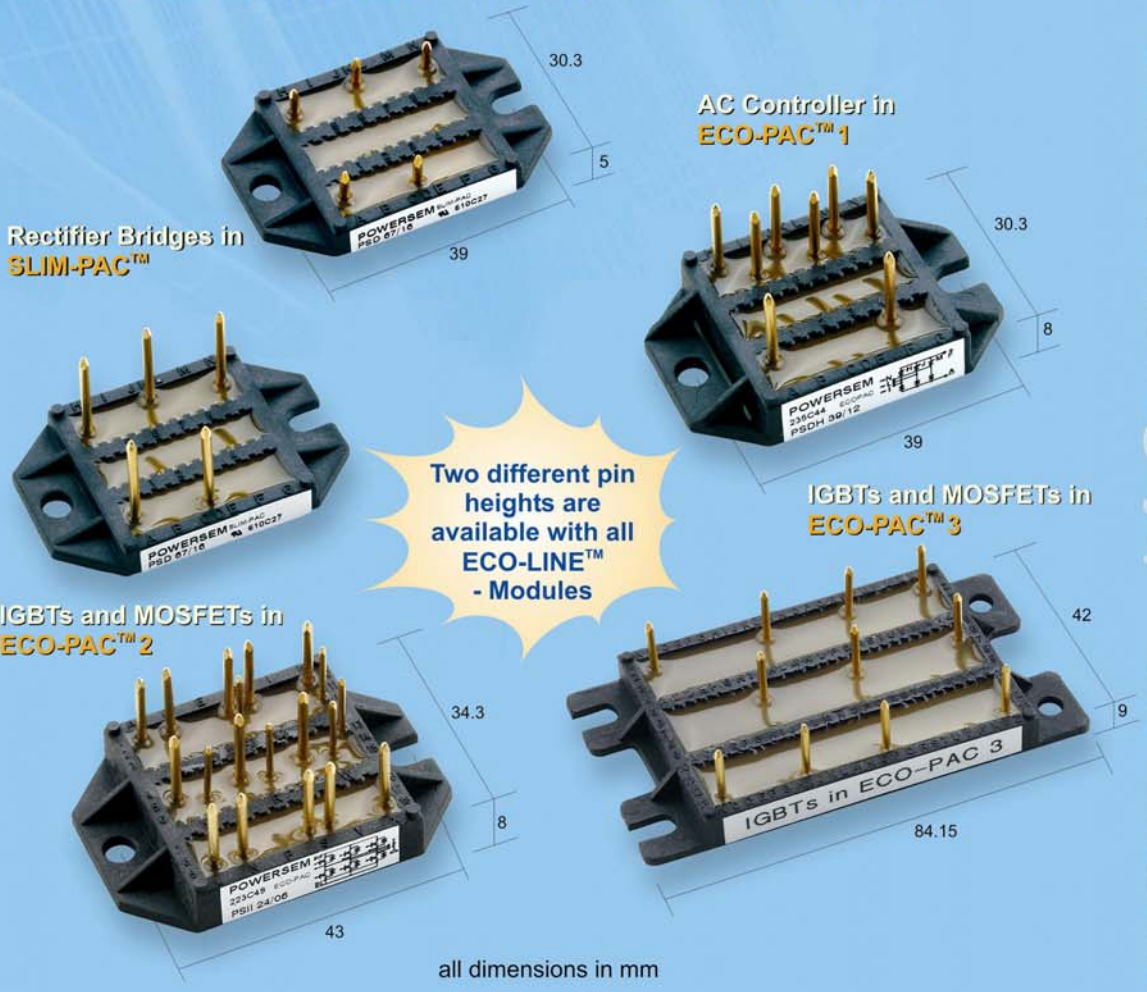
POWERSEM

Lowest Profile Package for Power Modules with Highest Performance and Widest Choice of Customized Circuit Configurations



- Customized choice of Circuit Configurations
- High - Tech Integrations of Diode, Thyristor, IGBT and MOSFET Chips
- One Package Concept for Current Ranges from 29A - 200 A and Blocking Voltages from 600 - 1800 V

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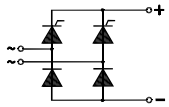
innovation and reliability with DCB technology

Single Phase Half Controlled Rectifier Bridges

released. E 148688



1 ~ Half Controlled Rectifier Bridges, B2HK

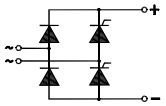
Type	V_{RRM} V	V_{vRMS} V	I_{DAV} A	T_C °C	I_{FSM} 45°C 10ms A	V_{TO} V	r_T mΩ	T_{VJM} °C	R_{thJC} Chip / Module K/W	R_{thJH} Chip / Module K/W	Figure	Package style see outlines starting at page 86
PSBH 25/08	800	250	32	85	200	0.85	27	125	1.3	1.8	22	Fig. 2
PSBH 25/12	1200	400							0.33	0.45		Weight = 270 g
PSBH 50/08	800	250	53	85	550	0.85	11	125	0.9	1.1	6	
PSBH 50/12	1200	400							---	---		
PSBH 50/14	1400	440							0.225	0.275		
PSBH 50/16	1600	500										
PSBH 54/08*	800	250	56	85	550	0.85	11	125	0.8	1.1	76	
PSBH 54/12*	1200	400							---	---		
PSBH 54/14*	1400	440							0.2	0.275		
PSBH 54/16*	1600	500										
PSBH 55/08	800	250	46	85	520	0.85	11	125	1.2	1.31	7	
PSBH 55/12	1200	400							---	---		
PSBH 55/14	1400	440							0.3	0.327		
PSBH 55/16	1600	500										
PSBH 75/08	800	250	74	85	1150	0.85	5.33	125	0.66	0.93		Fig. 6
PSBH 75/12	1200	400							---	---		Weight = 100 g
PSBH 75/14	1400	440							0.165	0.233		
PSBH 85/08	800	250	82	85	1150	0.85	3.7	125	0.65	0.8	2	
PSBH 85/12	1200	400							---	---		
PSBH 85/14	1400	440							0.163	0.2		
PSBH 125/08	800	250	123	85	1500	0.85	3.2	125	0.46	0.55		
PSBH 125/12	1200	400							---	---		
PSBH 125/14	1400	440							0.115	0.138		
PSBH 125/16	1600	500										

*** UL release applied**

Fig. 76

ECO-PAC™ 3

released, E 148688



1 ~ Half Controlled Rectifier Bridges, B2HZ

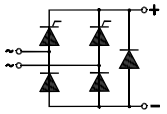
Type	V_{RRM} V	V_{vRMS} V	I_{DAV} A	T_C °C	I_{FSM} 45°C 10ms A	V_{TO} V	r_T mΩ	T_{VJM} °C	R_{thJC} Chip / Module K/W	R_{thJH} Chip / Module K/W	Figure	Package style see outlines starting at page 86
PSBZ 36/08	800	250	36	85	320	0.85	13	125	1.4	2.0	22	Fig. 7
PSBZ 36/12	1200	400							---	---		Weight = 220 g
PSBZ 36/14	1400	440							0.35	0.5		
PSBZ 36/16	1600	500										
PSBZ 50/08	800	250	53	85	550	0.85	11	125	0.9	1.1	6	
PSBZ 50/12	1200	400							---	---		
PSBZ 50/14	1400	440							0.225	0.275		
PSBZ 50/16	1600	500										
PSBZ 54/08*	800	250	56	85	550	0.85	11	125	0.8	1.1	76	
PSBZ 54/12*	1200	400							---	---		
PSBZ 54/14*	1400	440							0.2	0.275		
PSBZ 54/16*	1600	500										
PSBZ 55/08	800	250	46	85	520	0.85	11	125	1.2	1.31	7	
PSBZ 55/12	1200	400										
PSBZ 55/14	1400	440							---	---		
PSBZ 55/16	1600	500							0.3	0.327		
PSBZ 75/08	800	250	74	85	1150	0.85	5.33	125	0.66	0.93		
PSBZ 75/12	1200	400							---	---		
PSBZ 75/14	1400	440							0.165	0.233		

Fig. 22
Weight = 16

ECO-PAC™ 1

PSBZ 85/08	800	250	82	85	1150	0.85	3.7	125	0.65	0.8	2
PSBZ 85/12	1200	400							----------	----------	
PSBZ 85/14	1400	440							0.163	0.2	
PSBZ 125/08	800	250	123	85	1500	0.85	3.2	125	0.46	0.55	
PSBZ 125/12	1200	400							----------	----------	
PSBZ 125/14	1400	440							0.115	0.138	
PSBZ 125/16	1600	500									

Single Phase Half Controlled Rectifier Bridges

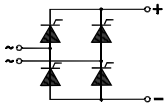


released, E 148688

1 ~ Half Controlled Rectifier Bridges with freewheeling diode, B2HKF

Type	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} Chip / Module K/W	R_{thJH} Chip / Module K/W	Figure	Package style see outlines starting at page 86
PSCH 25/08	800	250	32	85	200	0.85	27	125	1.3	1.8	22	Fig. 2
PSCH 25/12	1200	400							0.26	0.36		Weight = 270 g
PSCH 50/08	800	250	53	85	550	0.85	11	125	0.9	1.1	6	
PSCH 50/12	1200	400							----------	----------		
PSCH 50/14	1400	440							0.18	0.22		
PSCH 50/16	1600	500										
PSCH 55/08	800	250	46	85	520	0.85	11	125	1.2	1.31	7	
PSCH 55/12	1200	400							----------	----------		
PSCH 55/14	1400	440							0.24	0.262		
PSCH 55/16	1600	500										
PSCH 75/08	800	250	74	85	1150	0.85	5.33	125	0.66	0.93		
PSCH 75/12	1200	400							----------	----------		
PSCH 75/14	1400	440							0.132	0.186		
PSCH 85/08	800	250	82	85	1150	0.85	3.7	125	0.65	0.8	2	Fig. 6
PSCH 85/12	1200	400							----------	----------		Weight = 100 g
PSCH 85/14	1400	440							0.13	0.16		
PSCH 125/08	800	250	123	85	1500	0.85	3.2	125	0.46	0.55		
PSCH 125/12	1200	400							----------	----------		
PSCH 125/14	1400	440							0.092	0.11		
PSCH 125/16	1600	500										

released, E 148688



1 ~ Full Controlled Rectifier Bridges, B2C

Type	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} Chip / Module K/W	R_{thJH} Chip / Module K/W		Package style see outlines starting at page 86
PSBT 25/08	800	250	32	85	200	0.85	27	125	1.3	1.8	23	Fig. 7
PSBT 25/12	1200	400							0.33	0.45		Weight = 220 g
PSBT 50/08	800	250	53	85	550	0.85	11	125	0.9	1.1	6	
PSBT 50/12	1200	400							----------	----------		
PSBT 50/14	1400	440							0.225	0.275		
PSBT 50/16	1600	500										
PSBT 54/08*	800	250	56	85	550	0.85	11	125	0.8	1.1	76	
PSBT 54/12*	1200	400							----------	----------		
PSBT 54/14*	1400	440							0.2	0.275		
PSBT 54/16*	1600	500										
PSBT 55/08	800	250	46	85	520	0.85	11	125	1.2	1.31	7	
PSBT 55/12	1200	400							----------	----------		
PSBT 55/14	1400	440							0.3	0.327		
PSBT 55/16	1600	500										
PSBT 75/08	800	250	74	85	1150	0.85	5.33	125	0.66	0.93		
PSBT 75/12	1200	400							----------	----------		
PSBT 75/14	1400	440							0.165	0.233		
PSBT 85/08	800	250	82	85	1150	0.85	3.7	125	0.65	0.8	2	
PSBT 85/12	1200	400							----------	----------		
PSBT 85/14	1400	440							0.162	0.2		

Fig. 23
Weight = 16 g

ECO-PAC™ 1