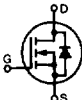


HiPerFET™ Power MOSFETs

Low Gate-Charge
Types = Suffix Q



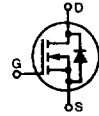
Avalanche rated with Fast Intrinsic Diode

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				▶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



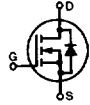
Avalanche rated with Fast Intrinsic Diode

V _{DSS} Max. V	I _{D(Cont)} T _C =25°C A	R _{DS(on)} T _C =25°C mΩ	Q _{G(on)} typ. nC	ISOPLUS220™ (C)	ISOPLUS247™ (R)	TO268 (T)	TO264 (K)	SOT227B (N)
				TO-263 (A) TO-220 (P)	PLUS247™ (X) TO-247 (H)	I3PAK (J)* TO-204 (M)	ISOPLUSI4-Pac (F)	ISOPLUS227 (E)
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

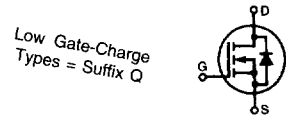


Avalanche rated with Fast Intrinsic Diode

V _{DSS} Max. V	I _{D(cont)} T _c =25°C A	R _{DS(on)} T _c =25°C mΩ	Q _{g(on)} 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



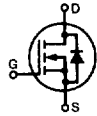
Avalanche rated with Fast Intrinsic Diode

V _{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

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°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	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

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