

11 FET's Metal Can

For Chopping and Switching

| Type No. | Case | Pol | BVGSS min. V | IGSS max. nA | rds (on) ohms | Ciss max. pF | Crss max. pF | ID (off) nA | IDSS min. mA | Vp max. V | ton nS | max. |
|----------|------|-----|--------------|--------------|---------------|--------------|--------------|-------------|--------------|-----------|--------|------|
| 2N3824 | TO72 | N | 50 | 0.1 | 250 | 6 | 3 | 0.1 | | | 8 | |
| 2N3970 | TO18 | N | 40 | 0.25 | 30 | 25 | 6 | 0.25 | 50 | 10 | 20 | |
| 2N3971 | TO18 | N | 40 | 0.25 | 60 | 25 | 6 | 0.25 | 25 | 5 | 30 | |
| 2N3972 | TO18 | N | 40 | 0.25 | 100 | 25 | 6 | 0.25 | 5 | 3 | 80 | |
| 2N4091 | TO18 | N | 40 | 0.2 | 30 | 16 | 5 | 0.2 | 30 | 10 | 25 | |
| 2N4092 | TO18 | N | 40 | 0.2 | 50 | 16 | 5 | 0.2 | 15 | 7 | 35 | |
| 2N4093 | TO18 | N | 40 | 0.2 | 80 | 16 | 5 | 0.2 | 8 | 5 | 60 | |
| 2N4391 | TO18 | N | 40 | 0.1 | 30 | 14 | 3.5 | 0.1 | 50 | 10 | 15 | |
| 2N4392 | TO18 | N | 40 | 0.1 | 60 | 14 | 3.5 | 0.1 | 25 | 5 | 15 | |
| 2N4393 | TO18 | N | 40 | 0.1 | 100 | 14 | 3.5 | 0.1 | 5 | 3 | 15 | |
| 2N4856A | TO18 | N | 40 | 0.25 | 25 | 10 | 4 | 0.25 | 50 | 10 | 8 | |
| 2N4857A | TO18 | N | 40 | 0.25 | 40 | 10 | 3.5 | 0.25 | 20 | 6 | 10 | |
| 2N4858A | TO18 | N | 40 | 0.25 | 60 | 10 | 3.5 | 0.25 | 8 | 4 | 16 | |
| 2N4859A | TO18 | N | 30 | 0.25 | 25 | 10 | 4 | 0.25 | 50 | 10 | 8 | |
| 2N4860A | TO18 | N | 30 | 0.25 | 40 | 10 | 3.5 | 0.25 | 20 | 6 | 10 | |
| 2N4861A | TO18 | N | 30 | 0.25 | 60 | 10 | 3.5 | 0.25 | 8 | 4 | 16 | |
| 2N5549 | TO18 | N | 40 | 0.25 | 100 | 8 | 2 | 0.25 | 10 | 6 | | |
| 2N2497 | TO5 | P | 20 | 10 | 1000 | 32 | | 10,000 | 1 | | | |
| 2N2498 | TO5 | P | 20 | 10 | 800 | 32 | | 10,000 | 2 | | | |
| 2N2499 | TO5 | P | 20 | 10 | 600 | 32 | | 10,000 | 5 | | | |
| 2N3329 | TO72 | P | 20 | 10 | 1000 | 20 | | | 1 | 5 | | |
| 2N3330 | TO72 | P | 20 | 10 | 1500 | 20 | | | 2 | 6 | | |
| 2N3331 | TO72 | P | 20 | 10 | 2000 | 20 | | | 5 | 8 | | |
| 2N3993 | TO72 | P | 25 | 1.2 | 150 | 16 | 4.5 | 1.2 | 10 | 9.5 | | |
| 2N3993A | TO72 | P | 25 | 1.2 | 150 | 12 | 3 | 1.2 | 10 | 9.5 | | |
| 2N3994 | TO72 | P | 25 | 1.2 | 300 | 16 | 5 | 1.2 | 2 | 5.5 | | |
| 2N3994A | TO72 | P | 25 | 1.2 | 300 | 12 | 3.5 | 1.2 | 2 | 5.5 | | |

For VHF Amplifiers and Mixers

| Type No. | Case | Pol | IGSS max. nA | Vp max. V | Ciss max. pF | Crss max. pF | Yfs min. μmho | Gps min. MHz | NF max. dB |
|----------|------|-----|--------------|-----------|--------------|--------------|---------------|--------------|------------|
| 2N3823 | TO72 | N | 0.5 | 8 | 6 | 2 | 3200 | 200 | 2.5 |
| 2N4416 | TO72 | N | 0.1 | 6 | 4 | 0.8 | 4000 | 400 | 4 |
| 2N4416A | TO72 | N | 0.1 | 6 | 4 | 0.8 | 4000 | 10 | 4 |
| 2N5549 | TO18 | N | 0.25 | 6 | 8 | 2 | 6000 | | |

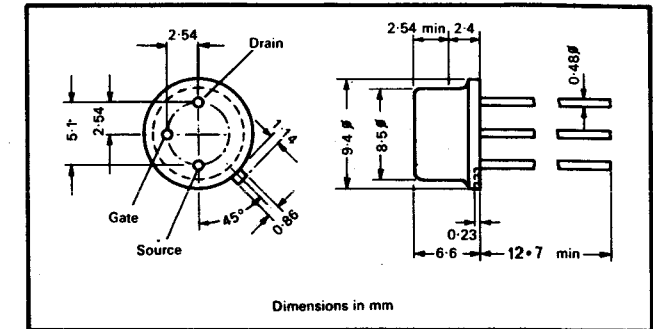
For General Purpose Amplifiers

| Type No. | Case | Pol | BVDGO min. V | IGSS max. nA | IDSS min. mA | Yfs min. μmho | Vp max. V | Ciss max. pF | Crss max. pF | NF dB max. |
|----------|------|-----|--------------|--------------|--------------|---------------|-----------|--------------|--------------|------------|
| 2N3821 | TO72 | N | 50 | 0.1 | 0.5 | 1500 | 4 | 6 | 3 | 6 |
| 2N3822 | TO72 | N | 50 | 0.1 | 2 | 3000 | 6 | 6 | 3 | 5 |
| BFW61 | TO72 | N | 25 | 1.0 | 2.0 | 2000 | 8 | 6 | 2 | |
| 2N4220 | TO72 | N | 30 | 0.1 | 0.5 | 1000 | 4 | 6 | 2 | |
| 2N4220A | TO72 | N | 30 | 0.1 | 0.5 | 1000 | 4 | 6 | 2 | 2.5 |
| 2N4221 | TO72 | N | 30 | 0.1 | 2 | 2000 | 6 | 6 | 2 | |
| 2N4221A | TO72 | N | 30 | 0.1 | 2 | 2000 | 6 | 6 | 2 | 2.5 |
| 2N4222 | TO72 | N | 30 | 0.1 | 5 | 2500 | 8 | 6 | 2 | |
| 2N4222A | TO72 | N | 30 | 0.1 | 5 | 2500 | 8 | 6 | 2 | 2.5 |
| BFW10 | TO72 | N | 30 | 0.5 | 8 | 3.5 | 8 | 5 | 0.75 | 2.5 |
| BFW11 | TO72 | N | 30 | 0.5 | 4 | 3.0 | 6 | 5 | 0.75 | 2.5 |
| 2N2386 | TO5 | P | 20 | 10 | | 1000 | | 50 | | |
| 2N2386A | TO5 | P | 20 | 10 | 1 | 2200 | | 10 | | |
| 2N2497 | TO5 | P | 20 | 10 | 1 | 1000 | | 32 | | 3 |
| 2N2498 | TO5 | P | 20 | 10 | 2 | 1500 | | 32 | | 3 |
| 2N2499 | TO5 | P | 20 | 10 | 5 | 2000 | | 32 | | 4 |
| 2N2500 | TO5 | P | 20 | 10 | 1 | 1000 | | 32 | | 1 |
| 2N2608 | TO18 | P | 30 | 10 | 4 | 1000 | | 17 | | 3 |
| 2N2609 | TO18 | P | 30 | 30 | 4 | 2500 | | 30 | | 3 |
| 2N3329 | TO72 | P | 20 | 10 | 1 | 1000 | 5 | 20 | | 3 |
| 2N3330 | TO72 | P | 20 | 10 | 2 | 1500 | 6 | 20 | | 3 |
| 2N3331 | TO72 | P | 20 | 10 | 5 | 2000 | 8 | 20 | | 4 |
| 2N3332 | TO72 | P | 20 | 10 | 1 | 1000 | 6 | 20 | | 1 |
| 2N3909 | TO72 | P | 20 | 10 | 0.3 | 1000 | 8 | 32 | 16 | |
| 2N3909A | TO72 | P | 20 | 10 | 0.3 | 2200 | 8 | 9 | 3 | |

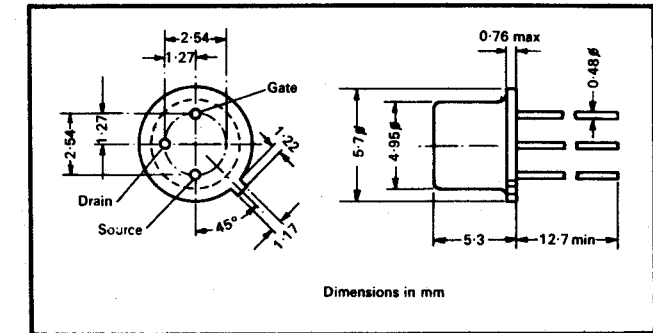
For Low Noise Amplifiers

| Type No. | Case | Pol | BVDGO min. V | IGSS max. nA | IDSS min. mA | Yfs min. μmho | Vp max. V | Ciss max. pF | Crss max. pF | en @ 10Hz nV/ Hz |
|----------|------|-----|--------------|--------------|--------------|---------------|-----------|--------------|--------------|------------------|
| BFW54 | TO72 | N | 50 | 0.1 | 2 | 3000 | 6 | 6 | 3 | 100 |
| BFW55 | TO72 | N | 50 | 0.1 | 2 | 3000 | 6 | 6 | 3 | 40 |
| BFW56 | TO72 | N | 50 | 0.1 | 2 | 3000 | 6 | 6 | 3 | 20 |

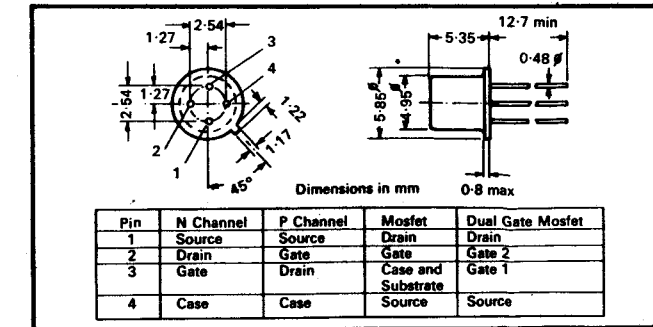
Case Outlines



TO-5



TO-18



TO-72

| Pin | N Channel | P Channel | Mosfet | Dual Gate Mosfet |
|-----|-----------|-----------|--------------------|------------------|
| 1 | Source | Source | Drain | Drain |
| 2 | Drain | Gate | Gate | Gate 2 |
| 3 | Gate | Drain | Case and Substrate | Gate 1 |
| 4 | Case | Case | Source | Source |