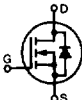


HiPerFET™ Power MOSFETs

Low Gate-Charge
Types = Suffix Q



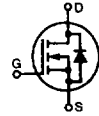
Avalanche rated with Fast Intrinsic Diode

| V_{DS} Max. V | $I_{D(on)}$ $T_c=25^\circ\text{C}$ A | $R_{DS(on)}$ $T_c=25^\circ\text{C}$ m Ω | $Q_{g(on)}$ typ. nc | ISOPLUS220™ (C)  | ISOPLUS247™ (R)  | TO268 (T)  | TO264 (K)  | SOT227B (N)  |
|-----------------------|--|--|---------------------------|--|--|--|---|--|
| New | 60 | (1)180 | 0.005 | 420 | | IXFR180N06 | | |
| | | (1)340 | 0.003 | 600 | | | | IXFN340N06 |
| 70 | | 76 | 0.011 | 240 | | IXFH76N07-11 | | |
| | | 76 | 0.012 | 240 | | IXFH76N07-12 | | |
| | | (1)180 | 0.007 | 480 | | | | IXFN180N07 |
| | | (1)200 | 0.006 | 480 | | | | IXFN200N07 |
| | | (1)180 | 0.006 | 420 | | IXFX180N07 | IXFK180N07 | |
| | | (1)180 | 0.006 | 420 | | IXFR180N07 | | |
| | | (1)280 | 0.006 | 420 | | | | IXFN280N07 |
| | (1)340 | 0.004 | 600 | | | | IXFN340N07 | |
| 80 | | 80 | 0.009 | 180 | | IXFH80N08 | IXFT80N08 | |
| | | 85 | 0.009 | 180 | IXFC80N085 | IXFH80N085 | IXFT80N085 | |
| 85 | | (1)180 | 0.007 | 320 | | IXFX180N085 | | IXFK180N085 |
| | | (1)180 | 0.007 | 320 | | IXFR180N085 | | |
| | | 280 | 0.0044 | 600 | | IXFH280N085 | | |
| 100 | | 75 | 0.025 | 180 | | | | IXFM75N10 |
| | | 75 | 0.025 | 180 | | | | IXFM75N10 |
| | | 75 | 0.02 | 180 | | IXFH75N10 | | |
| | | 75 | 0.02 | 140 | | IXFH75N10Q | | |
| | | 76 | 0.015 | 180 | | IXFR80N10Q | | |
| | | (1)80 | 0.015 | 180 | | IXFH80N10Q | IXFT80N10Q | |
| | | 80 | 0.0125 | 230 | IXFC80N10 | IXFH80N10Q | IXFT80N10 | |
| | | 80 | 0.0125 | 230 | | IXFH80N10 | | |
| | | (1)100 | 0.0125 | 180 | | | | IXFN100N10S1(2) |
| | | (1)100 | 0.0125 | 180 | | | | IXFN100N10S2(2) |
| | (1)100 | 0.0125 | 180 | | | | IXFN100N10S3(2) | |
| | (1)176 | 0.008 | 360 | | | | IXFE180N10 | |
| | (1)180 | 0.008 | 360 | | IXFX180N10 | | IXFK180N10 | |
| | (1)180 | 0.008 | 360 | | IXFR180N10 | | IXFN180N10 | |
| | (1)230 | 0.006 | 690 | | | | IXFN230N10 | |
| 150 | | 67 | 0.028 | 180 | | IXFR70N15 | | |
| | | 70 | 0.028 | 180 | | IXFH70N15 | IXFT70N15 | |
| | | 75 | 0.0225 | 180 | | IXFR80N15Q | | |
| | | 80 | 0.0225 | 180 | | IXFH80N15Q | IXFT80N15Q | IXFK80N15Q |
| | | (1)105 | 0.0125 | 360 | | IXFR150N15 | | |
| | | (1)150 | 0.0125 | 360 | | IXFX150N15 | | IXFK150N15 |
| 200 | | 50 | 0.04 | 98 | | IXFR58N20Q | | |
| | | 50 | 0.045 | 190 | | IXFH50N20 | | IXFM50N20 |
| | | 58 | 0.04 | 190 | | IXFH58N20 | IXFT58N20 | |
| | | 58 | 0.04 | 98 | | IXFH58N20Q | IXFT58N20Q | |
| | | 60 | 0.033 | 155 | IXFC60N20 | IXFH60N20 | IXFT60N20 | |

Foot notes: explanations see page 27

HiPerFET™ Power MOSFETs

Low Gate-Charge
Types = Suffix Q



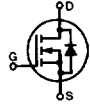
Avalanche rated with Fast Intrinsic Diode

| V_{DS} Max. V | $I_{D(Cont)}$ $T_c=25^\circ\text{C}$ A | $R_{DS(on)}$ $T_c=25^\circ\text{C}$ m Ω | $Q_{G(on)}$ typ. nC | ISOPLUS220™ (C)  | ISOPLUS247™ (R)  | TO268 (T)  | TO264 (K)  | SOT227B (N)  | |
|-----------------------|--|--|---------------------------|--|--|--|---|--|--|
| New 200 | 74 | 0.3 | 280 | | IXFH74N20 | IXFT74N20 | | | |
| | 80 | 0.03 | 280 | | | | IXFK80N20 | | |
| | 80 | 0.028 | 180 | | IXFR80N20Q IXFH80N20Q | IXFT80N20Q | IXFK80N20Q | | |
| | 90 | 0.022 | 140 | | IXFR90N20 IXFX90N20Q | IXFK90N20Q | | | |
| | 90 | 0.022 | 190 | | | | | | |
| | 120 | 0.017 | 360 | | IXFX120N20 | IXFK120N20 | | IXFN120N20 | |
| | 105 | 0.017 | 360 | | IXFR120N20 | | | | |
| 180 | 0.01 | 380 | | | | | IXFN180N20 | | |
| 250 | 60 | 0.047 | 180 | | ▶IXFH60N25Q | ▶IXFT60N25Q | IXFK60N25Q | | |
| | 87 | 0.027 | 300 | | ▶IXFR100N25 | | | | |
| | 100 | 0.027 | 300 | | IXFX100N25 | | IXFK100N25 | IXFN100N25 | |
| 300 | 35 | 0.085 | 95 | ▶IXFC40N30Q | | | | | |
| | 40 | 0.085 | 177 | | IXFH40N30 IXFH40N30Q | IXFT40N30Q IXFJ40N30 IXFM40N30 | | | |
| | 40 | 0.085 | 95 | | | | | | |
| | 40 | 0.085 | 177 | | | | | | |
| | 40 | 0.088 | 177 | | | | | | |
| | 52 | 0.06 | 150 | | IXFH52N30Q | IXFT52N30Q | IXFK52N30Q | | |
| | 66 | 0.046 | 190 | | | | | IXFE73N30Q | |
| | 73 | 0.042 | 190 | | ▶IXFX73N30Q | | ▶IXFK73N30Q IXFK73N30 | IXFN73N30Q IXFN73N30 | |
| | 73 | 0.045 | 360 | | | | | | |
| 75 | 0.033 | 360 | | IXFR90N30 | | | | | |
| 90 | 0.033 | 360 | | IXFX90N30 | | IXFK90N30 | IXFN90N30 | | |
| 130 | 0.018 | 380 | | | | | IXFN130N30 | | |
| 400 | 30 | 0.16 | 95 | | ▶IXFH30N40Q | ▶IXFT30N40Q ▶IXFM30N40Q | | | |
| 500 | 13 | 0.4 | 110 | ▶IXFC13N50Q | | IXFH13N50 IXFJ13N50 | IXFM13N50 | | |
| | 13 | 0.4 | 110 | | | | | | |
| | 21 | 0.25 | 90 | | IXFH21N50Q | IXFT21N50Q | ▶FDM21-05QC ⁽⁴⁾ ▶FMD21-05QC ⁽⁴⁾ | | |
| | 21 | 0.25 | 95 | | | | | | |
| | 21 | 0.25 | 95 | | | | | | |
| | 21 | 0.25 | 135 | | | | | | |
| | 21 | 0.23 | 135 | ▶IXFC24N50 | | IXFM21N50 ⁽³⁾ | | | |
| | 22 | 0.23 | 95 | | IXFR24N50Q IXFR24N50 IXFH24N50 IXFH24N50Q | IXFT24N50Q | | | |
| | 22 | 0.23 | 135 | | | | | | |
| | 24 | 0.23 | 135 | | | | | | |
| | 24 | 0.23 | 135 | | | | | | |
| | 23 | 0.2 | 135 | ▶IXFC26N50 | | | | | |
| | 24 | 0.2 | 95 | | IXFR26N50Q IXFR26N50 | | | | |
| 24 | 0.2 | 95 | | | | | | | |
| 26 | 0.2 | 135 | | IXFH26N50 IXFH26N50Q | IXFT26N50 IXFT26N50Q | | | | |
| 26 | 0.2 | 95 | | | | | | | |

Foot notes: explanations see page 27

HiPerFET™ Power MOSFETs

Low Gate-Charge
Types = Suffix Q

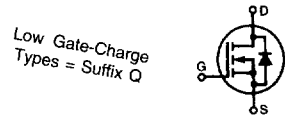


Avalanche rated with Fast Intrinsic Diode

| V_{DSS} Max. V | $I_{D(ON)}$ $T_c=25^\circ\text{C}$ A | $R_{DS(ON)}$ $T_c=25^\circ\text{C}$ m Ω | $Q_{G(ON)}$ typ. nC | ISOPLUS220™ (C) | ISOPLUS247™ (R) | TO268 (T) | TO264 (K) | SOT227B (N) | |
|------------------------|--|--|---------------------------|---------------------|---------------------|---|---------------------------------------|------------------------------------|--|
| ▶ New | 500 | 30 | 0.16 | 153 | | IXFR30N50Q IXFR32N50Q IXFH30N50Q IXFH30N50 IXFX30N50Q | IXFT30N50Q IXFT30N50 | IXFK30N50Q | |
| | | 30 | 0.15 | 153 | | IXFH32N50 IXFH32N50Q IXFX32N50Q | IXFT32N50 IXFT32N50Q IXFJ32N50Q | IXFK32N50Q | |
| | | 30 | 0.16 | 153 | | | | IXFK33N50 | |
| | | 30 | 0.16 | 227 | | | | IXFK35N50 | |
| | | 30 | 0.16 | 153 | | | | | |
| | | 32 | 0.15 | 227 | | | | | |
| | | 32 | 0.15 | 153 | | | | | |
| | | 32 | 0.15 | 153 | | | | | |
| | | 32 | 0.15 | 153 | | | | | |
| | | 33 | 0.16 | 227 | | | | | |
| | | 35 | 0.15 | 227 | | | | | |
| | | 34 | 0.12 | 190 | | IXFR44N50Q | | | |
| | | 40 | 0.1 | 190 | | IXFR48N50Q | | | |
| | | 43 | 0.1 | 330 | | IXFR50N50 | | | |
| | | 44 | 0.12 | 270 | | | | IXFK44N50(3) | IXFN44N50(3) IXFN44N50U2(2) IXFN44N50U3(2) IXFN44N50Q |
| | | 44 | 0.12 | 270 | | | | | |
| | | 44 | 0.12 | 270 | | IXFX44N50Q | | IXFK44N50Q | |
| | | 44 | 0.12 | 190 | | | | | |
| | | 42 | 0.1 | 190 | | | | | IXFE48N50Q |
| | | 48 | 0.1 | 190 | | IXFX48N50Q | | IXFK48N50Q IXFK48N50 | IXFN48N50Q IXFN48N50 |
| | 48 | 0.1 | 270 | | | | | IXFE48N50QD2(2) IXFE48N50QD3(2) | |
| | 42 | 0.1 | 190 | | | | | | |
| | 48 | 0.1 | 270 | | | | | IXFN48N50U2(2) IXFN48N50U3(2) | |
| | 48 | 0.1 | 270 | | | | | | |
| | 48 | 0.08 | 330 | | IXFR55N50 | | | | |
| | 50 | 0.085 | 330 | | | | | ▶ IXFE55N50 | |
| | 50 | 0.1 | 330 | | IXFX50N50 | | IXFK50N50 | IXFN50N50 | |
| | 55 | 0.08 | 330 | | IXFX55N50 | | IXFK55N50 | IXFN55N50 | |
| | 72 | 0.055 | 380 | | | | | ▶ IXFE80N50 | |
| | 75 | 0.055 | 380 | | | | | ▶ IXFN75N50 | |
| | 80 | 0.05 | 380 | | | | | IXFN80N50 | |
| | 550 | 22 | 0.27 | 150 | | IXFH22N55 | | | |
| | | 48 | 0.11 | 330 | | IXFX48N55 | | IXFK48N55 | IXFN48N55 |
| | 600 | 20 | 0.35 | 151 | | IXFH20N60 IXFH20N60Q | IXFM20N60 IXFT20N60Q | | |
| | | 20 | 0.35 | 95 | | | | | |
| | | 23 | 0.25 | 150 | | IXFR26N60Q | | | |
| | | 28 | 0.25 | 150 | | IXFH26N60Q | IXFT26N60Q | IXFK26N60Q | |
| | 32 | 0.25 | 325 | | | | IXFK32N60(3) | IXFN32N60(3) | |

Foot notes: explanations see page 27

HiPerFET™ Power MOSFETs



Avalanche rated with Fast Intrinsic Diode

| V _{DSS} Max. V | I _{D(on)} T _c =25°C A | R _{DS(on)} T _c =25°C mΩ | Q _{G(on)} typ. nc | ISOPLUS220™ (C) | | ISOPLUS247™ (R) | TO-268 (T) | TO264 (K) | SOT227B (N) |
|-------------------------------|---|---|----------------------------------|-----------------|---------------|--------------------|---------------|----------------------|-------------------|
| | | | | TO-263 (A) | TO-220 (P) | PLUS247™ (X) | I3PAK (J)* | ISOPLUSI4-Pac (F) | ISOPLUS227 (E) |
| New 600 | 36 | 0.18 | 325 | | | | | | |
| | 38 | 0.13 | 330 | | | IXFR44N60 | | IXFK36N60 | IXFN36N60 |
| | 40 | 0.13 | 330 | | | | | | IXFE44N60 |
| | 44 | 0.13 | 330 | | | IXFX44N60 | | IXFK44N60 | IXFN44N60 |
| | 60 | 0.08 | 380 | | | | | | IXFN60N60 |
| 800 | 3.6 | 3.6 | 24 | IXFA3N80 | | | | | |
| | 3.6 | 3.6 | 24 | IXFP3N80 | | | | | |
| | 7 | 1.4 | 110 | | | IXFH7N80(3) | IXFM7N80(3) | | |
| | 8 | 1.1 | 85 | | | IXFH8N80 | | | |
| | 9 | 1.1 | 56 | | | IXFH9N80Q | | | |
| | 9 | 0.9 | 85 | | | IXFH9N80 | | | |
| | 11 | 0.95 | 128 | | | IXFH11N80(3) | IXFM11N80(3) | | |
| | 13 | 0.8 | 90 | | | IXFH13N80Q | IXFT13N80Q | | |
| | 13 | 0.8 | 128 | | | IXFH13N80 | IXFM13N80 | | |
| | 14 | 0.7 | 128 | | | IXFH14N80 | | | |
| | 15 | 0.6 | 128 | | | IXFH15N80 | | | |
| | 15 | 0.6 | 90 | | | IXFH15N80Q | IXFT15N80Q | | |
| | 13 | 0.6 | 90 | | | IXFR15N80Q | | | |
| | 20 | 0.42 | 150 | | | IXFH20N80Q | IXFT20N80Q | IXFK20N80Q | |
| | 27 | 0.32 | 170 | | | IXFR27N80Q | | IXFK27N80Q | IXFN27N80Q |
| 27 | 0.32 | 170 | | | IXFX27N80Q | | IXFK27N80 | IXFN27N80 | |
| 27 | 0.32 | 350 | | | | | | | |
| 28 | 0.24 | 270 | | | IXFR34N80 | | | | |
| 34 | 0.24 | 270 | | | IXFX34N80 | | IXFK34N80 | IXFN34N80 | |
| 44 | 0.145 | 380 | | | | | | IXFN44N80 | |
| 900 | 6 | 1.8 | 88 | | | IXFH6N90(3) | IXFM6N90(3) | | |
| | 7 | 1.5 | 56 | | | IXFH7N90Q | IXFT7N90Q | | |
| | 10 | 1.1 | 155 | | | IXFH10N90(3) | IXFM10N90(3) | | |
| | 12 | 0.9 | 155 | | | IXFH12N90 | IXFM12N90 | | |
| | 12 | 0.9 | 90 | | | IXFH12N90Q | IXFT12N90Q | | |
| | 13 | 0.8 | 155 | | | IXFH13N90 | | | |
| | 16 | 0.65 | 133 | | | IXFH16N90Q | IXFT16N90Q | IXFK16N90Q | |
| | 24 | 0.45 | 170 | | | IXFX24N90Q | | IXFK24N90Q | IXFN24N90Q |
| | 25 | 0.33 | 240 | | | IXFX25N90 | | IXFK25N90 | IXFN25N90 |
| | 26 | 0.3 | 240 | | | IXFX26N90 | | IXFK26N90 | IXFN26N90 |
| | 35 | 0.25 | 390 | | | | | | IXFE39N90 |
| 39 | 0.2 | 390 | | | | | | IXFN39N90 | |
| 1000 | 4 | 2.8 | 39 | IXFA4N100Q | IXFH4N100Q | IXFT4N100Q | | | |
| | 4 | 2.8 | 39 | IXFP4N100Q | | | | | |
| | 3.5 | 2.8 | 39 | | | IXFR4N100Q | | | |

Foot notes: explanations see page 27