

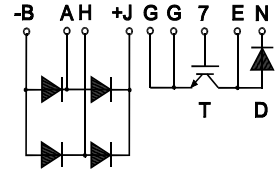
Rectifier Bridges for Power Factor Correction (PFC)

Single Phase PFC



released, E 148688

ECO-PAC™ 1



Boost Module with Ultra Fast IGBT and Boost Diode, Fast Rectifier Diodes

Type	V_{CES} V	I_{C80} T_C 80°C IGBT A	I_{F80} T_C 80°C boost diode A	V_{RMM} V	I_{C80} T_C 80°C rect. diodes A	R_{thJC} IGBT per diode K/W	R_{thJC} boost diode K/W	R_{thJC} rectifier K/W	Figure	Package style see outlines starting at page 86
PSBI 9/06	600	25	22	1200	10	0.96	1.15	2.5	44	
PSBI 33/06	600	30	19	600	22	0.96	1.15	2.5	79	

Fig. 44
Weight = 16

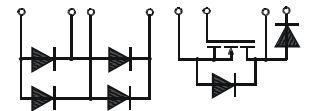


Fig. 79
Weight = 16



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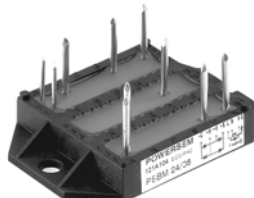
ECO-PAC™ 2



Boost Module with MOSFET and Boost Diode, Fast Rectifier Diodes

Type	V_{DSS} max. V	$I_{D(cont.)}$ T_s 25°C A	$R_{DS(on)}$ T_C 80°C boost diode Ω	R_{thJS} max. K/W	P_D max. $T_s = 25^\circ C$ W	V_{RRM} Boost Diode V	V_{RRM} Rectifier Diode V	Figure	Package style see outlines starting at page 86
PSBM 24/05	500	35	0.12	0.38	325	600	800	45	

Fig. 45
Weight = 24 g



Rectifier Bridges for Power Factor Correction (PFC)



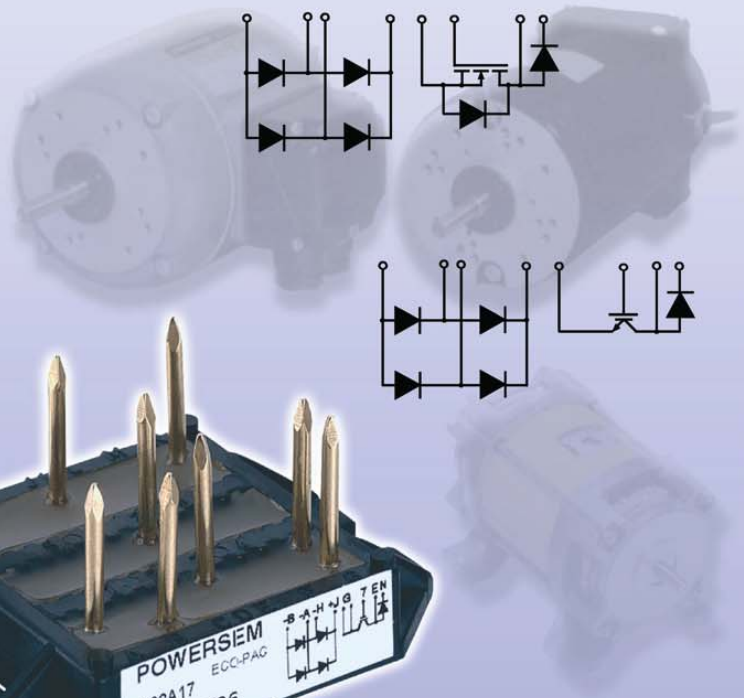
POWERSEM

ECO-PACs™

Power Factor Correction Module in ECO-PAC™

Features

- Package with DCB Ceramic Base Plate and Soldering Pins for PCB Mounting
- Isolation Voltage over 3000 V~
- High Level of Integration – only one Power Semiconductor Module required for the whole PFC Rectifier
- Standard PFC Control ICs usable
- Fast Rectifier Diodes for Enhanced EMC behaviour
- NPT IGBT with Low Saturation Voltage
- Ultra Fast Switching Capability
- High RBSOA and Short Circuit Ruggedness
- Internally Series Connected
- HiPerFRED Freewheeling Diode for Fast and Soft Reverse Recover at High Switching Frequency



Applications

- Single Phase Rectification with Power Factor Correction (PFC)
- Low Harmonic Content of Mains Current
- Mains Current and Voltage in Phase
- Wide Input Voltage Range, controlled Output Voltage

**your power bridge to the
connection future**

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