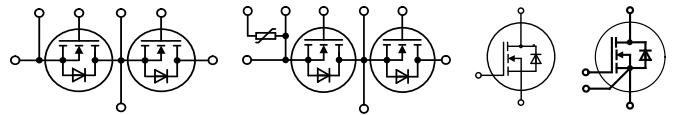
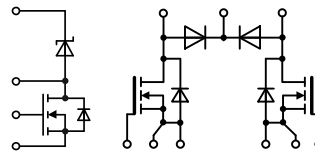


# Silicon Carbide Power MOSFETs



Part Type	$V_{DSS}$	$I_{D25}$ $T_C = 25^\circ C$	$I_{D80}$ $T_C = 80^\circ C$	$R_{DS(on)}$ $T_C = 25^\circ C$	$C_{iss}$ typ	$Q_g$ typ	$R_{thJC}$	Fig. No.	Package style Outline drawings on pages O-36...O-59
under development		A	A	mΩ (typ)	pF	nC	K/W		
New	V	A	A						
IXFN 130N90SK <sup>1)</sup>	900	136	109	10	4500	68	0.42	X027a	X016c <b>ISO247™</b> 
IXFN 27N120SK <sup>1)</sup>	1200	27	21.5	80	950	62	1.10	X027a	
IXFN 50N120SiC		47	35	40	1900	100	0.55		
IXFN 50N120SK <sup>1)</sup>		48	38	40	1895	115	0.60		
IXFN 70N120SK <sup>1)</sup>		68	55	25	2790	160	0.45		
MCB 60I1200TZ		90	70	25	2790	160	0.27		
IXFN 90N170SK <sup>1)</sup>	1700	90	67	23	7340	376	0.22	X027a	
<b>Phase Leg</b>									
MCB 20P1200LB	1200	22	17.5	80	950	62	1.60	X030a	X019a <b>TO-268AAHV</b> 
MCB 30P1200LB		37	29.5	40	1895	115	1.00		
MCB 40P1200LB		58	43	25	2790	160	0.60		
MCB 60P1200TLB *		77	62	25	2790	161	0.35		
MCB 35P1700TLB *	1700	47	35	45	3670	188	0.40		

<sup>1)</sup> Kelvin source gate connection; \* NTC included



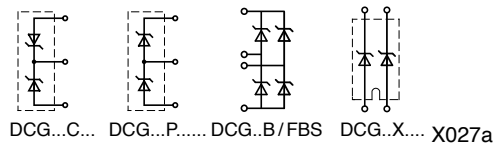
## Boost Circuits

Type	Circuit and Technology	$V_{DSS}$ max	$I_{D80}$ $T_C = 80^\circ C$	$R_{DS(on)}$ typ	$I_{F80}$ Boost Diode	Fig. No.	
under development		V	A	Ω	A		
New							
MXB 12R650DCGFC	X2 Class Boost + SiC Diode	650	12	0.15 (max)	11,5	X024a	X024a <b>ISOPLUS i4-PAC™</b> 
MKB 17RP650DCGLB	Dual Boost Superjunction <sup>1)</sup> + SiC		2 x 16	0.11 (max)	2 x 16	X030a	

<sup>1)</sup> Powered by Infineon CoolMOS™ superjunction bare die C6

# Silicon Carbide Schottky Diodes

## No reverse recovery



Type	$V_{RRM}$	$I_{F80}$ per diode	$I_{FAV}$ d = 0.5	@ $T_C$	$V_F$ typ., $T_{VJ} = 175^\circ C$	@ $I_F$	$R_{thJC}$	Fig. No.		
Under development		A	A	°C	V	A	K/W			
New	V	A	A							
<b>Dual</b>										
DCG 160X650NA	650	105	2x 80	80	1.35	50	0.47	X027a	X027a <b>SOT-miniBLOC</b> 227B 	
DCG 40X1200LB	1200	19.5	2x 14.5	80	2.20	20	1.90	X030a		
DCG 45X1200NA		30	2x 22	80	2.20	20	1.10	X027a		
DCG 85X1200NA		59	2x 43	80	2.20	40	0.57			
DCG 100X1200NA		66	2x 49	80	2.25	50	0.51			
DCG 130X1200NA		88	2x 64	80	2.30	60	0.39			
<b>Common Cathode</b>										
DCG 20C1200HR	1200	13	2x 10	80	2.20	10	3.00	X016c	X030a <b>SMPD-B</b> 	
DCG 35C1200HR		23	2x 17	80	2.20	20	1.80			
<b>Phase Leg</b>										
DCG 10P1200HR	2x 1200	13	10	80	2.20	10	3.00	X016c		
DCG 17P1200HR		23	17	80	2.20	20	1.80			
<b>Full Bridge</b>										
DCG 20B650LB	650	16	10.5	80	2.0	10	2.10	X030a		
FBS 10-12SC	1200	6.0	4.5	80	2.6	5	7.00	X024a		
DCG 20B1200LB		12.5	9.2	80	2.0	20	3.30	X030a		