

Transistors, General

| Type | Polarity | Material | P _{tot} Max. (mW) | f _T Typ. (MHz) | Absolute Max. Ratings | | | | h _{FE} | | | T _J Max. (°C) | C _{OB} Max. (pF) | Case Outline | Lead Info. | Manufacturer |
|---------|----------|----------|----------------------------------|---------------------------------|-------------------------|-------------------------|-------------------------|------------------------|-----------------|-------|------|--------------------------------|---------------------------------|-----------------|---------------|-----------------------|
| | | | | | V _{CE0} (V) | V _{CE0} (V) | V _{EB0} (V) | I _C (mA) | Min. | at mA | Max. | | | | | |
| ZTX4427 | NPN | Si | 500 | 50 | 40 | 20 | 2 | 400 | - | - | - | 175 | 4 | TO-92 | 06 | Fe |
| 2N128 | PNP | Ge | 25 | 40 | -10 | -10 | -4 | 5 | 19 | 0.5 | - | 85 | 6 | TO-24 | 52 | Sp |
| 2N156 | PNP | Ge | 25W | 0.1 | -30 | -30 | -15 | 3A | 25 | 500 | - | 100 | - | TO-13 | 53 | STC |
| 2N158 | PNP | Ge | 25W | 0.1 | -60 | -60 | -30 | 3A | 21 | 500 | - | 100 | - | TO-13 | 53 | STC |
| 2N158A | PNP | Ge | 25W | 0.1 | -60 | -60 | -30 | 3A | 21 | 500 | - | 100 | - | TO-13 | 53 | STC |
| 2N173 | PNP | Ge | 170W | 0.1 | -60 | -45 | -40 | 15A | 35 | 5A | 70 | 110 | - | TO-36 | 54 | STC |
| 2N174 | PNP | Ge | 170W | 0.1 | -80 | -55 | -60 | 15A | 25 | 5A | 50 | 110 | - | TO-36 | 54 | STC |
| 2N176 | PNP | Ge | 90W | - | -40 | -30 | -10 | 3A | 25 | 500 | - | 100 | - | TO-3 | 02 | STC |
| 2N231 | PNP | Ge | 9 | 0.25 | -4.5 | -4.5 | - | 3 | 19 | 0.5 | 66 | 85 | 6 | TO-24 | 52 | Sp |
| 2N240 | PNP | Ge | 30 | - | -6 | -6 | - | 15 | 16 | 0.5 | - | 85 | 6 | TO-24 | 52 | Sp |
| 2N277 | PNP | Ge | 170W | - | -40 | -25 | -15 | 15A | 35 | 5A | 70 | 110 | - | TO-36 | 54 | STC |
| 2N278 | PNP | Ge | 170W | - | -50 | -30 | -15 | 15A | 35 | 5A | 70 | 110 | - | TO-36 | 54 | STC |
| 2N297A | PNP | Ge | 85W | - | -60 | -40 | -40 | 5A | 40 | 500 | 100 | 110 | - | TO-3 | 02 | STC |
| 2N301 | PNP | Ge | 50W | - | -60 | -50 | -10 | 1.5A | 50 | 1A | 165 | 100 | - | TO-3 | 02 | STC |
| 2N301A | PNP | Ge | 50W | - | -60 | -50 | -10 | 1.5A | 50 | 1A | 165 | 100 | - | TO-3 | 02 | STC |
| 2N344 | PNP | Ge | 20 | 10 | -5 | -5 | - | 5 | 11 | 0.5 | 33 | 85 | 6 | TO-24 | 52 | Sp |
| 2N345 | PNP | Ge | 20 | 20 | -5 | -5 | - | 5 | 25 | 0.5 | 110 | 85 | 6 | TO-24 | 52 | Sp |
| 2N346 | PNP | Ge | 20 | 30 | -5 | -5 | - | 5 | 10 | 0.5 | - | 85 | 6 | TO-24 | 52 | Sp |
| 2N393 | PNP | Ge | 25 | 25 | -6 | -6 | -6 | 50 | 20 | 50 | - | 100 | 6 | TO-24 | 52 | Sp |
| 2N441 | PNP | Ge | 70W | - | -40 | -25 | -20 | 15A | 20 | 5A | 40 | 95 | - | TO-36 | 54 | STC |
| 2N442 | PNP | Ge | 70W | - | -50 | -30 | -30 | 15A | 20 | 5A | 40 | 95 | - | TO-36 | 54 | STC |
| 2N443 | PNP | Ge | 70W | - | -60 | -45 | -40 | 15A | 20 | 5A | 40 | 95 | - | TO-36 | 54 | STC |
| 2N456A | PNP | Ge | 50W | - | -40 | -20 | -20 | 7A | 30 | 5A | 90 | 100 | - | TO-3 | 02 | STC |
| 2N456B | PNP | Ge | 150W | - | -40 | -30 | -30 | 7A | 30 | 5A | 90 | 100 | - | TO-3 | 02 | STC |
| 2N457A | PNP | Ge | 50W | - | -60 | -30 | -20 | 7A | 30 | 5A | 90 | 100 | - | TO-3 | 02 | STC |
| 2N457B | PNP | Ge | 150W | - | -60 | -40 | -30 | 7A | 30 | 5A | 90 | 100 | - | TO-3 | 02 | STC |
| 2N458A | PNP | Ge | 50W | - | -60 | -40 | -20 | 7A | 30 | 5A | 90 | 100 | - | TO-3 | 02 | STC |
| 2N458B | PNP | Ge | 150W | - | -60 | -45 | -30 | 7A | 30 | 5A | 90 | 100 | - | TO-3 | 02 | STC |
| 2N497 | NPN | Si | 800 | - | 60 | 60 | 7 | 1A | 12 | 200 | 36 | 175 | - | TO-5 | 08 | F |
| 2N498 | NPN | Si | 800 | - | 100 | 100 | 7 | 1A | 12 | 200 | 36 | 175 | - | TO-5 | 08 | F |
| 2N499 | PNP | Ge | 30 | 100 | -30 | -18 | -0.5 | 50 | 6 | 2 | - | 85 | 2.5 | TO-1 | 01 | Sp |
| 2N499A | PNP | Ge | 60 | 100 | -30 | -18 | -0.5 | 50 | 20 | 1 | 80 | 100 | 2.5 | TO-1 | 01 | Sp |
| 2N501 | PNP | Ge | 60 | 120 | -15 | -12 | -2 | 50 | 20 | 10 | - | 85 | 5 | TO-1 | 01 | Sp |
| 2N501A | PNP | Ge | 60 | 175 | -15 | -12 | -2 | 50 | 30 | 10 | - | 85 | 3 | TO-1 | 01 | Sp |
| 2N502 | PNP | Ge | 60 | 500 | -20 | -20 | -0.5 | 100 | 65 | 2 | - | 100 | 2 | TO-5 | 08 | Sp |
| 2N502A | PNP | Ge | 75 | 620 | -30 | -30 | -0.5 | 100 | 65 | 2 | - | 100 | 1.6 | TO-5 | 08 | Sp |
| 2N502B | PNP | Ge | 75 | 620 | -30 | -30 | -0.5 | 100 | 20 | 2 | 80 | 100 | 1.6 | TO-5 | 08 | Sp |
| 2N503 | PNP | Ge | 25 | 100 | -20 | -20 | -0.5 | 50 | 4.2 | 50 | - | 85 | 2 | TO-5 | 08 | Sp |
| 2N504 | PNP | Ge | 30 | 455 | -35 | -25 | -1 | 50 | 16 | 1 | - | 85 | 2.5 | TO-1 | 01 | Sp |
| 2N511 | PNP | Ge | 150W | 0.1 | -40 | -30 | -30 | 25A | 20 | 10A | 60 | 100 | - | TO-3 | 02 | STC |
| 2N511A | PNP | Ge | 150W | 0.1 | -60 | -40 | -30 | 25A | 20 | 10A | 60 | 100 | - | TO-3 | 02 | STC |
| 2N511B | PNP | Ge | 150W | 0.1 | -80 | -45 | -30 | 25A | 20 | 10A | 60 | 100 | - | TO-3 | 02 | STC |
| 2N512 | PNP | Ge | 150W | 0.1 | -40 | -30 | -30 | 25A | 20 | 15A | 60 | 100 | - | TO-3 | 02 | STC |
| 2N512A | PNP | Ge | 150W | 0.12 | -60 | -40 | -30 | 25A | 20 | 15A | 60 | 100 | - | TO-3 | 02 | STC |
| 2N512B | PNP | Ge | 150W | 0.12 | -80 | -45 | -30 | 25A | 20 | 15A | 60 | 100 | - | TO-3 | 02 | STC |
| 2N513 | PNP | Ge | 150W | 0.15 | -40 | -30 | -30 | 25A | 20 | 20A | 60 | 100 | - | TO-3 | 02 | STC |
| 2N513A | PNP | Ge | 150W | 0.15 | -60 | -40 | -30 | 25A | 20 | 20A | 60 | 100 | - | TO-3 | 02 | STC |
| 2N513B | PNP | Ge | 150W | 0.15 | -80 | -45 | -30 | 25A | 20 | 20A | 60 | 100 | - | TO-3 | 02 | STC |
| 2N514 | PNP | Ge | 150W | 0.2 | -40 | -30 | -30 | 25A | 20 | 25A | 60 | 100 | - | TO-3 | 02 | STC |
| 2N514A | PNP | Ge | 150W | 0.2 | -60 | -40 | -30 | 25A | 20 | 25A | 60 | 100 | - | TO-3 | 02 | STC |
| 2N514B | PNP | Ge | 150W | 0.2 | -80 | -45 | -30 | 25A | 20 | 25A | 60 | 100 | - | TO-3 | 02 | STC |
| 2N538 | PNP | Ge | 34W | 0.2 | -80 | -60 | -28 | 3.5A | 20 | 2A | 50 | 100 | - | TO-10 | 53 | STC |
| 2N538A | PNP | Ge | 34W | 0.2 | -80 | -60 | -28 | 3.5A | 20 | 2A | 50 | 100 | - | TO-10 | 53 | STC |
| 2N539 | PNP | Ge | 34W | 0.2 | -80 | -55 | -28 | 3.5A | 30 | 2A | 75 | 100 | - | TO-10 | 53 | STC |
| 2N539A | PNP | Ge | 34W | 0.2 | -80 | -55 | -28 | 3.5A | 30 | 2A | 75 | 100 | - | TO-10 | 53 | STC |
| 2N540 | PNP | Ge | 34W | 0.2 | -80 | -55 | -28 | 3.5A | 45 | 2A | 113 | 100 | - | TO-10 | 53 | STC |
| 2N540A | PNP | Ge | 34W | 0.2 | -80 | -55 | -28 | 3.5A | 45 | 2A | 113 | 100 | - | TO-10 | 53 | STC |
| 2N588 | PNP | Ge | 30 | 50 | -15 | -15 | -0.5 | 50 | 20 | 10 | - | 85 | 3 | TO-1 | 01 | Sp |
| 2N588A | PNP | Ge | 60 | 50 | -15 | -15 | -0.5 | 50 | 30 | 10 | - | 85 | 3 | TO-1 | 01 | Sp |
| 2N627 | PNP | Ge | 94W | 0.1 | -40 | -30 | -20 | 10A | 10 | 10A | 30 | 100 | - | TO-3 | 02 | STC |
| 2N628 | PNP | Ge | 94W | 0.1 | -60 | -45 | -30 | 10A | 10 | 10A | 30 | 100 | - | TO-3 | 02 | STC |
| 2N629 | PNP | Ge | 94W | 0.1 | -80 | -60 | -40 | 10A | 10 | 10A | 30 | 100 | - | TO-3 | 02 | STC |
| 2N657 | NPN | Si | 1W | 70 | 100 | 100 | 7 | 1A | 30 | 200 | 90 | 150 | - | TO-5 | 08 | F,SGS |
| 2N665 | PNP | Ge | 35W | - | -80 | -40 | -40 | 5A | 40 | 500 | 80 | 95 | - | TO-3 | 02 | STC |
| 2N696 | NPN | Si | 600 | 80 | 60 | 40 | 5 | 500 | 20 | 150 | 60 | 175 | 35 | TO-5 | 08 | F,Fe,M,SGS,u |
| 2N697 | NPN | Si | 600 | 100 | 60 | 40 | 5 | 500 | 40 | 150 | 120 | 175 | 35 | TO-5 | 08 | F,Fe,M,N,RCA,SGS,II,u |
| 2N698 | NPN | Si | 800 | 40 | 120 | 60 | 7 | 500 | 20 | 150 | 60 | 175 | 15 | TO-5 | 08 | F,SGS,u |
| 2N699 | NPN | Si | 600 | 50 | 120 | 80 | 7 | 500 | 40 | 150 | 120 | 175 | 20 | TO-5 | 08 | N,RCA,SGS,u |
| 2N699B | NPN | Si | 870 | 60 | 120 | 80 | 7 | 500 | 40 | 150 | 120 | 200 | 15 | TO-5 | 08 | SGS |