

| TYPE NO  | CONSTRUCTION | PACKAGE & PINOUT | V <sub>DS</sub> | I <sub>b</sub> | T <sub>J</sub> | P <sub>TOT</sub> | V <sub>GS(OFF)</sub> or V <sub>GS(TH)</sub> | I <sub>DSS</sub> or I <sub>D(ON)</sub> | G <sub>FS</sub> * | R <sub>DS(ON)</sub> | C <sub>ISS</sub> | C <sub>OSS</sub> | USE | MNF | SUBSTITUTE        |
|----------|--------------|------------------|-----------------|----------------|----------------|------------------|---|--|-------------------|---------------------|------------------|------------------|-----|-----|-------------------|
|          |              |                  | MAX             | MAX            | MAX            | MAX              |   |  |                   | MAX                 | MAX              | MAX              |     |     |                   |
| IRF831R  | NME          | T0220 Dd         | 450V            | 4.5A           | 150C           | 75WC             | 2/4V  | 250µA                                  | 2.7Snn            | 1R5                 | 600Pt            | 20Pt             | IMS | HRS |                   |
| IRF832   | NME          | T0220 Dd         | 500V            | 4A             | 150C           | 75WC             | 2/4V  | -                                      | 2500mSmn          | 2R0                 | 80P              | 60P              | RHH | IRC | ZVN0350L MTP3N50  |
| IRF832R  | NME          | T0220 Dd         | 500V            | 4A             | 150C           | 75WC             | 2/4V  | 250µA                                  | 2.7Snn            | 2R0                 | 600Pt            | 20Pt             | IMS | HRS |                   |
| IRF833   | NME          | T0220 Dd         | 450V            | 4A             | 150C           | 75WC             | 2/4V  | -                                      | 2500mSmn          | 2R0                 | 80P              | 60P              | RHH | IRC | ZVN0345L MTP3N50  |
| IRF833R  | NME          | T0220 Dd         | 450V            | 4A             | 150C           | 75WC             | 2/4V  | 250µA                                  | 2.7Snn            | 2R0                 | 600Pt            | 20Pt             | IMS | HRS |                   |
| IRF840   | NME          | T0220 Dd         | 500V            | 8A             | 150C           | 125WC            | 2/4V  | -                                      | 4Snn              | 0R85                | 1N6              | 150P             | RHH | IRC | VN2350N5 MTP8N50  |
| IRF840FI | NME          | ISO220 D         | 500V            | 4.5A           | 150C           | 40WC             | 2/4V  | 250µA                                  | 4.9Snn            | 0R85                | 1N5              | 110P             | IMS | SGS |                   |
| IRF840R  | NME          | T0220 Dd         | 500V            | 8A             | 150C           | 125WC            | 2/4V  | -                                      | 4.9Snn            | 0R85                | 1N225tp          | 85Pt             | IHS | HRS |                   |
| IRF841   | NME          | T0220 Dd         | 450V            | 8A             | 150C           | 125WC            | 2/4V  | -                                      | 4.9Snn            | 0R85                | 1N6              | 150P             | RHH | IRC | VN2345N5 MTP8N50  |
| IRF841FI | NME          | ISO220 D         | 450V            | 4.5A           | 150C           | 40WC             | 2/4V  | 250µA                                  | 4.9Snn            | 0R85                | 1N5              | 110P             | IMS | SGS |                   |
| IRF841R  | NME          | T0220 Dd         | 450V            | 8A             | 150C           | 125WC            | 2/4V  | 250µA                                  | 4.9Snn            | 0R85                | 1N225tp          | 85Pt             | IHS | HRS |                   |
| IRF842   | NME          | T0220 Dd         | 500V            | 7A             | 150C           | 125WC            | 2/4V  | -                                      | 4.9Snn            | 1R1                 | 1N6              | 150P             | RHH | IRC | VN2350N5 MTP8N50  |
| IRF842R  | NME          | T0220 Dd         | 500V            | 7A             | 150C           | 125WC            | 2/4V  | 250µA                                  | 4.9Snn            | 1R1                 | 1N225tp          | 85Pt             | IHS | HRS |                   |
| IRF843   | NME          | T0220 Dd         | 450V            | 7A             | 150C           | 125WC            | 2/4V  | -                                      | 4.9Snn            | 1R1                 | 1N6              | 150P             | RHH | IRC | VN2345N5 MTP8N50  |
| IRF843R  | NME          | T0220 Dd         | 450V            | 7A             | 150C           | 125WC            | 2/4V  | 250µA                                  | 4.9Snn            | 1R1                 | 1N225tp          | 85Pt             | IHS | HRS |                   |
| IRF5522  | -ME          | T0220 Dd         | 100V            | 12A            | 150C           | 40WC             | NF5522+                                     | PF5522                                 | MATCHED           | PAIR                | -                | -                | MPP | IRC |                   |
| IRF5523  | -ME          | T0220 Dd         | 60V             | 12A            | 150C           | 40WC             | NF5523+                                     | PF5523                                 | MATCHED           | PAIR                | -                | -                | MPP | IRC |                   |
| IRF5532  | -ME          | T0220 Dd         | 100V            | 25A            | 150C           | 75WC             | NF5532+                                     | PF5532                                 | MATCHED           | PAIR                | -                | -                | MPP | IRC |                   |
| IRF5533  | -ME          | T0220 Dd         | 60V             | 25A            | 150C           | 75WC             | NF5533+                                     | PF5533                                 | MATCHED           | PAIR                | -                | -                | MPP | IRC |                   |
| IRF9130  | PME          | T03 C            | 100V            | 12A            | 150C           | 75WC             | 2/4V  | -                                      | 2Snn              | 0R3                 | 700P             | 200P             | RHG | IRC | ZVP1210M RFM12P10 |
| IRF9131  | PME          | T03 C            | 60V             | 12A            | 150C           | 75WC             | 2/4V  | -                                      | 2Snn              | 0R3                 | 700P             | 200P             | RHG | IRC | ZVP1206M RFM12P08 |
| IRF9132  | PME          | T03 C            | 100V            | 10A            | 150C           | 75WC             | 2/4V  | -                                      | 2Snn              | 0R4                 | 700P             | 200P             | RHG | IRC | ZVP1210M RFM8P10  |
| IRF9133  | PME          | T03 C            | 60V             | 10A            | 150C           | 75WC             | 2/4V  | -                                      | 2Snn              | 0R4                 | 700P             | 200P             | RHG | IRC | ZVP1206M RFM8P08  |
| IRF9140  | PME          | T03 C            | 100V            | 19A            | 150C           | 125WC            | 2/4V  | 250µA                                  | 5Snn              | 0R2                 | 1N3              | 400P             | IHS | IRC | RFK25P10 SMM20P10 |
| IRF9141  | PME          | T03 C            | 60V             | 19A            | 150C           | 125WC            | 2/4V  | 250µA                                  | 5Snn              | 0R2                 | 1N3              | 400P             | IHS | IRC | RFK25P08 SMM20P10 |
| IRF9142  | PME          | T03 C            | 100V            | 15A            | 150C           | 125WC            | 2/4V  | 250µA                                  | 5Snn              | 0R3                 | 1N3              | 400P             | IHS | IRC | RFM12P10 SMM20P10 |
| IRF9143  | PME          | T03 C            | 60V             | 15A            | 150C           | 125WC            | 2/4V  | 250µA                                  | 5Snn              | 0R3                 | 1N3              | 400P             | IHS | IRC | RFM12P08 SMM20P10 |
| IRF9150  | PME          | T03 C            | 100V            | 25A            | 150C           | 150WC            | 2/4V  | 250µA                                  | 4Snn              | 0R15                | 2N4tp            | 400Pt            | IHS | HRS |                   |
| IRF9151  | PME          | T03 C            | 60V             | 25A            | 150C           | 150WC            | 2/4V  | 250µA                                  | 4Snn              | 0R15                | 2N4tp            | 400Pt            | IHS | HRS |                   |
| IRF9230  | PME          | T03 C            | 200V            | 6.5A           | 150C           | 75WC             | 2/4V  | -                                      | 2200mSmn          | 0R8                 | 650P             | 90P              | RHH | IRC | VN1220N1          |
| IRF9231  | PME          | T03 C            | 150V            | 6.5A           | 150C           | 75WC             | 2/4V  | -                                      | 2200mSmn          | 0R8                 | 650P             | 90P              | RHH | IRC | VN1215N1 RFM10P15 |
| IRF9232  | PME          | T03 C            | 200V            | 5.5A           | 150C           | 75WC             | 2/4V  | -                                      | 2200mSmn          | 1R2                 | 650P             | 90P              | RHH | IRC | VN1220N1 RFM10P15 |
| IRF9233  | PME          | T03 C            | 150V            | 5.5A           | 150C           | 75WC             | 2/4V  | -                                      | 2200mSmn          | 1R2                 | 650P             | 90P              | RHH | IRC | VN1215N1 RFM5P15  |
| IRF9240  | PME          | T03 C            | 200V            | 11A            | 150C           | 125WC            | 2/4V  | 250µA                                  | 4Snn              | 0R5                 | 1N3              | 250P             | IHS | IRC | SMM11P20 RFM10P15 |
| IRF9241  | PME          | T03 C            | 150V            | 11A            | 150C           | 125WC            | 2/4V  | 250µA                                  | 4Snn              | 0R5                 | 1N3              | 250P             | IHS | IRC | SMM11P20 RFM10P15 |
| IRF9242  | PME          | T03 C            | 200V            | 9A             | 150C           | 125WC            | 2/4V  | 250µA                                  | 4Snn              | 0R7                 | 1N3              | 250P             | IHS | IRC | RFM10P15 SMM11P20 |
| IRF9243  | PME          | T03 C            | 150V            | 9A             | 150C           | 125WC            | 2/4V  | 250µA                                  | 4Snn              | 0R7                 | 1N3              | 250P             | IHS | IRC | RFM10P15 SMM9P15  |
| IRF9510  | PME          | T0220 Dd         | 100V            | 3A             | 150C           | 20WC             | 2/4V  | 250µAmx                                | 800mSmn           | 1R2                 | 250P             | 35P              | IMS | IRC | RFP5P12 SMP3P10   |
| IRF9511  | PME          | T0220 Dd         | 60V             | 3A             | 150C           | 20WC             | 2/4V  | 250µAmx                                | 800mSmn           | 1R2                 | 250P             | 35P              | IMS | IRC | RFP5P12 SMP3P10   |
| IRF9512  | PME          | T0220 Dd         | 100V            | 2.5A           | 150C           | 20WC             | 2/4V  | 250µAmx                                | 800mSmn           | 1R6                 | 250P             | 35P              | IMS | IRC | RFP5P12 SMP3P10   |
| IRF9513  | PME          | T0220 Dd         | 60V             | 2.5A           | 150C           | 20WC             | 2/4V  | 250µAmx                                | 800mSmn           | 1R6                 | 250P             | 35P              | IMS | IRC | RFD5P12 SMP3P06   |
| IRF9520  | PME          | T0220 Dd         | 100V            | 6A             | 150C           | 40WC             | 2/4V  | -                                      | 900mSmn           | 0R6                 | 450P             | 100P             | RHG | IRC | ZVP1110L RFP6P10  |
| IRF9521  | PME          | T0220 Dd         | 60V             | 6A             | 150C           | 40WC             | 2/4V  | -                                      | 900mSmn           | 0R6                 | 450P             | 100P             | RHG | IRC | ZVP1106L RFP6P08  |
| IRF9522  | PME          | T0220 Dd         | 100V            | 5A             | 150C           | 40WC             | 2/4V  | -                                      | 900mSmn           | 0R8                 | 450P             | 100P             | RHG | IRC | ZVP1110L RFP6P10  |
| IRF9523  | PME          | T0220 Dd         | 60V             | 5A             | 150C           | 40WC             | 2/4V  | -                                      | 900mSmn           | 0R8                 | 450P             | 100P             | RHG | IRC | ZVP1116L RFP6P08  |
| IRF9530  | PME          | T0220 Dd         | 100V            | 12A            | 150C           | 75WC             | 2/4V  | -                                      | 2Snn              | 0R3                 | 700P             | 200P             | RHG | IRC | ZVP1210L RFP12P10 |
| IRF9531  | PME          | T0220 Dd         | 60V             | 12A            | 150C           | 75WC             | 2/4V  | -                                      | 2Snn              | 0R3                 | 700P             | 200P             | RHG | IRC | ZVP1206L RFP12P08 |
| IRF9532  | PME          | T0220 Dd         | 100V            | 10A            | 150C           | 75WC             | 2/4V  | -                                      | 2Snn              | 0R4                 | 700P             | 200P             | RHG | IRC | ZVP1210L RFP8P10  |
| IRF9533  | PME          | T0220 Dd         | 60V             | 10A            | 150C           | 75WC             | 2/4V  | -                                      | 2Snn              | 0R4                 | 700P             | 200P             | RHG | IRC | ZVP1206L RFP8P08  |
| IRF9540  | PME          | T0220 Dd         | 100V            | 19A            | 150C           | 125WC            | 2/4V  | 250µAmx                                | 5Snn              | 0R2                 | 1N3              | 400P             | IHS | IRC | SMP20P10          |
| IRF9541  | PME          | T0220 Dd         | 60V             | 19A            | 150C           | 125WC            | 2/4V  | 250µAmx                                | 5Snn              | 0R2                 | 1N3              | 400P             | IHS | IRC | SMP20P10          |
| IRF9542  | PME          | T0220 Dd         | 100V            | 15A            | 150C           | 125WC            | 2/4V  | 250µAmx                                | 5Snn              | 0R3                 | 1N3              | 400P             | IHS | IRC | RFP12P10          |
| IRF9543  | PME          | T0220 Dd         | 60V             | 15A            | 150C           | 125WC            | 2/4V  | 250µAmx                                | 5Snn              | 0R3                 | 1N3              | 400P             | IHS | IRC | RFP12P08          |
| IRF9610  | PME          | T03 C            | 200V            | 1.75A          | 150C           | 20WC             | 2/4V  | -                                      | 900mSmn           | 3R0                 | 300P             | 35P              | RHH | IRC | VN1120N5 SMP2P20  |
| IRF9611  | PME          | T03 C            | 150V            | 1.75A          | 150C           | 20WC             | 2/4V  | -                                      | 900mSmn           | 3R0                 | 300P             | 35P              | RHH | IRC | VN1115N5 RFP5P15  |
| IRF9612  | PME          | T03 C            | 200V            | 1.5A           | 150C           | 20WC             | 2/4V  | -                                      | 900mSmn           | 4R0                 | 300P             | 35P              | RHH | IRC | VN1120N5 SMP2P20  |
| IRF9613  | PME          | T03 C            | 150V            | 1.5A           | 150C           | 20WC             | 2/4V  | -                                      | 900mSmn           | 4R0                 | 300P             | 35P              | RHH | IRC | VN1115N5 RFP5P15  |
| IRF9620  | PME          | T0220 Dd         | 200V            | 3.5A           | 150C           | 40WC             | 2/4V  | -                                      | 1Snn              | 1R5                 | 400P             | 45P              | RHH | IRC | VN1220N5          |
| IRF9621  | PME          | T0220 Dd         | 150V            | 3.5A           | 150C           | 40WC             | 2/4V  | -                                      | 1Snn              | 1R5                 | 400P             | 45P              | RHH | IRC | VN1125N5 RFP6P08  |
| IRF9622  | PME          | T0220 Dd         | 200V            | 3A             | 150C           | 40WC             | 2/4V  | -                                      | 1Snn              | 2R4                 | 400P             | 45P              | RHH | IRC | VN1220N5          |
| IRF9623  | PME          | T0220 Dd         | 150V            | 3A             | 150C           | 40WC             | 2/4V  | -                                      | 1Snn              | 2R4                 | 400P             | 45P              | RHH | IRC | VN1215N5 RFP6P08  |
| IRF9630  | PME          | T0220 Dd         | 200V            | 6.5A           | 150C           | 75WC             | 2/4V  | -                                      | 2200mSmn          | 0R8                 | 650P             | 90P              | RHH | IRC |                   |
| IRF9631  | PME          | T0220 Dd         | 150V            | 6.5A           | 150C           | 75WC             | 2/4V  | -                                      | 2200mSmn          | 0R8                 | 650P             | 90P              | RHH | IRC | RFP12P08          |
| IRF9632  | PME          | T0220 Dd         | 200V            | 5.5A           | 150C           | 75WC             | 2/4V  | -                                      | 2200mSmn          | 1R2                 | 650P             | 90P              | RHH | IRC |                   |
| IRF9633  | PME          | T0220 Dd         | 150V            | 5.5A           | 150C           | 75WC             | 2/4V  | -                                      | 2200mSmn          | 1R2                 | 650P             | 90P              | RHH | IRC | RFP12P08          |
| IRF9640  | PME          | T0220 Dd         | 200V            | 11A            | 150C           | 125WC            | 2/4V  | 250µAmx                                | 4Snn              | 0R5                 | 1N3              | 250P             | IHS | IRC | SMP11P20          |
| IRF9641  | PME          | T0220 Dd         | 150V            | 11A            | 150C           | 125WC            | 2/4V  | 250µAmx                                | 4Snn              | 0R5                 | 1N3              | 250P             | IHS | IRC | RFP10P15          |
| IRF9642  | PME          | T0220 Dd         | 200V            | 9A             | 150C           | 125WC            | 2/4V  | 250µAmx                                | 4Snn              | 0R7                 | 1N3              | 250P             | IHS | IRC | SMP11P20          |
| IRF9643  | PME          | T0220 Dd         | 150V            | 9A             | 150C           | 125WC            | 2/4V  | 250µAmx                                | 4Snn              | 0R7                 | 1N3              | 250P             | IHS | IRC | RFP10P15          |
| IRFAC30  | NME          | T03 C            | 600V            | 3.6A           | 150C           | 74WC             | 2/4V  | 250µA                                  | 2.4Snn            | 2R2                 | 630Pt            | 15P              | IHS | IRC |                   |
| IRFAC32  | NME          | T03 C            | 600V            | 3.2A           | 150C           | 74WC             | 2/4V  | 250µA                                  | 2.4Snn            | 2R7                 | 630Pt            | 15P              | IHS | IRC |                   |
| IRFAC40  | NME          | T03 C            | 600V            | 6.2A           | 150C           | 125WC            | 2/4V  | 250µA                                  | 4.7Snn            | 1R2                 | 1N3              | 30P              | IHS | IRC | SML601R3AN        |
| IRFAC40R | NME          | T03 C            | 600V            | 6.2A           | 150C           | 125WC            | 2/4V  | 250µA                                  | 4.7Snn            | 1R2                 | 1N3tp            | 30Pt             | IHS | HRS |                   |
| IRFAC42  | NME          | T03 C            | 600V            | 5.4A           | 150C           | 125WC            | 2/4V  | 250µA                                  | 4.7Snn            | 1R6                 | 1N3              | 30P              | IHS | IRC | SML601R6AN        |
| IRFAC42R | NME          | T03 C            | 600V            | 5.4A           | 150C           | 125WC            | 2/4V  | 250µA                                  | 4.7Snn            | 1R6                 | 1N3tp            | 30Pt             | IHS | HRS |                   |