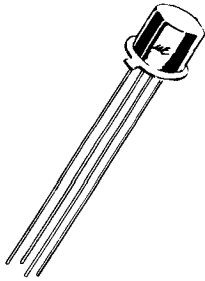


High Frequency Transistors

TO-72



TO-106



| TYPE NO. NPN PNP | Maximum Ratings | | | | | Electrical Characteristics @ T _A = 25°C | | | | | CASE |
|------------------------|---|----------------|-------------------|-------------------|-------------------|--|-------|---|-----------------|---------------------------------|---------|
| | P _D @ T _A = 25°C | I _C | BV _{CEO} | LV _{CEO} | BV _{EBO} | h _{FE} @ V _{CE} @ I _C | | V _{CE(sat)} @ I _C /I _B | C _{ob} | f _T @ I _C | |
| | | | | | | min./max. | max. | max. | min. | | |
| ME 3001 | 200mW | — | 30V | 12V | 3V | 20/200 @ 10V @ | 8mA | 0.25V @ 10/ 1.0mA | 1.6pF | 600MHz @ 20mA | TO-106 |
| ME 3002 | 200mW | — | 30V | 12V | 3V | 20/200 @ 10V @ | 8mA | 0.25V @ 10/ 1.0mA | 1.6pF | 900MHz @ 20mA | TO-106 |
| ME 3011 | 200mW | — | 20V | 12V | 2V | 20/ — @ 10V @ | 8mA | 0.60V @ 10/ 1.0mA | 1.7pF | 600MHz @ 20mA | TO-106 |
| 2N 917 | 300mW | 50mA | 30V | 15V | 3V | 20/200 @ 10V @ | 3mA | 0.50V @ 3/ 0.3mA | 1.7pF | 500MHz @ 4mA | TO-72G |
| 2N 918 | 200mW | 50mA | 30V | 15V | 3V | 20/200 @ 10V @ | 3mA | 0.40V @ 10/ 1.0mA | 1.7pF | 600MHz @ 4mA | TO-72G |
| 2N 3563 | 200mW | 50mA | 30V | 12V | 2V | 20/200 @ 10V @ | 8mA | 0.10V @ 10/ 1.0mA | 1.7pF | 600MHz @ 8mA | TO-106 |
| 2N 3564 | 200mW | 100mA | 30V | 15V | 4V | 20/500 @ 10V @ | 15mA | 0.30V @ 20/ 2.0mA | 3.5pF | 600MHz @ 15mA | TO-106 |
| 2N 3825 | 250mW | 100mA | 30V | 15V | 4V | 20/ — @ 2V @ | 10mA | 0.25V @ 2/ 0.2mA | 3.5pF | 800MHz* @ 2mA | TO-92B |
| 2N 4292 | 200mW | 50mA | 30V | 15V | 3V | 20/ — @ 3V @ | 1mA | 0.60V @ 10/ 1.0mA | 3.5pF | 600MHz @ 4mA | TO-92B |
| 2N 4293 | 200mW | 50mA | 30V | 15V | 3V | 20/ — @ 3V @ | 1mA | 0.60V @ 10/ 1.0mA | 3.5pF | 600MHz @ 4mA | TO-92B |
| 2N 5130 | 200mW | 50mA | 30V | 12V | 6V | 15/250 @ 10V @ | 8mA | 0.60V @ 10/ 1.0mA | 1.7pF | 450MHz @ 8mA | TO-106 |
| BF 115 | 200mW | 30mA | 50V | 30V | 5V | 45/165 @ 10V @ | 1mA | — | — | 300MHz @ 1mA | TO-72J |
| BF 152 | 200mW | 25mA | 30V | 12V | 2V | 20/ 50 @ 10V @ | 3mA | 0.50V @ 10/ 1.0mA | — | 600MHz — | TO-106 |
| BF 153 | 200mW | 25mA | 30V | 12V | 2V | 20/ — @ 6V @ | 3mA | 0.50V @ 10/ 1.0mA | 1.2pF | 300MHz — | TO-106 |
| BF 154 | 200mW | 50mA | 30V | 20V | 4V | 25/ — @ 10V @ | 10mA | 0.30V @ 10/ 1.0mA | 3.5pF | 200MHz — | TO-106 |
| BF 158 | 200mW | 50mA | 30V | 12V | 2V | 20/ — @ 10V @ | 4mA | 0.50V @ 10/ 1.0mA | 1.2pF | 600MHz — | TO-106 |
| BF 159 | 200mW | 50mA | 40V | 20V | 2V | 20/ — @ 10V @ | 4mA | 0.50V @ 10/ 1.0mA | 1.2pF | 600MHz — | TO-106 |
| BF 160 | 200mW | 50mA | 30V | 12V | 2V | 30/ — @ 24V @ | 1mA | 0.50V @ 10/ 1.0mA | 1.2pF | 400MHz — | TO-106 |
| BF 160C | 200mW | 50mA | 30V | 13V | 2V | 50/ — @ 24V @ | 1mA | 1.00V @ 30/ 3.0mA | 1.2pF | 400MHz — | TO-106 |
| BF 173 | 260mW | 25mA | 40V | 25V | 4V | 38/ — @ 10V @ | 7mA | — | — | 550MHz* @ 5mA | TO-72J |
| BF 184 | 145mW | 30mA | 30V | 20V | 5V | 75/750 @ 10V @ | 1mA | — | — | 300MHz @ 1mA | TO-72J |
| BF 185 | 145mW | 30mA | 30V | 20V | 5V | 34/140 @ 10V @ | 1mA | — | 1.5pF | 220MHz @ 1mA | TO-72J |
| BF 234 | 300mW | 30mA | 30V | 30V | 4V | 90/330 @ 10V @ | 1mA | — | — | 150MHz @ 1mA | TO-106 |
| BF 254 | 180mW | 30mA | 30V | 20V | 5V | 67/220 @ 10V @ | 1mA | — | — | 500MHz @ 1mA | TO-92E† |
| BF 255 | 180mW | 30mA | 30V | 20V | 5V | 36/125 @ 10V @ | 1mA | — | — | 450MHz @ 1mA | TO-92E† |
| BF 271 | 250mW | 50mA | 30V | 30V | 4V | 30/ — @ 10V @ | 10mA | — | 1.5pF | 450MHz — | TO-72G |
| BF 273 | 200mW | 50mA | 40V | 35V | 4V | 40/ — @ 10V @ | 1mA | — | 1.5pF | 600MHz — | TO-106B |
| BF 274 | 200mW | 50mA | 40V | 35V | 4V | 70/ — @ 10V @ | 1mA | — | 1.5pF | 600MHz — | TO-106B |
| BFX 19 | 200mW | — | 30V | 30V | 3V | 20/ — @ 12V @ | 4mA | — | 0.6pF | 400MHz — | TO-72G |
| BFX 20 | 200mW | — | 30V | 30V | 3V | 20/ — @ 12V @ | 25mA | — | 0.6pF | 400MHz — | TO-72G |
| BFX 89 | 200mW | 25mA | 30V | 15V | 2.5V | 25/150 @ 1V @ | 2mA | — | 1.7pF | 1GHz @ 2mA | TO-72G |
| BFY 74 | 360mW | 100mA | 60V | 45V | 5V | 40/180 @ 5V @ | 10mA | 1.00V @ 10/ 1.0mA | 4.0pF | 250MHz — | TO-18 |
| BFY 75 | 360mW | 100mA | 60V | 5V | 5V | 65/300 @ 5V @ | 10mA | 1.00V @ 10/ 1.0mA | 4.0pF | 250MHz — | TO-18 |
| BFY 78 | 300mW | 50mA | 25V | 12V | 3V | 20/ — @ 1V @ | 3mA | 1.00V @ 10/ 1.0mA | 2.8pF | 500MHz — | TO-18 |
| BFY 79 | 300mW | — | 30V | 30V | 4V | 30/ — @ 10V @ | 4mA | — | 1.6pF | 400MHz — | TO-72G |
| ME 0461 | 250mW | — | 60V | 50V | 6V | 50/200 @ 1V @ | 10mA | 0.15V @ 10/ 1.0mA | 6.0pF | 300MHz @ 10mA | TO-106 |
| ME 0462 | 360mW | — | 50V | 40V | 6V | 100/300 @ 1V @ | 10mA | 0.15V @ 10/ 1.0mA | 6.0pF | 300MHz @ 10mA | TO-106 |
| ME 0463 | 250mW | — | 30V | 20V | 5V | 50/300 @ 1V @ | 10mA | 0.25V @ 10/ 1.0mA | 8.0pF | 250MHz @ 10mA | TO-106 |
| MA 0461 | 300mW | — | 60V | 50V | 6V | 50/200 @ 1V @ | 10mA | 0.15V @ 10/ 1.0mA | 5.0pF | 500MHz @ 10mA | TO-18 |
| MA 0462 | 300mW | — | 50V | 40V | 6V | 100/300 @ 1V @ | 10mA | 0.15V @ 10/ 1.0mA | 3.0pF | 500MHz @ 10mA | TO-18 |
| MA 0463 | 360mW | — | 30V | 20V | 5V | 50/300 @ 1V @ | 10mA | 0.25V @ 10/ 1.0mA | 3.0pF | 500MHz @ 10mA | TO-18 |
| 2N 3639 | 200mW | 80mA | 6V | 6V | 4V | 30/120 @ 0.3V @ | 10mA | 0.25V @ 10/ 0.5mA | 4.0pF | 500MHz @ 10mA | TO-106 |
| 2N 3640 | 200mW | 80mA | 12V | 12V | 4V | 30/120 @ 0.3V @ | 10mA | 0.25V @ 10/ 0.5mA | 4.0pF | 500MHz @ 10mA | TO-106 |
| 2N 3798 | 360mW | 50mA | 60V | 60V | 5V | 150/450 @ 5V @ | 1mA | 0.25V @ 1/ 0.1mA | 4.0pF | 100MHz @ 10mA | TO-18 |
| 2N 3799 | 360mW | 50mA | 60V | 60V | 5V | 300/900 @ 5V @ | 1mA | 0.25V @ 1/ 0.1mA | 4.0pF | 100MHz — | TO-18 |
| 2N 4121 | 200mW | 100mA | 40V | 40V | 5V | 70/200 @ 1V @ | 10mA | 0.30V @ 50/ 5.0mA | 4.5pF | 400MHz @ 10mA | TO-106 |
| 2N 4122 | 200mW | 100mA | 40V | 40V | 5V | 100/300 @ 1V @ | 10mA | 0.25V @ 10/ 1.0mA | 4.5pF | 400MHz — | TO-106 |
| 2N 5138 | 200mW | 100mA | 30V | 30V | 5V | 50/800 @ 1V @ | 0.1mA | 0.30V @ 10/ 0.5mA | 5.0pF | 300MHz @ 0.5mA | TO-106 |
| 2N 5139 | 200mW | 100mA | 20V | 20V | 5V | 40/150 @ 1V @ | 10mA | 0.50V @ 50/ 5.0mA | 5.0pF | 300MHz @ 10mA | TO-106 |
| BFX 48 | 360mW | 100mA | 30V | 30V | 5V | 90/ — @ 1V @ | 10mA | 0.14V @ 10/ 1.0mA | 3.5pF | 400MHz — | TO-18 |