT)} (V) | I _C (mA) | C _{ob} (pF) | f _t (MHz) | β | I _C (mA) | t _{on} (ns) | N _F (dB) | β | Freq (MHz) | C _{ob} (pF) | CDIL Case Style | |
| | Min | Min | Min | @Tc=25°C | Max | Max | Max | Max | Min | Max | Min | Max | Max | Min | Max | Typ | Max | Min | Typ | Max | Max | Max | Max | Max | Max | |
| BF195 | 30 | 20 | 5 | 0.4 | 0.03 | 0.1 | 20 | | | 36 | 125 | 1 10 | | | | 0.3 | | | 1 | | | | | | | TO-92-2 |
| BF196 | 40 | 30 | 4 | 0.4 | 0.03 | 0.1 | 40 | | | 26 | | 4 10 | | | | | | | | | | | | | | TO-92-2 |
| BF197 | 40 | 25 | 4 | 0.35 | 0.1 | 0.1 | 40 | | | 36 | | 7 10 | | | | | 1100 | | 7 | | | | | | | TO-92-2 |
| BF198 | 40 | 30 | 4 | 0.625 | | 0.1 | 40 | | | 26 | | 4 10 | | | | | | | | | | | | | | TO-92-2 |
| BF199 | 40 | 25 | 4 | 0.35 | 0.1 | 0.1 | 20 | | | 40 | | 7 10 | | | | | 400 | | 5 | | | | | | | TO-92-2 |
| BF224 | 45 | 30 | 4 | 0.35 | 0.05 | 0.1 | 20 | | | 30 | | 7 10 | 0.15 | | 10 | | 300 600 | | 2 | | | 2.5 | | | | TO-92-2 |
| BF237 | 45 | 30 | 4 | 0.35 | 0.1 | 0.1 | 20 | | | | | | 0.25 | | 10 | | | | | | | | | | | TO-92-2 |
| BF238 | 45 | 30 | 4 | 0.35 | 0.1 | 0.1 | 20 | | | | | | 0.25 | | 10 | | | | | | | | | | | TO-92-2 |
| BF240 | 40 | 40 | 4 | 0.35 | 0.03 | 0.1 | 20 | | | 65 | 220 | 1 10 | | | | | | | | | | | | | | TO-92-2 |
| BF241 | 40 | 40 | 4 | 0.35 | 0.03 | 0.1 | 20 | | | 35 | 125 | 1 10 | | | | | | | | | | | | | | TO-92-2 |
| BF254 | 30 | 20 | 5 | 0.35 | 0.1 | 0.1 | 10 | | | 65 | 220 | 1 10 | | | | | 260 | | 1 | | | | | | | TO-92-2 |
| BF254-3 | 30 | 20 | 5 | 0.35 | 0.1 | 0.1 | 10 | | | 65 | 125 | 1 10 | | | | | 260 | | 1 | | | | | | | TO-92-2 |
| BF254-4 | 30 | 20 | 5 | 0.35 | 0.1 | 0.1 | 10 | | | 100 | 220 | 1 10 | | | | | 260 | | 1 | | | | | | | TO-92-2 |
| BF255 | 30 | 20 | 5 | 0.4 | 0.03 | 0.1 | 20 | | | 36 | 125 | 1 10 | | 0.65 | 0.74 | 1 | 0.3 | | | 1 | | | 3.5 | | | TO-92-2 |
| BF391 | 200 | 200 | 6 | 0.625 | 0.5 | 0.1 | 160 | | | 25 | | 1 10 | 2 | | 2 20 | | 50 | | 10 | | | | 2 | | | TO-92 |
| BF392 | 250 | 250 | 6 | 0.625 | 0.5 | 0.1 | 200 | | | 25 | | 1 10 | 2 | | 2 20 | | 50 | | 10 | | | | 2 | | | TO-92 |
| BF393 | 300 | 300 | 6 | 0.625 | 0.5 | 0.1 | 200 | | | 25 | | 1 10 | 2 | | 2 20 | | 50 | | 1 | | | | 2 | | | TO-92 |
| BF420 | 300 | 300 | 5 | 0.8 | 0.5 | 0.01 | 200 | | | 50 | | 25 20 | 0.5 | | 2 20 | | 60 | | 10 | | | | 1.6 | | | TO-92-1 |
| BF422 | 250 | 250 | 5 | 0.8 | 0.5 | 0.01 | 200 | | | 50 | | 25 20 | 0.5 | | 2 20 | | 60 | | 10 | | | | 1.6 | | | TO-92-1 |
| BF494 | 30 | 20 | 5 | 0.3 | 0.03 | 0.1 | 20 | | | 67 | 220 | 1 10 | | | | 1.5 | 120 | | 260 | 1 | | | 1 | | | TO-92-2 |
| BF494A | 30 | 20 | 5 | 0.3 | 0.03 | 0.1 | 20 | | | 200 | 500 | 1 10 | | | | 1.5 | 120 | | 260 | 1 | | | 1 | | | TO-92-2 |
| BF494B | 30 | 20 | 5 | 0.3 | 0.03 | 0.1 | 20 | | | 100 | 220 | 1 10 | | | | 1.5 | 120 | | 260 | 1 | | | 1 | | | TO-92-2 |
| BF495 | 30 | 20 | 5 | 0.3 | 0.03 | 0.1 | 20 | | | 35 | 125 | 1 10 | | | | 1.5 | 120 | | 260 | 1 | | | 1 | | | TO-92-2 |
| BF495C | 30 | 20 | 5 | 0.3 | 0.03 | 0.1 | 20 | | | 67 | 125 | 1 10 | | | | 1.5 | 120 | | 260 | 1 | | | 1 | | | TO-92-2 |
| BF495D | 30 | 20 | 5 | 0.3 | 0.03 | 0.1 | 20 | | | 35 | 76 | 1 10 | | | | 1.5 | 120 | | 260 | 1 | | | 1 | | | TO-92-2 |
| BF496 | 30 | 20 | 3 | 0.3 | 0.02 | 0.5 | 20 | | | 15 | | 2 10 | | | | | 550 | | 2 | | | | | | | TO-92 |
| BF959 | 30 | 20 | 3 | 0.625 | 0.1 | 0.1 | 20 | | | 35 | | 5 10 | 1 | | 1 30 | | 700 | | 20 | | | | 0.7 | | | TO-92-2 |
| BSY95A | 20 | 15 | 5 | 0.625 | 0.2 | 0.05 | 16 | | | 30 | 200 | 1 0.4 | 0.35 | 0.67 | 0.87 | 10 | 6 | 200 | | 10 | | | | | | TO-92 |