

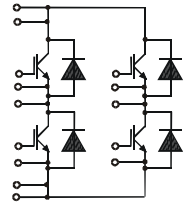
PS released, E 148688

IGBT Module (H - bridge configuration)

Type	V _{CES} Voltage Grade V	I _{C25} T _C = 25°C IGBT A	I _{C80} T _C = 80°C IGBT A	V _{CE(sat)} Saturation Voltage (typical) T _J =25 °C V	E _{off} T _J =125 °C IGBT mJ	R _{thJC} IGBT K/W	I _{F25} T _C = 25 °C DIODE A	I _{F80} T _C = 80 °C DIODE A	Figure	Package style see outlines starting at page 86
PSHI 25/06*	600	24.5	17	2.4	0.5	1.52	18.5	12	52	
PSHI 25/12*	1200	30	21	2.6	2.1	0.96	26	17		
PSHI 50/06*	600	42.5	29	2.4	1.0	0.96	30	19		
PSHI 50/12*	1200	49	33	3.1	3.4	0.6	49	31		
PSHI 100/06*	600	69	48	2.3	1.4	0.6	56	35		

*NTC optional

Fig. 52
Weight = 24 g



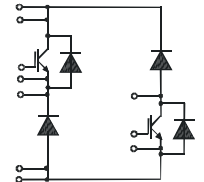
PS released, E 148688

IGBT Module (H - bridge configuration)

Type	V _{CES} Voltage Grade V	I _{C25} T _C = 25°C IGBT A	I _{C80} T _C = 80°C IGBT A	V _{CE(sat)} Saturation Voltage (typical) T _J =25 °C V	E _{off} T _J =125 °C IGBT mJ	R _{thJC} IGBT K/W	I _{F25} T _C = 25 °C DIODE A	I _{F80} T _C = 80 °C DIODE A	Figure	Package style see outlines starting at page 86
PSHI 50D/06*	600	42.5	29	2.4	1.0	0.96	56	35	61	
PSHI 50D/12*	1200	49	33	3.1	3.4	0.6	49	31		
PSHI 75D/06*	600	69	48	2.3	1.4	0.6	56	35		

*NTC optional

Fig. 61
Weight = 24 g



PS released, E 148688

IGBT Module (phase leg)

Type	V _{CES} Voltage Grade V	I _{C25} T _C = 25°C IGBT A	I _{C80} T _C = 80°C IGBT A	V _{CE(sat)} Saturation Voltage (typical) T _J =25 °C V	t _{d(on)} t _{d(off)} delay time Switching Character- istics ns	R _{thJC} IGBT K/W	I _{F25} T _C = 25 °C DIODE A	I _{F80} T _C = 80 °C DIODE A	R _{thJC} DIODE K/W	Figure	Package style see outlines starting at page 86
PSI 25/06*	600	24.5	17	2.4	30 270	1.52	18.5	12	3.5	54a	
PSI 25/12*	1200	30	21	2.6	100 500	0.96	26	17	2.3		
PSI 50/06*	600	42.5	29	2.4	50 270	0.96	30	19	2.3	54b	
PSI 50/12*	1200	49	33	3.1	100 500	0.6	49	31	1.3		
PSI 75/06*	600	69	48	2.3	50 300	0.6	56	35	1.3		
PSI 75/12*	1200	92	62	2.7	100 500	0.33	103	65	0.66		
PSI 100/06*	600	93	63	2.4	150 450	0.43	134	82	0.66		
PSI 130/06*	600	121	83	2.3	25 150	0.33	134	82.3	0.66		

*NTC optional

Fig. 54a
Weight = 24 g

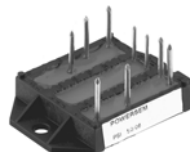
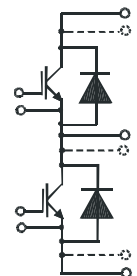


Fig. 54b
Weight = 24 g





IGBT Module (boost chopper)

Type	V_{CES}	I_{C25}	I_{C80}	$V_{CE(sat)}$	$t_{d(on)}$ $t_{d(off)}$ delay time Switching Character- istics	R_{thJC}	I_{F25}	I_{F80}	R_{thJC}	Figure	Package style see outlines starting at page 86	
	Voltage Grade	$T_c=25^\circ C$ IGBT	$T_c=80^\circ C$ IGBT	Saturation Voltage (typical) $T_j=25^\circ C$			$T_c=25^\circ C$ DIODE	$T_c=80^\circ C$ DIODE				DIODE
	V	A	A	V			A	A				K/W
PSSI 25/06*	600	24.5	17	2.4	30 270	1.52	18.5	12	3.5	57a		
PSSI 25/12*	1200	30	21	2.6	100 500	0.96	26	17	2.3			
PSSI 50/06*	600	42.5	29	2.4	50 270	0.96	30	19	2.3	57b		
PSSI 50/12*	1200	49	33	3.1	100 500	0.6	49	31	1.3			
PSSI 75/06*	600	69	48	2.3	50 300	0.6	56	35	1.3	57b		
PSSI 75/12*	1200	92	62	2.7	100 500	0.33	103	65	0.66			
PSSI 100/06*	600	93	63	2.4	150 450	0.43	134	82	0.66	57b		
PSSI 100/12*	1200	138	94	2.8	100 650	0.22	154	97	0.45			
PSSI 130/06*	600	121	83	2.3	25 150	0.33	134	82.3	0.66	57b		
PSSI 160/12*	1200	169	117	2.9	100 600	0.18	154	97	0.45			

*NTC optional

Fig. 57a
Weight = 24 g



Fig. 57b
Weight = 24 g



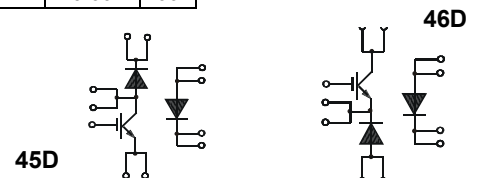
IGBT Module

Type	V_{CES}	I_{C25}	I_{C80}	$V_{CE(sat)}$	$t_{d(on)}$ $t_{d(off)}$ delay time Switching Character- istics	R_{thJC}	I_{F25}	I_{F80}	R_{thJC}	Figure	Package style see outlines starting at page 86	
	Voltage Grade	$T_c=25^\circ C$ IGBT	$T_c=80^\circ C$ IGBT	Saturation Voltage (typical) $T_j=25^\circ C$			$T_c=25^\circ C$ DIODE	$T_c=80^\circ C$ DIODE				DIODE
	V	A	A	V			A	A				K/W
PSSI 45D/06	600	69	48	2.3	50 300	0.6	134	82	0.66	65		
PSSI 46D/06	600	69	48	2.3	50 300	0.6	134	82	0.66	66		

Fig. 65
Weight = 24 g



Fig. 66
Weight = 24 g



IGBT Module (buck chopper)

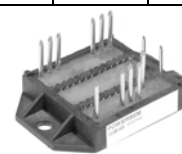
Type	V_{CES}	I_{C25}	I_{C80}	$V_{CE(sat)}$	$t_{d(on)}$ $t_{d(off)}$ delay time Switching Character- istics	R_{thJC}	I_{F25}	I_{F80}	R_{thJC}	Figure	Package style see outlines starting at page 86	
	Voltage Grade	$T_c=25^\circ C$ IGBT	$T_c=80^\circ C$ IGBT	Saturation Voltage (typical) $T_j=25^\circ C$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

*NTC optional

Fig. 62a
Weight = 24 g



Fig. 62b
Weight = 24 g

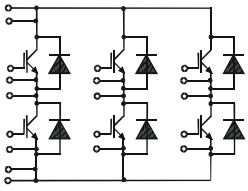


IGBT Modules

PSII released, E 148688

ECO-PAC™ 2

IGBT Sixpac Module

Type	V _{CES} Voltage Grade V	I _{C25} T _C = 25°C IGBT A	I _{C80} T _C = 80°C IGBT A	V _{CE(sat)} Saturation Voltage (typical) T _J =25 °C V	E _{off} T _J =125 °C IGBT mJ	R _{thJC} IGBT K/W	I _{F25} T _C = 25 °C DIODE A	I _{F80} T _C = 80 °C DIODE A	Figure	Package style see outlines starting at page 86
PSII 6/12*	1200	6	4.1	3.9	0.2	3.1	12	8	63	
PSII 15/12*	1200	18	14	2.3	1.1	1.4	15	10		
PSII 24/06*	600	19	14	1.9	0.3	1.7	21	14		
PSII 35/06	600	31	21	1.9	0.7	1.3	35	22	35	

*NTC optional

Fig. 63
Weight = 24 g



Fig. 35
Weight = 24 g



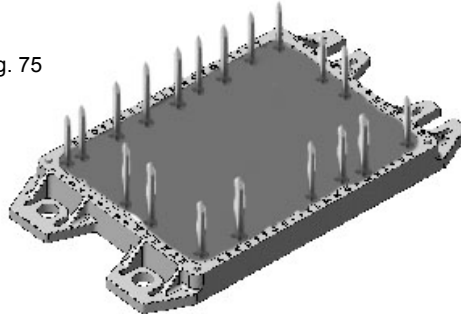
ECO-TOP™ 1

IGBT Sixpac Module, with Temperature Sensor

Type	V _{CES} Voltage Grade V	I _{C25} T _C = 25°C IGBT A	I _{C80} T _C = 80°C IGBT A	V _{CE(sat)} Saturation Voltage (typical) T _J =25 °C V	E _{off} T _J =125 °C IGBT mJ	R _{thJC} IGBT K/W	I _{F25} T _C = 25 °C DIODE A	I _{F80} T _C = 80 °C DIODE A	Figure	Package style see outlines starting at page 86
PSII 30/06	600	42.5	29	2.4	1.0	0.96	30	19	75	
PSII 30/12	1200	49	33	3.1	3.4	0.6	49	30		
PSII 50/06	600	69	48	2.3	1.4	0.6	56	35		
PSII 75/06	600	90	60	2.4	2.2	0.43	130	80		
PSII 75/12	1200	90	60	2.7	6.7	0.33	100	60		
PSII 100/06	600	120	80	2.3	2.3	0.33	130	80		
PSII 100/12	1200	130	90	2.8	10.5	0.22	150	100		

UL release applied

Fig. 75



ECO-TOP™ 1

Three Phase Rectifier Bridge, IGBT Brake Chopper, Three Phase IGBT Inverter, Temperature Sensor

Type	Rectifier 3~			Inverter 3~					Brake Chopper			Figure	Package style see outlines starting at page 86
	V _{RRM}	I _{FAV} T _C = 80°C	R _{thJC} max	V _{CES}	I _{C25} T _C = 25°C	I _{C80} T _C = 80°C	V _{CE(sat)} Saturation Voltage (typical) T _J = 25 °C	R _{thJC} max	V _{CES}	I _{C80} T _C = 80°C	R _{thJC} max		
	V	A	K/W	V	A	A	V	K/W	V	A	K/W		
PSIPM 30/06	1600	68	1.1	600	42.5	29	2.4	0.96	600	17	1.5	75	
PSIPM 35/12	1600	68	1.1	1200	49	33	3.1	0.6	1200	21	0.96		
PSIPM 50/06	1600	68	1.1	600	69	48	2.3	0.6	600	29	0.96		
PSIPM 60/12	1600	68	1.1	1200	92	62	2.7	0.33	1200	33	0.6		
PSIPM 100/06	1600	68	1.1	600	121	83	2.3	0.33	600	48	0.6		

UL release applied

Rectifier Bridges for Braking Systems

ECO-PAC™ 2



released, E 148688

IGBT Module (single switch)

Type	V_{CES}	I_{C25}	I_{C80}	$V_{CE(sat)}$	$t_{d(on)}$ $t_{d(off)}$ delay time Switching Character- istics	R_{thJC}	I_{F25}	I_{F80}	R_{thJC}	Figure	Package style see outlines starting at page 86				
	Voltage Grade	$T_C=$ 25°C IGBT	$T_C=$ 80°C IGBT	Saturation Voltage (typical) $T_J=25^\circ C$								IGBT	$T_C =$ 25 °C DIODE	$T_C =$ 80 °C DIODE	DIODE
	V	A	A	V								K/W	A	A	K/W
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

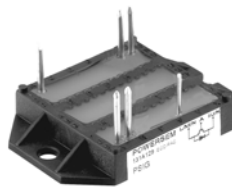
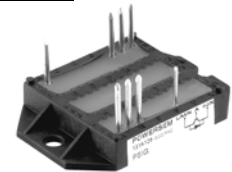


Fig. 55b
Weight = 24 g



released, E 148688

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

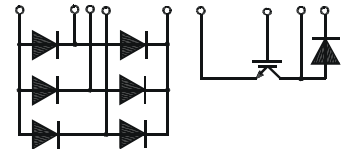
Type	Rectifier			IGBT		fast Diode			Figure	Package style see outlines starting at page 86
	V_{RRM}	I_{dAV} @ T_H		V_{CES}	I_{C80}	V_{RRM}	$I_{F(AV)}$	t_{rr}		
	V	A	°C	V	A	V	A	ns		
PSDI 33/06*	600	29	80	600	30	600	18	30	59	
PSDI 50/12	1600	56	$T_C=100$	1200	14	1200	10	110	53	

*NTC optional

Fig. 59
Weight = 24 g



Fig. 53
Weight = 24 g



released, E 148688

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	°C	V	A	V	A	ns		
PSDM 33/05*	800	54	85	500	24	600	33	30	60	

*NTC optional

Fig. 60
Weight = 24 g

