

Rectifier Bridges for Braking Systems

ECO-PAC™ 2



released, E 148688

IGBT Module (single switch)

Type	V_{CES}	I_{C25}	I_{C80}	$V_{CE(sat)}$ Saturation Voltage (typical) $T_J=25\text{ }^\circ\text{C}$	$t_{d(on)}$ $t_{d(off)}$ delay time Switching Character- istics		R_{thJC} IGBT	I_{F25} $T_C = 25\text{ }^\circ\text{C}$ DIODE	I_{F80} $T_C = 80\text{ }^\circ\text{C}$ DIODE	R_{thJC} DIODE	Figure	Package style see outlines starting at page 86					
	Voltage Grade	$T_C = 25\text{ }^\circ\text{C}$ IGBT	$T_C = 80\text{ }^\circ\text{C}$ IGBT										ns	K/W	A	A	K/W
	V	A	A														
PSIG 25/06	600	24.5	17	2.4	30	270	1.52	18.5	12	3.5	55a						
PSIG 25/12	1200	30	21	2.6	100	500	0.96	26	17	2.3							
PSIG 50/06	600	42.5	29	2.4	50	270	0.96	30	19	2.3	55b						
PSIG 50/12	1200	49	33	3.1	100	500	0.6	49	31	1.3							
PSIG 75/06	600	69	48	2.3	50	300	0.6	56	35	1.3	55b						
PSIG 75/12	1200	92	62	2.7	100	500	0.33	103	65	0.66							
PSIG 100/06	600	93	63	2.4	150	450	0.43	134	82	0.66	55b						
PSIG 100/12	1200	138	94	2.8	100	650	0.22	154	97	0.45							
PSIG 130/06	600	121	83	2.3	25	150	0.33	134	82.3	0.66	55b						
PSIG 160/12	1200	169	117	2.9	100	600	0.18	154	97	0.45							

Fig. 55a
Weight = 24 g

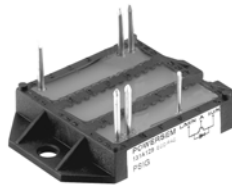
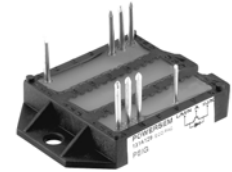


Fig. 55b
Weight = 24 g



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Three Phase Rectifier Bridge with IGBT and Fast Recovery Diode for Braking System

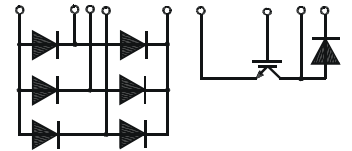
Type	Rectifier			IGBT		fast Diode			Figure	Package style see outlines starting at page 86
	V_{RRM}	I_{dAV} @ T_H		V_{CES}	I_{C80}	V_{RRM}	$I_{F(AV)}$	t_{rr}		
	V	A	$^\circ\text{C}$							
PSDI 33/06*	600	29	80	600	30	600	18	30	59	
PSDI 50/12	1600	56	$T_C=100$	1200	14	1200	10	110	53	

*NTC optional

Fig. 59
Weight = 24 g



Fig. 53
Weight = 24 g



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Three Phase Rectifier Bridge with MOSFET and Fast Recovery Diode for Braking System

Type	Rectifier			MOSFET		fast Diode			Figure	Package style see outlines starting at page 86
	V_{RRM}	I_{dAV} @ T_C		V_{CES}	I_{C80}	V_{RRM}	$I_{F(AV)}$	t_{rr}		
	V	A	$^\circ\text{C}$							
PSDM 33/05*	800	54	85	500	24	600	33	30	60	

*NTC optional

Fig. 60
Weight = 24 g

