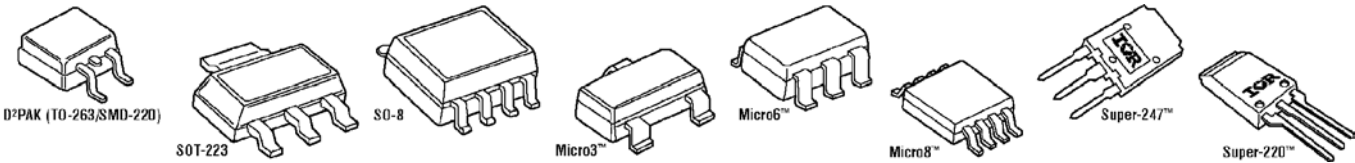


MOSFETs (Continued)



HEXFET™ Power MOSFETs — D\*PAK (cont.) — **NEW** —  
N-Channel (continued)

| Mfr.'s Type | V(BR) <sub>oss</sub> (V) | R <sub>DS(on)</sub> (Ω) | I <sub>D</sub> @ 25°C (A) | P <sub>D</sub> (W) |
|-------------|--------------------------|-------------------------|---------------------------|--------------------|
| IRF3710S    | 100                      | 0.0250                  | 57.00                     | 3.80               |
| IRF1310NS   | 100                      | 0.0360                  | 42.00                     | 3.80               |
| IRF540NS    | 100                      | 0.0520                  | 33.00                     | 3.80               |
| IRF530NS    | 100                      | 0.1100                  | 17.00                     | 3.80               |
| IRF3415S    | 150                      | 0.0420                  | 43.00                     | 3.80               |
| IRF3515S    | 150                      | 0.0450                  | 41.00                     | 200.00             |
| IRF3315S    | 150                      | 0.0820                  | 21.00                     | 94.00              |
| IRFS31N20D  | 200                      | 0.0820                  | 31.00                     | 200.00             |
| IRF640NS    | 200                      | 0.1500                  | 18.00                     | 150.00             |
| IRF630NS    | 200                      | 0.3000                  | 9.50                      | 82.00              |
| IRF644S     | 250                      | 0.2800                  | 14.00                     | 125.00             |
| IRF740S     | 400                      | 0.5500                  | 10.00                     | 125.00             |
| IRF710S     | 400                      | 3.6000                  | 2.00                      | 36.00              |
| IRF840S     | 500                      | 0.8500                  | 8.00                      | 125.00             |
| IRF830S     | 500                      | 1.5000                  | 4.50                      | 74.00              |
| IRF820S     | 500                      | 3.0000                  | 2.50                      | 50.00              |
| IRFBC40AS   | 600                      | 1.2000                  | 6.20                      | 125.00             |
| IRFBC40S    | 600                      | 1.2000                  | 6.20                      | 130.00             |

P-Channel

|           |      |        |        |        |
|-----------|------|--------|--------|--------|
| IRF490SL  | −55  | 0.0200 | −74.00 | 200.00 |
| IRF490SS  | −55  | 0.0200 | −74.00 | 3.80   |
| IRF530SS  | −55  | 0.0600 | −31.00 | 110.00 |
| IRF9224NS | −55  | 0.1750 | −12.00 | 45.00  |
| IRF9540NS | −100 | 0.1170 | −23.00 | 3.80   |
| IRF9530NS | −100 | 0.2000 | −14.00 | 3.80   |
| IRF9510S  | −100 | 1.2000 | −4.00  | 43.00  |
| IRF6215S  | −150 | 0.2900 | −13.00 | 110.00 |
| IRF9640S  | −200 | 0.5000 | −11.00 | 125.00 |
| IRF9630S  | −200 | 0.8000 | −6.50  | 74.00  |

Logic Level N-Channel

|           |     |        |        |        |
|-----------|-----|--------|--------|--------|
| IRL3502S  | 20  | 0.0070 | 110.00 | 140.00 |
| IRL3102S  | 20  | 0.0130 | 61.00  | 89.00  |
| IRL3803S  | 30  | 0.0060 | 140.00 | 200.00 |
| IRL2203NS | 30  | 0.0070 | 116.00 | 170.00 |
| IRL3303S  | 30  | 0.0260 | 38.00  | 68.00  |
| IRL1004S  | 40  | 0.0065 | 110.00 | 150.00 |
| IRL2505S  | 55  | 0.0080 | 104.00 | 200.00 |
| IRL3705NS | 55  | 0.0100 | 89.00  | 170.00 |
| IRLZ44NS  | 55  | 0.0220 | 47.00  | 110.00 |
| IRLZ34NS  | 55  | 0.0350 | 30.00  | 68.00  |
| IRLZ24NS  | 55  | 0.0600 | 18.00  | 45.00  |
| IRLZ14S   | 60  | 0.2000 | 10.00  | —      |
| IRL2910S  | 100 | 0.0260 | 55.00  | 3.80   |
| IRL540NS  | 100 | 0.0440 | 36.00  | 3.80   |
| IRL530NS  | 100 | 0.1000 | 17.00  | 3.80   |
| IRL520NS  | 100 | 0.1800 | 10.00  | 3.80   |
| IRL640S   | 200 | 0.1800 | 17.00  | 125.00 |
| IRL630S   | 200 | 0.4000 | 9.00   | 74.00  |

HEXFET™ Power MOSFETs — SOT-223

The SOT-223 package is capable of dissipating more than 1 W in a typical printed circuit board application. Package design allows for maximum die size, optimum thermal performance and ease of surface-mount manufacturing. Suitable for use with all soldering techniques.

N-Channel

| Mfr.'s Type | V(BR) <sub>oss</sub> (V) | R <sub>DS(on)</sub> (Ω) | I <sub>D</sub> @ 25°C (A) | P <sub>D</sub> (W) |
|-------------|--------------------------|-------------------------|---------------------------|--------------------|
| IRFL014N    | 55                       | 0.1600                  | 1.90                      | 2.10               |
| IRFL014     | 60                       | 0.2000                  | 5.20                      | 2.00               |
| IRFL4310    | 100                      | 0.2000                  | 2.20                      | 2.10               |
| IRFL110     | 100                      | 0.5400                  | 1.50                      | 2.00               |
| IRFL210     | 200                      | 1.5000                  | 0.96                      | 2.00               |
| IRFL214     | 250                      | 2.0000                  | 0.79                      | 2.00               |

Logic Level N-Channel

|          |     |        |      |      |
|----------|-----|--------|------|------|
| IRLL3303 | 30  | 0.0310 | 6.50 | 2.10 |
| IRLL2705 | 55  | 0.0400 | 5.20 | 2.10 |
| IRLL014N | 55  | 0.1400 | 2.00 | 1.00 |
| IRLL014  | 60  | 0.2000 | 2.70 | 2.00 |
| IRLL110  | 100 | 0.5400 | 1.50 | 2.00 |

HEXFET™ Power MOSFETs — SO-8

N-Channel

|         |    |        |       |      |
|---------|----|--------|-------|------|
| IRF7456 | 20 | 0.0065 | 16.00 | 2.50 |
| IRF7455 | 30 | 0.0075 | 13.00 | 1.60 |

P-Channel

|         |     |        |        |      |
|---------|-----|--------|--------|------|
| IRF7210 | −12 | 0.0050 | −16.00 | 2.50 |
|---------|-----|--------|--------|------|

Logic Level N-Channel

|          |    |        |       |      |
|----------|----|--------|-------|------|
| IRF7401  | 20 | 0.0220 | 8.70  | 2.50 |
| IRF7811A | 28 | 0.0120 | 11.40 | 2.50 |
| IRF7413  | 30 | 0.0110 | 12.00 | 2.50 |
| Si4410DY | 30 | 0.0135 | 10.0  | 2.50 |
| IRF9410  | 30 | 0.0300 | 7.00  | 2.50 |
| IRF7201  | 30 | 0.0300 | 7.00  | 2.50 |

Logic Level P-Channel

|         |      |        |       |      |
|---------|------|--------|-------|------|
| IRF7404 | −20‡ | 0.0400 | −5.30 | 2.50 |
| IRF7416 | −30  | 0.0200 | −8.80 | 2.50 |
| IRF7406 | −30  | 0.0450 | −4.70 | 2.50 |

Logic Level Dual N-Channel

|         |     |        |      |      |
|---------|-----|--------|------|------|
| IRF7311 | 20‡ | 0.0290 | 6.60 | 2.00 |
| IRF7301 | 20‡ | 0.0500 | 4.30 | 2.00 |
| IRF7101 | 20  | 0.1000 | 3.50 | 2.00 |
| IRF7313 | 30  | 0.0290 | 7.00 | 2.00 |
| IRF7303 | 30  | 0.0500 | 4.00 | 2.00 |
| IRF7103 | 50  | 0.1300 | 3.00 | 2.00 |
| IRF7341 | 55  | 0.0500 | 4.70 | 2.00 |

HEXFET™ Power MOSFETs — SO-8 (continued)

Logic Level Dual P-Channel

| Mfr.'s Type | V(BR) <sub>oss</sub> (V) | R <sub>DS(on)</sub> (Ω) | I <sub>D</sub> @ 25°C (A) | P <sub>D</sub> (W) |
|-------------|--------------------------|-------------------------|---------------------------|--------------------|
| IRF7324     | −20‡                     | 0.0260                  | 9.00                      | 2.00               |
| IRF7314     | −20                      | 0.0580                  | −4.20                     | 2.00               |
| IRF7304     | −20‡                     | 0.0900                  | −3.60                     | 2.00               |
| IRF7316     | −30                      | 0.0580                  | −4.90                     | 2.00               |
| IRF7306     | −30                      | 0.1000                  | −3.60                     | 2.00               |
| IRF9953     | −30                      | 0.2500                  | −2.30                     | 2.00               |
| IRF7342     | −55                      | 0.1050                  | −3.40                     | 2.00               |

Logic Level Dual N- and P-Channel

|         |     |        |       |      |
|---------|-----|--------|-------|------|
| IRF7307 | 20‡ | 0.0500 | 4.30  | 1.40 |
|         | −20 | 0.0900 | −3.60 | 1.40 |
| IRF7105 | 25  | 0.1000 | 3.50  | 2.00 |
|         | −25 | 0.2500 | −2.30 | 2.00 |
| IRF7319 | 30  | 0.0290 | 6.50  | 2.00 |
|         | −30 | 0.0580 | −4.90 | 2.00 |
| IRF7309 | 30  | 0.0500 | 4.00  | 2.00 |
|         | −30 | 0.1000 | −3.00 | 2.00 |
| IRF9952 | 30  | 0.1000 | 3.50  | 2.00 |
|         | −30 | 0.2500 | −1.80 | 2.00 |
| IRF7343 | 55  | 0.0500 | 4.70  | 2.00 |
|         | −55 | 0.1050 | −3.40 | 2.00 |

HEXFET™ Power MOSFETs — Micro3™

Logic Level N-Channel

|             |    |        |      |        |
|-------------|----|--------|------|--------|
| IRLML2803TR | 30 | 0.2500 | 0.91 | 540.00 |
|-------------|----|--------|------|--------|

Logic Level P-Channel

|             |     |        |       |        |
|-------------|-----|--------|-------|--------|
| IRLML5103TR | −30 | 0.6000 | −0.60 | 540.00 |
|-------------|-----|--------|-------|--------|

HEXFET™ Power MOSFETs — Micro6™

P-Channel

|             |     |        |       |      |
|-------------|-----|--------|-------|------|
| IRLMS6802TR | −20 | 0.0500 | −5.60 | 2.00 |
| Si3443DV    | −20 | 0.0650 | 4.40  | 2.00 |
| IRLMS5703TR | −30 | 0.2000 | −1.60 | 1.70 |

HEXFET™ Power MOSFETs Micro8™

Logic Level Dual N- and P-Channel

|           |     |        |       |      |
|-----------|-----|--------|-------|------|
| IRF7507TR | 20‡ | 0.1350 | 1.70  | 1.25 |
|           | −20 | 0.2700 | −1.30 | 1.25 |
| IRF7509TR | 30  | 0.1350 | 1.70  | 1.25 |
|           | −30 | 0.2700 | −1.20 | 1.25 |

HEXFET™ Power MOSFETs Super-247

N-Channel

|             |     |        |       |        |
|-------------|-----|--------|-------|--------|
| IRFPS37N50A | 500 | 0.1300 | 36.00 | 446.00 |
|-------------|-----|--------|-------|--------|

HEXFET™ Power MOSFETs Super-220

N-Channel

|             |     |        |       |        |
|-------------|-----|--------|-------|--------|
| IRFBA22N50A | 500 | 0.2300 | 22.00 | 210.00 |
|-------------|-----|--------|-------|--------|

\*Also Available in D\*PAK (TO-263/SMD-220). Add suffix S to the Mfr.'s Type Number. †Also available in D\*PAK IRFS11N50A and IRFS9N60A. ‡Indicates "low VGS(th)" which can operate at VGS = 2.7 V.

Rectifiers



Silicon Standard Recovery Rectifiers — General Purpose Alloy Type

| Mfr.'s Type* | V <sub>RRM</sub> (V) | I <sub>FSM</sub> (A) | I <sub>F(AV)</sub> A @ Max. T <sub>c</sub> (°C) | Package |
|--------------|----------------------|----------------------|-------------------------------------------------|---------|
| 1N3111       | 50                   | 3000                 | 150 @ 150                                       | DO-30   |
| 150K5A†      | 50                   | 3140                 | 150 @ 150                                       | DO-8    |
| 1N2054•      | 50                   | 4500                 | 250 @ 135                                       | DO-9    |
| 300U5A†      | 50                   | 5750                 | 300 @ 130                                       | DO-9    |
| 1N3288A†     | 100                  | 2300                 | 100 @ 130                                       | DO-8    |
| 1N3085       | 100                  | 3000                 | 150 @ 150                                       | DO-30   |
| 150K10A†     | 100                  | 3140                 | 150 @ 150                                       | DO-8    |
| 150L10A†     | 100                  | 3140                 | 150 @ 150                                       | DO-30   |
| 1N4045       | 100                  | 5000                 | 275 @ 120                                       | DO-9    |
| 1N4046       | 150                  | 5000                 | 275 @ 120                                       | DO-9    |
| 1N3289A†     | 200                  | 2300                 | 100 @ 130                                       | DO-8    |

| Mfr.'s Type* | V <sub>RRM</sub> (V) | I <sub>FSM</sub> (A) | I <sub>F(AV)</sub> A @ Max. T <sub>c</sub> (°C) | Package |
|--------------|----------------------|----------------------|-------------------------------------------------|---------|
| 150K20A†     | 200                  | 3140                 | 150 @ 150                                       | DO-8    |
| 150L20A†     | 200                  | 3140                 | 150 @ 150                                       | DO-30   |
| 1N4048       | 250                  | 5000                 | 275 @ 120                                       | DO-9    |
| 1N3087       | 300                  | 3000                 | 150 @ 150                                       | DO-30   |
| 150K30A†     | 300                  | 3140                 | 150 @ 150                                       | DO-8    |
| 150L30A†     | 300                  | 3140                 | 150 @ 150                                       | DO-30   |
| 1N4049       | 300                  | 5000                 | 275 @ 120                                       | DO-9    |
| 300U30A†     | 300                  | 5750                 | 300 @ 130                                       | DO-9    |
| 1N3088       | 400                  | 3000                 | 150 @ 150                                       | DO-30   |
| 150K40A†     | 400                  | 3140                 | 150 @ 150                                       | DO-8    |
| 150L40A†     | 400                  | 3140                 | 150 @ 150                                       | DO-30   |

| Mfr.'s Type* | V <sub>RRM</sub> (V) | I <sub>FSM</sub> (A) | I <sub>F(AV)</sub> A @ Max. T <sub>c</sub> (°C) | Package |
|--------------|----------------------|----------------------|-------------------------------------------------|---------|
| 1N4050       | 400                  | 5000                 | 275 @ 120                                       | DO-9    |
| 1N4051       | 500                  | 5000                 | 275 @ 120                                       | DO-9    |
| 1N3293A†     | 600                  | 2300                 | 100 @ 130                                       | DO-8    |
| 1N4052       | 600                  | 5000                 | 275 @ 120                                       | DO-9    |
| 300U60A†     | 600                  | 5750                 | 300 @ 130                                       | DO-9    |
| 150K80A†     | 800                  | 3140                 | 150 @ 150                                       | DO-8    |
| 300U80A†     | 800                  | 5750                 | 300 @ 130                                       | DO-9    |
| 1N3295A†     | 1000                 | 2300                 | 100 @ 130                                       | DO-8    |
| 1N4056       | 1000                 | 5000                 | 275 @ 120                                       | DO-9    |
| 300U100A†    | 1000                 | 5750                 | 300 @ 130                                       | DO-9    |
| —            | —                    | —                    | —                                               | —       |

\*Cathode-to-stud; for anode-to-stud, add "R" to basic number (example: 1N3289AR, 1N3111R, 150LR5A). †Also available in stud-topped case and flag terminal. ‡1N3288 series also available. •1N3735 series also available. \*