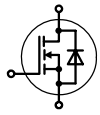
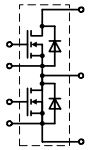


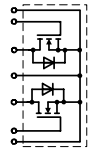
# MOSFET Modules



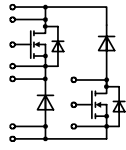
VMO  
single  
switch



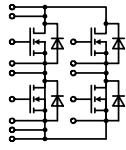
VMM  
phase leg



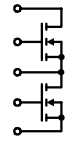
VMK / FMK  
dual switch



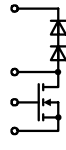
VHM  
H-bridge



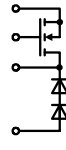
VKM  
H-bridge



FMM  
phase leg



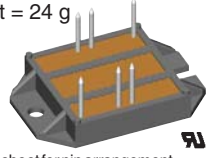
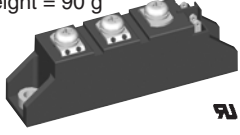




FMD  
boost



FDM  
buck

## N Channel Enhancement Types

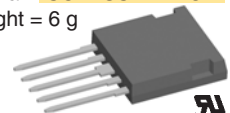
suffix "F" = HiPerFET™ technology with fast intrinsic diode

Type	V <sub>DSS</sub> V	I <sub>D25</sub> A T <sub>c</sub> = 25°C	I <sub>D80</sub> A T <sub>c</sub> = 80°C	R <sub>DSon</sub> mΩ T <sub>j</sub> = 25°C	t <sub>r</sub> ns	t <sub>f</sub> ns	R <sub>thJC</sub> K/W	Thermistor	Fig. No.	Package style
▶ New										
<b>single switch modules</b>										
VMO150-01P1	100	150	110	8	65	90	0.3		X102	<b>ECO-PAC 2</b> Weight = 24 g  See data sheet for pin arrangement
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		
<b>dual switch modules - common source configuration</b>										
VMK165-007T	70	165	<i>not recommended for new designs</i>						X125b	<b>TO-240 AA</b> Weight = 90 g 
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		
<b>MOSFET modules - phase leg configuration</b>										
FMM75-01F	100	75	50 / 90°C	21	60	60	0.50		X024a	X127a Weight 150 g 
VMM650-01F	100	680	<i>not recommended for new designs</i>						X130b	
VMM45-02F	200	45	<i>not recommended for new designs</i>						X125b	
VMM85-02F	200	84	<i>not recommended for new designs</i>						X127a	
VMM300-03F	300	290	<i>not recommended for new designs</i>						X128	
VMM90-09F	900	85	65	76	140	180	0.08		X130b	
<b>MOSFET modules - H bridge configuration</b>										
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			
<b>MOSFET modules - boost configuration</b>										
FMD21-05QC	500	21	15 / 90°C	180	16	30	1.50		X024a	X130b Weight = 250 g 
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	
<b>MOSFET modules - buck configuration</b>										
FDM21-05QC	500	21	15 / 90°C	180	16	30	0.50		X024a	X130d Weight = 250 g 
▶ 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<sup>+</sup>  
Power Semiconductors

CoolMOS™ is a trademark of Infineon Technologies

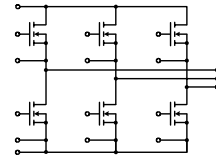
X024a **ISOPLUS i4-PAC™**  
Weight = 6 g



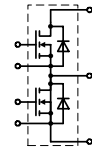
# MOSFET Modules

## Trench MOSFET Technology

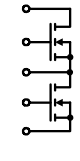
- very low  $R_{DSon}$
- fast body diode



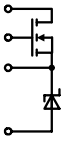
GWM, VWM  
sixpack



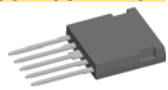
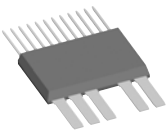

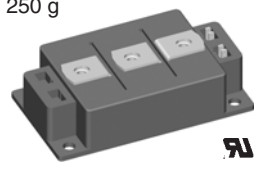
VMM  
phase leg



FMM  
phase leg



FDM  
buck

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

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