



Power Modules 2019/2020

starpower

- IGBT MODULES
- SiC MODULES



About StarPower

StarPower Semiconductor Ltd. is a leading power module company located in Jiaxing China about 59 miles southwest of Shanghai. Founded in 2005, StarPower designs and manufactures IGBT/SiC/MOSFET/IPM/FRD/Rectifier modules and customized modules for applications in the area of inverters, welding machines, inductive heating, UPS, EV/HEV, solar/wind power and etc. in the power range of 0.5kW up to more than 1MW.

Through heavy investment in R&Ds, we offer a broad range of quality and eco-friendly products and services to our customers. We are committed to excellence in all things we do. The company has one of the best production lines and well-trained workforce in the industry. Our mission is to create the most value for the success of our customers around the globe.

For more information, please go to our website at **www.powersemi.com** or call our sales hotline at **+86 573 82585700**(China); or go to our StarPower Europe website at **www.starpowereurope.com**, or call **+41 91 8504141**(Europe).



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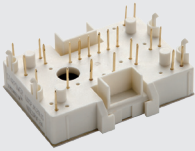
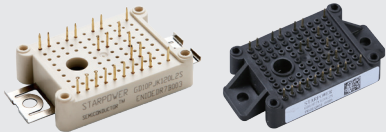
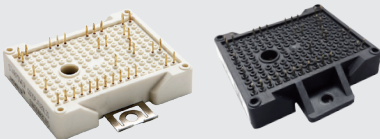
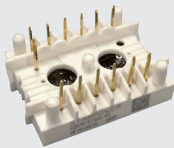
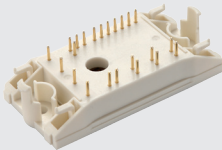
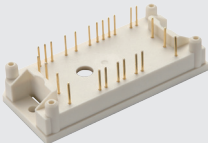
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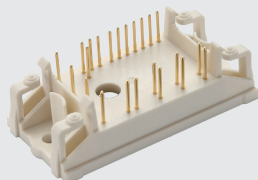
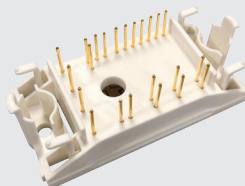
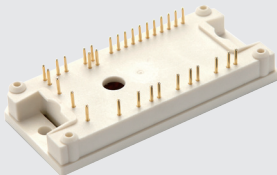
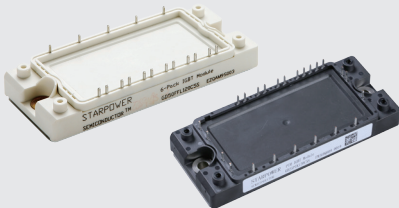
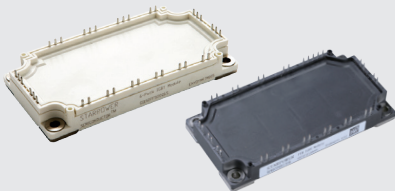
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Low Power Modules

Package Type	V_{CES} (V)				I_c (A)								
	600	650	1200	1700	5	10	25	30	40	75	150	200	
 L1 : PIM													
 L2 : 3 phase bridge/PIM													
 L3 : 3 phase bridge/PIM/NPC													
 L4 : 3 phase bridge													
 F1 : PIM/NPC/Boost													
 F2 : PIM/NPC													



Low Power Modules

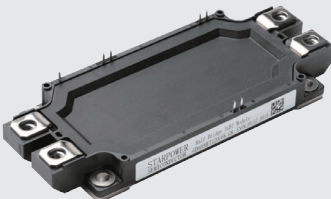
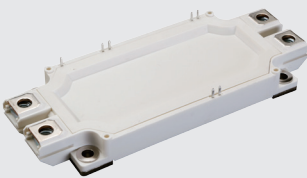
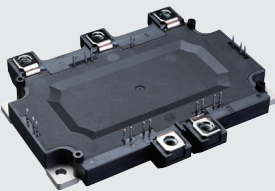
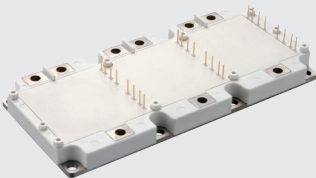
Package Type	V _{CES} (V)				I _c (A)								
	600	650	1200	1700	5	10	25	30	40	75	150	200	
 F3 : PIM													
 F4 : PIM													
 F5 : PIM													
 C5 : H bridge/3 phase bridge/PIM													
 C6 : H bridge/3 phase bridge/PIM													

Medium Power Modules

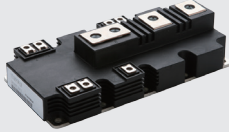
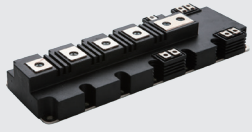
Package Type	$V_{CES} (V)$				$I_C (A)$							
	600	650	1200	1700	50	100	150	200	400	600	800	900
 C1: chopper/half bridge												
 C2.0: chopper/half bridge												
 C2.1: single												
 C8.0: half bridge												
 C8.1: half bridge												

Medium Power Modules



Package Type	V _{CES} (V)				I _c (A)								
	600	650	1200	1700	50	100	150	200	400	600	800	900	
 C8.2: H bridge													
 C6.1 black: half bridge/half NPC													
 C6.1 white: half bridge													
 P3: 3 phase bridge													
 P4: Tri-Pack													

High Power Modules

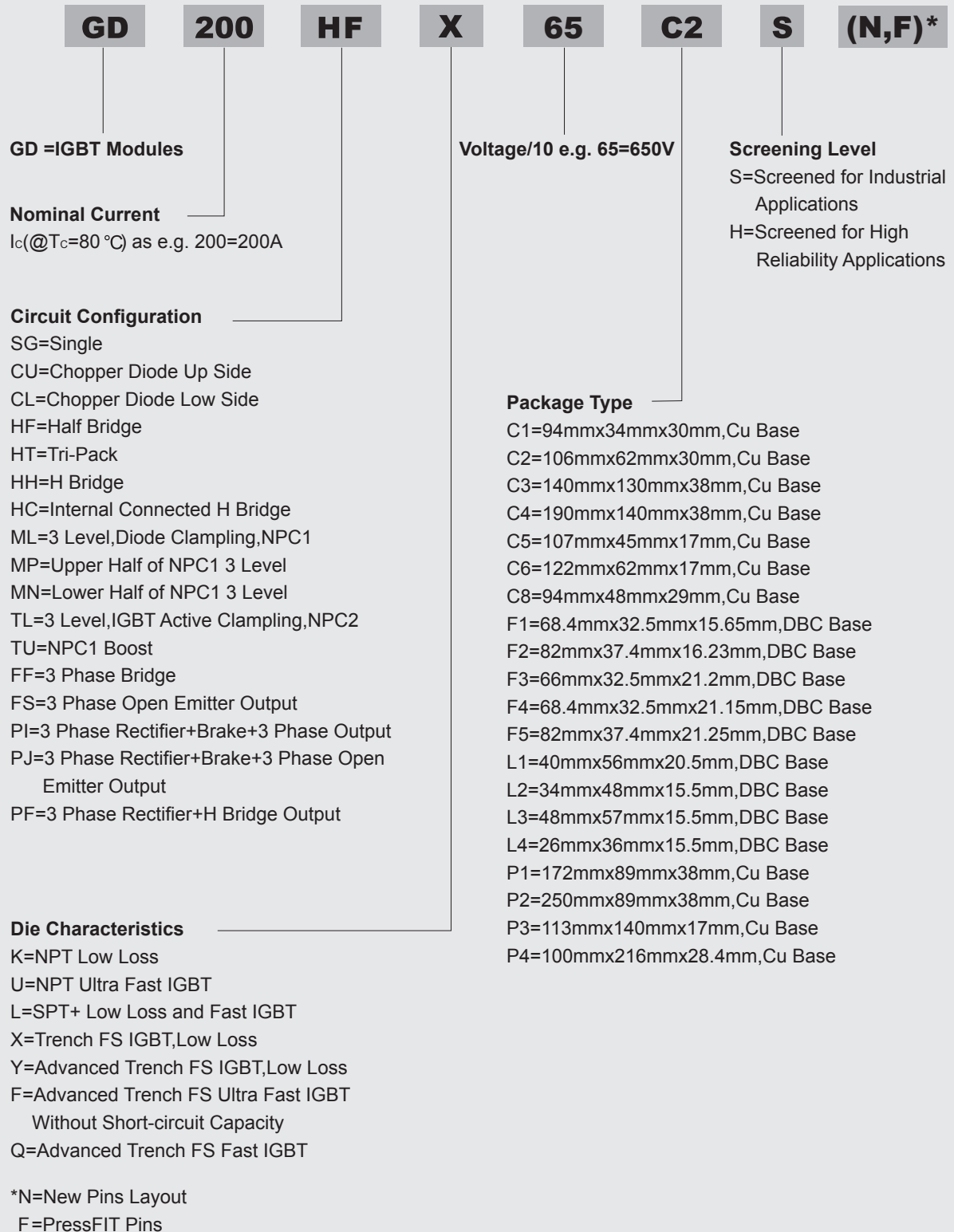
Package Type	$V_{CES} \text{ (V)}$			$I_c \text{ (A)}$							
	1200	1700	3300	400	600	900	1000	1400	2400	3600	
 C3.0: single											
 C3.1: half bridge											
 C3.2: single											
 C4.0: single											
 P1: half bridge											
 P2: half bridge											

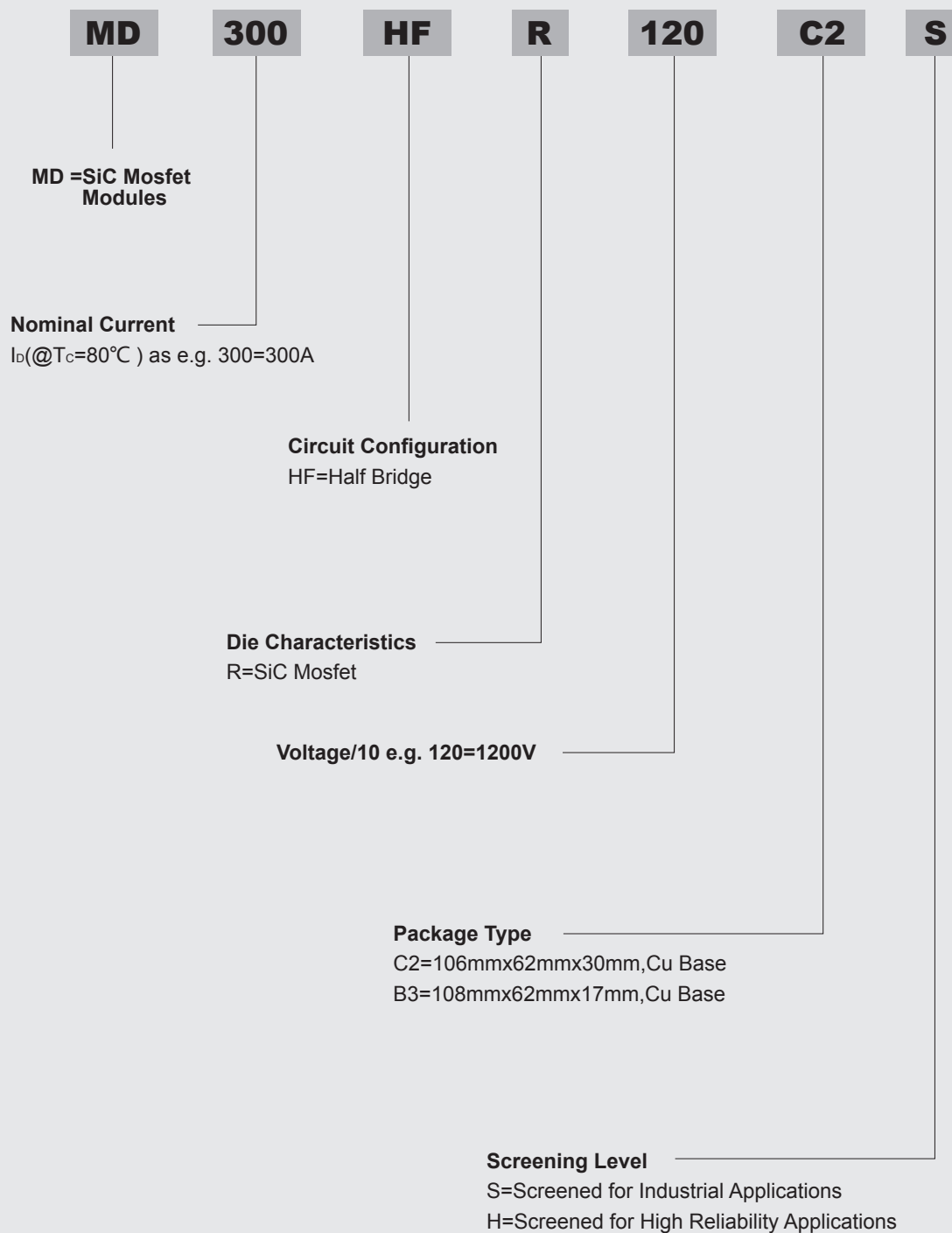
SiC Mosfet Modules



Package Type	V _{DSS} (V)		I _D (A)					
	1200	1700	50	120	200	400	600	
								
C2 : half bridge								
								
B3 : half bridge								

IGBT Module Nomenclature





Low Power Modules

Type	V _{CES} V	I _C A	V _{CE(sat)} @T _J =25°C typ. V	(E _{on} +E _{off}) @T _J =125°C typ. mJ	R _{th(J-C)} K/W	Package Outline/page	Circuit
650V NPC1							
Trench FS IGBT,Low Loss							
GD75MLX65L3S	650	75	1.45	2.32	0.514	L3.1/20	
GD100MLX65L3S	650	100	1.45	3.36	0.384	L3.1/20	
GD150MLX65L3S	650	150	1.45	5.48	0.269	L3.1/20	
GD75MLX65L3SF	650	75	1.45	2.32	0.514	L3.3/21	
GD100MLX65L3SF	650	100	1.45	3.36	0.384	L3.3/21	
GD150MLX65L3SF	650	150	1.45	5.48	0.269	L3.3/21	
650V 3 Phase Bridge							
Trench FS IGBT,Low Loss							
GD10FSX65L4S	650	10	1.45	0.44	3.132	L4.0/21	
GD15FSX65L4S	650	15	1.45	0.67	2.344	L4.0/21	
GD20FSX65L4S	650	20	1.45	0.99	2.063	L4.0/21	
GD30FSX65L4S	650	30	1.45	1.04	1.289	L4.0/21	
650V 3 Phase Bridge with NTC							
Trench FS IGBT,Low Loss							
GD20FSX65L2S	650	20	1.45	0.99	1.955	L2.1/19	
GD30FSX65L2S	650	30	1.45	1.04	1.222	L2.1/19	
GD50FSX65L2S	650	50	1.45	1.74	0.745	L2.1/19	
GD20FSX65L2SF	650	20	1.45	0.99	1.955	L2.6/20	
GD30FSX65L2SF	650	30	1.45	1.04	1.222	L2.6/20	
GD50FSX65L2SF	650	50	1.45	1.74	0.745	L2.6/20	
650V PIM							
Trench FS IGBT,Low Loss							
GD10PJX65L2S	650	10	1.45	0.44	2.968	L2.2/19	
GD15PJX65L2S	650	15	1.45	0.67	2.221	L2.2/19	
GD20PJX65L2S	650	20	1.45	0.99	1.955	L2.2/19	
GD30PJX65L2S	650	30	1.45	1.04	1.222	L2.2/19	
GD50PJX65L3S	650	50	1.45	1.74	0.745	L3.0/20	
GD10PJX65L2SF	650	10	1.45	0.44	2.968	L2.5/19	
GD15PJX65L2SF	650	15	1.45	0.67	2.221	L2.5/19	
GD20PJX65L2SF	650	20	1.45	0.99	1.955	L2.5/19	
GD30PJX65L2SF	650	30	1.45	1.04	1.222	L2.5/19	
GD50PJX65L3SF	650	50	1.45	1.74	0.745	L3.5/21	

Low Power Modules

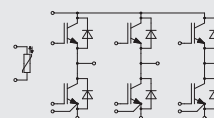
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Type	V_{CES} V	I_C A	$V_{CE(sat)}$ @ $T_j=25^\circ\text{C}$ typ. V	$(E_{on}+E_{off})$ @ $T_j=125^\circ\text{C}$ typ. mJ	$R_{th(J-C)}$ K/W	Package Outline/page	Circuit
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1200V 3 Phase Bridge with NTC

Advanced Trench FS IGBT, Low Loss

GD25FSY120L2S	1200	25	1.70	4.78	0.710	L2.1/19
GD35FSY120L2S	1200	35	1.70	6.09	0.552	L2.1/19
GD50FSY120L3S	1200	50	1.70	12.67	0.449	L3.2/20
GD75FSY120L3S	1200	75	1.70	14.40	0.292	L3.2/20



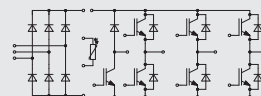
1200V PIM

Advanced Trench FS IGBT, Low Loss

GD10PJY120L2S	1200	10	1.70	2.27	1.200	L2.2/19
GD15PJY120L2S	1200	15	1.70	3.11	1.020	L2.2/19
GD25PJY120L3S	1200	25	1.70	4.78	0.710	L3.0/20
GD35PJY120L3S	1200	35	1.70	6.09	0.552	L3.0/20

NPT Low Loss

GD10PJK120L1S	1200	10	2.20	1.91	1.600	L1.2/19
GD15PJK120L1S	1200	15	2.20	2.95	1.180	L1.2/19
GD10PJK120L2S	1200	10	2.20	1.91	1.200	L2.2/19



Low Power Modules

Type	V_{CES} V	I_C A	$V_{CE(sat)}$ @ $T_J=25^{\circ}C$ typ. V	$(E_{on}+E_{off})$ @ $T_J=125^{\circ}C$ typ. mJ	$R_{th(J-C)}$ K/W	Package Outline/page	Circuit
650V NPC1 Boost							
Trench FS IGBT,Low Loss							
GD30TUX65F1S	650	30	1.45	1.04	1.400	F1.3/22	
GD50TUX65F1S	650	50	1.45	1.74	0.854	F1.3/22	
GD75TUX65F1S	650	75	1.45	2.32	0.589	F1.3/22	
650V NPC1							
Trench FS IGBT,Low Loss							
GD30MLX65F1S	650	30	1.45	1.04	1.400	F1.2/22	
GD50MLX65F1S	650	50	1.45	1.74	0.854	F1.2/22	
GD75MLX65F1S	650	75	1.45	2.32	0.589	F1.2/22	
GD30MLX65F1SF	650	30	1.45	1.04	1.400	F1.4/22	
GD75MLX65F1SF	650	75	1.45	2.32	0.589	F1.4/22	
650V PIM							
Trench FS IGBT,Low Loss							
GD10PJX65F1S	650	10	1.45	0.44	3.402	F1.1/21	
GD15PJX65F1S	650	15	1.45	0.67	2.546	F1.1/21	
GD20PJX65F1S	650	20	1.45	0.99	2.241	F1.1/21	
GD30PJX65F1S	650	30	1.45	1.04	1.400	F1.1/21	
GD30PJX65F2S	650	30	1.45	1.04	1.400	F2.0/22	
GD50PJX65F2S	650	50	1.45	1.74	0.854	F2.0/22	
GD75PJX65F2S	650	75	1.45	2.32	0.589	F2.0/22	
GD10PJX65F3S	650	10	1.45	0.44	3.402	F3.0/23	
GD15PJX65F3S	650	15	1.45	0.67	2.546	F3.0/23	
GD20PJX65F3S	650	20	1.45	0.99	2.241	F3.0/23	
GD30PJX65F3S	650	30	1.45	1.04	1.400	F3.0/23	
GD10PJX65F4S	650	10	1.45	0.44	3.402	F4.1/23	
GD15PJX65F4S	650	15	1.45	0.67	2.546	F4.1/23	
GD20PJX65F4S	650	20	1.45	0.99	2.241	F4.1/23	
GD30PJX65F4S	650	30	1.45	1.04	1.400	F4.1/23	
GD30PJX65F5S	650	30	1.45	1.04	1.400	F5.1/23	
GD50PJX65F5S	650	50	1.45	1.74	0.854	F5.1/23	
GD75PJX65F5S	650	75	1.45	2.32	0.589	F5.1/23	

Low Power Modules

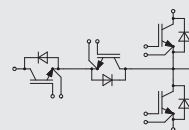
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Type	V_{CES} V	I_C A	$V_{CE(sat)}$ @ $T_j=25^\circ\text{C}$ typ. V	$(E_{on}+E_{off})$ @ $T_j=125^\circ\text{C}$ typ. mJ	$R_{th(J-C)}$ K/W	Package Outline/page	Circuit
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1200V NPC2

Advanced Trench FS Fast IGBT

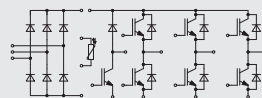
GD40TLQ120F1S	1200	40	2.00	1.57	0.572	F1.2/22
GD80TLQ120F1S	1200	80	2.00	3.14	0.286	F1.2/22
GD40TLQ120F1SF	1200	40	2.00	1.57	0.572	F1.4/22
GD80TLQ120F1SF	1200	80	2.00	3.14	0.286	F1.4/22



1200V PIM

Advanced Trench FS IGBT, Low Loss

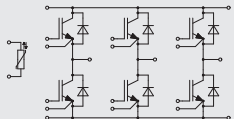
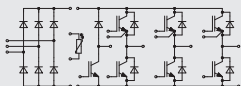
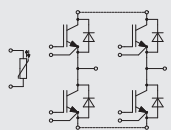
GD10PJY120F1S	1200	10	1.70	2.27	1.340	F1.1/21
GD15PJY120F1S	1200	15	1.70	3.11	1.165	F1.1/21
GD15PJY120F2S	1200	15	1.70	3.11	1.165	F2.0/22
GD25PJY120F2S	1200	25	1.70	4.78	0.794	F2.0/22
GD35PJY120F2S	1200	35	1.70	6.09	0.633	F2.0/22
GD50PJY120F2S	1200	50	1.70	12.67	0.515	F2.0/22
GD10PJY120F3S	1200	10	1.70	2.27	1.340	F3.0/23
GD15PJY120F3S	1200	15	1.70	3.11	1.165	F3.0/23
GD10PJY120F4S	1200	10	1.70	2.27	1.340	F4.1/23
GD15PJY120F4S	1200	15	1.70	3.11	1.165	F4.1/23
GD15PJY120F5S	1200	15	1.70	3.11	1.165	F5.1/23
GD25PJY120F5S	1200	25	1.70	4.78	0.794	F5.1/23
GD35PJY120F5S	1200	35	1.70	6.09	0.633	F5.1/23



NPT Low Loss

GD10PJK120F1S	1200	10	2.20	1.91	1.340	F1.1/21
GD15PJK120F2S	1200	15	2.20	2.95	0.984	F2.0/22
GD10PJK120F3S	1200	10	2.20	1.91	1.340	F3.0/23
GD10PJK120F4S	1200	10	2.20	1.91	1.340	F4.1/23
GD15PJK120F5S	1200	15	2.20	2.95	0.984	F5.1/23

Low Power Modules

Type	V _{CES} V	I _C A	V _{CE(sat)} @T _J =25°C typ. V	(E _{on} +E _{off}) @T _J =125°C typ. mJ	R _{th(J-C)} K/W	Package Outline/page	Circuit
650V 3 Phase Bridge with NTC							
Trench FS IGBT,Low Loss							
GD50FFX65C5S	650	50	1.45	1.7	0.793	C5.2/24	
GD75FFX65C5S	650	75	1.45	2.3	0.561	C5.2/24	
GD100FFX65C5S	650	100	1.45	3.4	0.452	C5.2/24	
GD50FFX65C5SF	650	50	1.45	1.7	0.793	C5.12/24	
GD75FFX65C5SF	650	75	1.45	2.3	0.561	C5.12/24	
GD100FFX65C5SF	650	100	1.45	3.4	0.452	C5.12/24	
GD100FFX65C6S	650	100	1.45	3.4	0.452	C6.2/25	
GD150FFX65C6S	650	150	1.45	5.5	0.339	C6.2/25	
GD200FFX65C6S	650	200	1.45	6.9	0.247	C6.2/25	
GD100FFX65C6SF	650	100	1.45	3.4	0.452	C6.8/26	
GD150FFX65C6SF	650	150	1.45	5.5	0.339	C6.8/26	
GD200FFX65C6SF	650	200	1.45	6.9	0.247	C6.8/26	
650V PIM							
Trench FS IGBT,Low Loss							
GD30PIX65C5S	650	30	1.45	1.0	1.025	C5.0/23	
GD50PIX65C5S	650	50	1.45	1.7	0.793	C5.0/23	
GD50PIX65C6S	650	50	1.45	1.7	0.793	C6.0/25	
GD75PIX65C6S	650	75	1.45	2.3	0.561	C6.0/25	
GD100PIX65C6S	650	100	1.45	3.4	0.452	C6.0/25	
1200V H Bridge							
NPT Ultra Fast IGBT							
GD50HHU120C5S	1200	50	3.10	7.9	0.316	C5.4/24	
GD75HHU120C5S	1200	75	3.10	9.3	0.225	C5.4/24	
GD100HHU120C6S	1200	100	3.10	12.7	0.196	C6.4/26	
GD150HHU120C6S	1200	150	3.10	23.7	0.106	C6.4/26	

Type	V_{CES} V	I_C A	$V_{CE(sat)}$ @ $T_j=25^\circ\text{C}$ typ. V	$(E_{on}+E_{off})$ @ $T_j=125^\circ\text{C}$ typ. mJ	$R_{th(J-C)}$ K/W	Package Outline/page	Circuit
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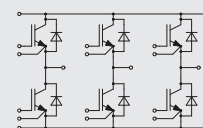
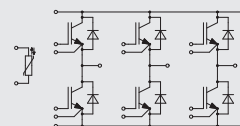
1200V 3 Phase Bridge with NTC

Advanced Trench FS IGBT, Low Loss

GD25FFY120C5S	1200	25	1.70	4.8	0.808	C5.2/24
GD35FFY120C5S	1200	35	1.70	6.1	0.629	C5.2/24
GD50FFY120C5S	1200	50	1.70	12.7	0.512	C5.2/24
GD75FFY120C5S	1200	75	1.70	14.4	0.394	C5.2/24
GD100FFY120C5S	1200	100	1.70	18.5	0.293	C5.2/24
GD75FFY120C6S	1200	75	1.70	14.4	0.394	C6.2/25
GD100FFY120C6S	1200	100	1.70	18.5	0.293	C6.2/25
GD150FFY120C6S	1200	150	1.70	26.1	0.170	C6.2/25
GD200FFY120C6S	1200	200	1.70	36.8	0.149	C6.2/25

NPT Low Loss

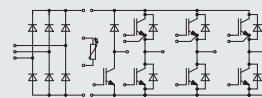
GD25FFK120C5SP	1200	25	2.20	5.5	0.576	C5.6/25
GD35FFK120C5SP	1200	35	2.20	7.9	0.707	C5.6/25
GD50FFK120C5SP	1200	50	2.20	12.5	0.332	C5.6/25
GD75FFK120C6S	1200	75	2.20	12.4	0.219	C6.2/25
GD100FFK120C6S	1200	100	2.20	18.3	0.219	C6.2/25



1200V PIM

Advanced Trench FS IGBT, Low Loss

GD10PIY120C5S	1200	10	1.70	2.3	1.279	C5.0/23
GD15PIY120C5S	1200	15	1.70	3.1	0.904	C5.0/23
GD25PIY120C5S	1200	25	1.70	4.8	0.728	C5.0/23
GD40PIY120C5S	1200	40	1.70	5.8	0.535	C5.0/23
GD25PIY120C5SN	1200	25	1.70	4.8	0.728	C5.3/24
GD35PIY120C5SN	1200	35	1.70	6.1	0.569	C5.3/24
GD50PIY120C5SN	1200	50	1.70	12.7	0.512	C5.3/24
GD40PIY120C6S	1200	40	1.70	5.8	0.535	C6.0/25
GD50PIY120C6S	1200	50	1.70	12.7	0.512	C6.0/25
GD75PIY120C6S	1200	75	1.70	14.4	0.394	C6.0/25
GD50PIY120C6SN	1200	50	1.70	12.7	0.512	C6.3/25
GD75PIY120C6SN	1200	75	1.70	14.4	0.394	C6.3/25
GD100PIY120C6SN	1200	100	1.70	18.5	0.293	C6.3/25
GD150PIY120C6SN	1200	150	1.70	26.1	0.170	C6.3/25



Low Power Modules

Type	V_{CES} V	I_C A	$V_{CE(sat)}$ @ $T_j=25^\circ\text{C}$ typ. V	$(E_{on}+E_{off})$ @ $T_j=125^\circ\text{C}$ typ. mJ	$R_{th(J-C)}$ K/W	Package Outline/page	Circuit
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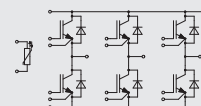
1700V 3 Phase Bridge with NTC

SPT+ Low Loss and Fast IGBT

GD75FFL170C6S	1700	75	2.40	47.6	0.273	C6.2/25
GD100FFL170C6S	1700	100	2.40	56.8	0.210	C6.2/25
GD150FFL170C6S	1700	150	2.40	101.0	0.169	C6.2/25
GD100FFL170C6SF	1700	100	2.40	56.8	0.210	C6.8/26
GD150FFL170C6SF	1700	150	2.40	101.0	0.169	C6.8/26

Trench FS IGBT,Low Loss

GD75FFX170C6S	1700	75	1.85	51.0	0.319	C6.2/25
GD100FFX170C6S	1700	100	1.85	62.4	0.245	C6.2/25
GD150FFX170C6S	1700	150	1.85	113.7	0.167	C6.2/25
GD100FFX170C6SF	1700	100	1.85	62.4	0.245	C6.8/26
GD150FFX170C6SF	1700	150	1.85	113.7	0.167	C6.8/26



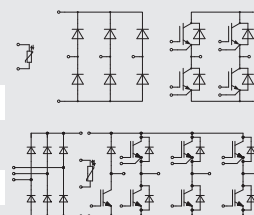
1700V PIM

SPT+ Low Loss and Fast IGBT

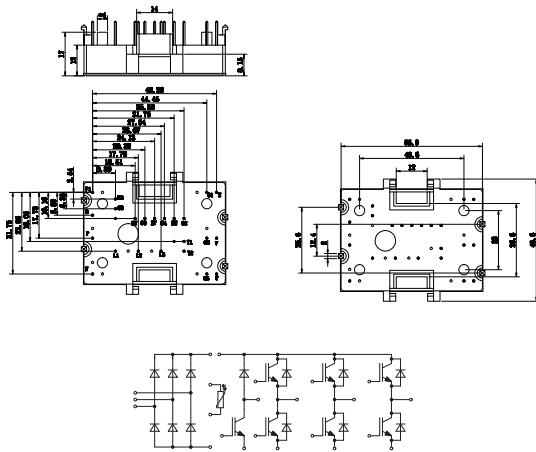
GD50PIL170C6S	1700	50	2.40	33.0	0.380	C6.0/25
GD75PIL170C6S	1700	75	2.40	47.6	0.273	C6.0/25

Trench FS IGBT,Low Loss

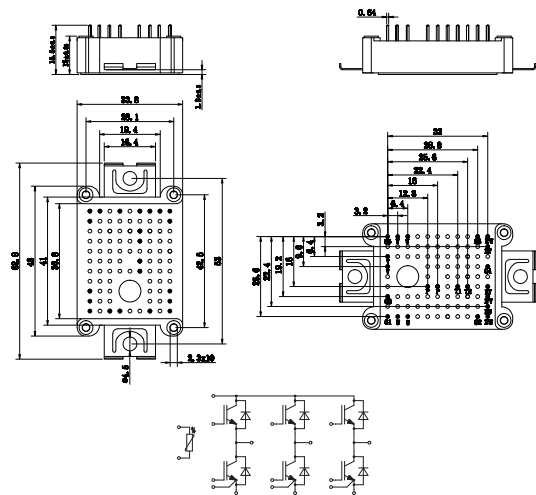
GD75PFX170C6S	1700	75	1.85	51.0	0.319	C6.7/26
GD100PFX170C6S	1700	100	1.85	62.4	0.245	C6.7/26
GD150PFX170C6S	1700	150	1.85	113.7	0.167	C6.7/26
GD50PIX170C6S	1700	50	1.85	31.3	0.455	C6.0/25
GD75PIX170C6S	1700	75	1.85	51.0	0.319	C6.0/25



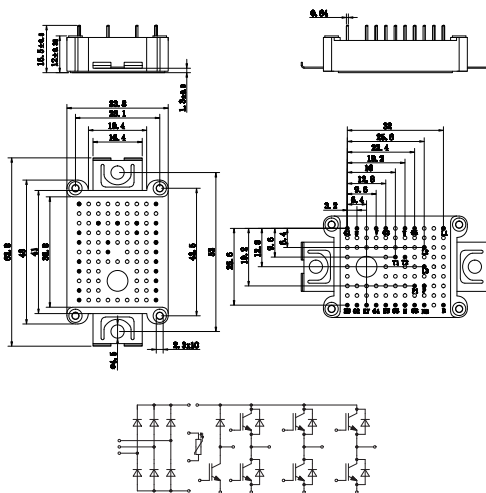
Case L1.2



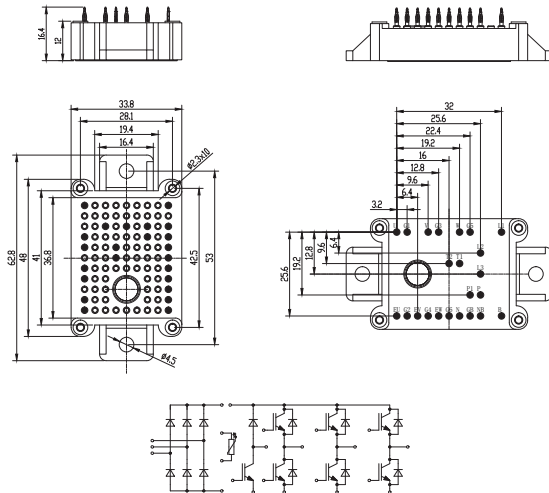
Case L2.1



Case L2.2

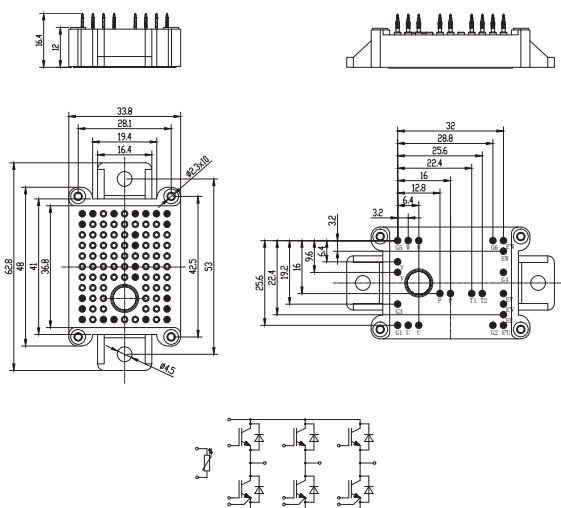


Case L2.5

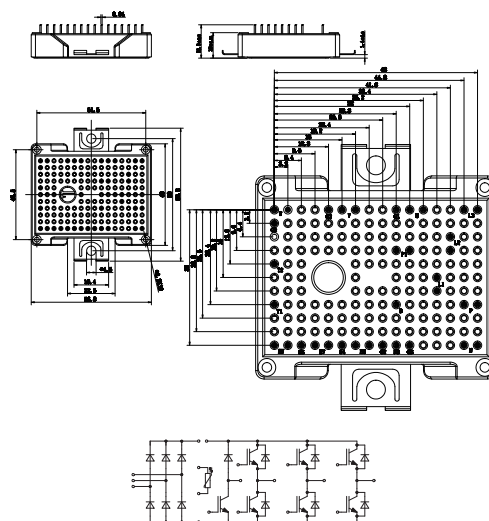


Low Power Module Package Outlines

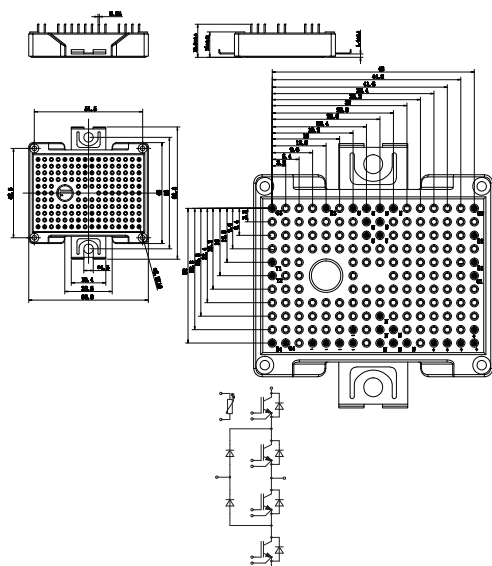
Case L2.6



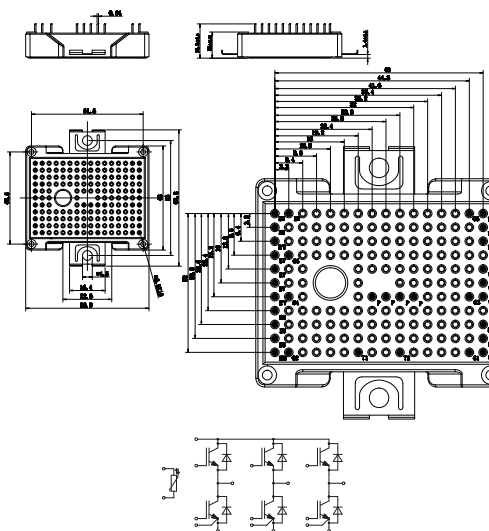
Case L3.0



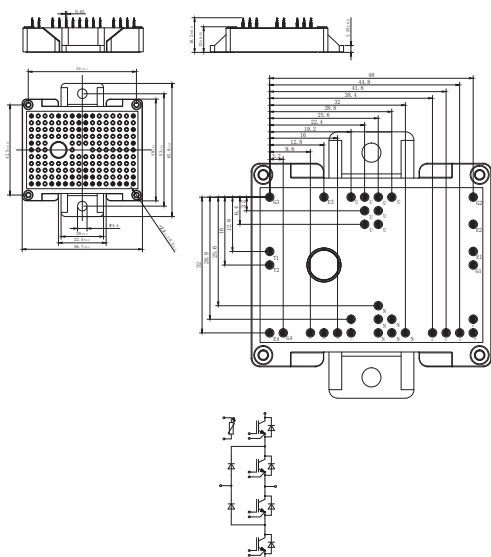
Case L3.1



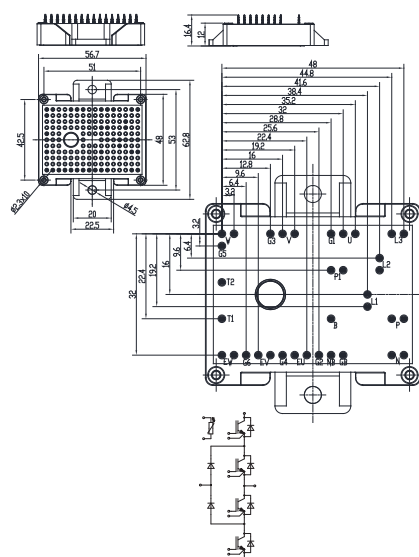
Case L3.2



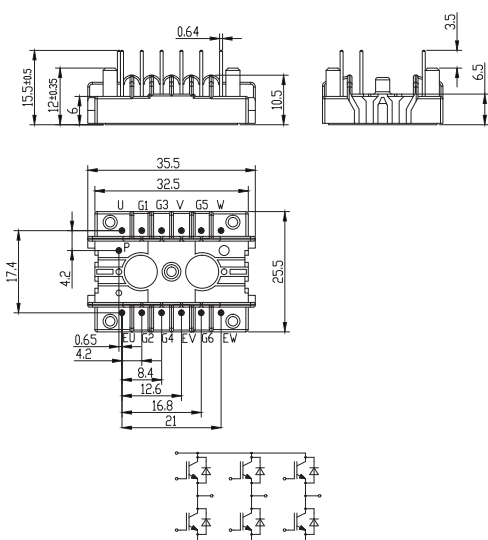
Case L3.3



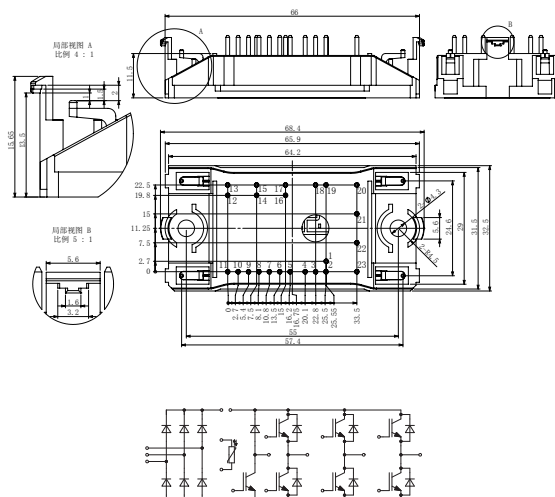
Case L3.5



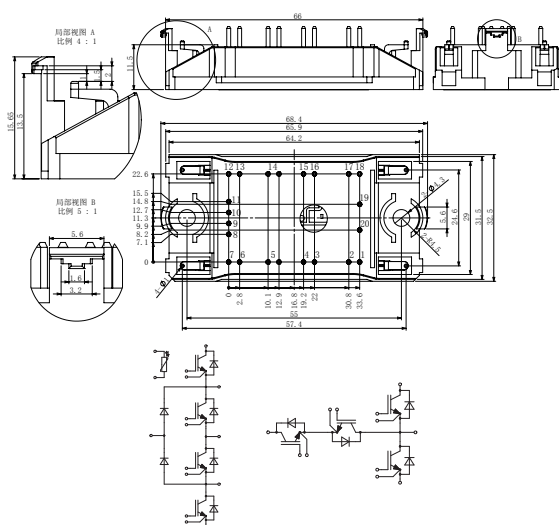
Case L4.0



Case F1.1



Case F1.2

[illegible]

[illegible][illegible]

Technical drawing of a 16-channel 100-pin connector. The drawing includes a top view, a side view, and a bottom view showing the internal wiring connections.

Top View Dimensions:

- Overall Width: 82
- Internal Width: 71
- Overall Height: 17
- Internal Height: 6.8
- Bottom Flange: 3.1

Side View Dimensions:

- Overall Height: 37.4
- Internal Height: 30.8
- Channel Depth: 20

Pin Layout and Dimensions:

- Pin 1: 1.6
- Pin 2: 2.0
- Pin 3: 2.0
- Pin 4: 2.0
- Pin 5: 2.0
- Pin 6: 2.0
- Pin 7: 2.0
- Pin 8: 2.0
- Pin 9: 2.0
- Pin 10: 2.0
- Pin 11: 2.0
- Pin 12: 2.0
- Pin 13: 2.0
- Pin 14: 2.0
- Pin 15: 2.0
- Pin 16: 2.0
- Pin 17: 2.0
- Pin 18: 2.0
- Pin 19: 2.0
- Pin 20: 2.0
- Pin 21: 2.0
- Pin 22: 2.0
- Pin 23: 2.0
- Pin 24: 2.0
- Pin 25: 2.0
- Pin 26: 2.0
- Pin 27: 2.0
- Pin 28: 2.0
- Pin 29: 2.0
- Pin 30: 2.0
- Pin 31: 2.0
- Pin 32: 2.0

Bottom View Dimensions:

- Overall Width: 82
- Internal Width: 71
- Overall Height: 17
- Internal Height: 6.8
- Bottom Flange: 3.1

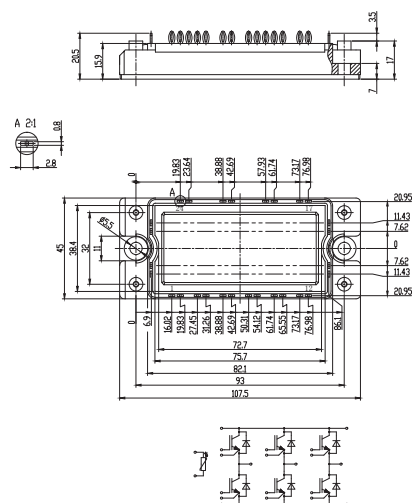
Internal Wiring Connections:

- Pin 1: 1.6
- Pin 2: 2.0
- Pin 3: 2.0
- Pin 4: 2.0
- Pin 5: 2.0
- Pin 6: 2.0
- Pin 7: 2.0
- Pin 8: 2.0
- Pin 9: 2.0
- Pin 10: 2.0
- Pin 11: 2.0
- Pin 12: 2.0
- Pin 13: 2.0
- Pin 14: 2.0
- Pin 15: 2.0
- Pin 16: 2.0
- Pin 17: 2.0
- Pin 18: 2.0
- Pin 19: 2.0
- Pin 20: 2.0
- Pin 21: 2.0
- Pin 22: 2.0
- Pin 23: 2.0
- Pin 24: 2.0
- Pin 25: 2.0
- Pin 26: 2.0
- Pin 27: 2.0
- Pin 28: 2.0
- Pin 29: 2.0
- Pin 30: 2.0
- Pin 31: 2.0
- Pin 32: 2.0

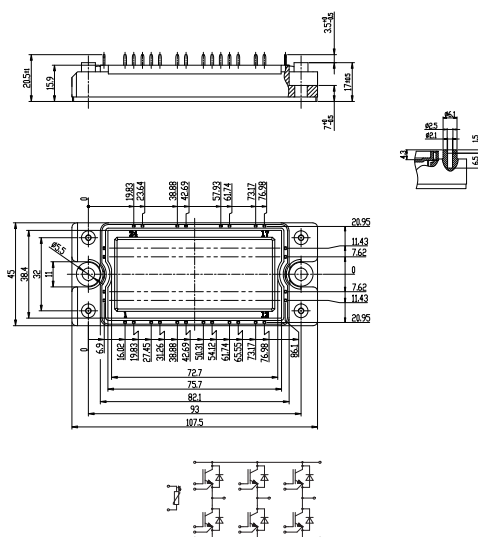
[illegible]

Low Power Module Package Outlines

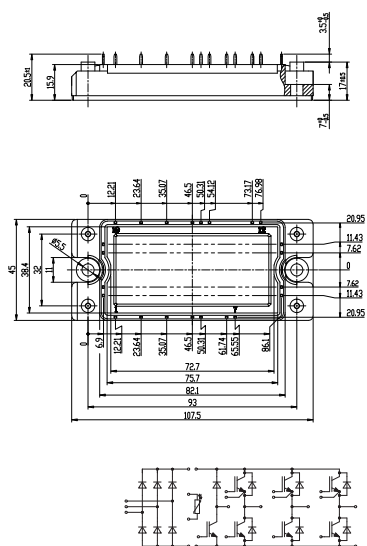
Case C5.12



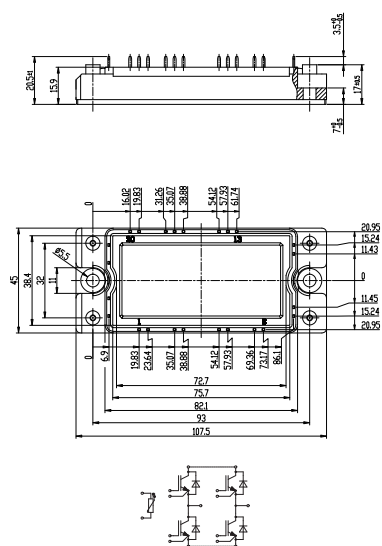
Case C5.2



Case C5.3

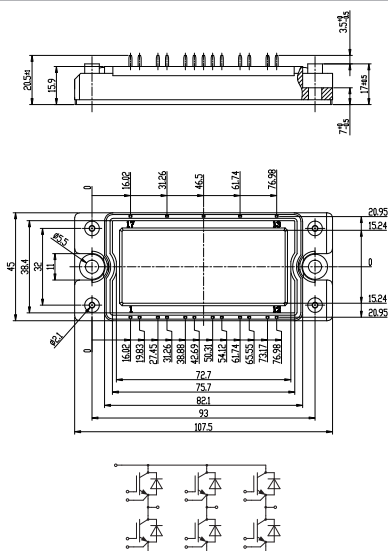


Case C5.4



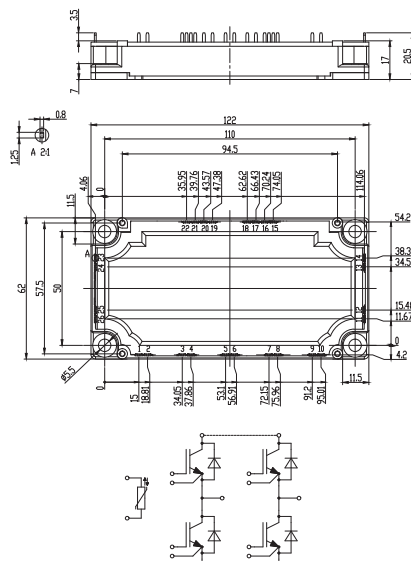


Case C5.6

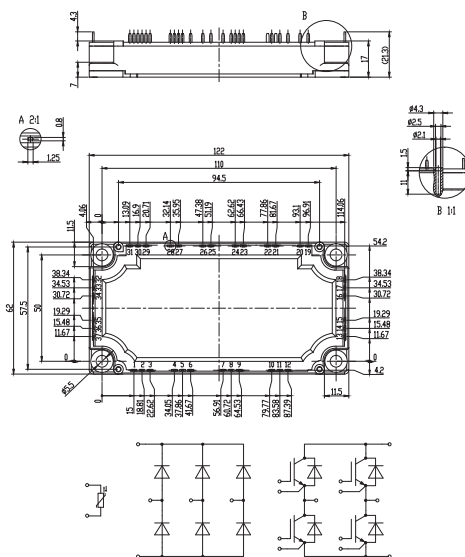


Low Power Module Package Outlines

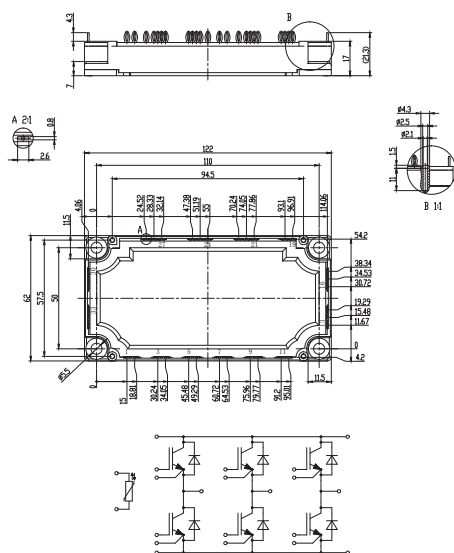
Case C6.4



Case C6.7



Case C6.8



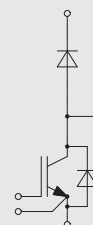


Type	V_{CES} V	I_C A	$V_{CE(sat)}$ @ $T_j=25^\circ\text{C}$ typ. V	$(E_{on}+E_{off})$ @ $T_j=125^\circ\text{C}$ typ. mJ	$R_{th(J-C)}$ K/W	Package Outline/page	Circuit
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650V Boost Chopper

Trench FS IGBT, Low Loss

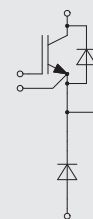
GD200CUX65C2S	650	200	1.45	6.9	0.245	C2.0/35
GD300CUX65C2S	650	300	1.45	12.7	0.157	C2.0/35
GD400CUX65C2S	650	400	1.45	16.2	0.121	C2.0/35
GD600CUX65C2S	650	600	1.45	29.9	0.080	C2.0/35



650V Buck Chopper

Trench FS IGBT, Low Loss

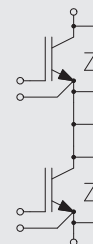
GD200CLX65C2S	650	200	1.45	6.9	0.245	C2.0/35
GD300CLX65C2S	650	300	1.45	12.7	0.157	C2.0/35
GD400CLX65C2S	650	400	1.45	16.2	0.121	C2.0/35
GD600CLX65C2S	650	600	1.45	29.9	0.080	C2.0/35



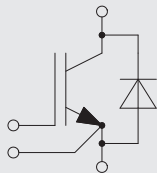
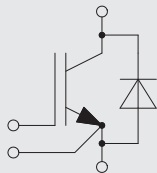
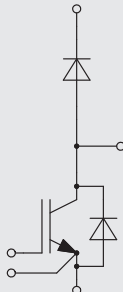
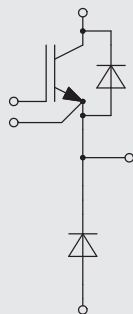
650V Half Bridge

Trench FS IGBT, Low Loss

GD50HFX65C1S	650	50	1.45	1.7	0.470	C1.0/35
GD75HFX65C1S	650	75	1.45	2.3	0.707	C1.0/35
GD100HFX65C1S	650	100	1.45	3.4	0.452	C1.0/35
GD150HFX65C1S	650	150	1.45	5.5	0.339	C1.0/35
GD200HFX65C1S	650	200	1.45	6.9	0.245	C1.0/35
GD200HFX65C2S	650	200	1.45	6.9	0.245	C2.0/35
GD300HFX65C2S	650	300	1.45	12.7	0.157	C2.0/35
GD400HFX65C2S	650	400	1.45	16.2	0.121	C2.0/35
GD600HFX65C2S	650	600	1.45	29.9	0.080	C2.0/35
GD200HFX65C8S	650	200	1.45	6.9	0.245	C8.0/36
GD300HFX65C8S	650	300	1.45	12.7	0.157	C8.0/36
GD400HFX65C8S	650	400	1.45	16.2	0.121	C8.0/36
GD200HFX65C8SN	650	200	1.45	6.9	0.245	C8.1/36
GD300HFX65C8SN	650	300	1.45	12.7	0.157	C8.1/36
GD400HFX65C8SN	650	400	1.45	16.2	0.121	C8.1/36



Medium Power Modules

Type	V_{CES} V	I_C A	$V_{CE(sat)}$ @ $T_J=25^{\circ}\text{C}$ typ. V	$(E_{on}+E_{off})$ @ $T_J=125^{\circ}\text{C}$ typ. mJ	$R_{th(J-C)}$ K/W	Package Outline/page	Circuit
1200V Single							
Advanced Trench FS IGBT,Low Loss							
GD300SGY120C2S	1200	300	1.70	57.1	0.093	C2.1/35	
GD400SGY120C2S	1200	400	1.70	86.8	0.072	C2.1/35	
GD600SGY120C2S	1200	600	1.70	103.8	0.040	C2.1/35	
NPT Ultra Fast IGBT							
GD400SGU120C2S	1200	400	3.10	41.6	0.047	C2.1/35	
GD600SGU120C2S	1200	600	3.10	130.8	0.031	C2.1/35	
1200V Boost Chopper							
Advanced Trench FS IGBT,Low Loss							
GD100CUY120C1S	1200	100	1.70	12.7	0.512	C1.0/35	
GD150CUY120C1S	1200	150	1.70	14.4	0.394	C1.0/35	
GD100CUY120C2S	1200	100	1.70	18.5	0.278	C2.0/35	
GD150CUY120C2S	1200	150	1.70	26.1	0.203	C2.0/35	
GD200CUY120C2S	1200	200	1.70	36.8	0.143	C2.0/35	
GD300CUY120C2S	1200	300	1.70	57.1	0.093	C2.0/35	
GD400CUY120C2S	1200	400	1.70	86.8	0.072	C2.0/35	
GD450CUY120C2S	1200	450	1.70	89.8	0.063	C2.0/35	
GD600CUY120C2S	1200	600	1.70	103.8	0.040	C2.0/35	
1200V Buck Chopper							
Advanced Trench FS IGBT,Low Loss							
GD100CLY120C1S	1200	100	1.70	12.7	0.512	C1.0/35	
GD150CLY120C1S	1200	150	1.70	14.4	0.394	C1.0/35	
GD100CLY120C2S	1200	100	1.70	18.5	0.278	C2.0/35	
GD150CLY120C2S	1200	150	1.70	26.1	0.203	C2.0/35	
GD200CLY120C2S	1200	200	1.70	36.8	0.143	C2.0/35	
GD300CLY120C2S	1200	300	1.70	57.1	0.093	C2.0/35	
GD400CLY120C2S	1200	400	1.70	86.8	0.072	C2.0/35	
GD450CLY120C2S	1200	450	1.70	89.8	0.063	C2.0/35	
GD600CLY120C2S	1200	600	1.70	103.8	0.040	C2.0/35	

Medium Power Modules



Type	V_{CES} V	I_C A	$V_{CE(sat)}$ @ $T_J=25^\circ\text{C}$ typ. V	$(E_{on}+E_{off})$ @ $T_J=125^\circ\text{C}$ typ. mJ	$R_{th(J-C)}$ K/W	Package Outline/page	Circuit
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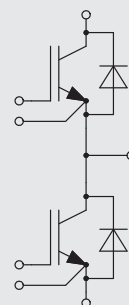
1200V Half Bridge

Advanced Trench FS IGBT, Low Loss

GD50HFF120C1S	1200	50	1.70	12.7	0.512	C1.0/35
GD75HFF120C1S	1200	75	1.70	14.4	0.394	C1.0/35
GD100HFF120C1S	1200	100	1.70	18.5	0.278	C1.0/35
GD150HFF120C1S	1200	150	1.70	26.1	0.203	C1.0/35
GD100HFF120C2S	1200	100	1.70	18.5	0.278	C2.0/35
GD150HFF120C2S	1200	150	1.70	26.1	0.203	C2.0/35
GD200HFF120C2S	1200	200	1.70	36.8	0.143	C2.0/35
GD300HFF120C2S	1200	300	1.70	57.1	0.093	C2.0/35
GD400HFF120C2S	1200	400	1.70	86.8	0.072	C2.0/35
GD450HFF120C2S	1200	450	1.70	89.8	0.063	C2.0/35
GD600HFF120C2S	1200	600	1.70	103.8	0.040	C2.0/35
GD100HFF120C8S	1200	100	1.70	18.5	0.278	C8.0/36
GD150HFF120C8S	1200	150	1.70	26.1	0.203	C8.0/36
GD200HFF120C8S	1200	200	1.70	36.8	0.143	C8.0/36
GD150HFF120C8SN	1200	150	1.70	26.1	0.203	C8.1/36
GD200HFF120C8SN	1200	200	1.70	36.8	0.143	C8.1/36

Advanced Trench FS Ultra Fast IGBT Without Short-circuit Capacity

GD50HFF120C1S	1200	50	1.70	9.1	0.512	C1.0/35
GD75HFF120C1S	1200	75	1.70	9.8	0.394	C1.0/35
GD100HFF120C1S	1200	100	1.70	16.3	0.278	C1.0/35
GD150HFF120C1S	1200	150	1.70	19.6	0.180	C1.0/35
GD100HFF120C2S	1200	100	1.70	16.3	0.278	C2.0/35
GD150HFF120C2S	1200	150	1.70	19.6	0.180	C2.0/35
GD200HFF120C2S	1200	200	1.70	32.7	0.142	C2.0/35
GD300HFF120C2S	1200	300	1.70	49.0	0.094	C2.0/35
GD400HFF120C2S	1200	400	1.70	65.2	0.066	C2.0/35



Medium Power Modules

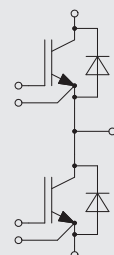
Type	V_{CES} V	I_C A	$V_{CE(sat)}$ @ $T_j=25^\circ\text{C}$ typ. V	$(E_{on}+E_{off})$ @ $T_j=125^\circ\text{C}$ typ. mJ	$R_{th(j-c)}$ K/W	Package Outline/page	Circuit
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NPT Low Loss

GD50HFK120C1S	1200	50	2.20	12.5	0.315	C1.0/35
GD75HFK120C1S	1200	75	2.20	12.4	0.229	C1.0/35
GD100HFK120C1S	1200	100	2.20	18.3	0.180	C1.0/35
GD100HFK120C2S	1200	100	2.20	18.3	0.165	C2.0/35
GD150HFK120C2S	1200	150	2.20	28.2	0.105	C2.0/35
GD200HFK120C2S	1200	200	2.20	41.1	0.092	C2.0/35
GD300HFK120C2S	1200	300	2.20	41.1	0.060	C2.0/35

NPT Ultra Fast IGBT

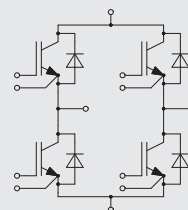
GD40HFU120C1S	1200	40	3.10	6.3	0.447	C1.0/35
GD50HFU120C1S	1200	50	3.10	7.9	0.302	C1.0/35
GD75HFU120C1S	1200	75	3.10	12.7	0.221	C1.0/35
GD100HFU120C1S	1200	100	3.10	12.5	0.190	C1.0/35
GD100HFU120C2S	1200	100	3.10	15.7	0.180	C2.0/35
GD150HFU120C2S	1200	150	3.10	21.5	0.108	C2.0/35
GD200HFU120C2S	1200	200	3.10	24.9	0.095	C2.0/35
GD300HFU120C2S	1200	300	3.10	32.7	0.063	C2.0/35
GD400HFU120C2S	1200	400	3.10	41.6	0.047	C2.0/35
GD100HFU120C8S	1200	100	3.10	10.3	0.158	C8.0/36
GD150HFU120C8S	1200	150	3.10	16.0	0.107	C8.0/36
GD200HFU120C8S	1200	200	3.10	24.9	0.095	C8.0/36
GD150HFU120C8SN	1200	150	3.10	16.0	0.107	C8.1/36
GD200HFU120C8SN	1200	200	3.10	24.9	0.095	C8.1/36



1200V H Bridge

NPT Ultra Fast IGBT

GD40HCU120C8S	1200	40	3.10	6.3	0.447	C8.2/36
GD50HCU120C8S	1200	50	3.10	7.9	0.312	C8.2/36
GD75HCU120C8S	1200	75	3.10	11.9	0.210	C8.2/36



Medium Power Modules



Type	V_{CES} V	I_C A	$V_{CE(sat)}$ @ $T_j=25^\circ\text{C}$ typ. V	$(E_{on}+E_{off})$ @ $T_j=125^\circ\text{C}$ typ. mJ	$R_{th(J-C)}$ K/W	Package Outline/page	Circuit
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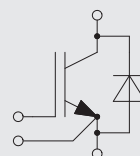
1700V Single

SPT+ Low Loss and Fast IGBT

GD400SGL170C2S	1700	400	2.40	167.7	0.054	C2.1/35
GD600SGL170C2S	1700	600	2.40	388.0	0.040	C2.1/35

Trench FS IGBT, Low Loss

GD400SGX170C2S	1700	400	1.85	304.0	0.062	C2.1/35
GD600SGX170C2S	1700	600	1.85	333.0	0.041	C2.1/35



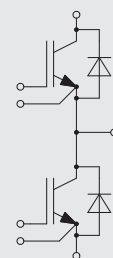
1700V Half Bridge

SPT+ Low Loss and Fast IGBT

GD50HFL170C1S	1700	50	2.40	33.0	0.339	C1.0/35
GD75HFL170C1S	1700	75	2.40	47.6	0.262	C1.0/35
GD100HFL170C1S	1700	100	2.40	56.8	0.217	C1.0/35
GD100HFL170C2S	1700	100	2.40	63.3	0.217	C2.0/35
GD150HFL170C2S	1700	150	2.40	101.0	0.133	C2.0/35
GD200HFL170C2S	1700	200	2.40	152.1	0.108	C2.0/35
GD300HFL170C2S	1700	300	2.40	211.7	0.081	C2.0/35
GD400HFL170C2S	1700	400	2.40	167.7	0.054	C2.0/35

Trench FS IGBT, Low Loss

GD50HFX170C1S	1700	50	1.85	31.3	0.358	C1.0/35
GD75HFX170C1S	1700	75	1.85	51.0	0.268	C1.0/35
GD100HFX170C1S	1700	100	1.85	62.4	0.237	C1.0/35
GD100HFX170C2S	1700	100	1.85	62.4	0.237	C2.0/35
GD150HFX170C2S	1700	150	1.85	113.7	0.133	C2.0/35
GD200HFX170C2S	1700	200	1.85	143.7	0.118	C2.0/35
GD300HFX170C2S	1700	300	1.85	195.8	0.082	C2.0/35
GD400HFX170C2S	1700	400	1.85	304.0	0.062	C2.0/35



Medium Power Modules

Type	V _{CES} V	I _C A	V _{CE(sat)} @T _J =25°C typ. V	(E _{on} +E _{off}) @T _J =125°C typ. mJ	R _{th(J-C)} K/W	Package Outline/page	Circuit
650V Half Bridge							
Trench FS IGBT,Low Loss							
GD300HFX65C6S	650	300	1.45	12.7	0.148	C6.1/35	
GD450HFX65C6S	650	450	1.45	20.3	0.116	C6.1/35	
GD600HFX65C6S	650	600	1.45	29.9	0.091	C6.1/35	
GD300HFX65C6H	650	300	1.45	12.7	0.157	C6.12/36	
GD450HFX65C6H	650	450	1.45	20.3	0.116	C6.12/36	
GD600HFX65C6H	650	600	1.45	29.9	0.091	C6.12/36	
650V Half NPC1 Up							
Trench FS IGBT,Low Loss							
GD300MPX65C6S	650	300	1.45	12.7	0.157	C6.1/35	
GD400MPX65C6S	650	400	1.45	16.2	0.121	C6.1/35	
650V Half NPC1 Low							
Trench FS IGBT,Low Loss							
GD300MNX65C6S	650	300	1.45	12.7	0.157	C6.1/35	
GD400MNX65C6S	650	400	1.45	16.2	0.121	C6.1/35	
650V 3 Phase Bridge with NTC							
Trench FS IGBT,Low Loss							
GD200FFX65P3S	650	200	1.45	8.1	0.200	P3.0/37	
GD300FFX65P3S	650	300	1.45	12.7	0.168	P3.0/37	
GD400FFX65P3S	650	400	1.45	16.2	0.122	P3.0/37	
GD200FFX65P3H	650	200	1.45	8.1	0.400	P3.1/37	
GD300FFX65P3H	650	300	1.45	12.7	0.257	P3.1/37	
GD400FFX65P3H	650	400	1.45	16.2	0.200	P3.1/37	
650V Tri-Pack							
Trench FS IGBT,Low Loss							
GD600HTX65P4S	650	600	1.45	22.7	0.120	P4.0/37	
GD800HTX65P4S	650	800	1.45	28.0	0.100	P4.0/37	

Medium Power Modules



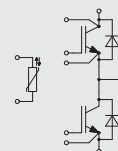
STARPOWER
YOUR BEST CHOICE

Type	V_{CES} V	I_C A	$V_{CE(sat)}$ @ $T_J=25^\circ\text{C}$ typ. V	$(E_{on}+E_{off})$ @ $T_J=125^\circ\text{C}$ typ. mJ	$R_{th(J-C)}$ K/W	Package Outline/page	Circuit
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1200V Half Bridge

Advanced Trench FS IGBT, Low Loss

GD150H FY120C6S	1200	150	1.70	26.1	0.136	C6.1/35
GD225H FY120C6S	1200	225	1.70	40.7	0.122	C6.1/35
GD300H FY120C6S	1200	300	1.70	57.1	0.093	C6.1/35
GD450H FY120C6S	1200	450	1.70	89.8	0.069	C6.1/35
GD600H FY120C6S	1200	600	1.70	96.0	0.038	C6.1/35
GD150H FY120C6H	1200	150	1.70	26.1	0.136	C6.12/36
GD225H FY120C6H	1200	225	1.70	40.7	0.122	C6.12/36
GD300H FY120C6H	1200	300	1.70	57.1	0.093	C6.12/36
GD450H FY120C6H	1200	450	1.70	89.8	0.069	C6.12/36
GD600H FY120C6H	1200	600	1.70	96.0	0.038	C6.12/36



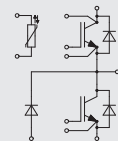
NPT Ultra Fast IGBT

GD150H FU120C6S	1200	150	3.10	23.7	0.106	C6.1/35
GD225H FU120C6S	1200	225	3.10	33.0	0.078	C6.1/35
GD300H FU120C6S	1200	300	3.10	32.7	0.066	C6.1/35

1200V Half NPC1 Up

Advanced Trench FS IGBT, Low Loss

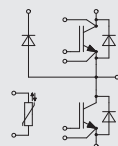
GD300M PY120C6S	1200	300	1.70	57.1	0.093	C6.1/35
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1200V Half NPC1 Low

Advanced Trench FS IGBT, Low Loss

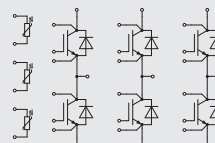
GD300M NY120C6S	1200	300	1.70	57.1	0.093	C6.1/35
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1200V Tri-Pack

Advanced Trench FS IGBT, Low Loss

GD400H TY120P4S	1200	400	1.70	46.4	0.110	P4.0/37
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Medium Power Modules

Type	V_{CES} V	I_C A	$V_{CE(sat)}$ @ $T_j=25^{\circ}\text{C}$ typ. V	$(E_{on}+E_{off})$ @ $T_j=125^{\circ}\text{C}$ typ. mJ	$R_{th(j-c)}$ K/W	Package Outline/page	Circuit
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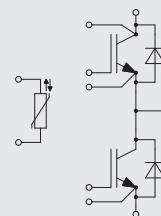
1700V Half Bridge

SPT+ Low Loss and Fast IGBT

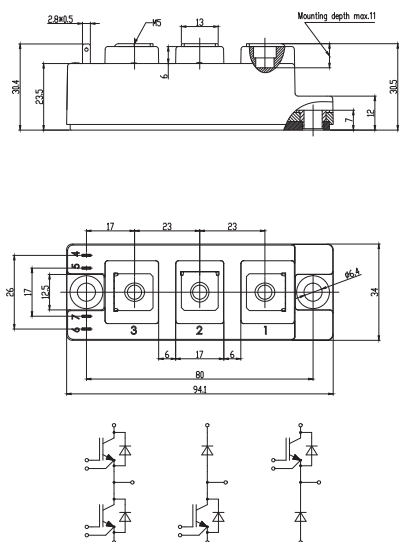
GD150HFL170C6S	1700	150	2.40	101.0	0.117	C6.1/35
GD225HFL170C6S	1700	225	2.40	164.5	0.091	C6.1/35
GD300HFL170C6S	1700	300	2.40	205.0	0.074	C6.1/35
GD450HFL170C6S	1700	450	2.40	286.0	0.046	C6.1/35
GD600HFL170C6S	1700	600	2.40	371.0	0.035	C6.1/35

Trench FS IGBT, Low Loss

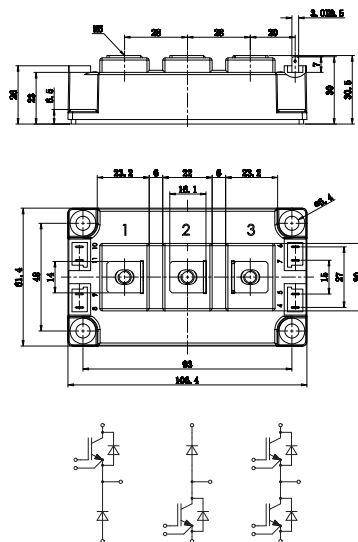
GD150HFX170C6S	1700	150	1.85	113.7	0.134	C6.1/35
GD225HFX170C6S	1700	225	1.85	157.0	0.113	C6.1/35
GD300HFX170C6S	1700	300	1.85	212.0	0.082	C6.1/35
GD450HFX170C6S	1700	450	1.85	323.0	0.059	C6.1/35
GD600HFX170C6S	1700	600	1.85	434.0	0.045	C6.1/35



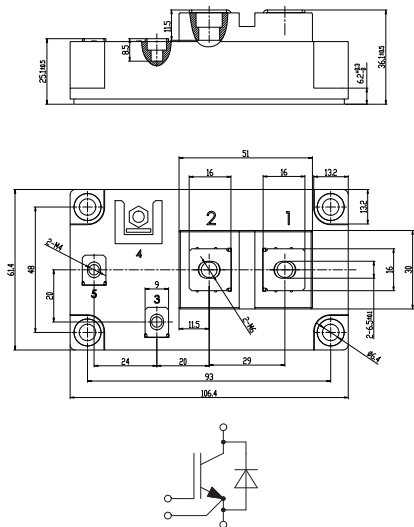
Case C1.0



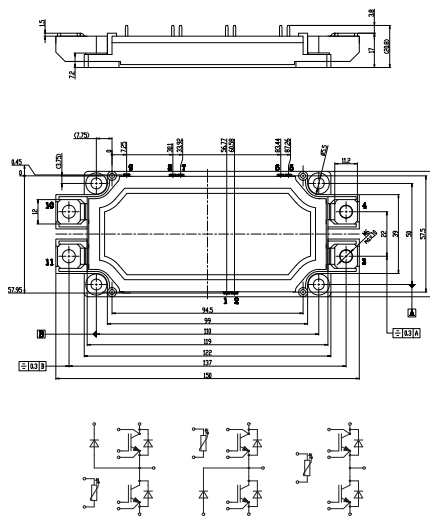
Case C2.0



Case C2.1

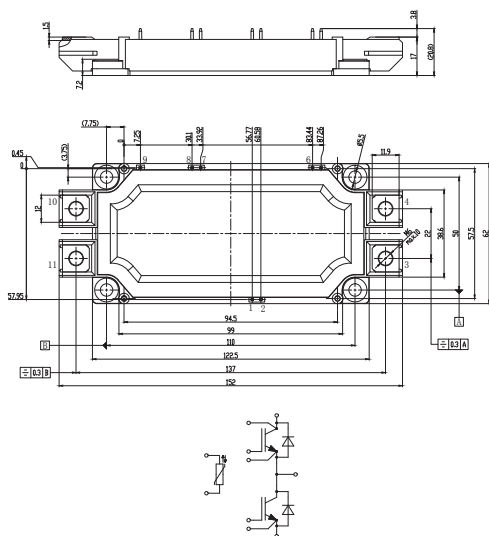


Case C6.1

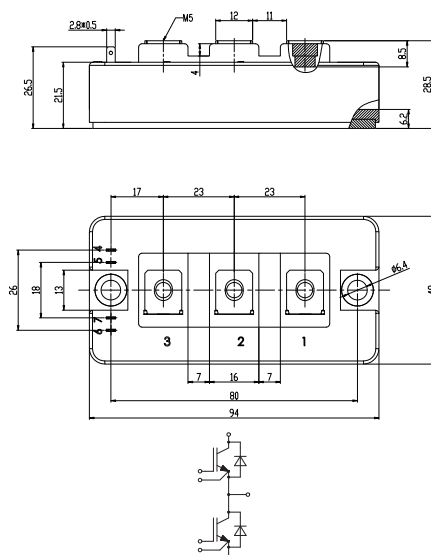


Medium Power Module Package Outlines

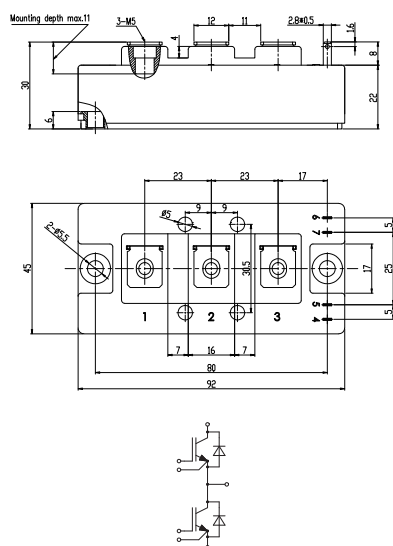
Case C6.12



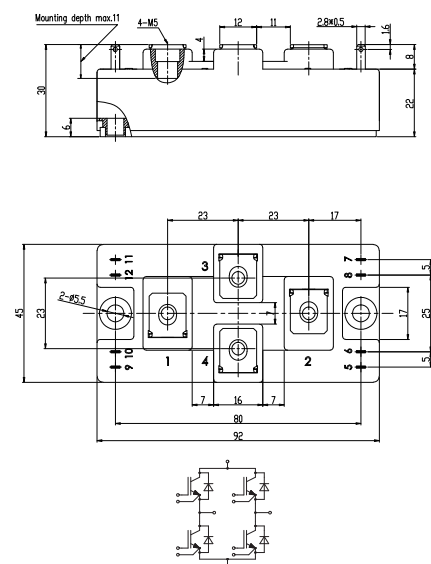
Case C8.0



Case C8.1

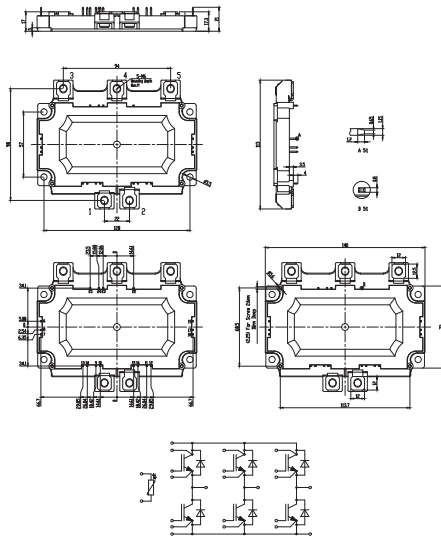


Case C8.2

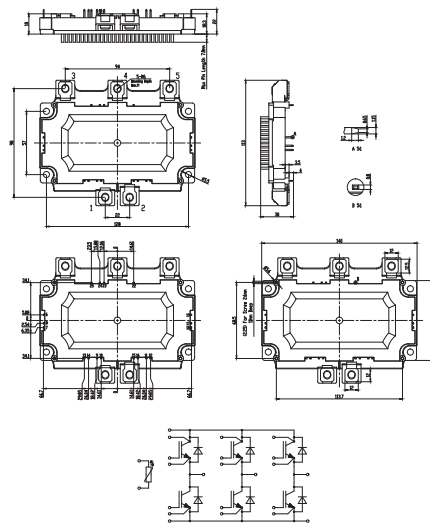




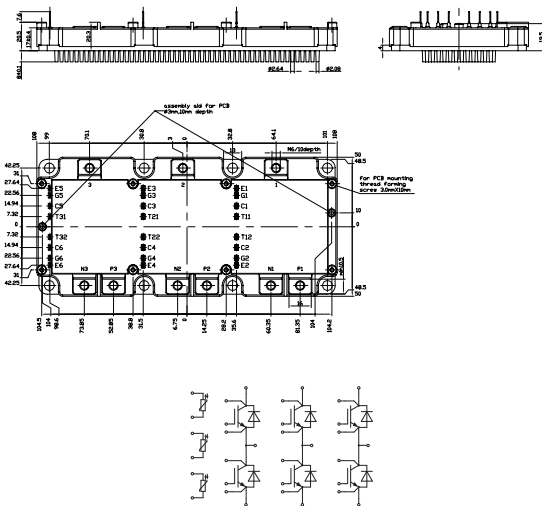
Case P3.0



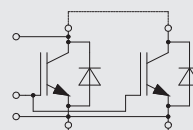
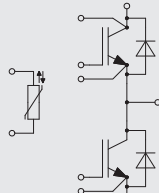
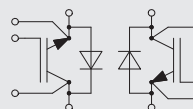
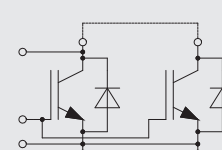
Case P3.1



Case P4.0



High Power Modules

Type	V_{CES} V	I_c A	$V_{CE(sat)}$ @ $T_J=25^{\circ}\text{C}$ typ. V	$(E_{on}+E_{off})$ @ $T_J=125^{\circ}\text{C}$ typ. mJ	$R_{th(J-C)}$ K/W	Package Outline/page	Circuit
1200V Single							
Advanced Trench FS IGBT,Low Loss							
GD800SGY120C3S	1200	800	1.70	154	0.028	C3.0/40	
GD1200SGY120C3S	1200	1200	1.70	387	0.020	C3.0/40	
GD1600SGY120C3S	1200	1600	1.70	573	0.015	C3.0/40	
GD2400SGY120C3S	1200	2400	1.70	945	0.011	C3.0/40	
GD800SGY120C3SN	1200	800	1.70	154	0.028	C3.2/40	
GD1200SGY120C3SN	1200	1200	1.70	387	0.020	C3.2/40	
GD1600SGY120C3SN	1200	1600	1.70	573	0.015	C3.2/40	
GD2400SGY120C3SN	1200	2400	1.70	945	0.011	C3.2/40	
GD2400SGY120C4S	1200	2400	1.70	945	0.011	C4.0/40	
GD3600SGY120C4S	1200	3600	1.70	1377	0.008	C4.0/40	
1200V Half Bridge with NTC							
Trench FS IGBT,Low Loss							
GD450HFY120P1S	1200	450	1.70	103	0.058	P1.0/41	
GD600HFY120P1S	1200	600	1.70	124	0.045	P1.0/41	
GD900HFY120P1S	1200	900	1.70	240	0.029	P1.0/41	
GD1400HFY120P2S	1200	1400	1.70	331	0.019	P2.0/41	
1200V Half Bridge							
Advanced Trench FS IGBT,Low Loss							
GD600HFY120C3S	1200	600	1.70	96	0.044	C3.1/40	
GD800HFY120C3S	1200	800	1.70	174	0.032	C3.1/40	
GD1200HFY120C3S	1200	1200	1.70	439	0.025	C3.1/40	
1700V Single							
SPT+ Low Loss and Fast IGBT							
GD800SGL170C3S	1700	800	2.40	512	0.021	C3.0/40	
GD1200SGL170C3S	1700	1200	2.40	674	0.017	C3.0/40	
GD1600SGL170C3S	1700	1600	2.40	1070	0.013	C3.0/40	
GD2400SGL170C3S	1700	2400	2.40	1580	0.010	C3.0/40	
GD800SGL170C3SN	1700	800	2.40	512	0.021	C3.2/40	
GD1200SGL170C3SN	1700	1200	2.40	674	0.017	C3.2/40	
GD1600SGL170C3SN	1700	1600	2.40	1070	0.013	C3.2/40	
GD2400SGL170C3SN	1700	2400	2.40	1580	0.010	C3.2/40	

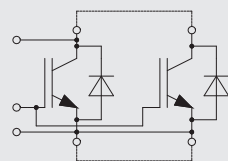


Type	V_{CES} V	I_C A	$V_{CE(sat)}$ @ $T_J=25^{\circ}C$ typ. V	$(E_{on}+E_{off})$ @ $T_J=125^{\circ}C$ typ. mJ	$R_{th(J-C)}$ K/W	Package Outline/page	Circuit
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GD2400SGL170C4S	1700	2400	2.40	1580	0.009	C4.0/40	
GD3600SGL170C4S	1700	3600	2.40	2328	0.006	C4.0/40	

Trench FS IGBT, Low Loss

GD800SGX170C3S	1700	800	1.85	605	0.026	C3.0/40	
GD1200SGX170C3S	1700	1200	1.85	867	0.019	C3.0/40	
GD1600SGX170C3S	1700	1600	1.85	1190	0.015	C3.0/40	
GD2400SGX170C3S	1700	2400	1.85	1554	0.011	C3.0/40	
GD800SGX170C3SN	1700	800	1.85	605	0.026	C3.2/40	
GD1200SGX170C3SN	1700	1200	1.85	867	0.019	C3.2/40	
GD1600SGX170C3SN	1700	1600	1.85	1190	0.015	C3.2/40	
GD2400SGX170C3SN	1700	2400	1.85	1554	0.011	C3.2/40	
GD2400SGX170C4S	1700	2400	1.85	1554	0.010	C4.0/40	
GD3600SGX170C4S	1700	3600	1.85	2698	0.007	C4.0/40	



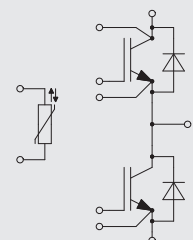
1700V Half Bridge with NTC

SPT+ Low Loss and Fast IGBT

GD650HFL170P1S	1700	650	2.40	505	0.035	P1.0/41	
GD1000HFL170P2S	1700	1000	2.40	590	0.023	P2.0/41	

Trench FS IGBT, Low Loss

GD450HFX170P1S	1700	450	1.85	379	0.055	P1.0/41	
GD650HFX170P1S	1700	600	1.85	563	0.038	P1.0/41	
GD1000HFX170P2S	1700	1000	1.85	763	0.025	P2.0/41	
GD1400HFX170P2S	1700	1400	1.85	1250	0.016	P2.0/41	



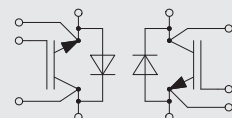
1700V Half Bridge

SPT+ Low Loss and Fast IGBT

GD600HFL170C3S	1700	600	2.40	371	0.033	C3.1/40	
GD800HFL170C3S	1700	800	2.40	512	0.026	C3.1/40	
GD1200HFL170C3S	1700	1200	2.40	674	0.022	C3.1/40	

Trench FS IGBT, Low Loss

GD600HFX170C3S	1700	600	1.85	434	0.034	C3.1/40	
GD800HFX170C3S	1700	800	1.85	605	0.031	C3.1/40	
GD1200HFX170C3S	1700	1200	1.85	867	0.024	C3.1/40	



Technical drawing of a three-phase motor assembly, showing side, front, and detail views with dimensions.

Side View (Top):

- Overall length: 190.00
- Distance from front face to first bearing center: 171.00
- Distance between bearing centers: 57.00
- Motor body width: 61.5
- Shaft diameter: 13
- Terminal box height: 38
- Terminal box mounting flange thickness: 5.00
- Label: MB

Front View (Middle):

- Overall width: 140
- Distance between terminal box centers: 124
- Terminal box height: 40
- Terminal box mounting flange thickness: 20
- Terminal box width: 29
- Terminal box mounting flange diameter: 51.2
- Terminal box mounting flange thickness: 15
- Terminal box mounting flange diameter: 40.00
- Terminal box mounting flange thickness: 4
- Terminal box mounting flange diameter: M4

Detail View (Bottom):

- Distance between terminal box centers: 79.4
- Terminal box width: 40.25
- Terminal box mounting flange diameter: 41.25

Electrical Circuit Diagram (Bottom):

- Three-phase supply (L1, L2, L3) connected to three switches.
- Each switch controls a motor (M1, M2, M3) and a fan (F1, F2, F3).
- Each motor and fan is connected to a common neutral line (N).

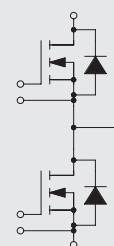
[illegible]

SiC Mosfet Modules

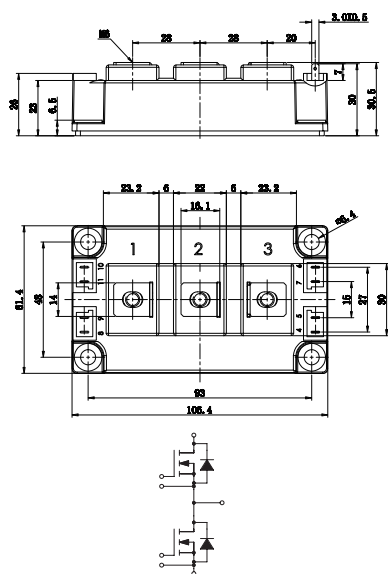
Type	V_{DS} V	I_D A	$R_{DS(on)}$ @ $T_J=25^{\circ}\text{C}$ max. mOhm	$R_{th(J-C)}$ K/W	Package Outline/page	Circuit
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SiC Mosfet

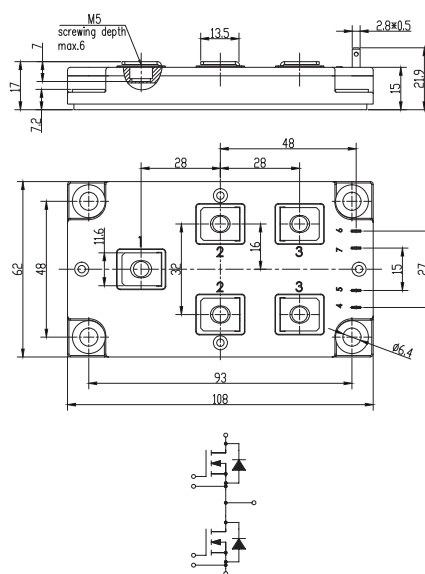
MD120HFR120C2S	1200	120	13	0.181	C2.0/43
MD300HFR120C2S	1200	300	6.5	0.100	C2.0/43
MD400HFR120C2S	1200	400	4.4	0.074	C2.0/43
MD200HFR170C2S	1700	200	8.7	0.058	C2.0/43
MD250HFR170C2S	1700	250	10.4	0.069	C2.0/43
MD120HFR120B3S	1200	120	13	0.181	B3.7/43
MD300HFR120B3S	1200	300	6.5	0.100	B3.7/43
MD400HFR120B3S	1200	400	4.4	0.074	B3.7/43
MD200HFR170B3S	1700	200	8.7	0.058	B3.7/43
MD250HFR170B3S	1700	250	10.4	0.069	B3.7/43



Case C2.0



Case B3.7





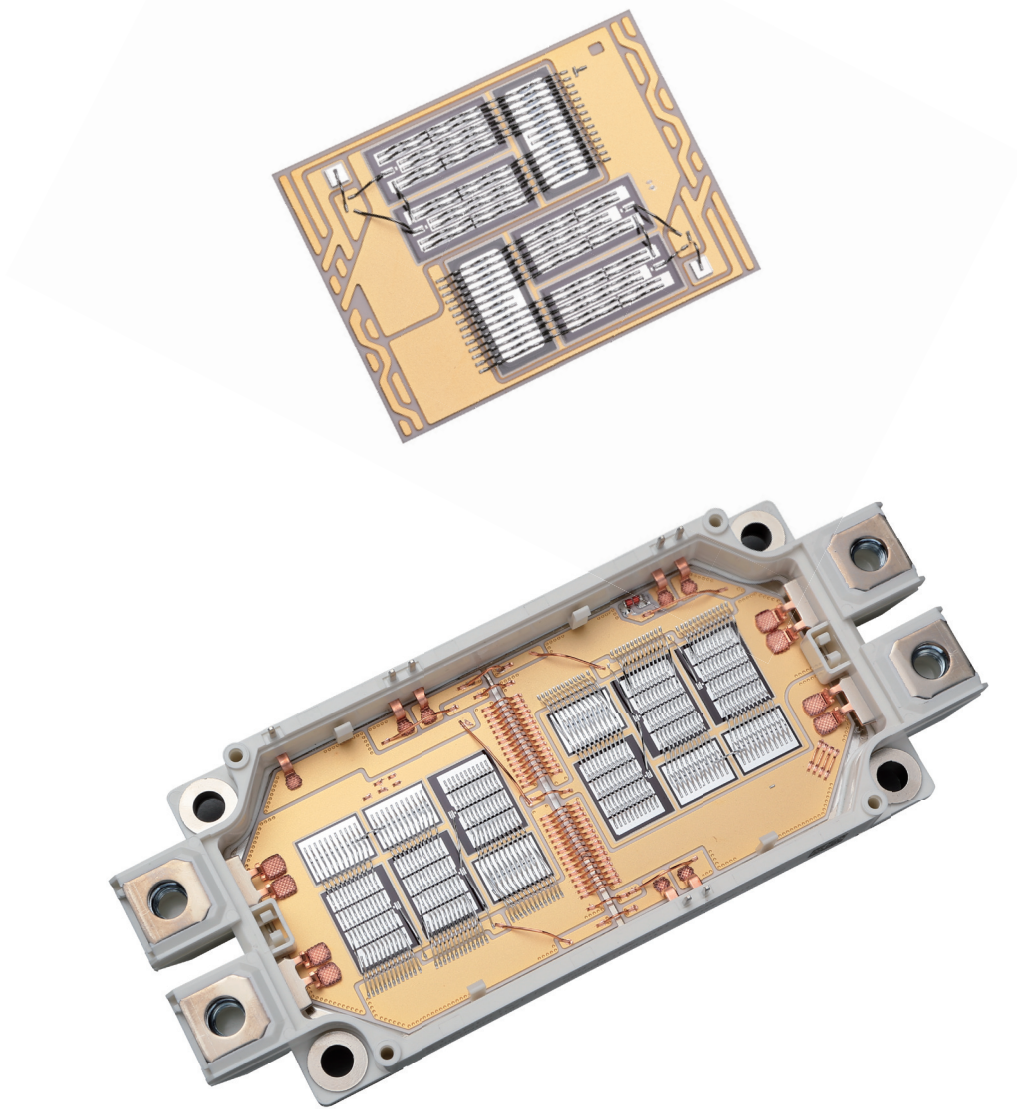
Note:

This Catalog contains product specifications, characteristics, structure and dimensions as of April 2019. The contents are subject to change without prior notice for specification change or other reasons. When using a product listed in this Catalog, be sure to obtain the latest specifications. If you need to use a product in the Catalog for equipment requiring higher reliability than normal, be sure to obtain prior written approval by StarPower.

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嘉兴斯达半导体股份有限公司
STARPOWER SEMICONDUCTOR LTD.

988 Kexing Road, Jiaxing, China 314006
www.powersemi.com

Tel: +86 573 82585600

Fax: +86 573 82585601

Beijing Office

Tel: +86 10-57236290
Fax: +86 10-88696821

Shenzhen Office

Tel: +86 573 82585600
Fax: +86 573 82585776

Nanjing Office

Tel: +86 25 84937665
Fax: +86 25 84937665

Chengdu Office

Tel: +86 28 84544069
Fax: +86 28 84544069

Jinan Office

Tel: +86 531 55504712
Fax: +86 531 55504712

Qingdao Office

Tel: +86 532 68982978
Fax: +86 532 68982978

Wuhan Office

Tel: +86 27 88739616
Fax: +86 27 88739606

StarPower Europe AG

Ai Cìoss, CH - 6593 Cadenazzo, Switzerland
www.starpowereurope.com

Tel: +41 91 8504141

Fax: +41 91 8401909