

STMICROELECTRONICS Power MOSFET Transistors



Products may be RoHS compliant. Check mouser.com for RoHS status.

SINGLE N-CHANNEL SUPERMESH™ MOSFET FAMILY

The SuperMESH™ family has built-in, back-to-back Zener diodes between the gate and source terminals. These Zener diodes improve resistance to destructive electrostatic discharges as well as protecting the gate oxide against damage from spurious voltage spikes. Because they are built-in, they preclude the need for external protection diodes.



For quantities greater than listed, call for quote.

| MOUSER STOCK NO. | STMicroelectronics Part No. | Package | Drain Source Breakdown Voltage (Min) (V) | Drain Current (Cont) (Max) (A) | Total Dissipation @ 25°C (Max) (W) | Static Drain Source On Resistance | | Price Each | | | |
|--------------------------|-----------------------------|--------------|--|--------------------------------|------------------------------------|-----------------------------------|---------------------|------------|-------|-------|-------|
| | | | | | | Ohms (Max) | @ Drain Current (A) | 1 | 10 | 100 | 250 |
| Surface Mount | | | | | | | | | | | |
| 511- STN3N40K3 | STN3N40K3 | SOT-223 | 400 | 1.8 | 3.3 | 3.400 | 0.60 | 1.04 | .87 | .74 | .65 |
| 511- STD7NK40Z | STD7NK40ZT4 | TO-252 | 400 | 5.4 | 70.0 | 1.000 | 2.70 | 1.71 | 1.50 | 1.20 | 1.06 |
| 511- STS1DN45K3 | STS1DN45K3 | SO-8 | 450 | 0.5 | 1.7 | 3.800 | 0.50 | 1.39 | 1.23 | .96 | .82 |
| 511- STB5N52K3 | STB5N52K3 | TO-263 | 525 | 4.4 | 70.0 | 1.500 | 2.20 | 1.18 | 1.01 | .825 | .739 |
| 511- STB6N52K3 | STB6N52K3 | TO-263 | 525 | 5.0 | 70.0 | 1.200 | 2.50 | 2.66 | 2.28 | 1.86 | 1.66 |
| 511- STB11N52K3 | STB11N52K3 | D2PAK | 525 | 10.0 | 125.0 | 0.510 | 5.00 | 3.08 | 2.77 | 2.25 | 1.94 |
| 511- STD1NK60 | STD1NK60T4 | TO-252 | 600 | 0.25 | 30.0 | 8.500 | 0.50 | .97 | .86 | .69 | .57 |
| 511- STN1NK60Z | STN1NK60Z | SOT-223 | 600 | 0.3 | 3.3 | 15.000 | 0.40 | .73 | .62 | .48 | .41 |
| 511- STN1HNK60 | STN1HNK60 | SOT-223 | 600 | 0.4 | 3.3 | 8.500 | 0.50 | .94 | .82 | .667 | .56 |
| 511- STD3NK60Z | STD3NK60ZT4 | TO-252 | 600 | 2.4 | 45.0 | 3.600 | 1.20 | 1.04 | .94 | .74 | .64 |
| 511- STB4NK60Z | STB4NK60ZT4 | TO-263 | 600 | 4.0 | 70.0 | 2.000 | 2.00 | 1.82 | 1.57 | 1.27 | 1.14 |
| 511- STD4NK60Z | STD4NK60ZT4 | TO-252 | 600 | 4.0 | 70.0 | 2.000 | 2.00 | 1.38 | 1.22 | .96 | .84 |
| 511- STL13NM60N | STL13NM60N | Power FLAT-8 | 600 | 10.0 | 90.0 | 0.385 | 5.00 | 3.57 | 3.20 | 2.60 | 2.38 |
| 511- STL18NM60N | STL18NM60N | Power FLAT-8 | 600 | 12.0 | 110.0 | 0.310 | 6.00 | 4.00 | 3.57 | 2.95 | 2.66 |
| 511- STD3LN62K3 | STD3LN62K3 | TO-252 | 620 | 2.5 | 45.0 | 3.000 | 1.25 | 1.26 | 1.08 | .883 | .791 |
| 511- STD4N62K3 | STD4N62K3 | TO-252 | 620 | 3.8 | 70.0 | 1.950 | 1.90 | 1.73 | 1.58 | 1.28 | 1.11 |
| 511- STD5N62K3 | STD5N62K3 | TO-252 | 620 | 4.2 | 70.0 | 1.600 | 2.10 | 1.61 | 1.45 | 1.17 | 1.04 |
| 511- STL8N65M5 | STL8N65M5 | Power FLAT-5 | 650 | 7.0 | 70.0 | 0.600 | 3.50 | 3.02 | 2.68 | 2.07 | 1.88 |
| 511- STN1NK80Z | STN1NK80Z | SOT-223 | 800 | 0.25 | 2.5 | 16.000 | 0.50 | 1.08 | .96 | .78 | .68 |
| 511- STD1NK80ZT4 | STD1NK80ZT4 | TO-252 | 800 | 1.0 | 45.0 | 16.000 | 0.50 | .94 | .82 | .66 | .56 |
| 511- STD2NK90Z | STD2NK90ZT4 | TO-252 | 900 | 2.1 | 70.0 | 6.500 | 1.05 | 1.81 | 1.60 | 1.25 | 1.08 |
| 511- STB6NK90Z | STB6NK90ZT4 | TO-263 | 900 | 5.8 | 140.0 | 2.000 | 2.90 | 3.02 | 2.62 | 2.16 | 1.95 |
| 511- STB21N90K5 | STB21N90K5 | D2PAK | 900 | 18.5 | 250.0 | 0.299 | 9.00 | 7.47 | 6.98 | 6.48 | 6.23 |
| 511- STD6N95K5 | STD6N95K5 | DPAK | 950 | 9.0 | 90.0 | 1.250 | 3.00 | 2.64 | 2.47 | 2.29 | 2.20 |
| 511- STB20N95K5 | STB20N95K5 | D2PAK | 950 | 17.5 | 250.0 | 0.330 | 9.00 | 7.83 | 7.31 | 6.79 | 6.53 |
| 511- STD3NK100Z | STD3NK100Z | TO-252 | 1000 | 2.5 | 90.0 | 6.000 | 1.25 | 3.09 | 2.77 | 2.20 | 1.99 |
| Thru-Hole | | | | | | | | | | | |
| 511- STFW6N120K3 | STFW6N120K3 | TO-3PF | 120 | 6.0 | 63.0 | 2.400 | 2.50 | 7.15 | 6.43 | 5.29 | 4.86 |
| 511- STW52NK25Z | STW52NK25Z | TO-247 | 250 | 52.0 | 300.0 | 0.045 | 26.00 | 5.23 | 4.64 | 3.78 | 3.40 |
| 511- STP11NK40Z | STP11NK40Z | TO-220AB | 400 | 10.0 | 110.0 | 0.550 | 4.50 | 1.95 | 1.76 | 1.41 | 1.26 |
| 511- STU3N45K3 | STU3N45K3 | D2PAK | 450 | 1.8 | 27 | 3.8 | 0.5 | .65 | .60 | .48 | .432 |
| 511- STP9NK50Z | STP9NK50Z | TO-220AB | 500 | 7.2 | 110.0 | 0.850 | 3.60 | 2.28 | 2.05 | 1.65 | 1.47 |
| 511- STP11NK50ZFP | STP11NK50ZFP | TO-220AB | 500 | 10.0 | 125.0 | 0.520 | 4.50 | 2.07 | 1.83 | 1.48 | 1.32 |
| 511- STW14NK50Z | STW14NK50Z | TO-247 | 500 | 14.0 | 150.0 | 0.380 | 6.00 | 3.02 | 2.70 | 2.22 | 2.04 |
| 511- STW15NK50Z | STW15NK50Z | TO-247 | 500 | 14.0 | 160.0 | 0.340 | 7.00 | 4.20 | 3.75 | 3.04 | 2.75 |
| 511- STF120NK50Z | STF120NK50Z | I2PAK | 500 | 17.0 | 40.0 | 0.270 | 8.50 | 4.29 | 4.01 | 3.72 | 3.58 |
| 511- STW20NK50Z | STW20NK50Z | TO-247 | 500 | 17.0 | 190.0 | 0.270 | 8.50 | 3.12 | 2.76 | 2.34 | 2.09 |
| 511- STP4N52K3 | STP4N52K3 | TO-220FP | 525 | 2.5 | 40.0 | 2.600 | 1.25 | 1.68 | 1.56 | 1.35 | 1.14 |
| 511- STF5N52K3 | STF5N52K3 | TO-220FP | 525 | 4.4 | 25 | 1.5 | 2.2 | 1.54 | 1.35 | 1.11 | 1.00 |
| 511- STF11N52K3 | STF11N52K3 | TO-220FP | 525 | 10.0 | 30.0 | 0.510 | 5.00 | 2.78 | 2.45 | 2.01 | 1.80 |
| 511- STP11N52K3 | STP11N52K3 | TO-220 | 525 | 10.0 | 125.0 | 0.510 | 5.00 | 3.50 | 3.08 | 2.50 | 2.23 |
| 511- STP6NK60Z | STP6NK60Z | TO-220AB | 600 | 6.0 | 110.0 | 1.200 | 3.00 | 1.41 | 1.23 | 1.01 | .907 |
| 511- STP10NK60ZFP | STP10NK60ZFP | TO-220FP | 600 | 10.0 | 35.0 | 0.075 | 4.50 | 2.78 | 2.50 | 1.99 | 1.76 |
| 511- STF10NK60Z | STF10NK60Z | I2PAK | 600 | 10.0 | 35.0 | 0.750 | 4.50 | 2.46 | 2.30 | 2.14 | 2.05 |
| 511- STF13NK60Z | STF13NK60Z | I2PAK | 600 | 13.0 | 35.0 | 0.550 | 4.50 | 3.36 | 3.14 | 2.92 | 2.80 |
| 511- STF24NM60N | STF24NM60N | TO-220FP | 600 | 17.0 | 125.0 | 0.190 | 8.00 | 5.91 | 5.21 | 4.29 | 3.84 |
| 511- STF34NM60N | STF34NM60N | TO-220FP | 600 | 29.0 | 40.0 | 0.105 | 14.50 | 8.45 | 7.45 | 6.13 | 5.49 |
| 511- STP34NM60ND | STP34NM60ND | TO-220 | 600 | 29.0 | 190.0 | 0.110 | 14.50 | 9.25 | 8.32 | 6.84 | 6.29 |
| 511- STW34NM60ND | STW34NM60ND | TO-247 | 600 | 29.0 | 190.0 | 0.110 | 14.50 | 9.64 | 8.61 | 7.10 | 6.53 |
| 511- STQ2N62K3-AP | STQ2N62K3-AP | TO-92 | 620 | 2.2 | 3.0 | 3.500 | 0.50 | .97 | .89 | .833 | .744 |
| 511- STF2N62K3 | STF2N62K3 | TO-220FP | 620 | 2.2 | 20.0 | 3.600 | 1.10 | 1.49 | 1.34 | 1.05 | .90 |
| 511- STB2N62K3 | STB2N62K3 | D2PAK | 620 | 2.2 | 45.0 | 3.600 | 1.00 | 1.70 | 1.54 | 1.24 | 1.10 |
| 511- STP2N62K3 | STP2N62K3 | TO-220 | 620 | 2.2 | 45.0 | 3.600 | 1.10 | 1.26 | 1.11 | .904 | .808 |
| 511- STU2N62K3 | STU2N62K3 | IPAK | 620 | 2.2 | 45.0 | 3.600 | 1.10 | 1.15 | 1.05 | .844 | .76 |
| 511- STF3LN62K3 | STF3LN62K3 | TO-220FP | 620 | 2.5 | 20.0 | 3.000 | 1.25 | .87 | .773 | .637 | .57 |
| 511- STU3LN62K3 | STU3LN62K3 | IPAK | 620 | 2.5 | 45.0 | 3.000 | 1.25 | 1.12 | 1.02 | .822 | .74 |
| 511- STF4N62K3 | STF4N62K3 | TO-220FP | 620 | 3.8 | 25 | 2 | 1.9 | 1.64 | 1.45 | 1.19 | 1.07 |
| 511- STF5N62K3 | STF5N62K3 | TO-220FP | 620 | 4.2 | 25.0 | 1.600 | 2.10 | 1.78 | 1.57 | 1.29 | 1.15 |
| 511- STU5N62K3 | STU5N62K3 | IPAK | 620 | 4.2 | 70.0 | 1.600 | 2.10 | 1.48 | 1.36 | 1.08 | .98 |
| 511- STP17N62K3 | STP17N62K3 | TO-220AB | 620 | 15.0 | 190.0 | 0.380 | 7.50 | 5.53 | 4.82 | 3.59 | 3.07 |
| 511- STW17N62K3 | STW17N62K3 | TO-247 | 620 | 15.0 | 190.0 | 0.380 | 7.50 | 6.25 | 5.51 | 4.50 | 4.15 |
| 511- STF6N65K3 | STF6N65K3 | TO-220FP | 650 | 5.4 | 30.0 | 1.300 | 2.80 | 1.72 | 1.52 | 1.25 | 1.12 |
| 511- STP10NM60ND | STP10NM60ND | TO-220FP | 650 | 8.0 | 25.0 | 0.600 | 32.00 | 2.98 | 2.68 | 2.13 | 1.89 |
| 511- STP10NM60ND | STP10NM60ND | TO-220 | 650 | 8.0 | 70.0 | 0.600 | 4.00 | 3.23 | 2.85 | 2.30 | 2.06 |
| 511- STF34NM60ND | STF34NM60ND | TO-220FP | 650 | 29.0 | 40.0 | 0.110 | 14.50 | 10.51 | 9.26 | 7.62 | 6.82 |
| 511- STW54NM65ND | STW54NM65ND | TO-247 | 650 | 49.0 | 350.0 | 0.065 | 24.50 | 20.00 | 17.87 | 14.73 | 13.54 |
| 511- STP4NK80Z | STP4NK80Z | TO-220AB | 800 | 3.0 | 80.0 | 3.500 | 1.50 | 1.53 | 1.25 | 1.03 | .89 |
| 511- STP5NK80Z | STP5NK80Z | TO-220AB | 800 | 4.3 | 110.0 | 2.400 | 2.15 | 1.41 | 1.23 | 1.01 | .907 |
| 511- STP10NK80ZFP | STP10NK80ZFP | TO-220FP | 800 | 9.0 | 40.0 | 0.900 | 4.50 | 3.20 | 2.93 | 2.39 | 2.15 |
| 511- STW10NK80Z | STW10NK80Z | TO-247 | 800 | 9.0 | 160.0 | 0.900 | 4.50 | 3.35 | 2.98 | 2.43 | 2.20 |
| 511- STF21N90K5 | STF21N90K5 | TO-220FP | 900 | 18.5 | 40.0 | 0.299 | 9.00 | 7.92 | 7.40 | 6.87 | 6.60 |
| 511- STW21N90K5 | STW21N90K5 | TO-247 | 900 | 18.5 | 250.0 | 0.299 | 9.00 | 8.76 | 8.18 | 7.60 | 7.30 |
| 511- STP6NK90Z | STP6NK90Z | TO-220AB | 900 | 5.8 | 140.0 | 2.000 | 2.90 | 2.45 | 2.19 | 1.75 | 1.55 |
| 511- STP9NK90Z | STP9NK90Z | TO-220AB | 900 | 8.0 | 160.0 | 1.300 | 3.60 | 2.81 | 2.45 | 2.01 | 1.80 |
| 511- STW12NK90Z | STW12NK90Z | TO-247 | 900 | 11.0 | 230.0 | 0.880 | 5.50 | 4.73 | 4.22 | 3.46 | 3.12 |
| 511- STW15NK90Z | STW15NK90Z | TO-247 | 900 | 15.0 | 350.0 | 0.550 | 7.50 | 6.79 | 6.02 | 4.90 | 4.40 |
| 511- STP21N90K5 | STP21N90K5 | TO-220 | 900 | 18.5 | 250.0 | 0.299 | 9.0 | 7.29 | 6.81 | 6.32 | 6.08 |
| 511- STF6N95K5 | STF6N95K5 | TO-220FP | 950 | 9.0 | 25.0 | 1.250 | 3.0 | 2.82 | 2.64 | 2.45 | 2.35 |
| 511- STP6N95K5 | STP6N95K5 | TO-220 | 950 | 9.0 | 90.0 | 1.250 | 3.0 | 2.82 | 2.64 | 2.45 | 2.35 |
| 511- STW6N95K5 | STW6N95K5 | TO-247 | 950 | 9.0 | 90.0 | 1.250 | 3.0 | 3.84 | 3.59 | 3.33 | 3.20 |
| 511- STP13N95K3 | STP13N95K3 | TO-220AB | 950 | 10.0 | 190.0 | 0.850 | 5.00 | 7.83 | 6.91 | 5.59 | 5.00 |