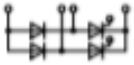
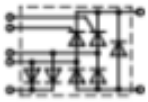
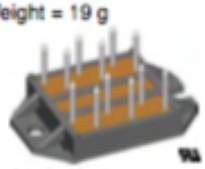
1~ Rectifier Bridges

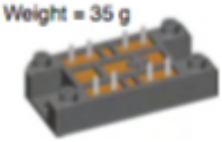
VKO VGO VHO 

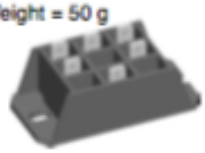
VKF VHF  VHFD

Type ○ Not for new design ➢ New	V_{RRM} V	V_{VRMS} V	I_{dAV} A	@ T_H °C	I_{FSM} 45°C A	V_{T0} V	r_T mΩ	T_{VJM} °C	R_{thJC} per Chip K/W	R_{thJH} per Chip K/W	Fig. No.	Package style Outline drawings on pages O-30...O-52
1~ Half Controlled Rectifier Bridges with free wheeling diode, B2HKF												
VHF 15-08io5	800	250	15	85	190	1.00	40.0	125	2.40	3.00	X117a	X101 ECO-PAC 1 Weight = 19 g
VHF 15-12io5	1200	400										
VHF 15-14io5	1400	440										
VHF 15-16io5	1600	500										
VHF 25-08io7	800	250	32	T_C = 85°C	200	0.85	27.0	125	1.30	1.80	X101	
VHF 25-12io7	1200	400										
VHF 28-08io5	800	250	28	85	300	0.90	15.0	125	1.40	2.00	X117a	
VHF 28-12io5	1200	400										
VHF 28-14io5	1400	440										
VHF 28-16io5	1600	500										
VHF 36-08io5	800	250	36	85	320	0.85	13.0	125	1.15	1.55	X117a	X103 V1-A-Pack Weight = 35 g
VHF 36-12io5	1200	400										
VHF 36-14io5	1400	440										
VHF 36-16io5	1600	500										
VHF 55-08io7	800	250	53	85	550	0.85	11.0	125	0.90	1.10	X118g	
VHF 55-12io7	1200	400										
VHF 55-14io7	1400	440										
VHF 55-16io7	1600	500										
VHF 85-12io7	1200	400	82	85	1150	0.85	6.0	125	0.65	0.80	X123d	
VHF 85-14io7	1400	440										
VHF 125-12io7	1200	400	123	85	1500	0.85	3.5	125	0.46	0.55	X123d	X117a FO-F-A Weight = 50 g
VHF 125-14io7	1400	440										
VHF 125-16io7	1600	500										
VHFD 16-08io1	800	250	16	85	150	1.00	40.0	125	2.40	3.00	X103	
VHFD 16-12io1	1200	400										
VHFD 16-14io1	1400	440										
VHFD 16-16io1	1600	500										
VHFD 29-08io1	800	250	28	85	300	0.90	15.0	125	1.40	2.00	X103	
VHFD 29-12io1	1200	400										
VHFD 29-14io1	1400	440										X118e FO-T-A Weight = 100 g
VHFD 29-16io1	1600	500										
VHFD 37-08io1	800	250	36	85	320	0.85	13.0	125	1.20	1.55	X103	
VHFD 37-12io1	1200	400										
VHFD 37-14io1	1400	440										
VHFD 37-16io1	1600	500										
1~ Half Controlled Rectifier Bridge, B2HK												
○ **VHO 55-08io7**	800	250	53	85	550	0.85	11.0	125	0.90	1.10	X118g	
○ **VHO 55-12io7**	1200	400										
○ **VHO 55-14io7**	1400	440										X118g FO-T-A Weight = 100 g
○ **VHO 55-16io7**	1600	500										
1~ Full Controlled Rectifier Bridge, B2C												
○ **VKO 55-08io7**	800	250	53	85	550	0.85	11.0	125	0.90	1.10	X118e	
○ **VKO 55-12io7**	1200	400										
○ **VKO 55-14io7**	1400	440										
○ **VKO 55-16io7**	1600	500										
1~ Full Controlled Rectifier Bridge, B2CF												
○ **VKF 55-08io7**	800	250	53	85	550	0.85	11.0	125	0.90	1.10	X118e	X123d PWS-E Weight = 300 g
○ **VKF 55-12io7**	1200	400										
○ **VKF 55-14io7**	1400	440										
○ **VKF 55-16io7**	1600	500										
1~ Half Controlled Rectifier Bridge, B2HZ												
VGO 36-08io7	800	250	36	85	320	0.85	13.0	125	1.40	2.00	X101	
VGO 36-12io7	1200	400										
VGO 36-14io7	1400	440										
VGO 36-16io7	1600	500										



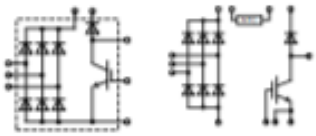
See data sheet for pin arrangement





3~ Rectifier Bridges

3~ Rectifier Bridges
with IGBT and Fast Diode for Brake Unit

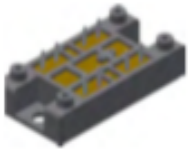


Type	Rectifier			IGBT		Fast Diode			Fig. No.
➢ New	V_{RRM} V	I_{FAV} A	@ T_C °C	V_{CES} V	I_{C80} A	V_{RRM} V	$I_{F(AV)}$ A	t_{rr} ns	
VUB 72-12NOXT	1200	75	110	1200	40	1200	21	130	X103
VUB 72-16NOXT	1600								
VUI 72-16NOXT	1600	75	110	1200	40	-	-	-	
VUB 116-16NOXT	1600	120	105	1200	84	1200	32	150	X112
VUB 120-16NOX	1600	180	90	1200	140	1200	32	300	X104
VUB 120-16NOXT									
VUB 135-22NO1	2200	150	105	1700	80	1700	33	tbd	X112
VUB 145-16NOXT	1600	150	105	1200	140	1200	32	300	
VUB 160-16NOX	1600	180	90	1200	175	1200	32	150	X104
VUB 160-16NOXT									
➢ MDMA 210UB1600PTED	1600	210	85	1200	84	1200	59	350	X112
➢ MDNA 210UB2200PTED	2200	210	85	1700	100	1700	54	550	
MDMA 240UB1600ED	1600	240	85	1200	140	1200	59	350	
➢ MDMA 280UB1600PTED	1600	280	85	1200	140	1200	59	350	
➢ MDNA 280UB2200PTED	2200	280	85	1700	100	1700	54	550	
➢ MDMA 360UB1600PTED	1600	360	85	1200	175	1200	90	350	
➢ MDNA 360UB2200PTED	2200	360	85	1700	145	1700	83	550	
➢ MDMA 450UB1600PTED	1600	450	85	1200	175	1200	90	350	

Package style
Outline drawings
on pages O-31...O-54

X027a SOT-227B miniBLOC

X103 V1-A-Pack

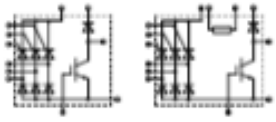


X104 V2-Pack

X112 E2-Pack

3~ Half Controlled Rectifier Bridges

with IGBT and Fast Diode for Brake Unit

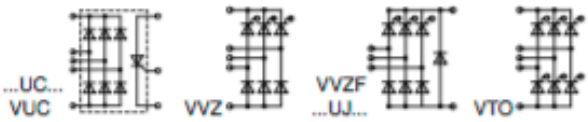


Type	Rectifier			IGBT		Fast Diode			Fig. No.
➢ New	V_{RRM} V	I_{FAV} A	@ T_C °C	V_{CES} V	I_{C80} A	V_{RRM} V	$I_{F(AV)}$ A	t_{rr} ns	
VVZB 120-16ioX	1600	180	85	1200	140	1200	32	300	X104
MCNA 120UI2200TED	2200	117	80	1700	80	1700	50	550	X112
VVZB 135-16ioXT	1600	150	85	1200	84	1200	32	150	
VVZB 170-16ioXT	1600	180	85	1200	140	1200	32	300	
MCMA 240UI1600ED	1600	240	80	1200	140	1200	59	350	
➢ MCMA 240UI1600PED									
➢ MCMA 245UI1600ED	1600	240	80	1200	175	1200	90	350	

X123c PWS-E

X123h PWS-E Flat

3~ Rectifier Bridges



Type	V_{RRM} V	V_{vRMS} V	I_{dAVM} A	@ T_H °C		$I_{FSM/TSM}$ 10 ms, 45°C A	V_{T0} V	r_T mΩ	T_{VJM} °C	R_{thJC} K/W	R_{thJH} K/W	Fig. No.	Package style Outline drawings on pages O-31...O-54
3~ Rectifier Bridges with Fast Diodes (t_{rr} = 1.5 ms) & Integrated Softstart Thyristor													
VUC 36-12go2	1200	400	34	85	Dio.	300	1.20	16.0	125	1.40	2.00	X105a	X101 ECO-PAC 1
					Thy.	400	0.85	10.0	125	0.90	1.10		
VUC 36-16go2	1600	500	34	85	Dio.	300	1.20	16.0	125	1.40	2.00		
					Thy.	400	0.85	10.0	125	0.90	1.10		
MDMA 60UC1600VC	1600	500	60	110	Dio.	350	0.83	11.5	150	1.30	1.60	X105c	See data sheet for pin arrangement
					Thy.	800	0.89	5.3	140	0.70	0.90		

Type	V_{RRM} V	V_{vRMS} V	I_{dAVM} A	@ T_H °C	$I_{FSM/TSM}$ 10 ms, 45°C A	V_{T0} V	r_T mΩ	T_{VJM} °C	R_{thJC} K/W	R_{thJH} K/W	Fig. No.
3~ Half Controlled Rectifier Bridges, B6HK											
VVZ 39-08ho7	800	250	39	85	200	0.85	27.0	125	1.30	1.80	X101
VVZ 39-12ho7	1200	400									
VVZ 40-12io1	1200	400	34	100	320	0.85	15.0	125	1.00	1.60	X105a
VVZ 40-16io1	1600	500									
VVZ 110-12io7	1200	400	110	85	1150	0.85	6.0	125	0.65	0.80	X123b
VVZ 175-12io7	1200	400	167	85	1500	0.85	3.5	125	0.46	0.55	
VVZ 175-16io7	1600	500									
3~ Half Controlled Rectifier Bridges with free wheeling diode, B6HKF											
MCMA 120UJ1800ED	1800	575	117	80	500	0.89	13.6	150	0.65	0.75	X112
○ **VVZF 70-16io7**	1600	500	70	85	550	0.85	11.0	125	0.90	1.10	X118c
3~ Full Controlled Rectifier Bridges, B6C											
VTO 39-08ho7	800	250	39	85	200	0.85	27.0	125	1.30	1.80	X101
VTO 39-12ho7	1200	400									

X105a V1-B-Pack

X105c V1-B-Pack

X123b PWS-E

X118c FO-T-A

X112 E2-Pack