

Power MOSFETs and MOSFET Modules

PolarHT™ and PolarHV™ MOSFETs for very low $R_{DS(on)}$

PolarHT™ and PolarHV™ MOSFETs feature a proprietary cell design and processing that has resulted in a MOSFET with a 30% reduction in $R_{DS(on)}$ per unit area along with a decrease in gate charge. IXYS has also reduced the wafer thickness, which substantially reduces thermal resistance. The combination of lower $R_{DS(on)}$, lower gate charge and higher power dissipation capability has resulted in a new family of MOSFETs, which will increase the cost effectiveness in SMPS applications.

PolarHT™ and PolarHV™ HiPerFETs with very low $R_{DS(on)}$, very low R_{thJC} and fast Body Diode

IXYS's PolarHT™ and PolarHV™ HiPerFETs combine the strengths of PolarHT family with a faster body diode, whose t_{rr} is reduced to make them suitable for phase-shift bridges, motor control and Uninterruptible Power Supply applications (UPS). So here is a win-win situation with lowest $R_{DS(on)}$, low R_{thJC} , very low Q_g and a faster body diode.

HiPerFET™ Power MOSFETs

The High Performance MOSFET family of Power MOSFETs is designed to provide superior dv/dt performance while eliminating the need for discrete, fast recovery "free wheeling diodes" in a broad range of power switching applications.

This class of Power MOSFET uses IXYS' HDMOS process, which improves the ruggedness of the MOSFET while reducing the reverse recovery time of the fast intrinsic diode to 250 ns or less at elevated (150°C) junction temperature even for high V_{DSS} rated parts. The performance of the fast intrinsic diode is comparable to discrete high voltage diodes and is tailored to minimize power dissipation and stress in the MOSFET.

'Q2 - Class' HiPerFET™ MOSFETs for lower gate charge and faster switching

New 'Q2 - class' HiPerFET MOSFETs (identified by the suffix letter Q2) are the result of a revolutionary new chip design, which decreases the MOSFET's total gate charge Q_g and the Miller capacitance C_{rss} , while maintaining the ruggedness and fast switching intrinsic diode of the company's current HiPerFET product line. The result is a MOSFET with dramatically improved switching efficiencies and thus enabling higher frequency operation and smaller power supplies.

The 'Q2-Class' line combines the low gate charge advantages with a double-metal construction resulting in a new generation of MOSFETs with an intrinsic gate resistance an order of magnitude lower than conventional MOSFETs. The resulting reduction in switching losses allows large MOSFETs to operate satisfactorily up to the multi-megahertz region.

Standard and MegaMOS™FETs

The IXYS family of high voltage N-Channel Power MOSFETs are designed to provide superior performance and ruggedness in high voltage switching applications. Major improvements are continuing to be made using high-cell density designs processed on thin silicon wafers for lower thermal resistance. The MegaMOS™FET family of large scale monolithic Power MOSFETs provides significantly higher power handling capability than industry standard MOSFETs.

Depletion Mode MOSFETs

Depletion mode MOSFETs, unlike the regular enhancement type MOSFETs, requires a negative gate bias to turn off. Consequently they remain on at or above zero gate bias voltage but otherwise have similar MOSFET characteristics. Their $R_{DS(on)}$ and breakdown voltage have a positive temperature coefficient, increasing the gate bias voltage increases the gate channel conductivity and so decreases $R_{DS(on)}$ to some extent and there is a usable intrinsic diode.

There are many applications in which Depletion Mode MOSFETs can be used: current regulators, off-line linear regulators, input transient voltage suppressors, input current inrush limiters, solid state relays etc.

P-Channel MOSFETs

For applications requiring load to be connected to ground/common, it is very convenient to use P-Channel MOSFETs. IXYS has a wide range of high current, high Voltage P-Channel MOSFETs which find variety of applications in complementary output stage of Totem Pole output stages, Buck Converters and those configurations, in which load must be connected between Source of MOSFET and ground/common terminals.

Linear Power MOSFETs

In some applications, customers need square SOA characteristics, while operating MOSFETs with simultaneous presence of V_{DS} and I_D . IXYS Linear

MOSFETs are very rugged to make this possible. Typical applications for these MOSFETs are constant current regulators and electronic loads.

CoolMOS™ Power MOSFETs

The specific resistance of a conventional designed MOSFET increases by more than the square of its blocking voltage. For CoolMOS™ FETs, this relation can be reduced to a linear function making it possible to achieve extremely low on-resistances at high breakdown voltages and small chip sizes. IXYS offers CoolMOS™ performance in the industry standard SOT-227 package as well as the isolated packages: **ISOPLUS247™**, **ISOPLUS220™** and **ISOPLUS i4-PAC™**. These isolated packages are also available in many MOSFET types affording greater convenience and safety.

Due to their internal DCB isolation, these devices simplify assembly and provide lower thermal resistance from junction to heatsink compared to external isolation materials. Together with the low $R_{DS(on)}$, the junction temperature could be significantly reduced, improving efficiency and reliability. At the same case temperature, the die can control higher currents, saving space and costs by utilizing a smaller number of components. CoolMOS™ devices are avalanche rated, guaranteeing rugged operation.

Trench Gate Power MOSFETs

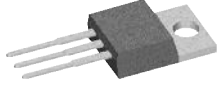
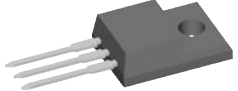
IXYS Trench Power MOSFETs are ideally suited for low voltage/ high current applications. These MOSFETs feature an exceedingly low $R_{DS(on)}$, thus guaranteeing very low power dissipation in low voltage, high current power switching applications.

This, combined with wide ranging operating junction temperature from -40°C to 175 °C make them suitable candidates for automobile applications and other similar demanding applications in harsh environments.

IXYS has currently a wide portfolio of Trench Gate MOSFETs with ratings from 55V to 300V and 42A to 220A. By optimization of several parameters, IXYS Corporation has come out with special higher Voltage rated Trench Gate MOSFETs for critical applications. Likewise, special Trench Gate MOSFET modules find variety of applications in very demanding Automotive segments.

PolarHT™ N-Channel Power MOSFETs

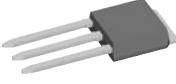

Low Voltage Types

Part Type	V _{DSS} max	I _D (cont) max	R _{DS(on)} max	C _{iss} typ	Q _g typ	t _{tr} max	R _{th(jc)} max	P _D	Fig. No	Package style		
► New	V	T _C =25°C A	T _C =25°C Ω	pF	nC	ns	K/W	W		Outline drawings on pages 188 - 224		
► IXTP110N055P	55	110*	0.0135	2210	76	80	0.38	330	X005a	X005a Weight = 4 g		
► IXTA110N055P		110*	0.0135	2210	76	80	0.38	330	X011b			
► IXTQ110N055P		110*	0.0135	2210	76	80	0.38	330	X017a			
► IXTQ150N06P	60	150*	0.01	3000	118	120	0.31	480	X017a			
► IXTQ200N06P		200*	0.006	5400	200	80	0.21	714	X017a			
► IXTP75N10P	100	75	0.025	2250	74	120	0.42	360	X005a	X007a Weight = 5 g		
► IXTA75N10P		75	0.025	2250	74	120	0.42	360	X011b			
► IXTQ75N10P		75	0.025	2250	74	120	0.42	360	X017a			
► IXTQ110N10P		110*	0.015	3550	110	130	0.31	480	X017a			
► IXTT110N10P		110*	0.015	3550	110	130	0.31	480	X019			
► IXTQ140N10P		140*	0.011	4700	155	120	0.25	600	X017a			
► IXTT140N10P		140*	0.011	4700	155	120	0.25	600	X019			
► IXTQ170N10P		170*	0.009	6000	198	120	0.21	714	X017a			
► IXTT170N10P		170*	0.009	6000	198	120	0.21	714	X019			
► IXTK170N10P		170*	0.009	6000	198	120	0.21	714	X020			
► IXTK200N10P		200*	0.0075	7600	240	100	0.18	800	X020			
► IXTR200N10P		120*	0.008	7600	240	100	0.5	300	X016a			
► IXTP62N15P		150	62	0.04	2250	70	150	0.42	350		X005a	X011b Weight = 2 g
► IXTA62N15P	62		0.04	2250	70	150	0.42	350	X011b			
► IXTQ62N15P	62		0.04	2250	70	150	0.42	350	X017a			
► IXTQ96N15P	96*		0.024	3500	110	150	0.31	480	X017a			
► IXTT96N15P	96*		0.024	3500	110	150	0.31	480	X019			
► IXTQ120N15P	120*		0.016	4900	150	150	0.25	600	X017a			
► IXTT120N15P	120*		0.016	4900	150	150	0.25	600	X019			
► IXTQ150N15P	150*		0.013	5800	190	150	0.21	714	X017a			
► IXTK150N15P	150*		0.013	5800	190	150	0.21	714	X020			
► IXTK180N15P	180*		0.01	7000	240	150	0.18	800	X020			
► IXTP50N20P	200	50	0.06	2250	70	150	0.42	360	X005a	X014a Weight = 6 g		
► IXTP50N20PM		20	0.066	2250	70	150	1.66	90	X007a			
► IXTA50N20P		50	0.06	2250	70	150	0.42	360	X011b			
► IXTQ50N20P		50	0.06	2250	70	150	0.42	360	X017a			
► IXTQ74N20P		74	0.034	3300	107	160	0.31	480	X017a			
► IXTT74N20P		74	0.034	3300	107	160	0.31	480	X019			
► IXTQ96N20P		96*	0.024	4800	145	160	0.25	600	X017a			
► IXTH96N20P		96*	0.024	4800	145	160	0.25	600	X014a			
► IXTT96N20P		96*	0.024	4800	145	160	0.25	600	X019			
► IXTQ120N20P		120*	0.022	6000	152	180	0.21	714	X017a			
► IXTK120N20P		120*	0.022	6000	152	180	0.21	714	X020			
► IXTK140N20P	140*	0.018	7500	240	180	0.18	800	X020				
► IXTP42N25P	250	42	0.084	2300	70	200	0.42	300	X005a	X016a Weight = 5 g		
► IXTA42N25P		42	0.084	2300	70	200	0.42	300	X011b			
► IXTQ42N25P		42	0.084	2300	70	200	0.42	300	X017a			
► IXTQ64N25P		64	0.049	3450	105	200	0.31	400	X017a			
► IXTT64N25P		64	0.049	3450	105	200	0.31	400	X019			
► IXTQ82N25P		82	0.035	4800	142	200	0.25	500	X017a			
► IXTT82N25P		82*	0.035	4800	142	200	0.25	500	X019			
► IXTK82N25P		82*	0.035	4800	142	200	0.25	500	X020			
► IXTQ100N25P		100*	0.027	6300	185	200	0.21	600	X017a			
► IXTK100N25P		100	0.027	6300	185	200	0.21	600	X020			
► IXTT100N25P		100*	0.027	6300	185	200	0.21	600	X019			
► IXTK120N25P		120*	0.024	8000	185	200	0.18	700	X020			
► IXTP36N30P		300	36	0.11	2250	70	250	0.42	300		X005a	X017a Weight = 5 g
► IXTA36N30P			36	0.11	2250	70	250	0.42	300		X011b	
► IXTQ36N30P	36		0.11	2250	70	250	0.42	300	X017a			
► IXTQ52N30P	52		0.066	3490	110	250	0.31	400	X017a			
► IXTT52N30P	52		0.066	3490	110	250	0.31	400	X019			
► IXTQ69N30P	69		0.049	4960	156	250	0.25	500	X017a			
► IXTT69N30P	69		0.049	4960	156	250	0.25	500	X019			
► IXTQ88N30P	88*		0.04	6300	180	250	0.21	600	X017a			
► IXTH88N30P	88*		0.04	6300	180	250	0.21	600	X014a			
► IXTK88N30P	88		0.04	6300	180	250	0.21	600	X020			
► IXTT88N30P	88*		0.04	6300	180	250	0.21	600	X019			
► IXTK102N30P	102*	0.033	7500	224	250	0.18	700	X020				
► IXTP36N30P	300	36	0.11	2250	70	250	0.42	300	X005a	X020 Weight = 10 g		
► IXTA36N30P		36	0.11	2250	70	250	0.42	300	X011b			
► IXTQ36N30P		36	0.11	2250	70	250	0.42	300	X017a			
► IXTQ52N30P		52	0.066	3490	110	250	0.31	400	X017a			
► IXTT52N30P		52	0.066	3490	110	250	0.31	400	X019			
► IXTQ69N30P		69	0.049	4960	156	250	0.25	500	X017a			
► IXTT69N30P		69	0.049	4960	156	250	0.25	500	X019			
► IXTQ88N30P		88*	0.04	6300	180	250	0.21	600	X017a			
► IXTH88N30P		88*	0.04	6300	180	250	0.21	600	X014a			
► IXTK88N30P		88	0.04	6300	180	250	0.21	600	X020			
► IXTT88N30P		88*	0.04	6300	180	250	0.21	600	X019			
► IXTK102N30P	102*	0.033	7500	224	250	0.18	700	X020				

Note * - Drain and source currents may be limited by external package leads. Note: Performance and availability are subject to change at IXYS' discretion.

PolarHV™ Power MOSFETs

High Voltage Types

Part Type	V _{DSS} max	I _D (cont) max T _c =25°C	R _{DS(on)} max T _c =25°C	C _{iss} typ	Q _g typ	t _{tr} max	R _{thJC} max	P _D	Fig. No	Package style	
► New	V	A	Ω	pF	nC	ns	K/W	W	Fig. No	Outline drawings on pages 188 - 224	
► IXTY1R6N50P	500	1.6	6	120	2	400	3.00	42.0	X004	X003 Weight = 0.3 g	TO-251AA 
► IXTP1R6N50P		1.6	6	120	2	400	3.00	42.0	X005a		
► IXTY2R4N50P		2.4	3.5	225	7.25	400	2.5	50	X004		
► IXTP2R4N50P		2.4	3.5	225	7.25	400	2.5	50	X005a		
► IXTY3N50P		3.6	2	409	9.3	400	1.80	70	X004		
► IXTP3N50P		3.6	2	409	9.3	400	1.80	70	X005a		
► IXTA3N50P		3.6	2	409	9.3	400	1.80	70	X011b		
► IXTY5N50P		5	1.3	600	12	400	1.5	83.3	X004		
► IXTP5N50P		5	1.3	600	12	400	1.5	83.3	X005a		
► IXTA5N50P		5	1.3	600	12	400	1.5	83.3	X011b		
► IXTP6N50P		6	1	750	15	400	1.2	105	X005a		
► IXTA6N50P		6	1	750	15	400	1.2	105	X011b		
► IXTA8N50P		8	0.8	1200	21	400	1.00	150	X011b		
► IXTP8N50P		8	0.8	1200	21	400	1.00	150	X005a		
► IXTP8N50PM		4	0.88	1200	21	400	3	41	X007a		
► IXTI12N50P		12	0.5	1689	30	400	0.62	200	X008		
► IXTP12N50P		12	0.5	1689	30	400	0.62	200	X005a		
► IXTP12N50PM		6	0.55	1800	30	400	2.5	50	X007a		
► IXTP16N50P		16	0.4	2110	40	400	0.42	300	X005a		
► IXTA16N50P		16	0.4	2110	40	400	0.42	300	X011b		
► IXTV22N50P	22	0.27	2629	50	400	0.35	350	X009			
► IXTV22N50PS	22	0.27	2629	50	400	0.35	350	X013			
► IXTQ22N50P	22	0.27	2629	50	400	0.35	350	X017a			
► IXTH22N50P	22	0.27	2630	50	400	0.35	350	X014a			
► IXTV26N50P	26	0.23	3600	65	300	0.31	400	X009			
► IXTV26N50PS	26	0.23	3600	66	300	0.31	400	X013			
► IXTQ26N50P	26	0.23	3600	67	300	0.31	400	X017a			
► IXTT26N50P	26	0.23	3600	68	300	0.31	400	X019			
► IXTC26N50P	14	0.26	3600	96	400	0.95	130	X010a			
► IXTV30N50P	30	0.2	4150	72	400	0.27	460	X009			
► IXTV30N50PS	30	0.2	4150	72	400	0.27	460	X013			
► IXTH30N50P	30	0.2	4150	72	400	0.27	460	X014a			
► IXTQ30N50P	30	0.2	4150	72	400	0.27	460	X017a			
► IXTT30N50P	30	0.2	4150	72	400	0.27	460	X019			
► IXTV36N50P	36	0.17	4770	82	400	0.23	540	X009			
► IXTV36N50PS	36	0.17	4770	82	400	0.23	540	X013			
► IXTH36N50P	36	0.17	4770	82	400	0.23	540	X014a			
► IXTQ36N50P	36	0.17	4770	82	400	0.23	540	X017a			
► IXTT36N50P	36	0.17	4770	82	400	0.23	540	X019			
► IXTQ44N50P	44	0.14	5440	98	400	0.19	650	X017a			
► IXTU1R4N60P	600	1.4	9.0	140	5.2	500	2.5	50	X003	X013 Weight = 2 g	PLUS220 SMD 
► IXTP1R4N60P		1.4	9.0	140	5.2	500	2.5	50	X005a		
► IXTY1R4N60P		1.4	9.0	140	5.2	500	2.5	50	X004		
► IXTP2N60P		2	4.7	205	4	500	2.50	50	X005a		
► IXTY2N60P		2	4.7	205	4	500	2.50	50	X004		
► IXTY3N60P		3	2.8	370	8	500	1.80	70	X004		
► IXTP3N60P		3	2.8	370	8	500	1.80	70	X005a		
► IXTA3N60P		3	2.8	370	8	500	1.80	70	X011b		
► IXTP4N60P		4	1.9	560	12	500	1.50	83.0	X005a		
► IXTA4N60P		4	1.9	560	12	500	1.50	83.0	X011b		
► IXTP5N60P		5	1.6	690	14	500	1.25	100	X005a		
► IXTA5N60P		5	1.6	690	14	500	1.25	100	X011b		
► IXTA7N60P		7	1	1000	20	500	1.00	125	X011b		
► IXTP7N60P		7	1	1000	20	500	1.00	125	X005a		
► IXTA10N60P		10	0.74	1500	30	500	0.62	166	X011b		
► IXTI10N60P		10	0.74	1500	30	500	0.62	166	X008		
► IXTP10N60P		10	0.74	1500	30	500	0.62	166	X005a		
► IXTP10N60PM		5	0.81	1500	30	500	2.5	50	X007a		
► IXTP14N60P		14	0.55	2200	40	500	0.42	300	X005a		
► IXTA14N60P		14	0.55	2200	40	500	0.42	300	X011b		
► IXTQ14N60P	14	0.55	2200	40	500	0.42	300	X017a			
► IXTV18N60P	18	0.42	3000	50	500	0.35	360	X009			

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

PolarHV™ Power MOSFETs

High Voltage Types

Part Type	V _{DSS} max	I _D (cont) max	R _{DS(on)} max	C _{iss} typ	Q _g typ	t _{rr} max	R _{thJC} max	P _D	Fig. No	Package style
► New	V	T _C =25°C A	T _C =25°C 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
► IXTQ18N60P		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	
► IXTQ22N60P		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	
► IXTQ26N60P		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	
► IXTQ30N60P		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	X010a Weight = 3 g
► 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.

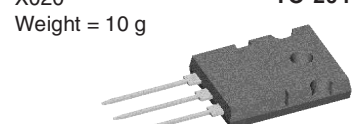
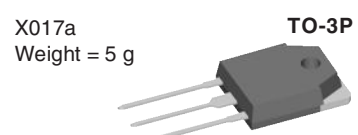
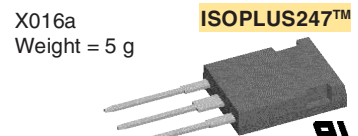
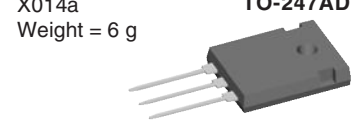
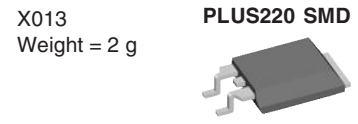
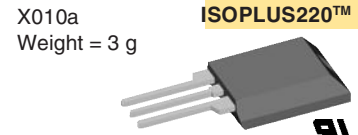
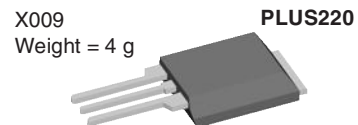
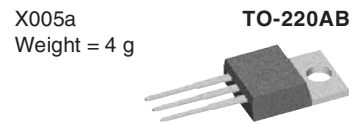
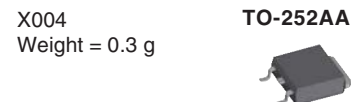
PolarHT™ HiPerFET with Fast Intrinsic Diode

Low Voltage Types

Part Type	V _{DSS} max	I _D (cont) max	R _{DS(on)} max	C _{iss} typ	Q _g typ	t _{rr} max	R _{thJC} max	P _D	Fig. No	Package style		
► New	V	T _C =25°C A	T _C =25°C 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	X011b Weight = 2 g		
► 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	X016a Weight = 5 g
► 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	X017a Weight = 5 g	
► 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.



PolarHT™ HiPerFET with Fast Intrinsic Diode

Low Voltage Types

Part Type	V _{DSS} max	I _D (cont) max T _C =25°C	R _{DS(on)} max T _C =25°C	C _{iss} typ	Q _g typ	t _{rr} max	R _{thJC} max	P _D	Fig. No	Package style
➤ New	V	A	Ω	pF	nC	ns	K/W	W		Outline drawings on pages 188 - 224
➤ IXFH120N20P	200	120*	0.022	6000	185	150	0.21	714	X014a	X009 Weight = 4 g
➤ IXFK120N20P		120*	0.022	6000	185	150	0.21	714	X020	
➤ IXFK140N20P		140*	0.018	7500	240	150	0.18	833	X020	
➤ IXFR140N20P		90*	0.022	7500	240	150	0.5	300	X016a	
➤ IXFN140N20P		140*	0.018	7500	240	150	0.18	833	X027a	
➤ IXFH100N25P	250	100*	0.027	6300	185	200	0.21	600	X014a	X010a Weight = 3 g
➤ IXFX120N25P		120*	0.024	8000	185	200	0.18	833	X015	
➤ IXFK120N25P		120*	0.024	8000	185	200	0.18	833	X020	
➤ IXFH52N30P	300	52	0.066	3490	110	200	0.31	400	X014a	X013 Weight = 4 g
➤ IXFV52N30P		52	0.066	3490	110	200	0.31	400	X009	
➤ IXFV52N30PS		52	0.066	3490	110	200	0.31	400	X013	
➤ IXFC52N30P		31	0.072	3490	110	200	1.25	100	X010a	
➤ IXFH69N30P		69	0.049	4960	156	200	0.25	500	X014a	
➤ IXFT69N30P		69	0.049	4960	156	200	0.25	500	X019	X014a Weight = 6 g
➤ IXFH88N30P		88	0.04	6300	180	200	0.21	600	X014a	
➤ IXFK88N30P		88	0.04	6300	180	200	0.21	600	X020	
➤ IXFK102N30P		102*	0.033	7500	224	200	0.18	700	X020	
➤ IXFR102N30P		60	0.036	7500	224	200	0.5	250	X016a	
➤ IXFN102N30P		102*	0.033	7500	224	200	0.18	700	X027a	X015 Weight = 5 g
➤ IXFK140N30P		140*	0.024	14000	185	200	0.12	1040	X020	
➤ IXFN140N30P		140*	0.024	14000	185	200	0.18	700	X027a	
➤ IXFR140N30P		82*	0.027	14000	185	200	0.35	360	X016a	
➤ IXFX140N30P		140*	0.024	14000	185	200	0.12	1040	X015	

PolarHV™ HiPerFETs with Fast Intrinsic Diode

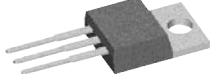






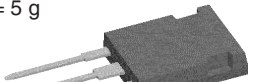
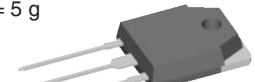

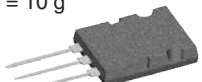
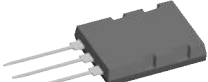
High Voltage Types

Part Type	V _{DSS} max	I _D (cont) max T _C =25°C	R _{DS(on)} max T _C =25°C	C _{iss} typ	Q _g typ	t _{rr} max	R _{thJC} max	P _D	Fig. No	Package style
➤ New	V	A	Ω	pF	nC	ns	K/W	W		Outline drawings on pages 188 - 224
➤ IXFP3N50PM	500	2.7	2	409	9.3	200	3.5	36	X007a	X015 Weight = 5 g
➤ IXFP5N50PM		3.2	1.4	600	12	200	3.3	38	X007a	
➤ IXFP8N50PM		4	0.8	1200	21	200	3	41	X007a	
➤ IXFP12N50P		12	0.5	1689	30	200	0.62	200	X005a	
➤ IXFA12N50P		12	0.5	1689	30	200	0.62	200	X011b	
➤ IXFP12N50PM		5.4	0.55	1689	30	200	2.5	50	X007a	X016a Weight = 5 g
➤ IXFP16N50P		16	0.4	2250	43	200	0.42	300	X005a	
➤ IXFA16N50P		16	0.4	2250	43	200	0.42	300	X011b	
➤ IXFH16N50P		16	0.4	2250	43	200	0.42	300	X014a	
➤ IXFC16N50P		10	0.45	2250	43	200	1.25	100	X010a	
➤ IXFV22N50P		22	0.27	3150	50	200	0.35	350	X009	X019 Weight = 5 g
➤ IXFV22N50PS		22	0.27	3150	50	200	0.35	350	X013	
➤ IXFH22N50P		22	0.27	3150	50	200	0.35	350	X014a	
➤ IXFV26N50P		26	0.23	3600	60	200	0.31	400	X009	
➤ IXFV26N50PS		26	0.23	3600	60	200	0.31	400	X013	
➤ IXFH26N50P		26	0.23	3600	60	200	0.31	400	X014a	X020 Weight = 10 g
➤ IXFC26N50P		15	0.26	3600	60	200	0.95	130	X010a	
➤ IXFV30N50P		30	0.2	4000	72	200	0.27	470	X009	
➤ IXFV30N50PS		30	0.2	4000	72	200	0.27	470	X013	
➤ IXFH30N50P		30	0.2	4000	72	200	0.27	470	X014a	
➤ IXFT30N50P		30	0.2	4000	72	200	0.27	470	X019	X027a Weight = 30 g
➤ IXFV36N50P		36	0.17	4800	82	200	0.23	550	X009	
➤ IXFV36N50PS		36	0.17	4800	82	200	0.23	550	X013	
➤ IXFH36N50P		36	0.17	4800	82	200	0.23	550	X014a	
➤ IXFT36N50P		36	0.19	4800	82	200	0.23	550	X019	
➤ IXFC36N50P		19	0.17	4800	82	200	0.75	166	X010a	SOT-227B miniBLOC
➤ IXFR36N50P		24	0.2	4800	82	200	0.8	156	X016a	
➤ IXFH44N50P		44	0.14	5500	104	200	0.19	670	X014a	
➤ IXFT44N50P		44	0.14	5500	104	200	0.19	670	X019	
➤ IXFK44N50P		44	0.14	5500	104	200	0.19	670	X020	

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

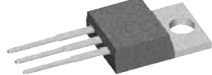
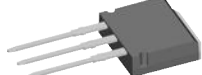




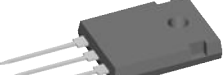
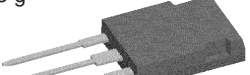
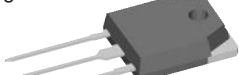
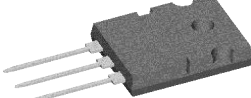
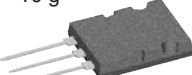
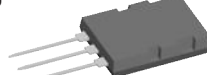
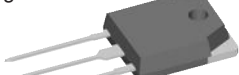
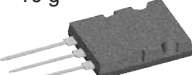
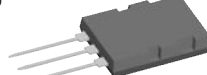
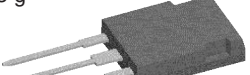
High Voltage Types

Part Type	V _{DSS} max	I _D (cont) max T _C =25°C	R _{DS(on)} max T _C =25°C	C _{iss} typ	Q _g typ	t _{rr} max	R _{thJC} max	P _D	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 TO-220AB
▶ IXFX64N50P		64	0.085	7000	150	200	0.42	830	X015	Weight = 4 g
▶ IXFK64N50P		64	0.085	7000	150	200	0.15	830	X020	
▶ IXFR64N50P		35	0.1	7000	150	200	0.42	300	X016a	
▶ IXFN64N50P		52	0.085	7000	150	200	0.2	625	X027a	
▶ IXFN64N50PD2**		52	0.086	7000	150	200	0.2	830	X027a	X008 TO-262 i2-PAC
▶ IXFX80N50P		80	0.065	8000	200	200	0.12	1040	X015	
▶ IXFR80N50P		45	0.07	8000	200	200	0.35	360	X016a	Weight = 3 g
▶ IXFK80N50P		80	0.065	8000	200	200	0.12	1040	X020	
▶ IXFN80N50P		66	0.065	12700	195	200	0.18	694	X027a	
▶ IXFB100N50P		100	0.05	20000	240	200	0.1	1250	X021	
▶ IXFL100N50P		70	0.055	20000	240	200	0.2	625	X022	X009 PLUS220
▶ IXFN100N50P		100	0.05	20000	240	200	0.12	1040	X027a	
▶ 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 ISOPLUS220™
▶ IXFA14N60P		14	0.55	2300	38	200	0.42	300	X011b	
▶ IXFH14N60P		14	0.55	2300	38	200	0.42	300	X014a	Weight = 3 g
▶ IXFC14N60P		8	0.6	2200	40	200	1.25	100	X010a	
▶ 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	
▶ IXFV22N60P		22	0.33	3600	60	200	0.31	400	X009	
▶ IXFV22N60PS		22	0.33	3600	60	200	0.31	400	X013	X011b TO-263AB
▶ IXFH22N60P		22	0.33	3600	60	200	0.31	400	X014a	
▶ IXFC22N60P		12	0.36	3600	105	200	0.95	130	X010a	Weight = 2 g
▶ IXFV26N60P		26	0.27	4000	72	200	0.27	460	X009	
▶ IXFV26N60PS		26	0.27	4000	72	200	0.27	460	X013	
▶ IXFH26N60P		26	0.27	4000	72	200	0.27	460	X014a	
▶ IXFT26N60P		26	0.27	4000	72	200	0.27	460	X019	X013 PLUS220 SMD
▶ IXFV30N60P		30	0.24	4800	82	200	0.23	540	X009	
▶ IXFV30N60PS		30	0.24	4800	82	200	0.23	540	X013	Weight = 4 g
▶ IXFH30N60P		30	0.24	4800	82	200	0.23	540	X014a	
▶ IXFT30N60P		30	0.24	4800	82	200	0.23	540	X019	
▶ IXFC30N60P		17	0.25	4800	82	200	0.8	160	X010a	
▶ IXFR30N60P		17	0.25	4800	82	200	0.8	160	X016a	X014a TO-247AD
▶ IXFH36N60P		36	0.19	5800	102	200	0.19	650	X014a	
▶ IXFT36N60P		36	0.19	5800	102	200	0.19	650	X019	Weight = 6 g
▶ IXFK36N60P		36	0.19	5800	102	200	0.19	650	X020	
▶ IXFR36N60P		20	0.2	5800	103	200	0.6	208	X016a	
▶ IXFX48N60P		48	0.14	8860	150	200	0.15	830	X015	
▶ IXFK48N60P		48	0.14	8860	150	200	0.15	830	X020	X016a ISOPLUS247™
▶ IXFR48N60P		32	0.15	8860	150	200	0.42	300	X016a	
▶ 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 TO-3P
▶ IXFR64N60P		36	0.1	12000	200	200	0.35	360	X016a	
▶ IXFX64N60P		64	0.095	12000	200	200	0.12	1040	X015	Weight = 5 g
▶ IXFB82N60P		82	0.075	23000	240	200	0.1	1250	X021	
▶ IXFL82N60P		54	0.08	23000	240	200	0.2	625	X022	
▶ IXFN82N60P		82	0.075	23000	240	200	0.12	1040	X027a	
										X019 TO-268AA
										Weight = 5 g
										X020 TO-264
										Weight = 10 g
										
										

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.

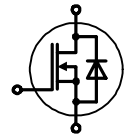
PolarHV™ HiPerFETs with Fast Intrinsic Diodes

High Voltage Types

Part Type	V _{DSS} max	I _D (cont) max T _C =25°C	R _{DS(on)} max T _C =25°C	C _{iss} typ	Q _g typ	t _{rr} max	R _{thJC} max	P _D	Fig. No	Package style	
► New	V	A	Ω	pF	nC	ns	K/W	W		Outline drawings on pages 188 - 224	
► IXFA7N80P	800	7	1.4	1500	30	250	0.62	200	X011b	X005a Weight = 4 g	TO-220AB 
► 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	X008 Weight = 5 g	TO-262 i2-PAC 
► IXFA10N80P		10	1.1	2300	40	250	0.42	300	X011b		
► IXFC10N80P		5	1.2	2300	40	250	1.25	100	X010a		
► IXFH10N80P		10	1.1	2300	40	250	0.42	300	X014a	X009 Weight = 4 g	PLUS220 
► 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	X010a Weight = 3 g	ISOPLUS220™ 
► 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	X011b Weight = 2 g	TO-263AB 
► IXFV12N80PS		12	0.85	3000	50	250	0.35	360	X013		
► IXFC14N80P		8	0.77	3600	60	250	0.95	130	X010a		
► IXFH14N80P		14	0.7	3600	60	250	0.31	400	X014a	X013 Weight = 4 g	PLUS220 SMD 
► 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	X014a Weight = 6 g	TO-247AD 
► IXFV14N80PS		14	0.7	3600	60	250	0.31	400	X013		
► IXFC16N80P		9	0.66	4000	70	250	0.9	138	X010a		
► IXFH16N80P		16	0.6	4000	70	250	0.27	460	X014a	X016a Weight = 5 g	ISOPLUS247™ 
► 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	X017a Weight = 5 g	TO-3P 
► IXFC20N80P		10	0.55	4800	80	250	0.8	160	X010a		
► IXFH20N80P		20	0.5	4800	80	250	0.23	540	X014a		
► IXFR20N80P		10	0.55	4800	80	250	0.8	160	X016a	X020 Weight = 10 g	TO-264 
► 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	X021 Weight = 10 g	PLUS264 
► IXFH24N80P		24	0.4	5800	100	250	0.19	650	X014a		
► IXFK24N80P		24	0.4	5800	100	250	0.19	650	X020		
► IXFR24N80P		14	0.44	5800	100	250	0.6	208	X016a	X022 Weight = 10 g	ISOPLUS264 
► 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	X017a Weight = 5 g	TO-3P 
► IXFR32N80P		20	0.29	8860	135	250	0.42	300	X016a		
► IXFX32N80P		32	0.27	8860	135	250	0.15	830	X015		
► IXFK44N80P		44	0.19	12000	200	250	0.12	1040	X020	X021 Weight = 10 g	PLUS264 
► 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	X022 Weight = 10 g	ISOPLUS264 
► 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	X016a Weight = 5 g	ISOPLUS247™ 

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

HiPerFET™ Power MOSFETs with Fast Intrinsic Diode



Part Type	V _{DSS} max V	I _D (cont) max T _C =25°C A	R _{DS(on)} max T _C =25°C Ω	C _{iss} typ pF	Q _g typ nC	t _{tr} max ns	R _{thJC} max K/W	P _D 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	

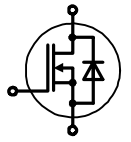
Note 1. * - Drain and source currents may be limited by external package leads.

Q2-Class HiPerFET™ with Fast Intrinsic Diode

Very High Speed

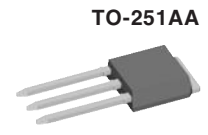
Part Type	V _{DSS} max V	I _D (cont) max T _C =25°C A	R _{DS(on)} max T _C =25°C Ω	C _{iss} typ pF	Q _g typ nC	t _{tr} max ns	R _{thJC} max K/W	P _D W	Fig. No	Package style
▶ New										
IXFR40N50Q2	500	29	0.17	4200	110	250	0.22	560	X016a	X016a Weight = 5 g
IXFH40N50Q2		40	0.16	4200	110	250	0.25	500	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	X022 Weight = 10 g
IXFX66N50Q2	66	0.08	6800	199	250	0.17	735	X015		
IXFB80N50Q2		80	0.06	10500	260	250	0.14	890	X021	X027a Weight = 30 g
IXFN80N50Q2	80	0.06	10500	260	250	0.14	890	X027a		
▶ IXFF80N50Q2		80	0.066	10500	260	250	0.33	380	X024c	X027a Weight = 30 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	
IXFN72N55Q2		72	0.072	10500	258	250	0.14	890	X027a	
IXFK52N60Q2	600	52	0.115	6800	198	250	0.17	735	X020	X027a Weight = 30 g
IXFX52N60Q2		52	0.115	6800	198	250	0.17	735	X015	
IXFN70N60Q2		70	0.08	7200	265	250	0.14	890	X027a	
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	SOT-227B miniBLOC
▶ IXFB50N80Q2	50	0.15	7200	265	250	0.14	890	X021		
▶ IXFN50N80Q2		50	0.15	7200	265	250	0.14	890	X027a	SOT-227B miniBLOC
▶ 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	SOT-227B miniBLOC
▶ IXFX30N100Q2	30	0.4	8200	186	300	0.17	735	X015		
▶ IXFN38N100Q2		38	0.25	7200	250	300	0.14	893	X027a	SOT-227B miniBLOC
▶ 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 _{DSS} max	I _D (cont) max T _C =25°C	R _{DS(on)} max T _C =25°C	C _{iss} typ	Q _g typ	t _{tr} max	R _{thJC} max	P _D	Fig. No	Package style
► New	V	A	Ω	pF	nC	ns	K/W	W		Outline drawings on pages 188 - 224
IXTK250N10	100	250*	0.005	7800	390	150	0.17	730	X020	X003 Weight = 0.3 g
IXTY01N80	800	0.1	50	60	8	1500	3	25	X004	
IXTU01N80		0.1	50	60	8	1500	3	25	X003	
IXTY1N80		1	11	220	8.5	710	3.1	40	X004	
IXTP1N80		1	11	220	8.5	710	3.1	40	X005a	
IXTA1N80		1	11	220	8.5	710	3.1	40	X011b	
IXTP2N80		2	6.2	440	22	510	2.3	54	X005a	
IXTA2N80		2	6.2	440	22	510	2.3	54	X011b	
IXTU01N100		1000	0.1	80	60	8	1500	3	25	X003
IXTY01N100	0.1		80	60	8	1500	3	25	X004	
IXTA05N100	0.75		15	220	8.5	710	3.1	40	X011b	
IXTP05N100	0.75		15	220	8.5	710	3.1	40	X005a	
IXTT1N100	1.5		11	480	23	710	2.3	60	X019	
IXTH1N100	1.5		11	480	23	710	2.3	60	X014a	
IXTA1N100	1.5		11	480	23	710	2.3	54	X011b	
IXTP1N100	1.5		11	480	23	710	2.3	54	X005a	
► IXTP2N100	2		7	825	40	1000	1.25	100	X005a	
IXTP3N120	1200		3	4.5	1050	39	700	0.62	200	X005a
IXTA3N120		3	4.5	1050	39	700	0.62	200	X011b	
IXTH3N120		3	4.5	1050	39	700	0.62	200	X014a	
IXTT6N120		6	2.4	1950	56	850	0.42	300	X019	
IXTH6N120		6	2.4	1950	56	850	0.42	300	X014a	
IXTH12N120		12	1.4	3400	95	850	0.25	500	X014a	

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

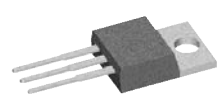


TO-251AA

TO-252AA



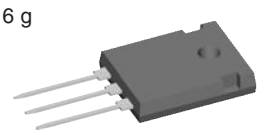
TO-220AB



TO-263AB



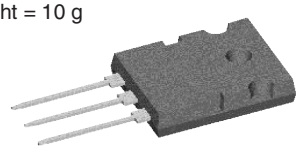
TO-247AD



TO-268AA



TO-264



N-Channel Depletion-Mode Power MOSFETs

Normally On MOSFETs

Part Type	V _{DSS} max	I _D (cont) max T _C =25°C	R _{DS(on)} max V _{GS} = 0 V	V _{GS(off)} max	C _{iss} typ	C _{rss} typ	R _{thJC} max	P _D	Fig. No
► New	V	A	Ω	V	pF	pF	K/W	W	
► IXTY02N50D	500	0.2	30	-5	120	5	5	25	X004
► IXTU02N50D		0.2	30	-5	120	5	5	25	X003
IXTP02N50D		0.2	30	-5	120	5	5	25	X005a
► IXTH20N50D		20	0.33	-3.5	2500	100	0.31	400	X014a
► IXTT20N50D		20	0.33	-3.5	2500	100	0.31	400	X019
► IXTY01N100D	1000	0.1	110	-5	120	3	5	25	X004
► IXTU01N100D		0.1	110	-5	120	3	5	25	X003
IXTP01N100D		0.1	110	-5	120	3	5	25	X005a
► IXTH10N100D		10	1.4	-3.5	2500	90	0.31	400	X014a
► IXTT10N100D		10	1.4	-3.5	2500	90	0.31	400	X019

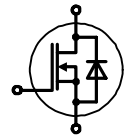
X011b
Weight = 2 g

X014a
Weight = 6 g

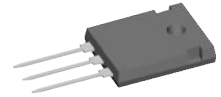
X019
Weight = 5 g

X020
Weight = 10 g

P-Channel Power MOSFETs



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



TO-247AD

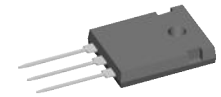


TO-268AA

Linear Power MOSFETs

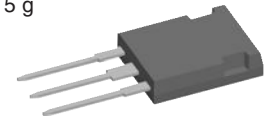
High Voltage SOA

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

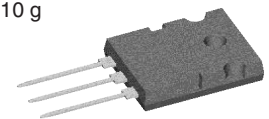


TO-247AD

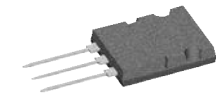
PLUS247



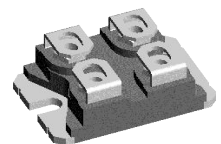
TO-264



PLUS264

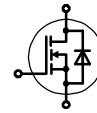


SOT-227B
miniBLOC



CoolMOS™ Power MOSFETs

CoolMOS™ is a trademark of Infineon Technologies

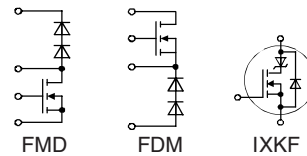


Outline drawings on page
188 - 224

K Series - CoolMOS™

Type	V _{DSS}	I _{D(cont)} T _C = 25°C	R _{DS(on)} max. T _J = 25°C	Q _G typ.	R _{thJC} max.	V _{isol} RMS	Fig. No.
► New	V	A	Ω	nC	K/W	V	
IXKC20N60C	600	14	0.190	80	1.00	2500	X010a
IXKC40N60C		24	0.096	160	0.50	2500	X010a
► IXKP35N60C5		35	0.100	60	0.35	-	X005a
► 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
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

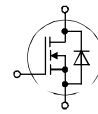
Notes: * Silicon chip current rating.



CoolMOS™ configurations in i4-package

Type	V _{DSS}	I _{D(cont)} T _C = 25°C	R _{DS(on)} max. T _J = 25°C	Q _G typ.	R _{thJC} max.	Config.	Fig. No.
► New	V	A	Ω	nC	K/W		
IXKF40N60SCD1	600	38	0.070	250	0.45	single	X024c
► FMD25-06KC5		25	0.100	under development		boost	X024a
► FMD25-06KC5SiC		25	0.100	under development		boost, SiC	X024a
FMD40-06KC		38	0.070	250	0.45	boost	X024a
► FMD40-06KC5		47	0.045	under development		boost	X024a
► FDM25-06KC5		25	0.100	under development		buck	X024a
► FDM25-06KC5SiC		25	0.100	under development		buck, SiC	X024a
► FDM40-06KC5		47	0.045	under development		buck	X024a

Trench Gate Power MOSFETs

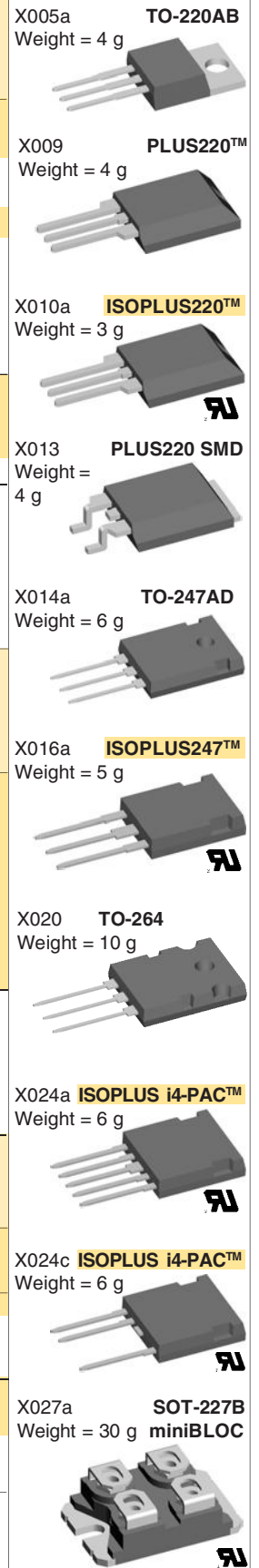


U Series

Type	V _{DSS} Max.	I _{D(cont)} T _C = 25°C	R _{DS(on)} typ T _C = 25°C	Q _{G(on)} typ	t _{rr} typ.	P _D	Fig. No.
► New	V	A	mΩ	nC	ns	W	
IXUC100N055	55	100 *	6.1	100	80	150	X010a
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
IXUC120N10		120 *	7.3	220	80	300	X010a
► IXUN280N10		280 *	3.9	440	80	770	X027a
► IXUN350N10		350 *	1.9	640	100	965	X027a

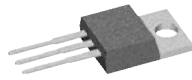

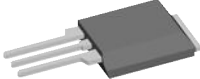


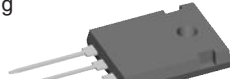

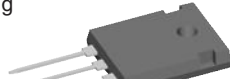
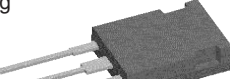



Notes: * Drain and source currents may be limited by external package leads

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



Trench Gate Power MOSFETs

Very Low $R_{DS(on)}$

Part Type	V_{DSS} max	I_D (cont) max $T_C=25^\circ\text{C}$	$R_{DS(on)}$ max $T_C=25^\circ\text{C}$	C_{iss} typ	Q_g typ	t_{rr} max	R_{thJC} max	P_D	Fig. No	Package style	
► New	V	A	Ω	pF	nC	ns	K/W	W		Outline drawings on pages 188 - 224	
► IXTP64N055T	55	64	0.013	1700	60	80	1.25	120	X005a	X005a Weight = 4 g	TO-220AB 
► IXTU64N055T		64*	0.013	1700	60	80	1.25	120	X003		
► IXTY64N055T		64*	0.013	1700	60	80	1.25	120	X004		
► IXTP90N055T		90*	0.008	2600	64	80	1.00	150	X005a		
► IXTU90N055T		90*	0.008	2600	64	80	1.00	150	X003		
► IXTY90N055T		90*	0.008	2600	64	80	1.00	150	X004		
► IXTA110N055T		110*	0.0067	3100	80	80	0.75	200	X011b	X008 Weight = 3 g	TO-262 i2-PAC 
► IXTA110N055T7		110*	0.0067	3100	80	80	0.75	200	X012b		
► IXTP110N055T		110*	0.0067	3100	80	80	0.75	200	X005a		
► IXTA182N055T		182*	0.0044	4850	115	80	0.42	350	X011b		
► IXTA182N055T7		182*	0.0044	4850	115	80	0.42	350	X012b		
► IXTP182N055T		182*	0.0044	4850	115	80	0.42	350	X005a	X009 Weight = 4 g	PLUS220 
► IXTQ182N055T		182*	0.0044	4850	115	80	0.42	350	X017a		
► IXTA220N055T		220*	0.0036	5800	175	80	0.37	400	X011b		
► IXTA220N055T7	220*	0.0036	5800	175	80	0.37	400	X012b			
► IXTP220N055T	220*	0.0036	5800	175	80	0.37	400	X005a			
► IXTQ220N055T	220*	0.0036	5800	175	80	0.37	400	X017a	X010a Weight = 3 g	ISOPLUS220™ 	
► IXTA240N055T	240*	0.0033	6900	190	80	0.33	450	X011b			
► IXTA240N055T7	240*	0.0033	6900	190	80	0.33	450	X012b			
► IXTC240N055T	140*	0.0036	6900	190	80	1.00	150	X010a	X011b Weight = 2 g	TO-263AB 	
► IXTQ240N055T	240*	0.0033	6900	190	80	0.33	450	X017a			
► IXTP240N055T	240*	0.0033	6900	190	80	0.33	450	X005a			
► IXTC280N055T	164*	0.0030	7900	240	80	0.85	175	X010a	X014a Weight = 6 g	TO-247AD 	
► IXTH280N055T	280*	0.0028	7900	240	80	0.30	500	X014a			
► IXTQ280N055T	280*	0.0028	7900	240	80	0.30	500	X017a			
► IXTV280N055T	280*	0.0028	7900	240	80	0.30	500	X009			
► IXTV280N055TS	280*	0.0028	7900	240	80	0.30	500	X013			
► IXTP55N075T	75	55	0.0017	2100	35	100	1.25	120	X005a	X013 Weight = 4 g	PLUS220 SMD 
► IXTU55N075T		55*	0.0017	2100	35	100	1.25	120	X003		
► IXTY55N075T		55*	0.0017	2100	35	100	1.25	120	X004		
► IXTP76N075T		76*	0.0011	2600	64	100	1.00	150	X005a		
► IXTU76N075T		76*	0.0011	2600	64	100	1.00	150	X003		
► IXTY76N075T		76*	0.0011	2600	64	100	1.00	150	X004		
► IXTA98N075T		98*	0.009	3100	80	100	0.75	200	X011b		
► IXTA98N075T7		98*	0.009	3100	80	100	0.75	200	X012b		
► IXTP98N075T		98*	0.009	3100	80	100	0.75	200	X005a	X014a Weight = 6 g	TO-247AD 
► IXTA160N075T		160*	0.0055	4850	130	100	0.42	350	X011b		
► IXTA160N075T7		160*	0.0055	4850	130	100	0.42	350	X012b		
► IXTP160N075T		160*	0.0055	4850	130	100	0.42	350	X005a		
► IXTQ160N075T		160*	0.0055	4850	130	100	0.42	350	X017a	X016a Weight = 5 g	ISOPLUS247™ 
► IXTA200N075T		200*	0.0044	5450	139	100	0.37	400	X011b		
► IXTA200N075T7	200*	0.0044	5450	139	100	0.37	400	X012b			
► IXTP200N075T	200*	0.0044	5450	139	100	0.37	400	X005a			
► IXTQ200N075T	200*	0.0044	5450	139	100	0.37	400	X017a			
► IXTA220N075T	220*	0.004	6900	190	100	0.33	450	X011b			
► IXTA220N075T7	220*	0.004	6900	190	100	0.33	450	X012b			
► IXTC220N075T	125*	0.0044	6900	190	100	1.00	150	X010a	X017a Weight = 5 g	TO-3P 	
► IXTQ220N075T	220*	0.004	6900	190	100	0.33	450	X017a			
► IXTP220N075T	220*	0.004	6900	190	100	0.33	450	X005a			
► IXTC250N075T	150*	0.0037	7900	240	100	0.85	175	X010a	X019 Weight = 5 g	TO-268AA 	
► IXTH250N075T	250*	0.0034	7900	240	100	0.30	500	X014a			
► IXTQ250N075T	250*	0.0034	7900	240	100	0.30	500	X017a			
► IXTV250N075T	250*	0.0034	7900	240	100	0.30	500	X009			
► IXTV250N075TS	250*	0.0034	7900	240	100	0.30	500	X013			
► IXTP50N085T	85	50	0.02	2100	35	110	1.25	120	X005a	X020 Weight = 10 g	TO-264 
► IXTU50N085T		50*	0.02	2100	35	110	1.25	120	X003		
► IXTY50N085T		50*	0.02	2100	35	110	1.25	120	X004		
► IXTP70N085T		70	0.013	2600	64	110	1.00	150	X005a		
► IXTU70N085T		70*	0.013	2600	64	110	1.00	150	X003		
► IXTY70N085T		70*	0.013	2600	64	110	1.00	150	X004		
► IXTA88N085T		88*	0.011	3100	80	110	0.75	200	X011b		
► IXTA88N085T7		88*	0.011	3100	80	110	0.75	200	X012b		

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

Trench Gate Power MOSFETs

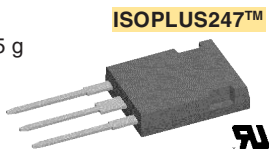
Very Low $R_{DS(on)}$

Part Type	V_{DS} max	I_D (cont) max $T_c=25^\circ\text{C}$	$R_{DS(on)}$ max $T_c=25^\circ\text{C}$	C_{iss} typ	Q_g typ	t_{rr} max	R_{thJC} max	P_D	Fig. No	Package style
► New	V	A	Ω	pF	nC	ns	K/W	W		Outline drawings on pages 188 - 224
► IXTP88N085T	85	88*	0.011	3100	80	110	0.75	200	X005a	X003 Weight = 0.3 g
► IXTA152N085T		152*	0.0066	4850	130	110	0.42	350	X011b	
► IXTA152N085T7		152*	0.0066	4850	130	110	0.42	350	X012b	
► IXTP152N085T		152*	0.0066	4850	130	110	0.42	350	X005a	
► IXTQ152N085T		152*	0.0066	4850	130	110	0.42	350	X017a	
► IXTA180N085T		180*	0.0055	6500	175	110	0.37	400	X011b	
► IXTA180N085T7		180*	0.0055	6500	175	110	0.37	400	X012b	
► IXTP180N085T		180*	0.0055	6500	175	110	0.37	400	X005a	
► IXTQ180N085T		180*	0.0055	6500	175	110	0.37	400	X017a	
► IXTA200N085T		200*	0.005	6900	190	110	0.33	450	X011b	
► IXTA200N085T7		200*	0.005	6900	190	110	0.33	450	X012b	
► IXTC200N085T		110*	0.0055	6900	190	110	1.00	150	X010a	
► IXTQ200N085T		200*	0.005	6900	190	110	0.33	450	X017a	
► IXTP200N085T		200*	0.005	6900	190	110	0.33	450	X005a	
► IXTC230N085T	136*	0.0045	7900	240	110	0.85	175	X010a		
► IXTH230N085T	230*	0.0041	7900	240	110	0.30	500	X014a		
► IXTQ230N085T	230*	0.0041	7900	240	110	0.30	500	X017a		
► IXTV230N085T	230*	0.0041	7900	240	110	0.30	500	X009		
► IXTV230N85TS	230*	0.0041	7900	240	110	0.30	500	X013		
► IXTP44N10T	100	44	0.025	1800	32	130	1.25	120	X005a	X009 Weight = 4 g
► IXTU44N10T		44*	0.025	1800	32	130	1.25	120	X003	
► IXTY44N10T		44*	0.025	1800	32	130	1.25	120	X004	
► IXTP60N10T		60	0.018	2200	58	130	1.00	150	X005a	
► IXTU60N10T		60*	0.018	2200	58	130	1.00	150	X003	
► IXTY60N10T		60*	0.018	2200	58	130	1.00	150	X004	
► IXTA80N10T		80*	0.013	2600	72	130	0.75	200	X011b	
► IXTA80N10T7		80*	0.013	2600	72	130	0.75	200	X012b	
► IXTP80N10T		80*	0.013	2600	72	130	0.75	200	X005a	
► IXTA130N10T		130*	0.0085	4100	115	130	0.42	350	X011b	
► IXTA130N10T7		130*	0.0085	4100	115	130	0.42	350	X012b	
► IXTP130N10T		130*	0.0085	4100	115	130	0.42	350	X005a	
► IXTQ130N10T		130*	0.0085	4100	115	130	0.42	350	X017a	
► IXTA160N10T		160*	0.0069	5800	155	130	0.37	400	X011b	
► IXTA160N10T7		160*	0.0069	5800	155	130	0.37	400	X012b	
► IXTP160N10T		160*	0.0069	5800	155	130	0.37	400	X005a	
► IXTQ160N10T		160*	0.0069	5800	155	130	0.37	400	X017a	
► IXTA180N10T		180*	0.0061	6200	170	130	0.33	450	X011b	
► IXTA180N10T7		180*	0.0061	6200	170	130	0.33	450	X012b	
► IXTC180N10T		100*	0.0067	6200	170	130	1.00	150	X010a	
► IXTQ180N10T		180*	0.0061	6200	170	130	0.33	450	X017a	
► IXTP180N10T		180*	0.0061	6200	170	130	0.33	450	X005a	
► IXTC200N10T		118*	0.0059	7200	220	130	0.85	175	X010a	
► IXTH200N10T		200*	0.0054	7200	220	130	0.30	500	X014a	
► IXTQ200N10T	200*	0.0054	7200	220	130	0.30	500	X017a		
► IXTV200N10T	200*	0.0054	7200	220	130	0.30	500	X009		
► IXTV200N10TS	200*	0.0054	7200	220	130	0.30	500	X013		

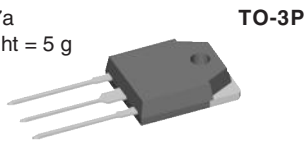
Note 1. Performance and availability are subject to change at IXYS' discretion.

Note 2. * - Drain and source currents may be limited by external package leads.

X016a
Weight = 5 g



X017a
Weight = 5 g



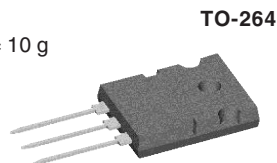
X013
Weight = 4 g



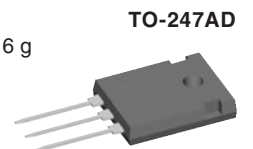
X019
Weight = 5 g



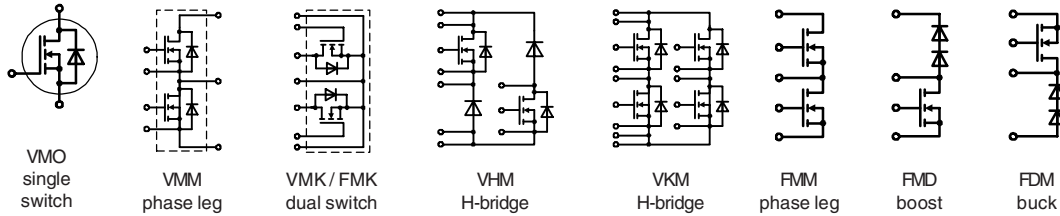
X020
Weight = 10 g



X014a
Weight = 6 g

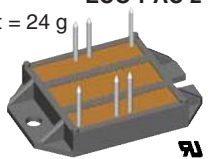
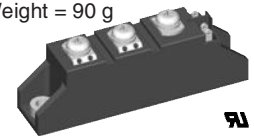





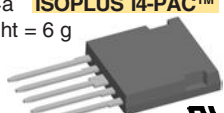


MOSFET Modules



N Channel Enhancement Types

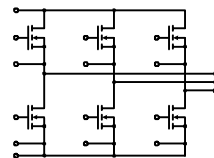
suffix "F" = HiPerFET™ technology with fast intrinsic diode

Type	V _{DSS} V	I _{D25} A T _C = 25°C	I _{D80} A T _C = 80°C	R _{DSon} mΩ T _J = 25°C	t _r ns	t _f ns	R _{thJC} K/W	Thermistor	Fig. No.	Package style
► New										
single switch modules										X102 Weight = 24 g  See data sheet for pin arrangement
VMO150-01P1	100	150	110	8	65	90	0.3		X102	ECO-PAC 2
VMO550-01F	100	590	<i>not recommended for new designs</i>					X128		
VMO650-01F	100	690	<i>not recommended for new designs</i>					X128		
► VMO1200-01F	100	1245	930	1.35	200	500	0.039	X130d		
VMO580-02F	200	580	<i>not recommended for new designs</i>					X130d		
VMO40-05P1	500	41	31	100	45	60	0.3	X102		
VMO60-05F	500	60	<i>not recommended for new designs</i>					X125b		
VMO80-05P1	500	82	62	50	45	60	0.16	X102		
dual switch modules - common source configuration										X125b TO-240 AA Weight = 90 g 
VMK165-007T	70	165	<i>not recommended for new designs</i>						X125b	
FMK75-01F	100	75	50 / 90°C	21	60	60	0.50		X024a	
VMK90-02T2	200	84	<i>not recommended for new designs</i>						X125b	
MOSFET modules - phase leg configuration										X127a Weight 150 g 
FMM75-01F	100	75	50 / 90°C	21	60	60	0.50		X024a	
VMM650-01F	100	680	} <i>not recommended for new designs</i>						• X130b	
VMM45-02F	200	45							X125b	
VMM85-02F	200	84							X127a	
VMM300-03F	300	290							• X128	
VMM90-09F	900	85	65	76	140	180	0.08		X130b	
MOSFET modules - H bridge configuration										X128 Weight = 250 g 
VHM40-06P1	600	38	25 / 90°C	70	10	95	0.45		• X102	
VKM60-01P1	100	75	60	25	60	60	0.5			
VKM40-06P1*	600	38	25	70	10	95	0.45			
MOSFET modules - boost configuration										X130b Weight = 250 g 
FMD21-05QC	500	21	15 / 90°C	180	16	30	1.50		X024a	
FMD40-06KC *	600	38	25 / 90°C	60	10	30	0.45		X024a	
► FMD25-06KC5 *	600	25	tbd	100	<i>under development</i>				X024a	
► FMD25-06KC5SiC *	600	25		100	<i>under development</i>				X024a	
► FMD40-06KC5 *	600	47		45	<i>under development</i>				X024a	
MOSFET modules - buck configuration										X130d Weight = 250 g 
FDM21-05QC	500	21	15 / 90°C	180	16	30	0.50		X024a	
► FDM25-06KC5 *	600	25	tbd	100	<i>under development</i>				X024a	
► FDM25-06KC5SiC *	600	25		100	<i>under development</i>				X024a	
► FDM40-06KC5 *	600	47		45	<i>under development</i>				X024a	
*  COOLMOS™ Power Semiconductors CoolMOS™ is a trademark of Infineon Technologies										X024a ISOPLUS i4-PAC™ Weight = 6 g 

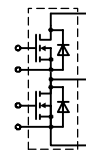
MOSFET Modules

Trench MOSFET Technology

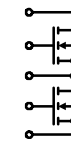
- very low $R_{DS(on)}$
- fast body diode



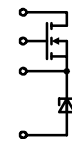
GWM, VWM
sixpack




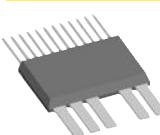


VMM
phase leg



FMM
phase leg



FDM
buck

Type	V_{DSS} V $T_C =$	I_{D25} A $T_C = 25^\circ\text{C}$	I_{D80} A $T_J = 90^\circ\text{C}$	$R_{DS(on)}$ $m\Omega$ 25°C	t_f ns	t_r ns	R_{thJC} K/W	Fig. No.	Package style	
<p>► New</p> <p>Outline drawings on page 188 - 224</p>										
Phase leg configuration										
FMM300-0055P	55	300	220	2.7	40	50	0.50	X024a	X024a Weight = 6 g ISOPLUS i4-PAC™ 	
FMM150-0075P	75	150	120	4.7	60	60	0.60	X024a		
FMM200-0075P	75	200	160	3.5	1170	1020	0.55	X024a		
VMM1500-0075P	75	1500	1200 / 80°C	0.55	200	170	0.06	X130b		
VMM1000-01P	100	1000	800 / 80°C	0.75	100	100	0.06	X130b		
FMM65-015P	150	65	50	13	100	80	0.60	X024a		
Sixpack configuration										
VWM350-0075P	75	340	250 / 80°C	2.3	200	170	0.26	X104	X026 Weight = 25 g ISOPLUS-DIL™ 	
VWM200-01P	100	210	170 / 80°C	3.6	100	100	0.26	X104		
GWM220-004P3*	40	220	160	2.8	190	270	0.85	X026	X104 Weight = 80 g  See data sheet for pin arrangement	
GWM160-0055P3*	55	160	120	3	50	40	0.85	X026		
GWM120-0075P3*	75	125	100	4.8	50	60	0.85	X026		
► GWM100-0085X1*	85	<i>under development</i>						X026		
GWM70-01P2*	100	70	50 / 80°C	11	70	85	0.85	X026		
► GWM95-01X1*	100	<i>under development</i>						X026		
Buck configuration										
FDM100-0045SP	45	100	80	5.7	155	115	1.0	X024a	X130b Weight = 250 g  RA	
Boost configuration										
FMD80-0045SP	100	70	50	11	70	55	0.85	X024a		

* Bent lead and SMD lead version available, refer to ISOPLUS-DIL pages 59/60