





# PolarHV™ Power MOSFETs

## High Voltage Types

Part Type	V <sub>DSS</sub> max	I <sub>D</sub> (cont) max T <sub>C</sub> =25°C	R <sub>DS(on)</sub> max T <sub>C</sub> =25°C	C <sub>iss</sub> typ	Q <sub>g</sub> typ	t <sub>rr</sub> max	R <sub>thJC</sub> max	P <sub>D</sub>	Fig. No	Package style	
> New	V	A	Ω	pF	nC	ns	K/W	W		Outline drawings on pages 188 - 224	
> IXTV18N60PS	600	18	0.42	3000	50	500	0.35	360	X013	X004 Weight = 0.3 g  X005a Weight = 4 g  X009 Weight = 4 g  X010a Weight = 3 g  X011b Weight = 2 g  X013 Weight = 2 g  X014a Weight = 6 g  X016a Weight = 5 g  X017a Weight = 5 g  X019 Weight = 5 g  X020 Weight = 10 g	<b>TO-252AA</b>
> IXTV18N60P		18	0.42	3000	50	500	0.35	360	X017a		
> IXTV22N60P		22	0.35	3600	62	500	0.31	400	X009		
> IXTV22N60PS		22	0.35	3600	62	500	0.31	400	X013		
> IXTV22N60P		22	0.35	3600	62	500	0.31	400	X017a		
> IXTV26N60P		26	0.27	4100	126	500	0.27	460	X009		
> IXTV26N60PS		26	0.27	4100	126	500	0.27	460	X013		
> IXTH26N60P		26	0.27	4100	126	500	0.27	460	X014a		
> IXTV26N60P		26	0.27	4100	126	500	0.27	460	X017a		
> IXTT26N60P		26	0.27	4100	126	500	0.27	460	X019		
> IXTV30N60P		30	0.24	5050	82	500	0.23	540	X009		
> IXTV30N60PS		30	0.24	5050	82	500	0.23	540	X013		
> IXTH30N60P		30	0.24	5050	82	500	0.23	540	X014a		
> IXTV30N60P		30	0.24	5050	82	500	0.23	540	X017a		
> IXTT30N60P		30	0.24	5050	82	500	0.23	540	X019		
> IXTA2N80P	800	2	6	370	8	650	1.8	70	X011b		
> IXTP2N80P		2	6	370	8	650	1.8	70	X005a		
> IXTY2N80P		2	6	370	8	650	1.8	70	X004		
> IXTA4N80P		3.5	3	690	15	650	1.25	100	X011b		
> IXTP4N80P		3.5	3	690	15	650	1.25	100	X005a		

Note: Performance and availability are subject to change at IXYS' discretion.

## PolarHT™ HiPerFET with Fast Intrinsic Diode

### Low Voltage Types

Part Type	V <sub>DSS</sub> max	I <sub>D</sub> (cont) max T <sub>C</sub> =25°C	R <sub>DS(on)</sub> max T <sub>C</sub> =25°C	C <sub>iss</sub> typ	Q <sub>g</sub> typ	t <sub>rr</sub> max	R <sub>thJC</sub> max	P <sub>D</sub>	Fig. No	Package style	
> New	V	A	Ω	pF	nC	ns	K/W	W		Outline drawings on pages 188 - 224	
> IXFH110N10P	100	110*	0.015	3550	110	200	0.31	480	X014a	X010a Weight = 3 g  X011b Weight = 2 g  X013 Weight = 2 g  X014a Weight = 6 g  X016a Weight = 5 g  X017a Weight = 5 g  X019 Weight = 5 g  X020 Weight = 10 g	<b>TO-263AB</b>
> IXFV110N10P		110*	0.015	3550	110	200	0.31	480	X009		
> IXFV110N10PS		110*	0.015	3550	110	200	0.31	480	X013		
> IXFC110N10P		66*	0.017	3550	110	200	0.95	160	X010a		
> IXFH140N10P		140*	0.011	4700	155	200	0.25	600	X014a		
> IXFT140N10P		140*	0.011	4700	155	200	0.25	600	X019		
> IXFH170N10P		170*	0.009	6000	198	200	0.21	714	X014a		
> IXFK170N10P		170*	0.009	6000	198	200	0.21	714	X020		
> IXFK200N10P		200*	0.0075	7600	240	140	0.18	833	X020		
> IXFX200N10P		200*	0.0075	7600	240	140	0.18	833	X015		
> IXFR200N10P		133*	0.008	7600	240	140	0.42	350	X016a		
> IXFN200N10P		200*	0.0075	7600	240	140	0.18	833	X027a		
> IXFH96N15P	150	96*	0.024	3500	110	200	0.31	480	X014a		
> IXFV96N15P		96*	0.024	3500	110	200	0.31	480	X009		
> IXFV96N15PS		96*	0.024	3500	110	200	0.31	480	X013		
> IXFC96N15P		58	0.026	3500	110	200	1.25	120	X010a		
> IXFH120N15P		120*	0.016	4900	150	200	0.25	600	X014a		
> IXFT120N15P		120*	0.016	4900	150	200	0.25	600	X019		
> IXFH150N15P		150*	0.013	5800	190	200	0.21	714	X014a		
> IXFK150N15P		150*	0.013	5800	190	200	0.21	714	X020		
> IXFK180N15P		180*	0.011	7000	240	200	0.18	833	X020		
> IXFR180N15P		94*	0.013	7000	240	200	0.5	250	X016a		
> IXFN180N15P		180*	0.011	7000	240	200	0.18	833	X027a		
> IXFX180N15P		180*	0.011	7000	240	200	0.18	833	X015		
> IXFH74N20P	200	74	0.034	3300	107	200	0.31	480	X014a		
> IXFV74N20P		74*	0.034	3300	107	200	0.31	480	X009		
> IXFV74N20PS		74*	0.034	3300	107	200	0.31	480	X013		
> IXFC74N20P		35	0.036	3300	107	200	1.25	100	X010a		
> IXFH96N20P		96*	0.024	4800	145	200	0.25	600	X014a		
> IXFT96N20P		96*	0.024	4800	145	200	0.25	600	X019		
> IXFV96N20P		96*	0.024	4800	145	200	0.25	600	X009		

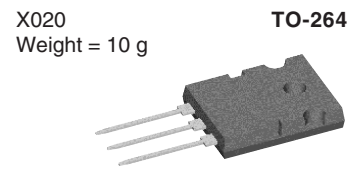
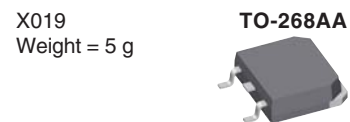
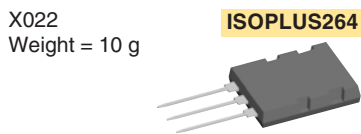
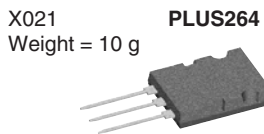
Note 1 - performance and availability are subject to change at the discretion of IXYS  
 Note 2. \* - Drain and source currents may be limited by external package leads.



# PolarHV™ HiPerFETs with Fast Intrinsic Diode

## High Voltage Types

Part Type	V <sub>DSS</sub> max	I <sub>D</sub> (cont) max T <sub>C</sub> =25°C	R <sub>DS(on)</sub> max T <sub>C</sub> =25°C	C <sub>iss</sub> typ	Q <sub>g</sub> typ	t <sub>rr</sub> max	R <sub>thJC</sub> max	P <sub>D</sub>	Fig. No	Package style
> New	V	A	Ω	pF	nC	ns	K/W	W		Outline drawings on pages 188 - 224
> IXFR44N50P	500	24	0.15	5500	104	200	0.6	210	X016a	X005a Weight = 4 g
> IXFX64N50P		64	0.085	7000	150	200	0.42	830	X015	
> IXFK64N50P		64	0.085	7000	150	200	0.15	830	X020	
> IXFR64N50P		35	0.1	7000	150	200	0.42	300	X016a	X008 Weight = 3 g
> IXFN64N50P		52	0.085	7000	150	200	0.2	625	X027a	
> IXFN64N50PD2**		52	0.086	7000	150	200	0.2	830	X027a	
> IXFX80N50P		80	0.065	8000	200	200	0.12	1040	X015	X009 Weight = 4 g
> IXFR80N50P		45	0.07	8000	200	200	0.35	360	X016a	
> IXFK80N50P		80	0.065	8000	200	200	0.12	1040	X020	
> IXFN80N50P		66	0.065	12700	195	200	0.18	694	X027a	X010a Weight = 3 g
> IXFB100N50P		100	0.05	20000	240	200	0.1	1250	X021	
> IXFL100N50P		70	0.055	20000	240	200	0.2	625	X022	
> IXFN100N50P		100	0.05	20000	240	200	0.12	1040	X027a	X010a Weight = 3 g
> IXFP10N60P	600	10	0.74	1500	30	200	0.62	200	X005a	
> IXFA10N60P		10	0.74	1500	30	200	0.62	200	X011b	
> IXFP14N60P		14	0.55	2300	38	200	0.42	300	X005a	X010a Weight = 3 g
> IXFA14N60P		14	0.55	2300	38	200	0.42	300	X011b	
> IXFH14N60P		14	0.55	2300	38	200	0.42	300	X014a	
> IXFC14N60P		8	0.6	2200	40	200	1.25	100	X010a	X009 Weight = 2 g
> IXFV18N60P		18	0.4	3000	50	200	0.35	360	X009	
> IXFV18N60PS		18	0.4	3000	50	200	0.35	360	X013	
> IXFH18N60P		18	0.4	3000	50	200	0.35	360	X014a	X011b Weight = 2 g
> IXFV22N60P		22	0.33	3600	60	200	0.31	400	X009	
> IXFV22N60PS		22	0.33	3600	60	200	0.31	400	X013	
> IXFH22N60P		22	0.33	3600	60	200	0.31	400	X014a	X010a Weight = 2 g
> IXFC22N60P		12	0.36	3600	105	200	0.95	130	X010a	
> IXFV26N60P		26	0.27	4000	72	200	0.27	460	X009	
> IXFV26N60PS		26	0.27	4000	72	200	0.27	460	X013	X013 Weight = 4 g
> IXFH26N60P		26	0.27	4000	72	200	0.27	460	X014a	
> IXFT26N60P		26	0.27	4000	72	200	0.27	460	X019	
> IXFV30N60P		30	0.24	4800	82	200	0.23	540	X009	X014a Weight = 6 g
> IXFV30N60PS		30	0.24	4800	82	200	0.23	540	X013	
> IXFH30N60P		30	0.24	4800	82	200	0.23	540	X014a	
> IXFT30N60P		30	0.24	4800	82	200	0.23	540	X019	X014a Weight = 6 g
> IXFC30N60P		17	0.25	4800	82	200	0.8	160	X010a	
> IXFR30N60P		17	0.25	4800	82	200	0.8	160	X016a	
> IXFH36N60P		36	0.19	5800	102	200	0.19	650	X014a	X016a Weight = 5 g
> IXFT36N60P		36	0.19	5800	102	200	0.19	650	X019	
> IXFK36N60P		36	0.19	5800	102	200	0.19	650	X020	
> IXFR36N60P		20	0.2	5800	103	200	0.6	208	X016a	X017a Weight = 5 g
> IXFX48N60P		48	0.14	8860	150	200	0.15	830	X015	
> IXFK48N60P		48	0.14	8860	150	200	0.15	830	X020	
> IXFR48N60P		32	0.15	8860	150	200	0.42	300	X016a	X017a Weight = 5 g
> IXFN48N60P		40	0.14	8860	150	200	0.2	625	X027a	
> IXFK64N60P		64	0.095	12000	200	200	0.12	1040	X020	
> IXFN64N60P		50	0.095	12000	200	200	0.18	694	X027a	X017a Weight = 5 g
> IXFR64N60P		36	0.1	12000	200	200	0.35	360	X016a	
> IXFX64N60P		64	0.095	12000	200	200	0.12	1040	X015	
> IXFB82N60P		82	0.075	23000	240	200	0.1	1250	X021	X019 Weight = 5 g
> IXFL82N60P		54	0.08	23000	240	200	0.2	625	X022	
> IXFN82N60P		82	0.075	23000	240	200	0.12	1040	X027a	




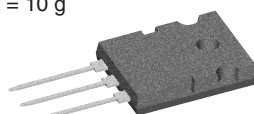
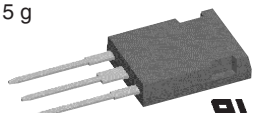
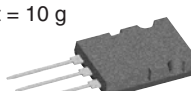
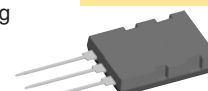
Note 1. Performance and availability are subject to change at the discretion of IXYS  
 Note 2. \*\* - MOSFET and FRED diode chips connected in "boost" configuration.

# PolarHV™ HiPerFETs with Fast Intrinsic Diodes

## High Voltage Types

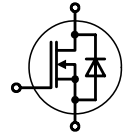
Part Type	V <sub>DSS</sub> max	I <sub>D</sub> (cont) max T <sub>C</sub> =25°C	R <sub>DS(on)</sub> max T <sub>C</sub> =25°C	C <sub>iss</sub> typ	Q <sub>g</sub> typ	t <sub>rr</sub> max	R <sub>thJC</sub> max	P <sub>D</sub>	E <sub>g</sub> No	Package style	
➤ New	V	A	Ω	pF	nC	ns	K/W	W	Fig. No	Outline drawings on pages 188 - 224	
➤ IXFA7N80P	800	7	1.4	1500	30	250	0.62	200	X011b	X005a	TO-220AB Weight = 4 g
➤ IXFI7N80P		7	1.4	1500	30	250	0.62	200	X008		
➤ IXFP7N80P		7	1.4	1500	30	250	0.62	200	X005a		
➤ IXFP7N80PM		4	1.5	1500	30	250	2.5	50	X007a		
➤ IXFA10N80P		10	1.1	2300	40	250	0.42	300	X011b		
➤ IXFC10N80P		5	1.2	2300	40	250	1.25	100	X010a	X008	TO-262 i2-PAC Weight = 5 g
➤ IXFH10N80P		10	1.1	2300	40	250	0.42	300	X014a		
➤ IXFP10N80P		10	1.1	2300	40	250	0.42	300	X005a		
➤ IXFQ10N80P		10	1.1	2300	40	250	0.42	300	X017a		
➤ IXFC12N80P		7	0.93	3000	50	250	1.05	120	X010a	X009	PLUS220 Weight = 4 g
➤ IXFH12N80P		12	0.85	3000	50	250	0.35	360	X014a		
➤ IXFQ12N80P		12	0.85	3000	50	250	0.35	360	X017a		
➤ IXFV12N80P		12	0.85	3000	50	250	0.35	360	X009		
➤ IXFV12N80PS		12	0.85	3000	50	250	0.35	360	X013		
➤ IXFC14N80P		8	0.77	3600	60	250	0.95	130	X010a	X010a	ISOPLUS220™ Weight = 3 g
➤ IXFH14N80P		14	0.7	3600	60	250	0.31	400	X014a		
➤ IXFQ14N80P		14	0.7	3600	60	250	0.31	400	X017a		
➤ IXFT14N80P		14	0.7	3600	60	250	0.31	400	X019		
➤ IXFV14N80P		14	0.7	3600	60	250	0.31	400	X009		
➤ IXFV14N80PS		14	0.7	3600	60	250	0.31	400	X013		
➤ IXFC16N80P		9	0.66	4000	70	250	0.9	138	X010a	X011b	TO-263AB Weight = 2 g
➤ IXFH16N80P		16	0.6	4000	70	250	0.27	460	X014a		
➤ IXFT16N80P		16	0.6	4000	70	250	0.27	460	X019		
➤ IXFV16N80P		16	0.6	4000	70	250	0.27	460	X009		
➤ IXFV16N80PS		16	0.6	4000	70	250	0.27	460	X013		
➤ IXFC20N80P		10	0.55	4800	80	250	0.8	160	X010a	X013	PLUS220 SMD Weight = 4 g
➤ IXFH20N80P		20	0.5	4800	80	250	0.23	540	X014a		
➤ IXFR20N80P		10	0.55	4800	80	250	0.8	160	X016a		
➤ IXFT20N80P		20	0.5	4800	80	250	0.23	540	X019		
➤ IXFV20N80P		20	0.5	4800	80	250	0.23	540	X009		
➤ IXFV20N80PS		20	0.5	4800	80	250	0.23	540	X013		
➤ IXFH24N80P		24	0.4	5800	100	250	0.19	650	X014a	X020	TO-247AD Weight = 6 g
➤ IXFK24N80P		24	0.4	5800	100	250	0.19	650	X020		
➤ IXFR24N80P		14	0.44	5800	100	250	0.6	208	X016a	X014a	ISOPLUS247™ Weight = 5 g
➤ IXFT24N80P		24	0.4	5800	100	250	0.19	650	X019		
➤ IXFK32N80P		32	0.27	8860	135	250	0.15	830	X020		
➤ IXFN32N80P		29	0.27	8860	135	250	0.2	625	X027a		
➤ IXFR32N80P		20	0.29	8860	135	250	0.42	300	X016a	X017a	TO-3P Weight = 5 g
➤ IXFX32N80P		32	0.27	8860	135	250	0.15	830	X015		
➤ IXFK44N80P		44	0.19	12000	200	250	0.12	1040	X020		
➤ IXFN44N80P		36	0.19	12000	200	250	0.18	694	X027a		
➤ IXFR44N80P		26	0.20	12000	200	250	0.35	360	X016a		
➤ IXFX44N80P		44	0.19	12000	200	250	0.12	1040	X015		
➤ IXFB60N80P		60	0.14	23000	265	250	0.1	1250	X021		
➤ IXFL60N80P		42	0.15	23000	265	250	0.2	625	X022		
➤ IXFN60N80P		54	0.14	23000	265	250	0.12	1040	X027a		

X019 Weight = 5 g		TO-268AA	X020 Weight = 10 g		TO-264	
X021 Weight = 10 g		PLUS264	X022 Weight = 10 g		ISOPLUS264	X017a Weight = 5 g

Note 1 - performance and availability are subject to change at the discretion of IXYS

# HiPerFET™ Power MOSFETs with Fast Intrinsic Diode



Part Type	V <sub>DSS</sub> max V	I <sub>D</sub> (cont) max T <sub>C</sub> =25°C A	R <sub>DS(on)</sub> max T <sub>C</sub> =25°C Ω	C <sub>iss</sub> typ pF	Q <sub>g</sub> typ nC	t <sub>rr</sub> max ns	R <sub>th(jc)</sub> max K/W	P <sub>D</sub> W	Fig. No	Package style
IXFN180N07	70	180*	0.007	9000	480	150	0.24	521	X027a	X005a Weight = 4 g
IXFK180N07		180*	0.006	9400	420	250	0.22	568	X020	
IXFX180N07		180*	0.006	9400	420	250	0.22	568	X015	
IXFN340N07		340*	0.004	12200	490	200	0.18	694	X027a	
IXFN280N085	85	280	0.0044	16000	600	250	0.18	694	X027a	X011b Weight = 2 g
IXFX180N10	100	180*	0.008	9100	360	250	0.22	568	X015	
IXFK180N10		180*	0.008	9100	360	250	0.22	568	X020	
IXFN180N10		180*	0.008	9100	360	250	0.21	595	X027a	
IXFN230N10		230*	0.006	21000	690	250	0.18	694	X027a	
IXFH4N100Q	1000	4	3	1050	39	250	0.8	156	X014a	X014a Weight = 6 g
IXFA4N100Q		4	3	1050	39	250	0.8	156	X011b	
IXFP4N100Q		4	3	1050	39	250	0.8	156	X005a	
IXFT4N100Q		4	3	1050	39	250	0.8	156	X019	
IXFR4N100Q		3.5	3.3	1050	39	250	1.57	80	X016a	X015 Weight = 5 g
IXFX24N100	24	0.39	7000	250	250	0.22	568	X015		
IXFK24N100	24	0.39	7000	250	250	0.22	568	X020		
IXFN24N100	24	0.39	7000	250	250	0.21	595	X027a		
IXFN34N100		34	0.28	9200	380	250	0.18	694	X027a	X015 Weight = 5 g
IXFL34N100		30	0.3	9200	380	250	0.225	556	X022	
IXFN36N100		36	0.24	9200	380	250	0.18	694	X027a	
IXFP3N120	1200	3	4.5	1050	39	300	0.62	200	X005a	
IXFA3N120		3	4.5	1050	39	300	0.62	200	X011b	

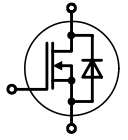
Note 1. \* - Drain and source currents may be limited by external package leads.

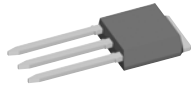

## Q2-Class HiPerFET™ with Fast Intrinsic Diode

Very High Speed

Part Type	V <sub>DSS</sub> max V	I <sub>D</sub> (cont) max T <sub>C</sub> =25°C A	R <sub>DS(on)</sub> max T <sub>C</sub> =25°C Ω	C <sub>iss</sub> typ pF	Q <sub>g</sub> typ nC	t <sub>rr</sub> max ns	R <sub>th(jc)</sub> max K/W	P <sub>D</sub> W	Fig. No	Package style
▶ New										
IXFR40N50Q2	500	29	0.17	4200	110	250	0.22	560	X016a	X016a Weight = 5 g
IXFH40N50Q2		40	0.16	4200	110	250	0.25	500	X014a	
IXFR66N50Q2		50	0.085	6800	199	250	0.25	500	X016a	X020 Weight = 10 g
IXFN66N50Q2	66	0.08	6800	199	250	0.17	735	X027a		
IXFK66N50Q2	66	0.08	6800	199	250	0.17	735	X020		
IXFX66N50Q2	66	0.08	6800	199	250	0.17	735	X015		
IXFB80N50Q2		80	0.06	10500	260	250	0.14	890	X021	X021 Weight = 10 g
IXFN80N50Q2	80	0.06	10500	260	250	0.14	890	X027a		
▶ IXFF80N50Q2		80	0.066	10500	260	250	0.33	380	X024c	X022 Weight = 10 g
▶ IXFL80N50Q2		80	0.066	10500	260	250	0.33	380	X022	
IXFX60N55Q2	550	60	0.088	6900	200	250	0.17	735	X015	X022 Weight = 10 g
IXFK60N55Q2		60	0.088	6900	200	250	0.17	735	X020	
IXFB72N55Q2		72	0.072	10500	258	250	0.14	890	X021	X021 Weight = 10 g
IXFN72N55Q2	72	0.072	10500	258	250	0.14	890	X027a		
IXFK52N60Q2	600	52	0.115	6800	198	250	0.17	735	X020	X020 Weight = 10 g
IXFX52N60Q2		52	0.115	6800	198	250	0.17	735	X015	
IXFN70N60Q2		70	0.08	7200	265	250	0.14	890	X027a	X021 Weight = 10 g
IXFB70N60Q2	70	0.08	7200	265	250	0.14	890	X021		
▶ IXFR38N80Q2	800	28	0.3	8340	190	250	0.3	416	X016a	X027a Weight = 30 g
▶ IXFK38N80Q2		38	0.22	8340	190	250	0.17	735	X020	
▶ IXFX38N80Q2		38	0.22	8340	190	250	0.17	735	X015	X021 Weight = 30 g
IXFB50N80Q2	50	0.15	7200	265	250	0.14	890	X021		
IXFN50N80Q2		50	0.15	7200	265	250	0.14	890	X027a	X021 Weight = 30 g
▶ IXFR14N100Q2	1000	9.1	1	2700	83	300	0.62	200	X016a	
IXFH14N100Q2		14	0.9	2700	83	300	0.25	500	X014a	
▶ IXFK30N100Q2		30	0.4	8200	186	300	0.17	735	X020	X020 Weight = 30 g
▶ IXFX30N100Q2	30	0.4	8200	186	300	0.17	735	X015		
IXFN38N100Q2		38	0.25	7200	250	300	0.14	893	X027a	X021 Weight = 30 g
▶ IXFL38N100Q2		22	0.28	7200	250	300	0.33	380	X022	
IXFB38N100Q2		38	0.25	7200	250	300	0.14	893	X021	

# Standard N-Channel Power MOSFETs




Part Type	V <sub>DSS</sub> max	I <sub>D</sub> (cont) max T <sub>C</sub> =25°C	R <sub>DS(on)</sub> max T <sub>C</sub> =25°C	C <sub>iss</sub> typ	Q <sub>g</sub> typ	t <sub>rr</sub> max	R <sub>thJC</sub> max	P <sub>D</sub>	No	Package style
► New	V	A	Ω	pF	nC	ns	K/W	W	Fig.	Outline drawings on pages 188 - 224
<b>IXTK250N10</b>	100	250*	0.005	7800	390	150	0.17	730	X020	X003 Weight = 0.3 g 
<b>IXTY01N80</b>	800	0.1	50	60	8	1500	3	25	X004	
<b>IXTU01N80</b>		0.1	50	60	8	1500	3	25	X003	
<b>IXTY1N80</b>		1	11	220	8.5	710	3.1	40	X004	
<b>IXTP1N80</b>		1	11	220	8.5	710	3.1	40	X005a	
<b>IXTA1N80</b>		1	11	220	8.5	710	3.1	40	X011b	
<b>IXTP2N80</b>		2	6.2	440	22	510	2.3	54	X005a	
<b>IXTA2N80</b>		2	6.2	440	22	510	2.3	54	X011b	
<b>IXTU01N100</b>	1000	0.1	80	60	8	1500	3	25	X003	X004 Weight = 0.3 g 
<b>IXTY01N100</b>		0.1	80	60	8	1500	3	25	X004	
<b>IXTA05N100</b>		0.75	15	220	8.5	710	3.1	40	X011b	
<b>IXTP05N100</b>		0.75	15	220	8.5	710	3.1	40	X005a	
<b>IXTT1N100</b>		1.5	11	480	23	710	2.3	60	X019	
<b>IXTH1N100</b>		1.5	11	480	23	710	2.3	60	X014a	
<b>IXTA1N100</b>		1.5	11	480	23	710	2.3	54	X011b	
<b>IXTP1N100</b>		1.5	11	480	23	710	2.3	54	X005a	
► <b>IXTP2N100</b>		2	7	825	40	1000	1.25	100	X005a	
<b>IXTP3N120</b>		1200	3	4.5	1050	39	700	0.62	200	
<b>IXTA3N120</b>	3		4.5	1050	39	700	0.62	200	X011b	
<b>IXTH3N120</b>	3		4.5	1050	39	700	0.62	200	X014a	
<b>IXTT6N120</b>	6		2.4	1950	56	850	0.42	300	X019	
<b>IXTH6N120</b>	6		2.4	1950	56	850	0.42	300	X014a	
<b>IXTH12N120</b>	12		1.4	3400	95	850	0.25	500	X014a	

Note 1. \* - Drain and source currents may be limited by external package leads

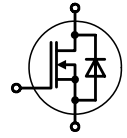
## N-Channel Depletion-Mode Power MOSFETs

Normally On MOSFETs

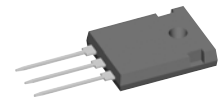
Part Type	V <sub>DSS</sub> max	I <sub>D</sub> (cont) max T <sub>C</sub> =25°C	R <sub>DS(on)</sub> max V <sub>GS</sub> = 0 V	V <sub>GS(off)</sub> max	C <sub>iss</sub> typ	C <sub>rss</sub> typ	R <sub>thJC</sub> max	P <sub>D</sub>	No	Package style
► New	V	A	Ω	V	pF	pF	K/W	W	Fig.	Outline drawings on pages 188 - 224
► <b>IXTY02N50D</b>	500	0.2	30	-5	120	5	5	25	X004	X019 Weight = 5 g 
► <b>IXTU02N50D</b>		0.2	30	-5	120	5	5	25	X003	
► <b>IXTP02N50D</b>		0.2	30	-5	120	5	5	25	X005a	
► <b>IXTH20N50D</b>	20	0.33	-3.5	2500	100	0.31	400	X014a		
► <b>IXTT20N50D</b>	20	0.33	-3.5	2500	100	0.31	400	X019		
► <b>IXTY01N100D</b>	1000	0.1	110	-5	120	3	5	25	X004	
► <b>IXTU01N100D</b>		0.1	110	-5	120	3	5	25	X003	
► <b>IXTP01N100D</b>		0.1	110	-5	120	3	5	25	X005a	
► <b>IXTH10N100D</b>		10	1.4	-3.5	2500	90	0.31	400	X014a	
► <b>IXTT10N100D</b>		10	1.4	-3.5	2500	90	0.31	400	X019	



# P-Channel Power MOSFETs



Part Type	V <sub>DSS</sub> max	I <sub>D</sub> (cont) max T <sub>C</sub> =25°C	R <sub>DS(on)</sub> max T <sub>C</sub> =25°C	C <sub>iss</sub> typ	Q <sub>g</sub> typ	t <sub>rr</sub> typ	R <sub>thjC</sub> max	P <sub>D</sub>	Fig. No	Package style
► New	V	A	Ω	pF	nC	ns	K/W	W	Fig. No	Outline drawings on pages 188 - 224
IXTH50P085	-85	-50	0.055	4200	150	180	0.42	300	X014a	X014a Weight = 6 g
IXTH36P10	-100	-36	0.075	2800	95	180	0.65	180	X014a	
IXTH50P10		-50	0.055	4200	140	180	0.42	300	X014a	X019 Weight = 5 g
► IXTT50P10		-50	0.055	4200	140	180	0.42	300	X019	
IXTH16P20	-200	-16	0.16	2800	95	180	0.42	300	X014a	X019 Weight = 5 g
IXTH24P20		-24	0.11	4200	150	250	0.42	300	X014a	
► IXTT24P20		-24	0.15	4500	150	250	0.42	300	X019	
IXTH8P50	-500	-8	1.2	3400	130	400	0.65	180	X014a	X014a Weight = 5 g
► IXTT8P50		-8	1.2	3400	130	400	0.65	180	X019	
IXTH11P50		-11	0.75	4700	130	500	0.42	300	X014a	
IXTT11P50		-11	0.75	4700	130	500	0.42	300	X019	
IXTH10P60	-600	-10	1	4700	160	500	0.42	300	X014a	



TO-247AD

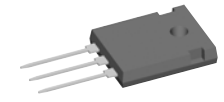


TO-268AA

# Linear Power MOSFETs

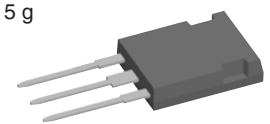
## High Voltage SOA

Part Type	V <sub>DSS</sub> max	I <sub>D</sub> (cont) max T <sub>C</sub> =25°C	R <sub>DS(on)</sub> max T <sub>C</sub> =25°C	C <sub>iss</sub> typ	Q <sub>g</sub> typ	t <sub>rr</sub> max	R <sub>thjC</sub> max	P <sub>D</sub>	Fig. No	Package style	
► New	V	A	Ω	pF	nC	ns	K/W	W	Fig. No	Outline drawings on pages 188 - 224	
► IXTH24N50L	500	24	0.3	2500	160	500	0.31	400	X014a	X014a Weight = 6 g	
► IXTN46N50L		46	0.18	7000	260	600	0.18	700	X027a		
► IXTK46N50L		46	0.18	7000	260	600	0.18	700	X020	X015 Weight = 5 g	
► IXTX46N50L		46	0.18	7000	260	600	0.18	700	X015		
► IXTB62N50L		62	0.1	11500	550	500	0.156	800	X021		
► IXTN62N50L		62	0.1	11500	550	500	0.156	800	X027a		
► IXTH12N100L	1000	12	1.3	2600	155	1000	0.31	400	X014a	X015 Weight = 5 g	
► IXTX22N100L		24	0.6	7050	270	1000	0.18	700	X015		
► IXTK22N100L		24	0.6	7050	270	1000	0.18	700	X020	X020 Weight = 10 g	
► IXTN22N100L		24	0.6	7050	270	1000	0.18	700	X027a		
► IXTB30N100L		30	0.45	11400	530	1000	0.156	800	X021		
► IXTN30N100L		30	0.45	11400	530	1000	0.156	800	X027a		
											X020 Weight = 10 g
											X021 Weight = 10 g
										X027a Weight = 30 g	

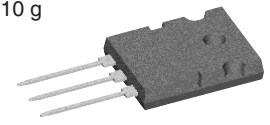


TO-247AD

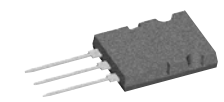
PLUS247



TO-264



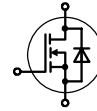
PLUS264



SOT-227B  
miniBLOC

# CoolMOS™ Power MOSFETs

CoolMOS™ is a trademark of Infineon Technologies

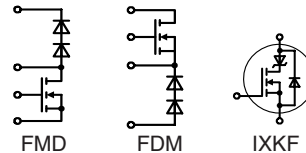


## K Series - CoolMOS™

Outline drawings on page 188 - 224

Type	V <sub>DSS</sub>	I <sub>D(cont)</sub> T <sub>C</sub> = 25°C	R <sub>DS(on)</sub> max. T <sub>J</sub> = 25°C	Q <sub>G</sub> typ.	R <sub>thJC</sub> max.	V <sub>isol</sub> RMS	Fig. No.	
► New	V	A	Ω	nC	K/W	V		
IXKC20N60C	600	14	0.190	80	1.00	2500	X010a	X005a TO-220AB Weight = 4 g
IXKC40N60C		24	0.096	160	0.50	2500	X010a	
► IXKP35N60C5		35	0.100	60	0.35	-	X005a	X009 PLUS220™ Weight = 4 g
► IXKH35N60C5		35	0.100	60	0.35	-	X014a	
IXKR40N60C		38	0.070	250	0.45	2500	X016a	
IXKN40N60C		40	0.070	250	0.43	2500	X027a	
IXKH47N60C		47	0.070	250	0.30	-	X014a	
► IXKH70N60C5		70	0.045	150	0.20	-	X014a	X010a ISOPLUS220™ Weight = 3 g
IXKN75N60C		75	0.036	500	0.22	2500	X027a	
IXKK85N60C		85*	0.036	540	0.18	-	X020	
IXKC13N80C	800	13	0.290	85	0.96	2500	X010a	
IXKC25N80C		20	0.150	180	0.90	2500	X010a	
IXKR25N80C		25	0.150	170	0.50	2500	X016a	
IXKN45N80C		44	0.074	335	0.33	2500	X027a	X013 PLUS220 SMD Weight = 4 g

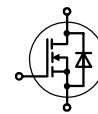
Notes: \* Silicon chip current rating.



## CoolMOS™ configurations in i4-package

Type	V <sub>DSS</sub>	I <sub>D(cont)</sub> T <sub>C</sub> = 25°C	R <sub>DS(on)</sub> max. T <sub>J</sub> = 25°C	Q <sub>G</sub> typ.	R <sub>thJC</sub> max.	Config.	Fig. No.	
► New	V	A	Ω	nC	K/W			
IXKF40N60SCD1	600	38	0.070	250	0.45	single boost	X024c	X016a ISOPLUS247™ Weight = 5 g
► FMD25-06KC5		25	0.100	under development		boost, SiC	X024a	
► FMD25-06KC5SiC		25	0.100	under development		boost	X024a	
FMD40-06KC		38	0.070	250	0.45	boost	X024a	
► FMD40-06KC5		47	0.045	under development		buck	X024a	
► FDM25-06KC5		25	0.100	under development		buck, SiC	X024a	X020 TO-264 Weight = 10 g
► FDM25-06KC5SiC		25	0.100	under development		buck	X024a	
► FDM40-06KC5		47	0.045	under development		buck	X024a	

## Trench Gate Power MOSFETs



### U Series

Type	V <sub>DSS</sub> Max.	I <sub>D(cont)</sub> T <sub>C</sub> = 25°C	R <sub>DS(on)</sub> typ T <sub>C</sub> = 25°C	Q <sub>G(on)</sub> typ	t <sub>rr</sub> typ.	P <sub>D</sub>	Fig. No.	
► New	V	A	mΩ	nC	ns	W		
IXUC100N055	55	100 *	6.1	100	80	150	X010a	X024a ISOPLUS i4-PAC™ Weight = 6 g
IXUC200N055		200 *	4.0	200	80	250	X010a	
IXUC160N075	75	160 *	5.3	250	120	250	X010a	
IXUV170N075		175 *	5.3	250	120	310	X009	
IXUV170N075S		175 *	5.3	250	120	310	X013	
IXUC60N10	100	60 *	12.8	110	80	150	X010a	X027a SOT-227B Weight = 30 g miniBLOC
IXUC120N10		120 *	7.3	220	80	300	X010a	
► IXUN280N10		280 *	3.9	440	80	770	X027a	
► IXUN350N10		350 *	1.9	640	100	965	X027a	

Notes: \* Drain and source currents may be limited by external package leads

More Trench Gate MOSFETs are shown in the MOSFET Modules table and the table on the following page.