Single Phase Rectifier Bridges, released, E 148688

Part Number	V_{RRM} V	V_{vRMS} V	I_{DAV} A	T_C °C	I_{FSM} 45°C 10ms A	V_{TO} V	r_T mΩ	T_{VJM} °C	R_{thJC} per Chip/ per Module K/W	R_{thJH} per Chip/ per Module K/W	Figure
PSB 15/06	600	180	21	100	100	0.8	40	150	2.3 / 0.58	2.8 / 0.7	**14**
PSB 15/08	800	250									
PSB 15/12	1200	400									
PSB 21/08	800	250	21	100	100	0.8	40	150	2.3 / 0.58	2.8 / 0.7	**3**
PSB 21/12	1200	400									
PSB 25T/08	800	250	21	63	380	0.85	12	150	8.2 / 2.05	9.4 / 2.35	**11**
PSB 25T/12	1200	400									
PSB 25T/14	1400	440									
PSB 25T/16	1600	500									
PSB 25T/18	1800	575									
PSB 31/08	800	250	38	100	450	0.8	10	150	1.55 / 0.388	2.1 / 0.525	**5**
PSB 31/12	1200	400									
PSB 31/14	1400	440									
PSB 31/16	1600	500									
PSB 31/18	1800	575									
PSB 35T/08	800	250	35	85	400	0.85	12	150	2.8 / 0.7	3.4 / 0.85	**12**
PSB 35T/12	1200	400									
PSB 35T/14	1400	440									
PSB 35T/16	1600	500									
PSB 35T/18	1800	575									
PSB 36T/08	800	250	30	62	550	0.8	5.8	150	6.2 / 1.55	7.4 / 1.85	**11**
PSB 36T/12	1200	400									
PSB 36T/14	1400	440									
PSB 36T/16	1600	500									
PSB 36T/18	1800	575									
PSB 41/08	800	250	45	100	550	0.8	8	150	1.45 / 0.363	1.9 / 0.475	**5**
PSB 41/12	1200	400									
PSB 41/14	1400	440									
PSB 41/16	1600	500									
PSB 41/18	1800	575									
PSB 50/08	800	250	72	100	675	0.8	5	150	1.1 / 0.275	1.52 / 0.38	**6**
PSB 50/12	1200	400									
PSB 50/14	1400	440									
PSB 50/16	1600	500									
PSB 50/18	1800	575									
PSB 51/08	800	250	55	100	750	0.8	6	150	1.3 / 0.325	1.6 / 0.4	**5**
PSB 51/12	1200	400									
PSB 51/14	1400	440									
PSB 51/16	1600	500									
PSB 51/18	1800	575									

© POWERSEM All rights reserved

Single Phase Rectifier Bridges, released, E 148688

	Part Number	V_{RRM} V	V_{vRMS} V	I_{DAV} A	T_C °C	I_{FSM} 45°C 10ms A	V_{TO} V	r_T mΩ	T_{VJM} °C	R_{thJC} per Chip/ per Module K/W	R_{thJH} per Chip/ per Module K/W	Figure
	PSB 53/08	800	250	54	100	300	0.8	13	150	1.1 / 0.28	1.6 / 0.4	**14**
	PSB 53/12	1200	400									
	PSB 53/14	1400	440									
	PSB 53/16	1600	500									
	PSB 54/08	800	250	54	100	300	0.8	13	150	1.1 / 0.28	1.6 / 0.4	**3**
	PSB 54/12	1200	400									
	PSB 54/14	1400	440									
	PSB 54/16	1600	500									
	PSB 55T/08	800	250	50	64	750	0.85	8	150	2.6 / 0.65	2.84 / 0.71	**13**
	PSB 55T/12	1200	400									
	PSB 55T/14	1400	440									
	PSB 55T/16	1600	500									
	PSB 55T/18	1800	575									
	PSB 61/08	800	250	65	100	1000	0.8	5	150	1.12 / 0.28	1.5 / 0.375	**5**
	PSB 61/12	1200	400									
	PSB 61/14	1400	440									
	PSB 61/16	1600	500									
	PSB 61/18	1800	575									
30 mm	**PSB 62/08**	800	250	52	100	550	0.8	8	150	1.45 / 0.36	1.87 / 0.47	**1**
30 mm	**PSB 62/12**	1200	400									
30 mm	**PSB 62/14**	1400	440									
30 mm	**PSB 62/16**	1600	500									
30 mm	**PSB 62/18**	1800	575									
17 mm	**PSBS 62/08**	800	250	52	100	550	0.8	8	150	1.45 / 0.36	1.87 / 0.47	**23**
17 mm	**PSBS 62/12**	1200	400									
17 mm	**PSBS 62/14**	1400	440									
17 mm	**PSBS 62/16**	1600	500									
17 mm	**PSBS 62/18**	1800	575									



Figure 1
page 64



Figure 3
page 65



Figure 5
page 66



Figure 6
page 66



Figure 11
page 69



Figure 12
page 69



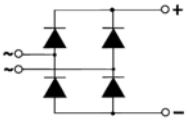
Figure 13
page 70



Figure 14
page 70



Figure 23
page 75



B2U

POWERSEM reserves the right to change limits, test conditions and dimensions - www.POWERSEM.com
© POWERSEM All rights reserved

Single Phase Rectifier Bridges, released, E 148688

	Part Number	V_{RRM} V	V_{vRMS} V	I_{DAV} A	T_C °C	I_{FSM} 45°C 10ms A	V_{TO} V	r_T mΩ	T_{VJM} °C	R_{thJC} per Chip/ per Module K/W	R_{thJH} per Chip/ per Module K/W	Figure
30 mm	**PSB 63/08**	800	250	60	100	1000	0.8	8	150	0.58 / 0.145	0.825 / 0.206	**1**
	PSB 63/12	1200	400									
	PSB 63/14	1400	440									
	PSB 63/16	1600	500									
	PSB 63/18	1800	575									
17 mm	**PSBS 63/08**	800	250	60	100	1000	0.8	8	150	0.58 / 0.145	0.825 / 0.206	**23**
	PSBS 63/12	1200	400									
	PSBS 63/14	1400	440									
	PSBS 63/16	1600	500									
	PSBS 63/18	1800	575									
	PSB 68/08	800	250	68	90	530	0.8	7.5	150	1.2 / 0.3	1.5 / 0.375	**3**
	PSB 68/12	1200	400									
	PSB 68/14	1400	440									
	PSB 68/16	1600	500									
	PSB 75/08	800	250	70	85	1000	0.8	6	150	1.28 / 0.32	1.38 / 0.345	**15**
	PSB 75/12	1200	400									
	PSB 75/14	1400	440									
	PSB 75/16	1600	500									
	PSB 75/18	1800	575									
	PSB 78/08	800	250	78	100	750	0.8	6.0	150	1.2 / 0.3	1.5 / 0.375	**4**
	PSB 78/12	1200	400									
	PSB 78/14	1400	440									
	PSB 78/16	1600	500									
30 mm	**PSB 82/08**	800	250	72	100	750	0.8	5	150	1.1 / 0.28	1.52 / 0.38	**1**
	PSB 82/12	1200	400									
	PSB 82/14	1400	440									
	PSB 82/16	1600	500									
	PSB 82/18	1800	575									
17 mm	**PSBS 82/08**	800	250	72	100	750	0.8	5	150	1.1 / 0.28	1.52 / 0.38	**23**
	PSBS 82/12	1200	400									
	PSBS 82/14	1400	440									
	PSBS 82/16	1600	500									
	PSBS 82/18	1800	575									
30 mm	**PSB 83/08**	800	250	88	100	1200	0.8	5	150	0.58 / 0.145	0.825 / 0.206	**1**
	PSB 83/12	1200	400									
	PSB 83/14	1400	440									
	PSB 83/16	1600	500									
	PSB 83/18	1800	575									

© POWERSEM All rights reserved

Single Phase Rectifier Bridges, released, E 148688

	Part Number	V_{RRM} V	V_{vRMS} V	I_{DAV} A	T_C °C	I_{FSM} 45°C 10ms A	V_{TO} V	r_T mΩ	T_{VJM} °C	R_{thJC} per Chip/ per Module K/W	R_{thJH} per Chip/ per Module K/W	Figure
17 mm	PSBS 83/08	800	250	88	100	1200	0.8	5	150	0.58 / 0.145	0.825 / 0.206	23
	PSBS 83/12	1200	400									
	PSBS 83/14	1400	440									
	PSBS 83/16	1600	500									
	PSBS 83/18	1800	575									
	PSB 88/08	800	250	92	100	900	0.8	4	150	0.85 / 0.212	1.15 / 0.288	4
	PSB 88/12	1200	400									
	PSB 88/14	1400	440									
	PSB 88/16	1600	500									
	PSB 95/08	800	250	95	85	1200	0.8	5	150	0.9 / 0.225	1.1 / 0.275	6
	PSB 95/12	1200	400									
	PSB 95/14	1400	440									
	PSB 95/16	1600	500									
	PSB 95/18	1800	575									
	PSB 105/08	800	250	107	85	1500	0.8	5	150	0.83 / 0.21	1.13 / 0.28	15
	PSB 105/12	1200	400									
	PSB 105/14	1400	440									
	PSB 105/16	1600	500									
	PSB 105/18	1800	575									
30 mm	PSB 112/08	800	250	84	100	1200	0.8	5	150	0.85 / 0.2125	1.05 / 0.263	2
	PSB 112/12	1200	400									
	PSB 112/14	1400	440									
	PSB 112/16	1600	500									
	PSB 112/18	1800	575									
17 mm	PSBS 112/08	800	250	84	100	1200	0.8	5	150	0.85 / 0.2125	1.05 / 0.263	22
	PSBS 112/12	1200	400									
	PSBS 112/14	1400	440									
	PSBS 112/16	1600	500									
	PSBS 112/18	1800	575									



Figure 1 page 64



Figure 2 page 64



Figure 3 page 65



Figure 4 page 65



Figure 6 page 66



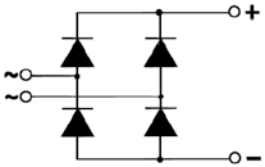
Figure 15 page 71



Figure 22 page 74



Figure 23 page 75

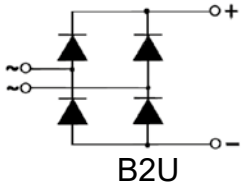


B2U

© POWERSEM All rights reserved

Single Phase Rectifier Bridges, released, E 148688

	Part Number	V_{RRM} V	V_{vRMS} V	I_{DAV} A	T_C °C	I_{FSM} 45°C 10ms A	V_{TO} V	r_T mΩ	T_{VJM} °C	R_{thJC} per Chip/ per Module K/W	R_{thJH} per Chip/ per Module K/W	Figure
	PSB 125/08	800	250	124	85	1800	0.8	3	150	0.83 / 0.21	1.13 / 0.28	**15**
	PSB 125/12	1200	400									
	PSB 125/14	1400	440									
	PSB 125/16	1600	500									
	PSB 125/18	1800	575									
30 mm	**PSB 162/08**	800	250	122	100	1800	0.8	3	150	0.65 / 0.16	0.83 / 0.21	**2**
30 mm	**PSB 162/12**	1200	400									
30 mm	**PSB 162/14**	1400	440									
30 mm	**PSB 162/16**	1600	500									
30 mm	**PSB 162/18**	1800	575									
17 mm	**PSBS 162/08**	800	250	122	100	1800	0.8	3	150	0.65 / 0.16	0.83 / 0.21	**22**
17 mm	**PSBS 162/12**	1200	400									
17 mm	**PSBS 162/14**	1400	440									
17 mm	**PSBS 162/16**	1600	500									
17 mm	**PSBS 162/18**	1800	575									
30 mm	**PSB 192/08**	800	250	174	100	2800	0.8	2.2	150	0.45 / 0.11	0.6 / 0.15	**2**
30 mm	**PSB 192/12**	1200	400									
30 mm	**PSB 192/14**	1400	440									
30 mm	**PSB 192/16**	1600	500									
30 mm	**PSB 192/18**	1800	575									
17 mm	**PSBS 192/08**	800	250	174	100	2800	0.8	2.2	150	0.45 / 0.11	0.6 / 0.15	**22**
17 mm	**PSBS 192/12**	1200	400									
17 mm	**PSBS 192/14**	1400	440									
17 mm	**PSBS 192/16**	1600	500									
17 mm	**PSBS 192/18**	1800	575									



B2U


Figure 2
page 64


Figure 15
page 71


Figure 22
page 74

© POWERSEM All rights reserved

Single Phase Half Controlled Rectifier Bridges, released, E 148688

Part Number	V_{RRM} V	V_{vRMS} V	I_{DAV} A	T_C °C	I_{FSM} 45°C 10ms A	V_{TO} V	r_T mΩ	T_{VJM} °C	R_{thJC} per Chip/ per Module K/W	R_{thJH} per Chip/ per Module K/W	Figure
PSBH 25/08	800	250	32	85	200	0.85	27	125	1.3 / 0.33	1.8 / 0.45	**3**
PSBH 25/12	1200	400									
PSBH 50/08	800	250	53	85	550	0.85	11	125	0.9 / 0.225	1.1 / 0.275	**5**
PSBH 50/12	1200	400									
PSBH 50/14	1400	440									
PSBH 50/16	1600	500									
PSBH 55/08	800	250	46	85	520	0.85	11	125	1.2 / 0.3	1.31 / 0.327	**6**
PSBH 55/12	1200	400									
PSBH 55/14	1400	440									
PSBH 55/16	1600	500									
PSBH 75/08	800	250	74	85	1150	0.85	5.33	125	0.66 / 0.165	0.93 / 0.233	**6**
PSBH 75/12	1200	400									
PSBH 75/14	1400	440									
PSBH 85/08	800	250	82	85	1150	0.85	3.7	125	0.65 / 0.163	0.8 / 0.2	**2**
PSBH 85/12	1200	400									
PSBH 85/14	1400	440									
PSBH 125/08	800	250	123	85	1500	0.85	3.2	125	0.46 / 0.115	0.55 / 0.138	**2**
PSBH 125/12	1200	400									
PSBH 125/14	1400	440									
PSBH 125/16	1600	500									



Figure 2
page 64



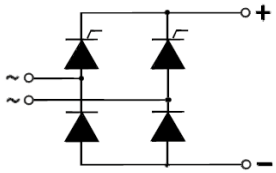
Figure 3
page 65



Figure 5
page 66



Figure 6
page 66

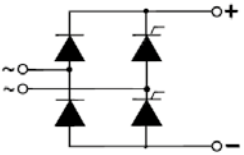


B2HK

POWERSEM reserves the right to change limits, test conditions and dimensions - www.POWERSEM.com
© POWERSEM All rights reserved

Single Phase Half Controlled Rectifier Bridges, released, E 148688

Part Number	V_{RRM} V	V_{vRMS} V	I_{DAV} A	T_C °C	I_{FSM} 45°C 10ms A	V_{TO} V	r_T mΩ	T_{VJM} °C	R_{thJC} per Chip/ per Module K/W	R_{thJH} per Chip/ per Module K/W	Figure
PSBZ 36/08	800	250	36	85	320	0.85	13	125	1.4 / 0.35	2.0 / 0.5	**3**
PSBZ 36/12	1200	400									
PSBZ 36/14	1400	440									
PSBZ 36/16	1600	500									
PSBZ 50/08	800	250	53	85	550	0.85	11	125	0.9 / 0.225	1.1 / 0.275	**5**
PSBZ 50/12	1200	400									
PSBZ 50/14	1400	440									
PSBZ 50/16	1600	500									
PSBZ 55/08	800	250	46	85	520	0.85	11	125	1.2 / 0.3	1.31 / 0.327	**6**
PSBZ 55/12	1200	400									
PSBZ 55/14	1400	440									
PSBZ 55/16	1600	500									
PSBZ 75/08	800	250	74	85	1150	0.85	5.33	125	0.66 / 0.165	0.93 / 0.233	**6**
PSBZ 75/12	1200	400									
PSBZ 75/14	1400	440									
PSBZ 85/08	800	250	82	85	1150	0.85	3.7	125	0.65 / 0.163	0.8 / 0.2	**2**
PSBZ 85/12	1200	400									
PSBZ 85/14	1400	440									
PSBZ 125/08	800	250	123	85	1500	0.85	3.2	125	0.46 / 0.115	0.55 / 0.138	**2**
PSBZ 125/12	1200	400									
PSBZ 125/14	1400	440									
PSBZ 125/16	1600	500									



B2HZ



Figure 2
page 64



Figure 3
page 65



Figure 5
page 66



Figure 6
page 66

© POWERSEM All rights reserved

Single Phase Half Controlled Rectifier Bridges, released, E 148688 With Freewheeling Diode

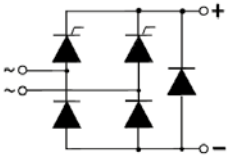
Part Number	V_{RRM} V	V_{vRMS} V	I_{DAV} A	T_C °C	I_{FSM} 45°C 10ms A	V_{TO} V	r_T mΩ	T_{VJM} °C	R_{thJC} per Chip/ per Module K/W	R_{thJH} per Chip/ per Module K/W	Figure
PSCH 25/08	800	250	32	85	200	0.85	27	125	1.3 / 0.26	1.8 / 0.36	**3**
PSCH 25/12	1200	400									
PSCH 50/08	800	250	53	85	550	0.85	11	125	0.9 / 0.18	1.1 / 0.22	**5**
PSCH 50/12	1200	400									
PSCH 50/14	1400	440									
PSCH 50/16	1600	500									
PSCH 55/08	800	250	46	85	520	0.85	11	125	1.2 / 0.24	1.31 / 0.262	**6**
PSCH 55/12	1200	400									
PSCH 55/14	1400	440									
PSCH 55/16	1600	500									
PSCH 75/08	800	250	74	85	1150	0.85	5.33	125	0.66 / 0.132	0.93 / 0.186	**6**
PSCH 75/12	1200	400									
PSCH 75/14	1400	440									
PSCH 85/08	800	250	82	85	1150	0.85	3.7	125	0.65 / 0.13	0.8 / 0.16	**2**
PSCH 85/12	1200	400									
PSCH 85/14	1400	440									
PSCH 125/08	800	250	123	85	1500	0.85	3.2	125	0.46 / 0.092	0.55 / 0.11	**2**
PSCH 125/12	1200	400									
PSCH 125/14	1400	440									
PSCH 125/16	1600	500									



Figure 2
page 64



Figure 3
page 65



B2HKF



Figure 5
page 66

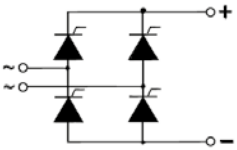


Figure 6
page 66

© POWERSEM All rights reserved

Single Phase Full Controlled Rectifier Bridges, released, E 148688

Part Number	V_{RRM} V	V_{vRMS} V	I_{DAV} A	T_C °C	I_{FSM} 45°C 10ms A	V_{TO} V	r_T mΩ	T_{VJM} °C	R_{thJC} per Chip/ per Module K/W	R_{thJH} per Chip/ per Module K/W	Figure
PSBT 25/08	800	250	32	85	200	0.85	27	125	1.3 / 0.33	1.8 / 0.45	**3**
PSBT 25/12	1200	400									
PSBT 50/08	800	250	53	85	550	0.85	11	125	0.9 / 0.225	1.1 / 0.275	**5**
PSBT 50/12	1200	400									
PSBT 50/14	1400	440									
PSBT 50/16	1600	500									
PSBT 55/08	800	250	46	85	520	0.85	11	125	1.2 / 0.3	1.31 / 0.327	**6**
PSBT 55/12	1200	400									
PSBT 55/14	1400	440									
PSBT 55/16	1600	500									
PSBT 75/08	800	250	74	85	1150	0.85	5.33	125	0.66 / 0.165	0.93 / 0.233	**6**
PSBT 75/12	1200	400									
PSBT 75/14	1400	440									
PSBT 85/08	800	250	82	85	1150	0.85	3.7	125	0.65 / 0.162	0.8 / 0.2	**2**
PSBT 85/12	1200	400									
PSBT 85/14	1400	440									
PSBT 125/08	800	250	123	85	1500	0.85	3.2	125	0.46 / 0.115	0.55 / 0.137	**2**
PSBT 125/12	1200	400									
PSBT 125/14	1400	440									
PSBT 125/16	1600	500									



B2C



Figure 2
page 64



Figure 3
page 65



Figure 5
page 66



Figure 6
page 66

© POWERSEM All rights reserved

Single Phase Full Controlled Rectifier Bridges, released, E 148688 With Freewheeling Diode

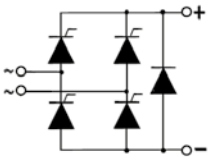
Part Number	V_{RRM} V	V_{vRMS} V	I_{DAV} A	T_C °C	I_{FSM} 45°C 10ms A	V_{TO} V	r_T mΩ	T_{VJM} °C	R_{thJC} per Chip/ per Module K/W	R_{thJH} per Chip/ per Module K/W	Figure
PSCT 50/08	800	250	53	85	550	0.85	11	125	0.9 / 0.18	1.1 / 0.22	**5**
PSCT 50/12	1200	400									
PSCT 50/14	1400	440									
PSCT 50/16	1600	500									
PSCT 55/08	800	250	46	85	520	0.85	11	125	1.2 / 0.24	1.31 / 0.262	**6**
PSCT 55/12	1200	400									
PSCT 55/14	1400	440									
PSCT 55/16	1600	500									
PSCT 75/08	800	250	74	85	1150	0.85	5.33	125	0.66 / 0.132	0.93 / 0.186	**6**
PSCT 75/12	1200	400									
PSCT 75/14	1400	440									
PSCT 85/08	800	250	82	85	1150	0.85	3.7	125	0.65 / 0.13	0.8 / 0.16	**2**
PSCT 85/12	1200	400									
PSCT 85/14	1400	440									
PSCT 125/08	800	250	123	85	1500	0.85	3.2	125	0.46 / 0.092	0.55 / 0.11	**2**
PSCT 125/12	1200	400									
PSCT 125/14	1400	440									
PSCT 125/16	1600	500									



Figure 2 page 64



Figure 5 page 66



B2CF



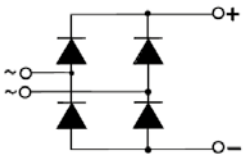
Figure 6 page 66

POWERSEM reserves the right to change limits, test conditions and dimensions - www.POWERSEM.com

© POWERSEM All rights reserved

Single Phase Rectifier Bridges,
released, E 148688 With Fast Recovery Epitaxial Diodes

Part Number	V_{RRM} V	V_{vRMS} V	I_{DAV} A	T_C °C	I_{FSM} 45°C 10ms A	V_{TO} V	r_T mΩ	t_{rr} ns	R_{thJC} per Chip/ per Module K/W	R_{thJH} per Chip/ per Module K/W	Figure
PSB 19F/04	400	125	27	85	50	1.18	22	35	2.5 / 0.63	2.8 / 0.7	**3**
PSB 19F/06	600	200	27	85	50	1.18	22	35	2.5 / 0.63	2.8 / 0.7	
PSB 19F/08	800	250	19	85	40	1.32	30	40	2.5 / 0.63	2.8 / 0.7	
PSB 19F/12	1200	400	19	85	40	1.32	30	40	2.5 / 0.63	2.8 / 0.7	
PSB 33F/04	400	125	44	85	110	1.13	13	35	1.6 / 0.4	1.9 / 0.48	**3**
PSB 33F/06	600	200	44	85	110	1.13	13	35	1.6 / 0.4	1.9 / 0.48	
PSB 33F/08	800	250	32	85	90	1.32	30	40	1.6 / 0.4	1.9 / 0.48	
PSB 33F/12	1200	400	32	85	90	1.32	30	40	1.6 / 0.4	1.9 / 0.48	
PSB 71F/04	400	125	68	85	250	0.98	8	35	0.9 / 0.23	1.2 / 0.3	**3**
PSB 71F/06	600	200	68	85	250	0.98	8	35	0.9 / 0.23	1.2 / 0.3	
PSB 71F/08	800	250	59	85	200	1.31	15	40	0.9 / 0.23	1.2 / 0.3	
PSB 71F/12	1200	400	59	85	200	1.31	15	40	0.9 / 0.23	1.2 / 0.3	
PSB 100F/04	400	125	100	85	600	1.09	4.3	35	0.85 / 0.21	1.0 / 0.25	**4**
PSB 100F/06	600	200	100	85	600	1.09	4.3	35	0.85 / 0.21	1.0 / 0.25	
PSB 100F/08	800	250	100	75	500	1.12	5.7	40	0.85 / 0.21	1.0 / 0.25	
PSB 100F/12	1200	400	100	75	500	1.12	5.7	40	0.85 / 0.21	1.0 / 0.25	



B2U



Figure 3
page 65



Figure 4
page 65

© POWERSEM All rights reserved