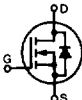


# HiPerFET™ Power MOSFETs

Low Gate-Charge  
Types = Suffix Q



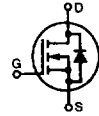
Avalanche rated with Fast Intrinsic Diode

$V_{DS}$ Max. V	$I_{D(on)}$ $T_c=25^\circ\text{C}$ A	$R_{DS(on)}$ $T_c=25^\circ\text{C}$ m $\Omega$	$Q_{g(on)}$ 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				▶FMM75-01F(4)	
	75	0.025	180				▶FMK75-01F(4)	
	75	0.02	180		IXFH75N10	IXFM75N10		
	75	0.02	140		IXFH75N10Q			
	76	0.015	180		▶IXFR80N10Q			
	(1)80	0.015	180					
	80	0.0125	230	▶IXFC80N10	IXFH80N10Q	IXFT80N10Q		
	80	0.0125	230		IXFH80N10	IXFT80N10		
	(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	IXFN180N10
	(1)180	0.008	360		IXFR180N10			
	(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	IXFN150N15
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



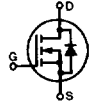
Avalanche rated with Fast Intrinsic Diode

$V_{DS}$ Max. V	$I_{D(Cont)}$ $T_c=25^\circ\text{C}$ A	$R_{DS(on)}$ $T_c=25^\circ\text{C}$ m $\Omega$	$Q_{G(on)}$ 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 <sup>(4)</sup> ▶FMD21-05QC <sup>(4)</sup>		
	21	0.25	95						
	21	0.25	95						
	21	0.25	135						
	21	0.23	135	▶IXFC24N50		IXFM21N50 <sup>(3)</sup>			
	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

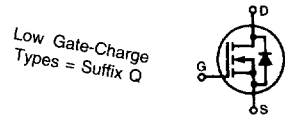


Avalanche rated with Fast Intrinsic Diode

V <sub>DSS</sub> Max. V	I <sub>D(cont)</sub> T <sub>c</sub> =25°C A	R <sub>DS(on)</sub> T <sub>c</sub> =25°C mΩ	Q <sub>g(on)</sub> typ. nc	ISOPLUS220™ (C)		ISOPLUS247™ (R)	TO268 (T)	TO264 (K)	SOT227B (N)
				TO-263 (A)	TO-220 (P)	PLUS247™ (X)	I3PAK (J)*	ISOPLUSI4-Pac (F)	ISOPLUS227 (E)
▶ New	500	30	0.16	153					
	30	0.15	153						
	30	0.16	153						
	30	0.16	227						
	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						
	40	0.1	190						
	43	0.1	330						
	44	0.12	270						
	44	0.12	270						
	44	0.12	270						
	44	0.12	190						
	42	0.1	190						
	48	0.1	190						
48	0.1	270							
42	0.1	190							
42	0.1	190							
48	0.1	270							
48	0.1	270							
48	0.08	330							
50	0.085	330							
50	0.1	330							
55	0.08	330							
72	0.055	380							
75	0.055	380							
80	0.05	380							
550	22	0.27	150						
48	0.11	330							
600	20	0.35	151						
20	0.35	95							
23	0.25	150							
28	0.25	150							
32	0.25	325							

Foot notes: explanations see page 27

# HiPerFET™ Power MOSFETs



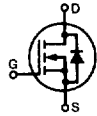
## Avalanche rated with Fast Intrinsic Diode

V <sub>DSS</sub> Max. V	I <sub>D(on)</sub> T <sub>c</sub> =25°C A	R <sub>DS(on)</sub> T <sub>c</sub> =25°C mΩ	Q <sub>G(on)</sub> 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)	
<b>New</b> 600	36	0.18	325						IXFK36N60	IXFN36N60
	38	0.13	330							
	40	0.13	330							IXFE44N60
	44	0.13	330						IXFK44N60	IXFN44N60
	60	0.08	380							IXFN60N60
800	3.6	3.6	24	IXFA3N80						
	3.6	3.6	24	IXFP3N80						
	7	1.4	110							
	8	1.1	85							
	9	1.1	56							
	9	0.9	85							
	11	0.95	128							
	13	0.8	90							
	13	0.8	128							
	14	0.7	128							
	15	0.6	128							
	15	0.6	90							
	13	0.6	90							
	20	0.42	150							
	27	0.32	170							
27	0.32	170								
27	0.32	350								
28	0.24	270								
34	0.24	270								
44	0.145	380								
900	6	1.8	88							
	7	1.5	56							
	10	1.1	155							
	12	0.9	155							
	12	0.9	90							
	13	0.8	155							
	16	0.65	133							
	24	0.45	170							
	25	0.33	240							
	26	0.3	240							
	35	0.25	390							
39	0.2	390								
1000	4	2.8	39	IXFA4N100Q	IXFH4N100Q	IXFT4N100Q				
	4	2.8	39	IXFP4N100Q						
	3.5	2.8	39							

Foot notes: explanations see page 27

# HiPerFET™ Power MOSFETs

Low Gate-Charge  
Types = Suffix Q



Avalanche rated with Fast Intrinsic Diode

V <sub>DSS</sub> Max. V	I <sub>D(Cont)</sub> T <sub>c</sub> =25°C A	R <sub>DS(on)</sub> T <sub>c</sub> =25°C mΩ	Q <sub>G(on)</sub> 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	1000	6 6	2 2	88 48		IXFH6N100 IXFH6N100Q	IXFM6N100 IXFT6N100Q		
		10 10 10	1.2 1.2 1.2	122 122 90		IXFH10N100 IXFR10N100Q	IXFM10N100 IXFT10N100		
		12 12 12 12	1.05 1.05 1 1	122 122 90 90		IXFH12N100 IXFH12N100Q IXFR12N100Q	IXFM12N100 IXFT12N100 IXFT12N100Q		
		13	0.9	122		IXFH13N100	IXFT13N100		
		14 14	0.75 0.75	220 220		IXFH14N100 IXFX14N100	IXFT14N100		
		15 15 15	0.725 0.7 0.7	130 220 220		IXFH15N100Q IXFH15N100 IXFX15N100	IXFT15N100Q IXFT15N100	IXFK15N100Q	
		18	0.5	170		IXFR21N100Q			
		21	0.5	170		IXFX21N100Q		IXFK21N100Q	IXFN21N100Q
		22	0.39	250		IXFR24N100		IXFF24N100	▶ IXFE24N100
		23	0.43	250					▶ IXFN23N100
		24	0.39	250		IXFX24N100		IXFK24N100	IXFN24N100
		32	0.28	380					▶ IXFE36N100
		34	0.28	380					▶ IXFN34N100
		36	0.24	380					IXFN36N100

I3PAK is the leaded TO-268 case style.

- (1) Current limited by external leads
- (2) S1 Schottky diode connected in antiparallel to MOSFET;  
S2 MOSFET and Schottky diode chips connected in 'boost' configuration;  
S3 MOSFET and Schottky diode chips connected in 'buck' configuration;  
U2 MOSFET and FRED diode chips connected in 'boost' configuration;  
U3 MOSFET and FRED diode chips connected in 'buck' configuration.

(3) Not for new designs

(4) ISOPLUS i4PAC circuit configurations:

FMM 2 MOSFETs connected in series.

FMK 2 MOSFETs connected common source.

FMD MOSFET and HiPerDyn FRED diode connected in boost configuration.

FDM MOSFET and HiPerDyn FRED diode connected in buck configuration.

Outline drawings on page 91-100