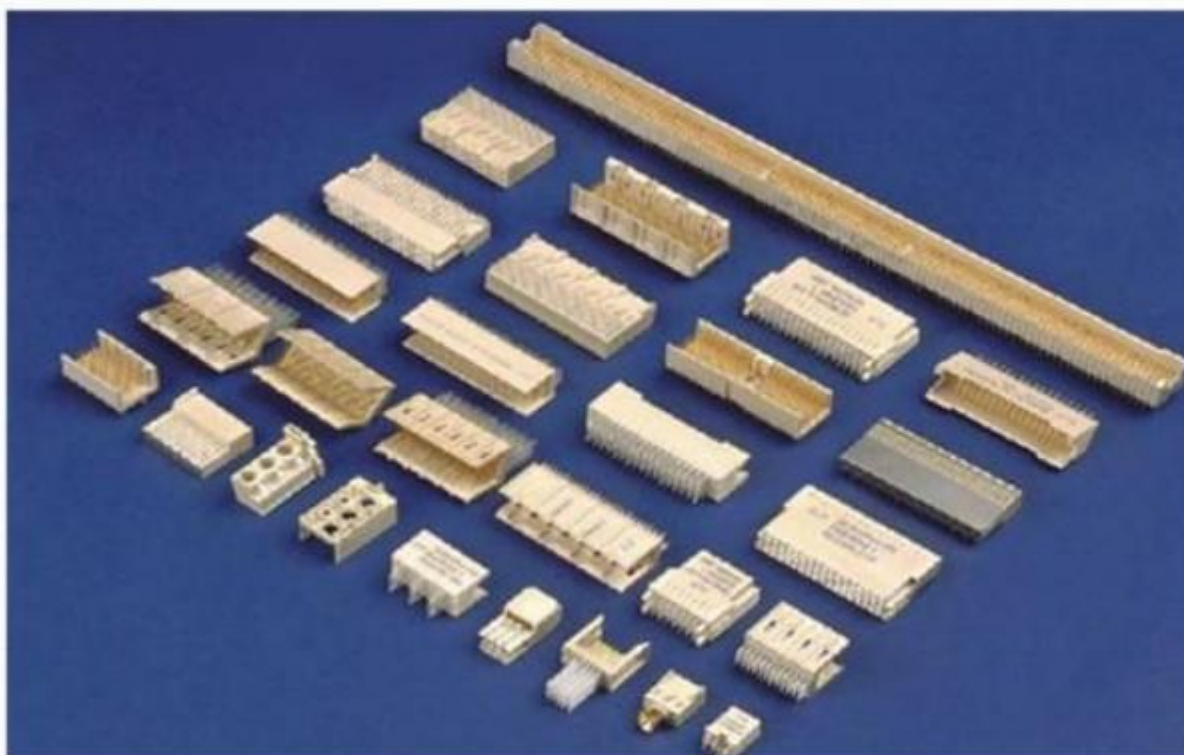
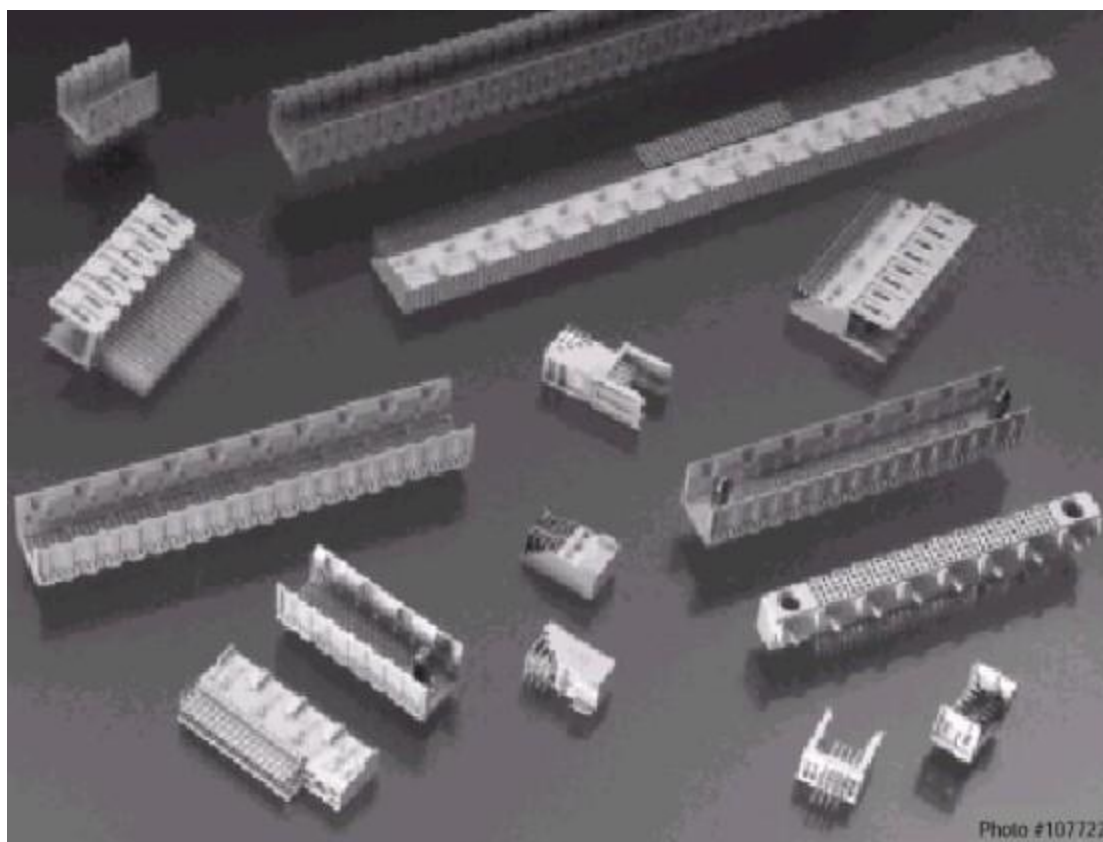




2MM connector I generation II generation

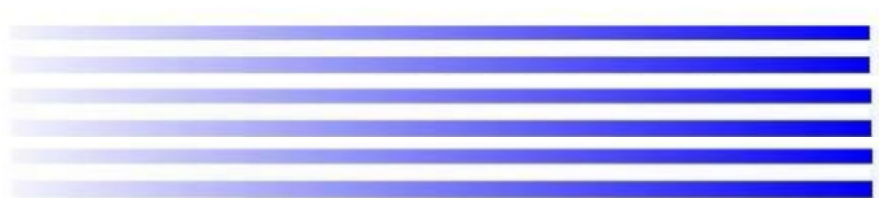




Catalog

1 HLCHM2.0 Series introduction.....	4
1.1 Main application field.....	4
1.2 Solderless push-in HM2.0 connector.....	4
2 HLHM2.0 Series introduction.....	4
2.1 Main feature.....	5
2.2 Main performance.....	5
2.3 Environmental performance.....	5
2.4 material.....	6
2.5 PCB board is recommended to open the section coating structure.....	6
2.6 Circuit density.....	7
2.7 Complete connector assembly.	8
2.8 Socket straight pin classification.....	10
2.9 Name the product model.....	11
2.10 Type A.....	12
2.11 Type B ₂₅	18
2.12 Type B ₂₂	23
2.13 Type B ₁₉	27
2.14 Type AB ₂₅	31
2.15 Type AB ₁₉	36





2.16 Type C ₁₁	40
2.17 Type M.....	50
2.18 Type D ₂₂	55
2.19 Type E ₂₅	61
2.20 DE ₂₅	67
2.21 Type F ₁₁	73
2.22 I generation 30 core.....	80
2.23 I generation 24 core.....	83
2.24 I generation 48. core.....	86
2.25 I generation 60. core.....	90
2.26 I generation 90. core.....	91
2.27 I generation 96. core.....	92
2.28 I generation 120. core.....	96
2.29 I generation 150. core.....	98
2.30 I generation 210. core.....	99
2.31 I generation 36. core.....	100
2.32 I generation 30. core.....	101





1.1 Main application field

Backplane high-speed signal connector is a kind of connector commonly used in large communication equipment, ultra-high performance servers and giant computers, industrial computers and high-end storage devices. It is used to connect the board and backplane for high-speed signal transmission. It is mainly used in information technology, data communication, industrial control, medical electronics and military computers.

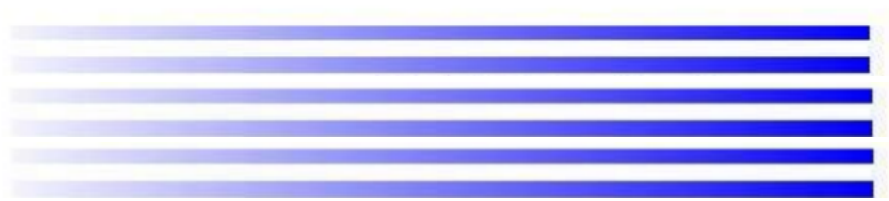


1.2 Push-in HLHM2.0 connector

Weldless pressed into HLHM2.0 connector in line with IEC61066-4 international standard high density airtight pinhole connector, adapt to the signal transmission rate increasing, hot swap and other requirements, and the connector on the single board to cooperate with each other, complete the signal transmission between the boards and provide power for the single board; Receiving power from outside; Provide interfaces between different devices; Provide detection signal channels; It is widely used in switching access, transmission, data communication, wireless and other products.

2 HLCHM2.0 series products





2.1 Main feature

- ◆ Comply with IEC61076-4
- ◆ Contact interval 2.0mm
- ◆ End mode: pressing type
- ◆ The product conforms to RH0S standard

2.2 Main performance

- ◆ Rated voltage: contact part/contact part 500Vr.m.s
- ◆ Rated current: 1.5A(20°C); 1.0A(70°C)(Load of all signal contacts)
- ◆ Resistance voltage: 750Vr.m.s
- ◆ Contact resistance: $\leq 20\text{ m}\Omega$
- ◆ Insulation resistance⁴: $\geq 10\text{ M}\Omega$
- ◆ Mechanical life: Performance grade 1 (500 times)
Performance grade 2 (250 times)
- ◆ Insertion force: 0.75N/pinMax
- ◆ Separation force: 0.15N/pinMin

2.3 Environmental performance

- ◆ Operating temperature and humidity: -55°C ~ 125°C/5--85%R.H
- ◆ Salt spray: 48 hours
- ◆ Vibration: frequency: 10-2000Hz, acceleration²: 200m/s





- ◆ Impact: half sine wave acceleration 500m/s^2

2.4 material

- ◆ Contact: copper alloy surface treatment: Ni/Pd/Au
- ◆ Insulation material: LCP Flame retardant grade: UL94V-0

2.5 PCB board is recommended to open the section coating structure

- ◆ The high deformability and recovery properties of welder-free pressed contacts allow them to be moved repeatedly without the need to repair damage to their function.

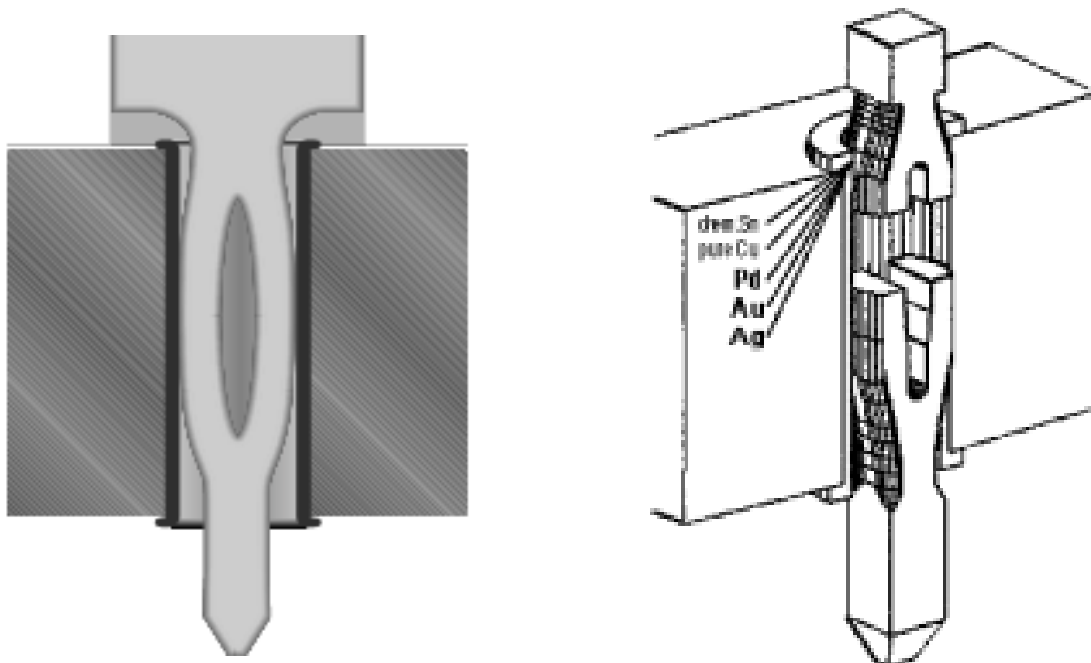
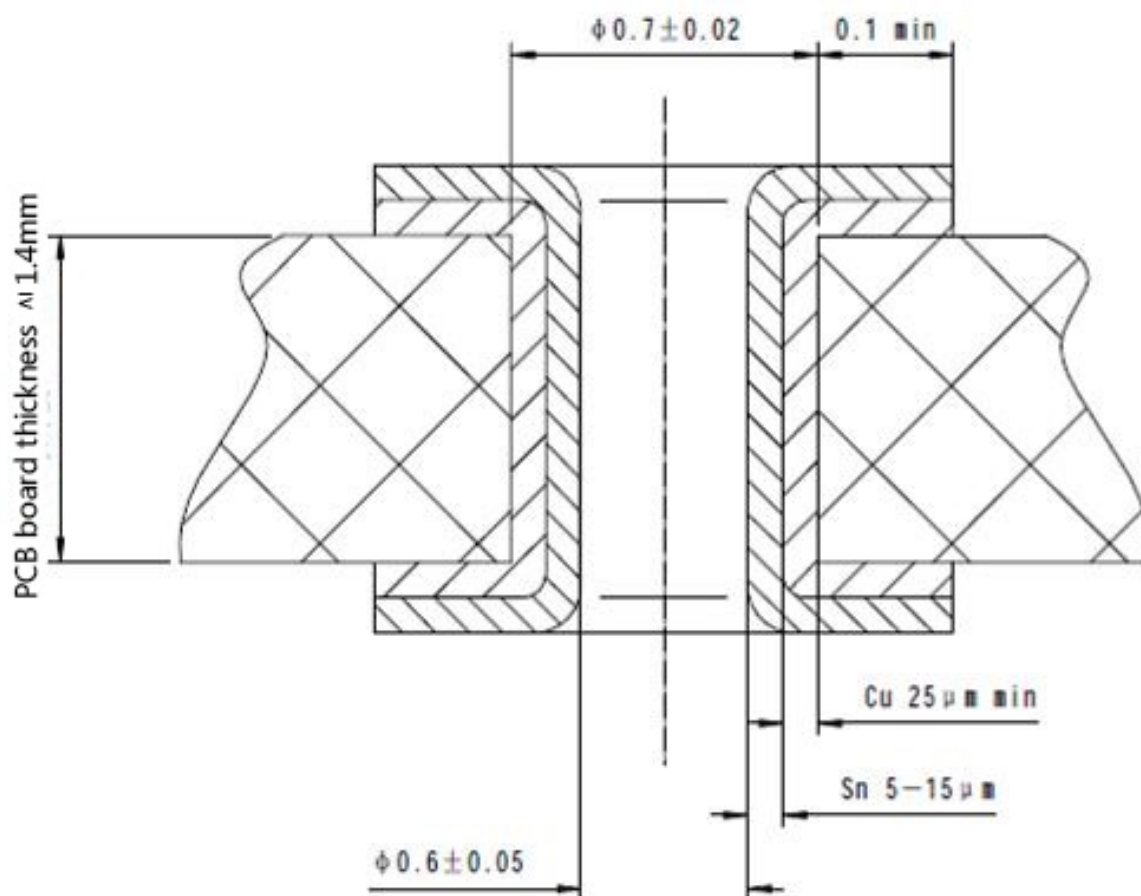


FIG. 1 Schematic diagram of solder less area of PCB cut surface coating





- ◆ The recommended PCB open-cut coating structure conforms to IEC 61076-4-101



2.6 Circuit density

When using a PCB board with a suitable ring size recommended for plating through holes ($\phi 0.6 \pm 0.05\text{mm}$), the remaining distance between plating through holes is about 1mm, considering that the width of the copper-covered circuit track and the space between them should be uniform. Two 0.2mm wide copper-covered circuit tracks or three 0.14mm wide copper-covered circuit tracks can be passed between two electroplated through rings. The circuit track design is shown in Figure 3.

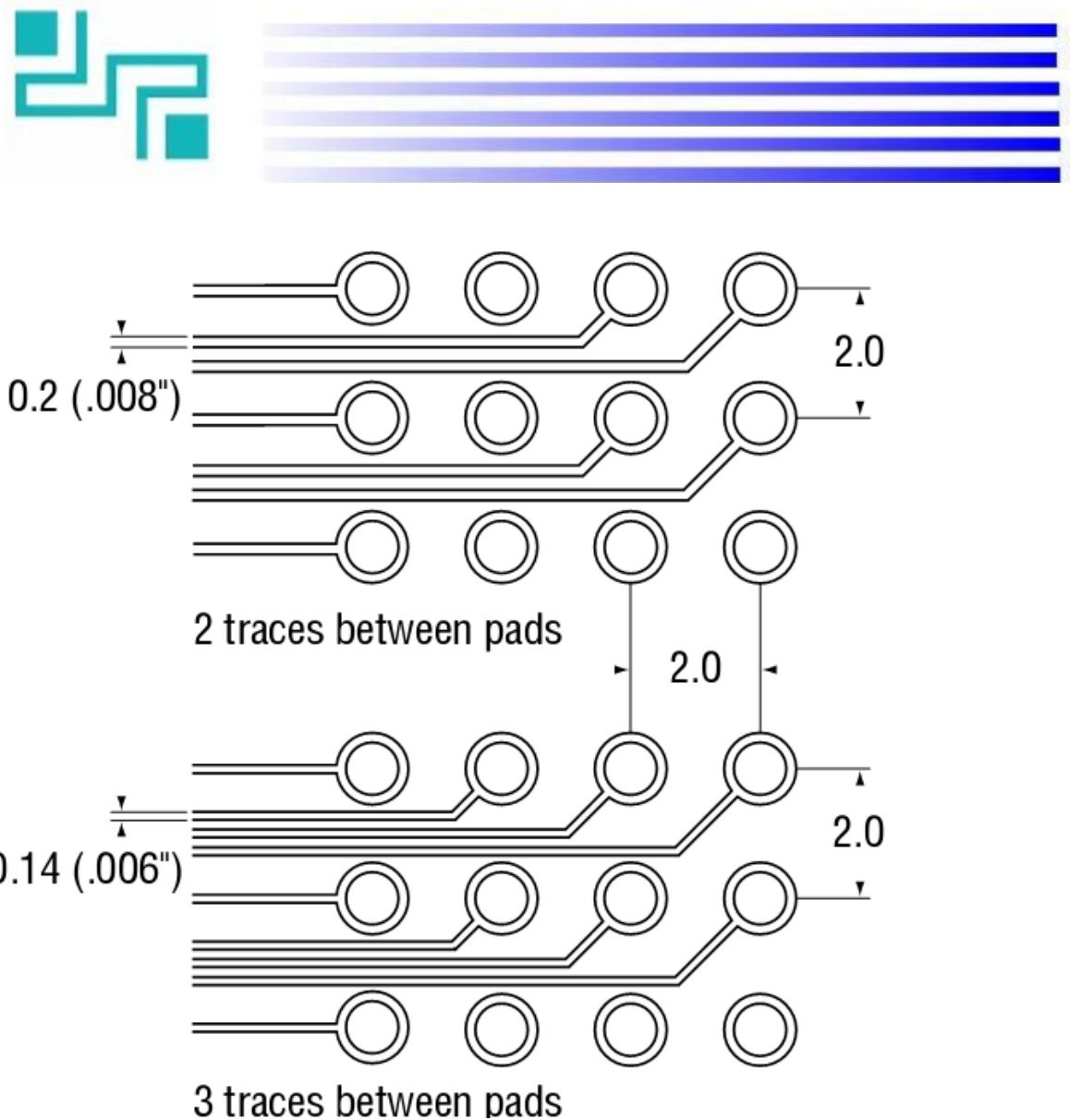


FIG. 3 Schematic diagram of circuit track

2.7 Complete connector composition

One or more connector assemblies are spliced end to end to form a complete connector. All varieties of assemblies may be spliced at will, but the assembly into fixed and free connector structures shall be identical. In addition to the lengthening assembly (C, F and N) length of 25mm, all the length of the assembly is 50mm, in order to make the connector total length of 25mm odd times, should only be lengthened at the end of the connector. Integrated with the MPC, the assembly has all the features of a complete connector and can be used independently.



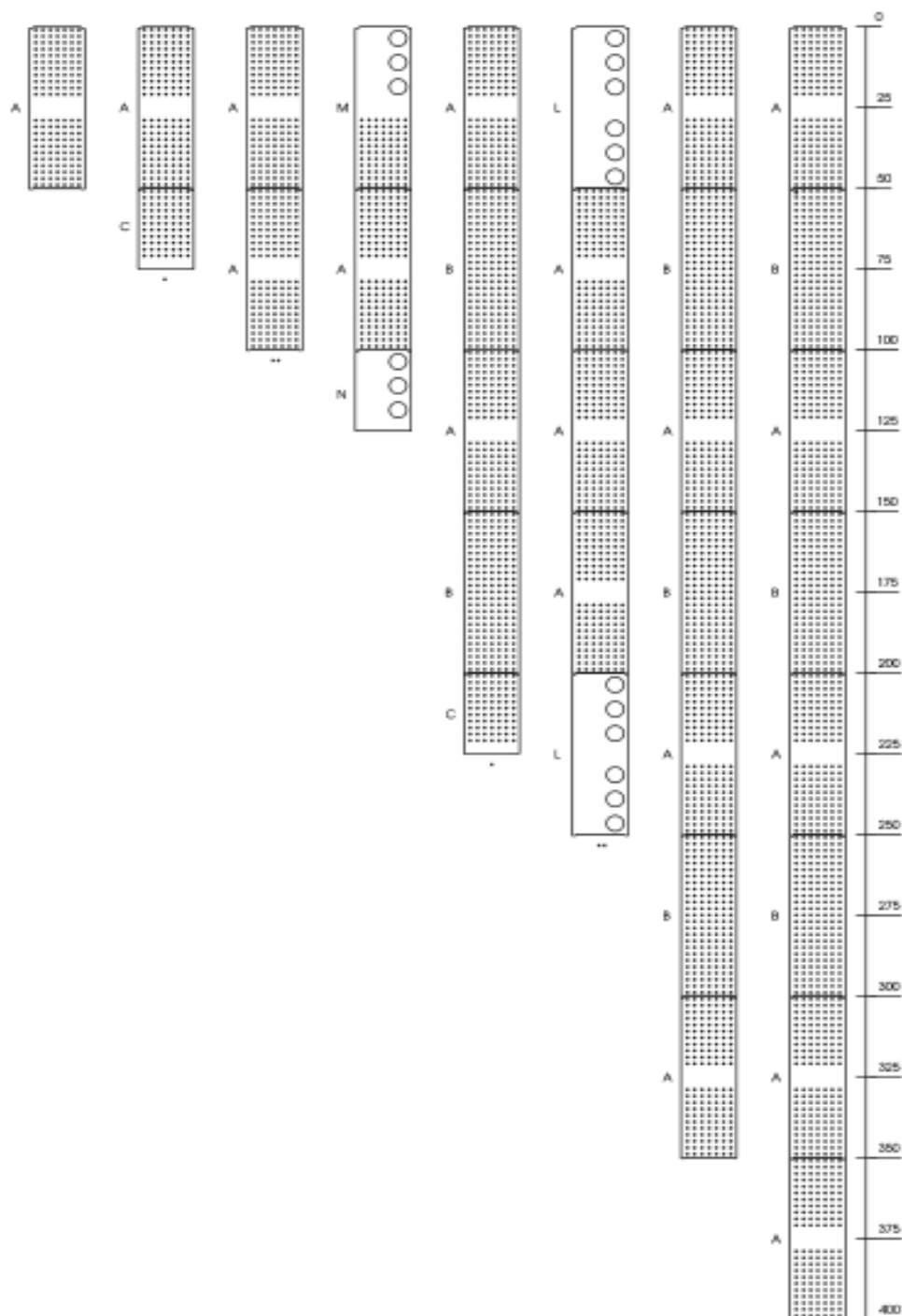
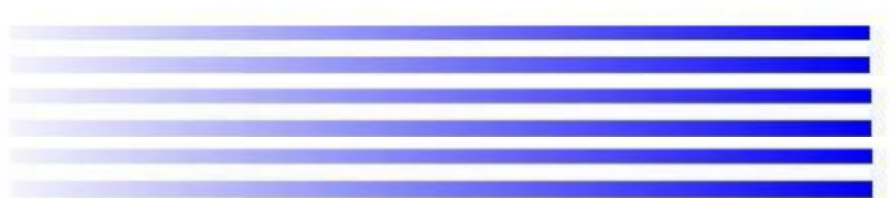


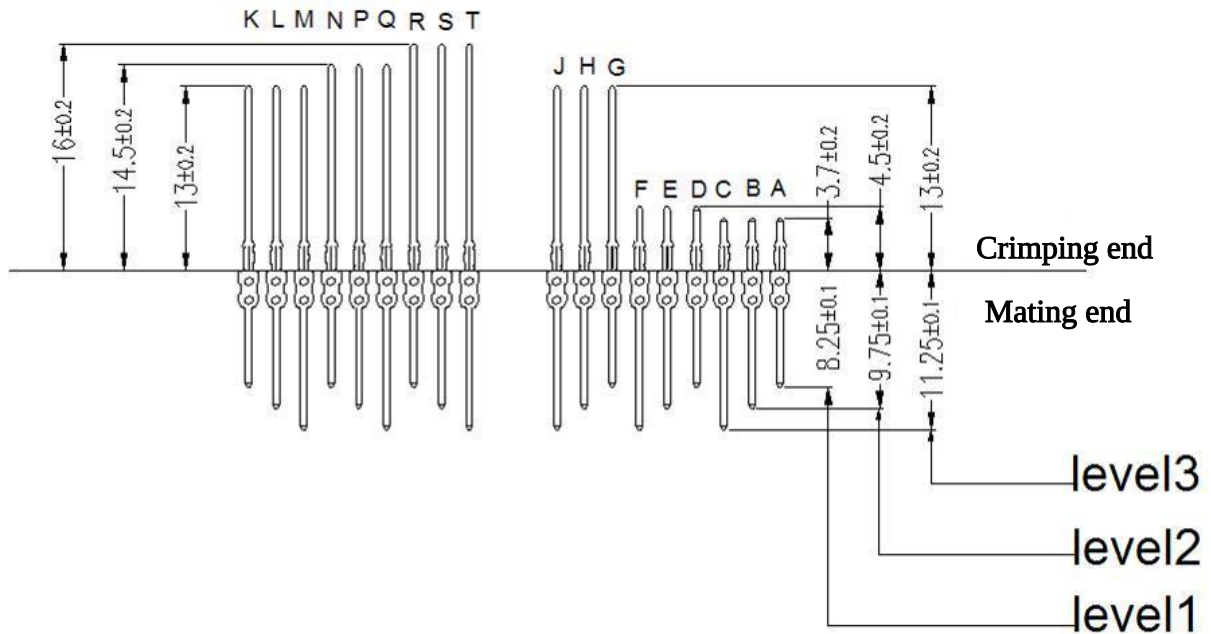
Figure 4 shows an example of the complete connector arrangement





2.8 Socket straight pin classification

HardMetric class pin



The FeaturesBus class pins

KEY		
CODE	DIMENSIONS	
	DIM "A" MATE	DIM "B" TAIL
1	5.00	4.30
2	5.75	4.30
3	6.50	4.30
4	7.25	4.30

Technical drawing of a FeaturesBus class pin. The drawing shows a cross-section of the pin with dimensions DIM "A" $\pm$ 0.15 and DIM "B" $\pm$ 0.20. The pin has a central body with a hole and a tail section. The dimension 3.45 is also indicated.

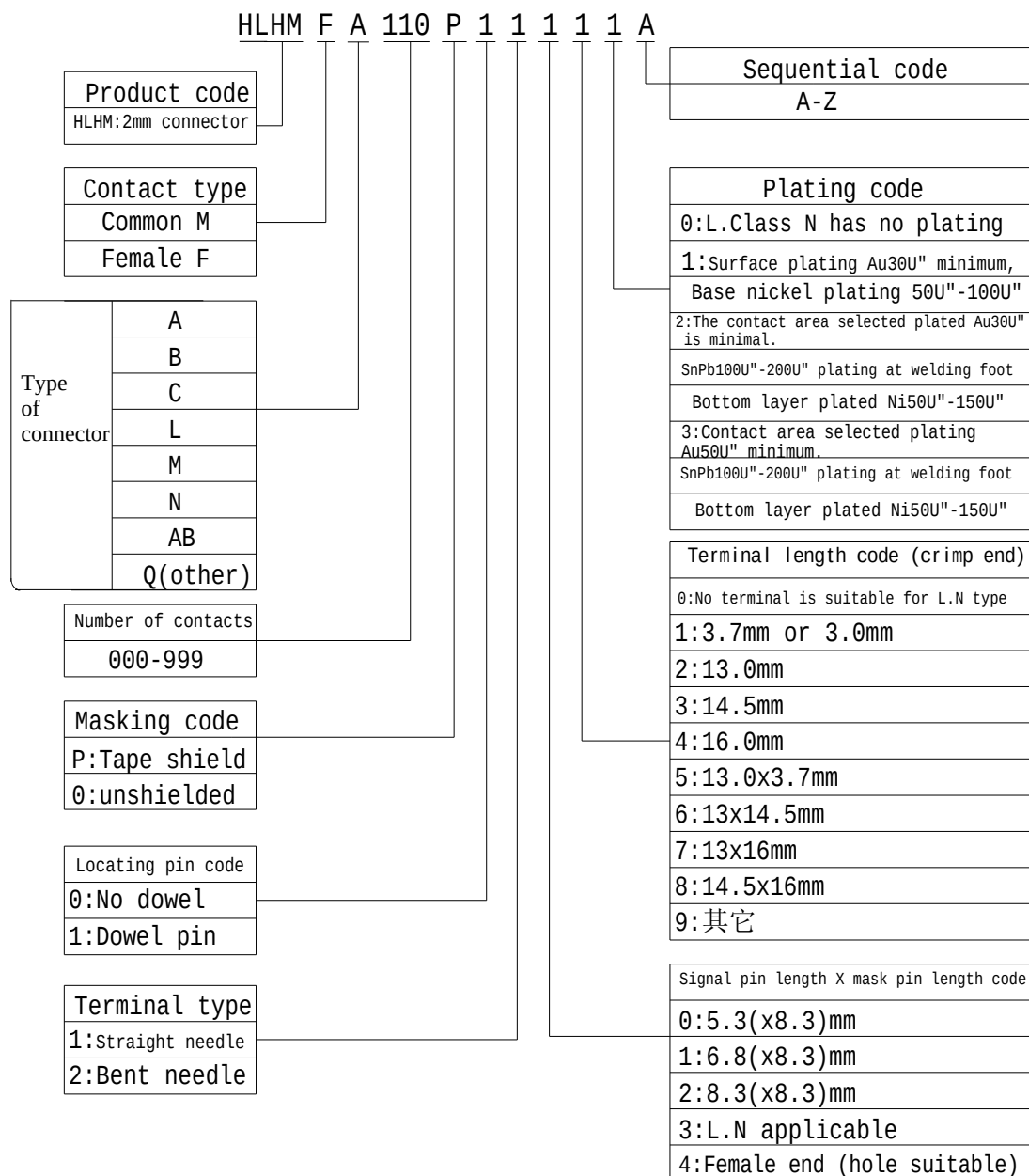




2.9 Product model naming

Enterprise standard of Hongli Kunpeng
International Trade Co., LTD

Naming method of 2MM connectors according to IEC61076-4-101 standard



Note: 1. When the models in the assembly drawing and the specification are inconsistent, this naming standard shall prevail





(with shieldingsheet)

(Product model: HLHMFA110P02412A)

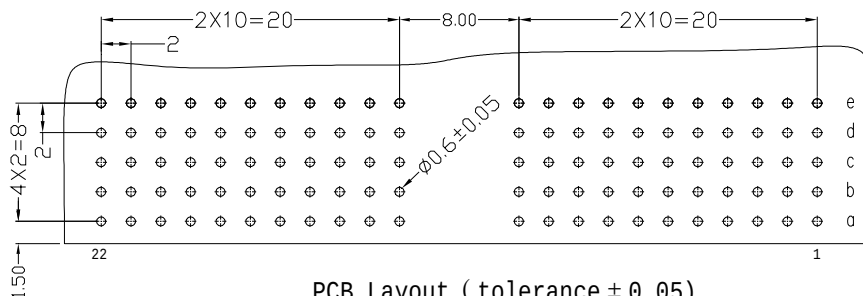
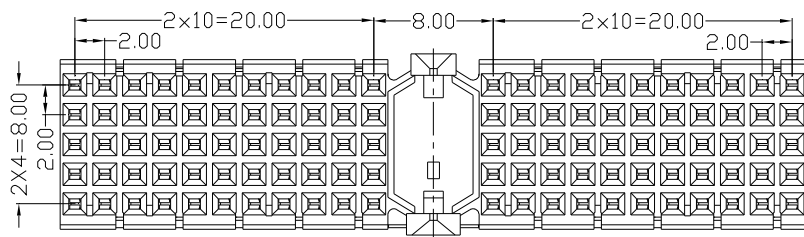
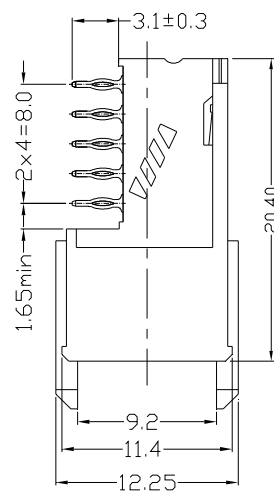
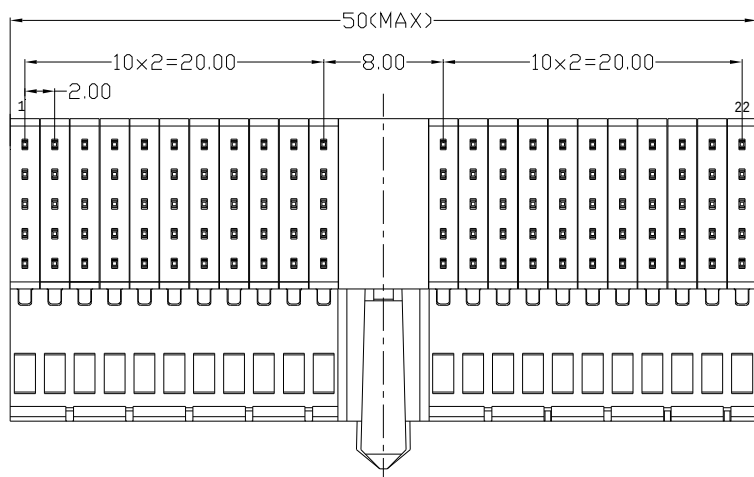
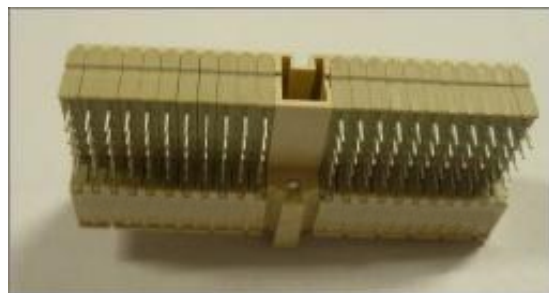


Note: 1) PCB board hole size is $\Phi 0.7 \pm 0.02$;
After electroplating, the through-hole size is $\Phi 0.6 \pm 0.05$;



(without shield)

(Product model: HLHMFA110002412B)

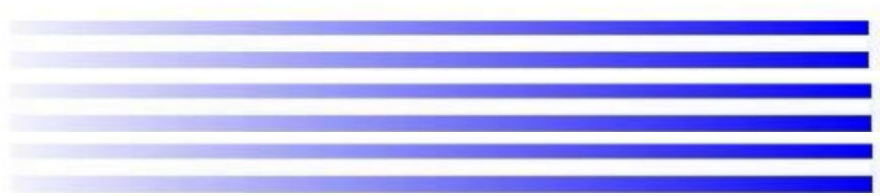


PCB Layout (tolerance ± 0.05)

Recommended PCB hole size

Note: 1) PCB board hole size is $\Phi 0.7 \pm 0.02$;
After electroplating, the through-hole size is $\Phi 0.6 \pm 0.05$;

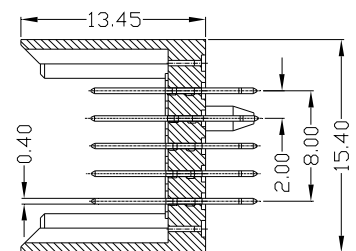
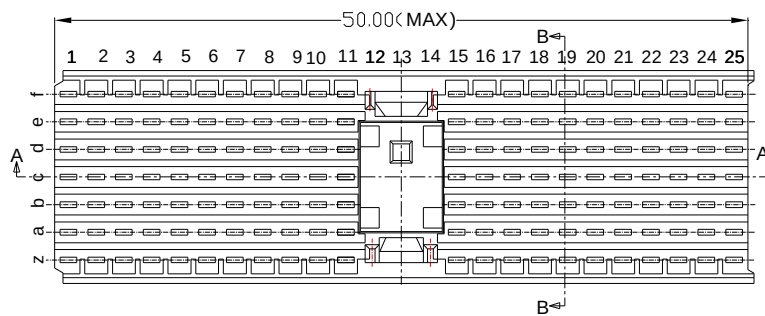




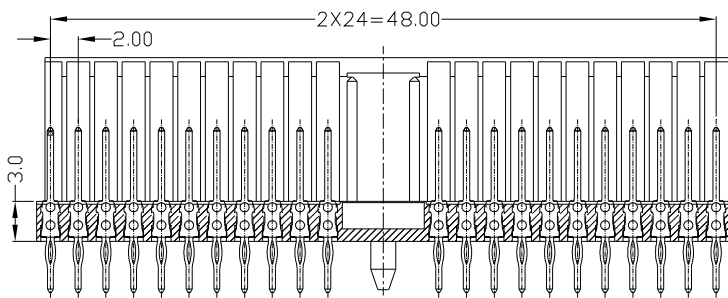
Type A

socket, Insertion pin, Straight type, Tape dowe

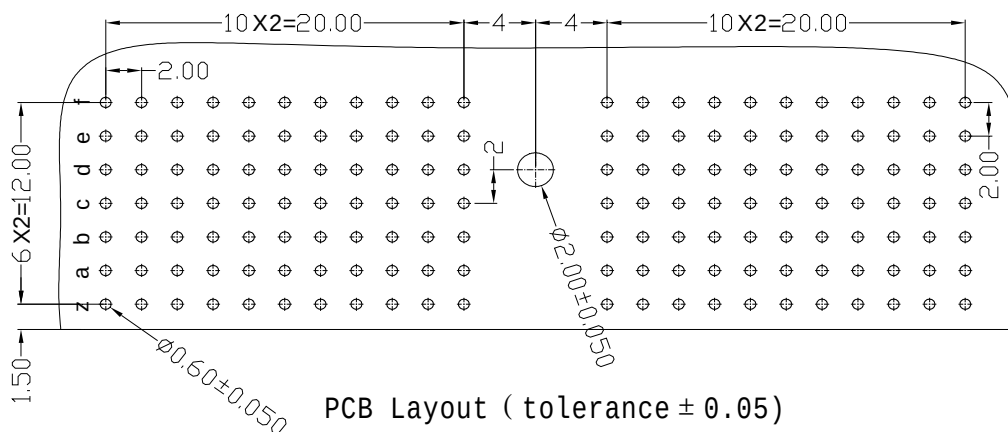
110/154 core



B-B



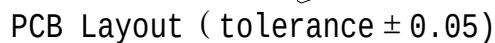
A-A



PCB Layout (tolerance ± 0.05)

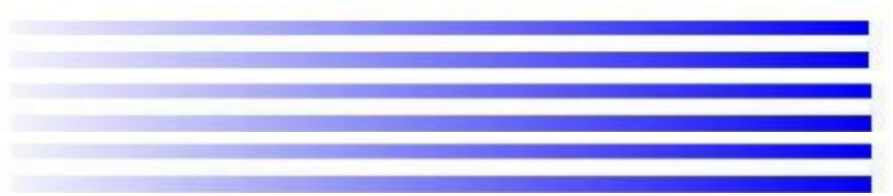
Recommended PCB board hole size (with shielding needle)

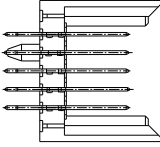
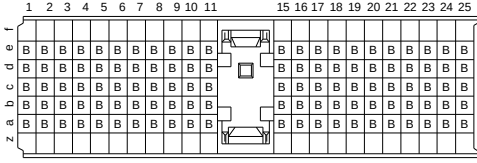
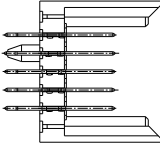
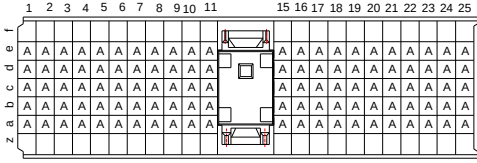
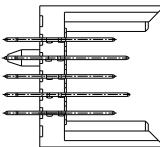
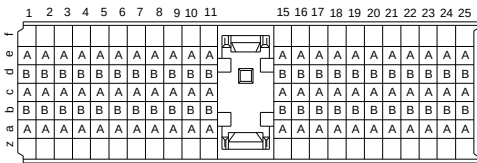
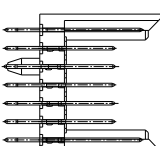
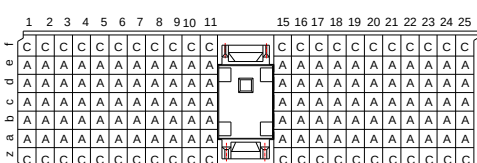
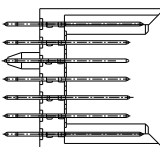
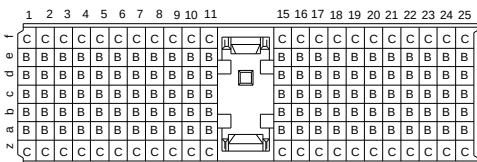




Note: 1) PCB board hole size is $\Phi 0.7 \pm 0.02$;
After electroplating, the through-hole size is $\Phi 0.6 \pm 0.05$;





Product model	Schematic diagram	Number of cores	Fit length
HLHMMA110011112A	 	110	-/- 3.7/9.75 3.7/9.75 3.7/9.75 3.7/9.75 3.7/9.75 -/-
HLHMMA110011012B	 	110	-/- 3.7/8.25 3.7/8.25 3.7/8.25 3.7/8.25 3.7/8.25 -/-
HLHMMA110011012C	 	110	-/- 3.7/8.25 3.7/9.75 3.7/8.25 3.7/9.75 3.7/8.25 -/-
HLHMMA154P11012D	 	154	3.7/11.25 3.7/8.25 3.7/8.25 3.7/8.25 3.7/8.25 3.7/11.25
HLHMMA154P11112E	 	154	3.7/11.25 3.7/9.75 3.7/9.75 3.7/9.75 3.7/9.75 3.7/11.25

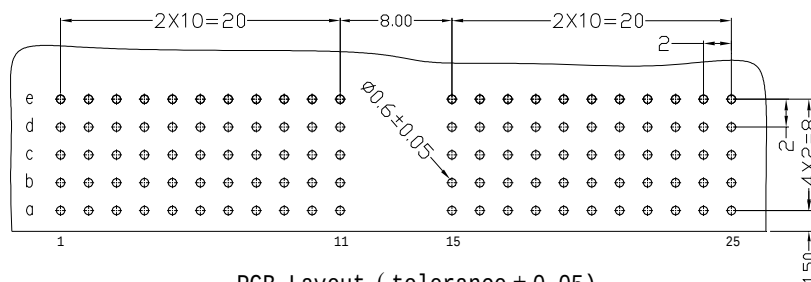
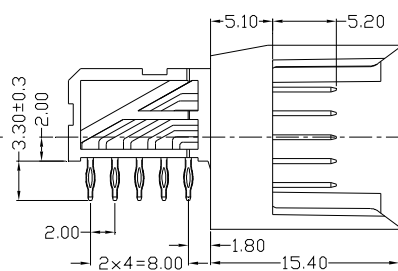
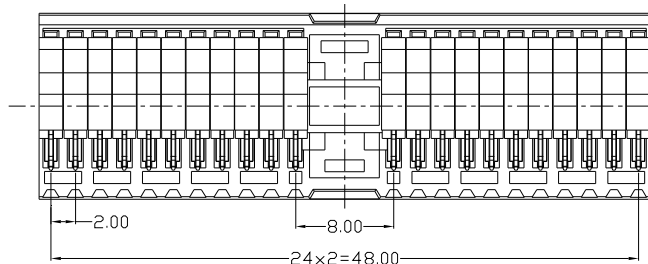
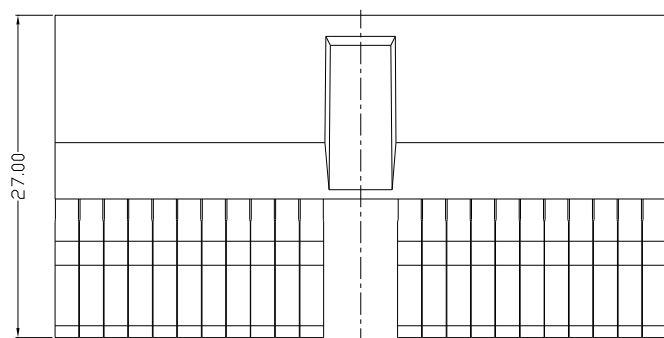
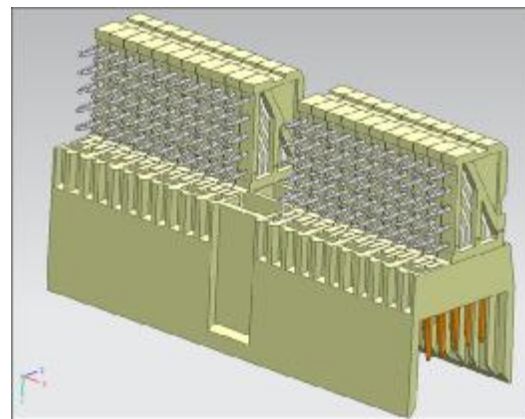
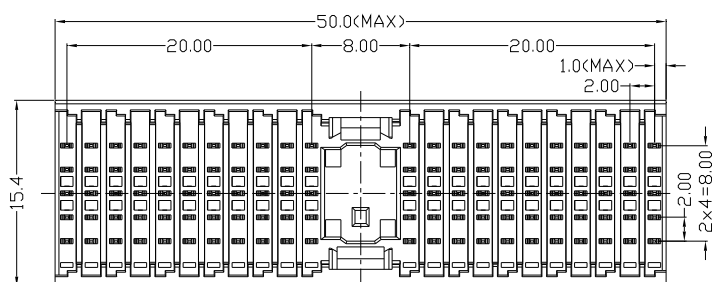




Type A

socket, Insertion pin, Straight type, No dowel pins

110core product model: HLHMA110002012A



PCB Layout (tolerance ± 0.05)

Recommended PCB hole size

Note: 1) PCB board hole size is $\Phi 0.7 \pm 0.02$;

After electroplating, the through-hole size is $\Phi 0.6 \pm 0.05$;

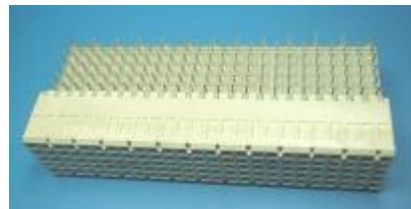




2.11 Type B₂₅

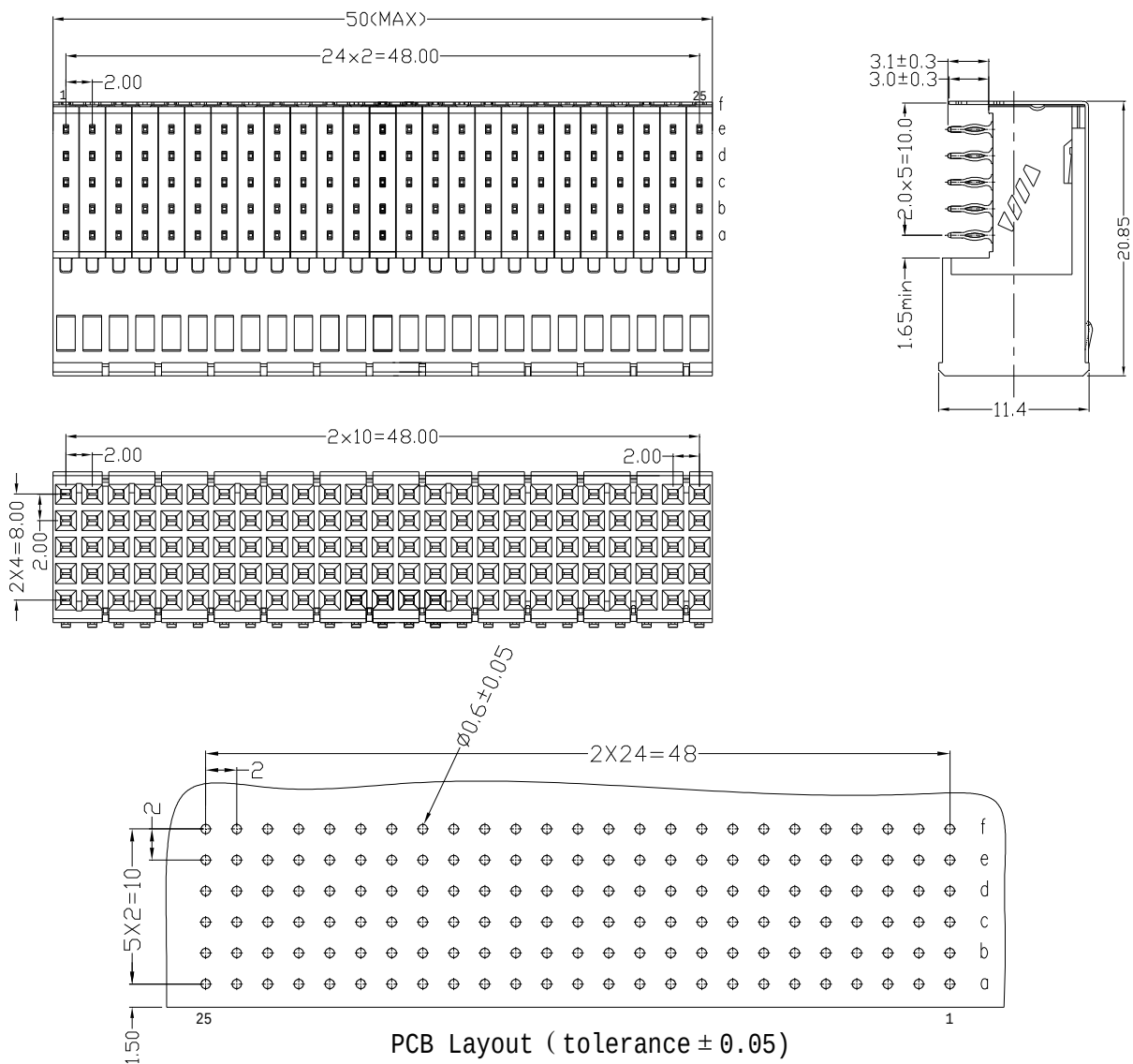
Plug, jack, right Angle bent

125 core without/with shield



(with shielding sheet)

(Product model: HLHMF125P02412A)



Recommended PCB hole size

Note: 1) PCB board hole size is $\phi 0.7 \pm 0.02$;

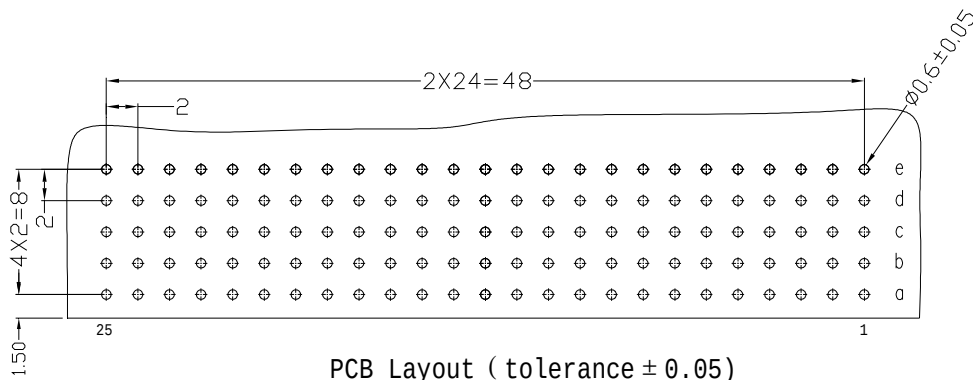
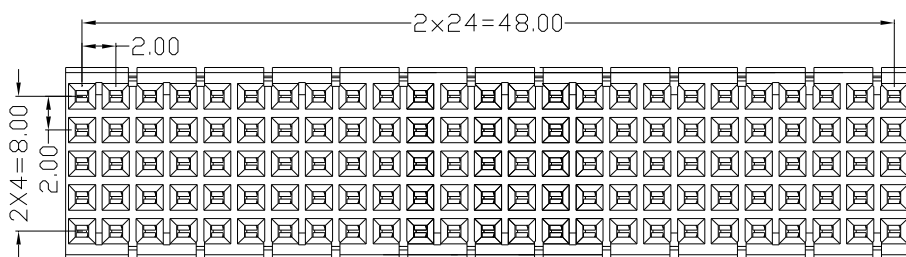
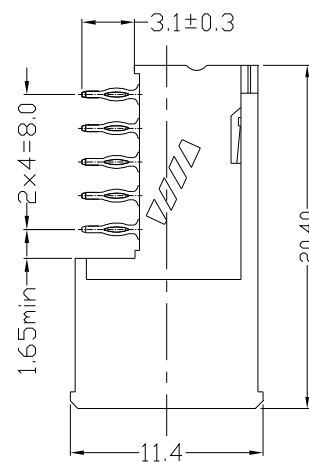
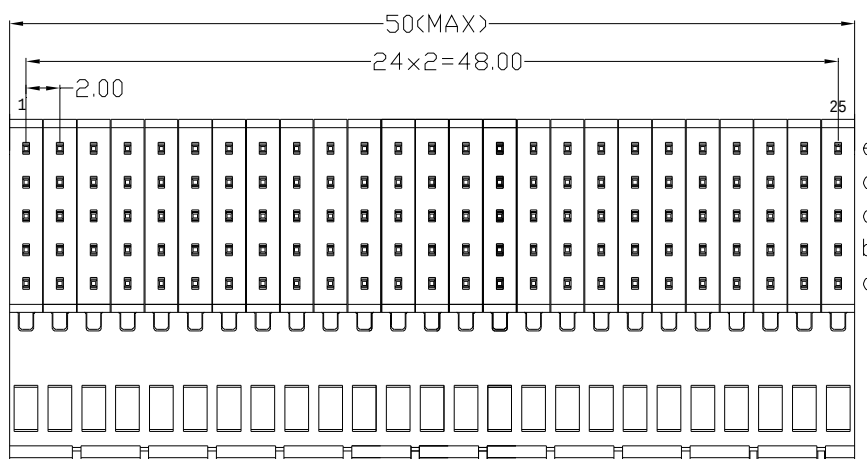
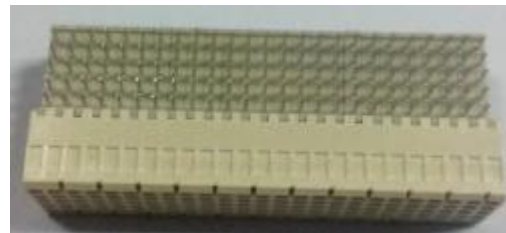
After electroplating, the through-hole size is $\phi 0.6 \pm 0.05$;





(without shield)

(Product model: HLHMFB125002412B)



Recommended PCB hole size

Note: 1) PCB board hole size is $\Phi 0.7 \pm 0.02$;
After electroplating, the through-hole size is $\Phi 0.6 \pm 0.05$;

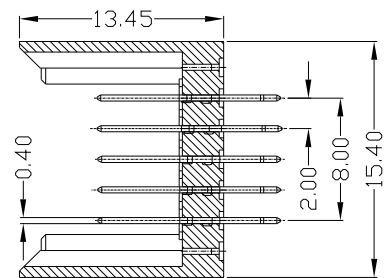
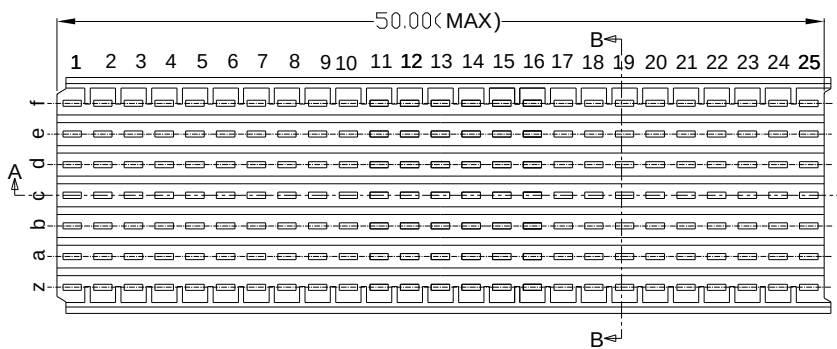
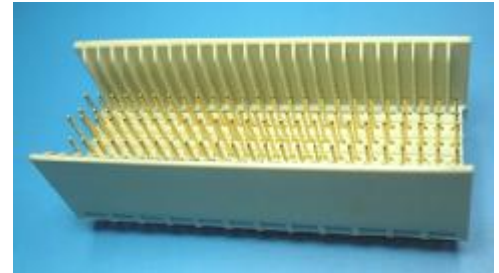




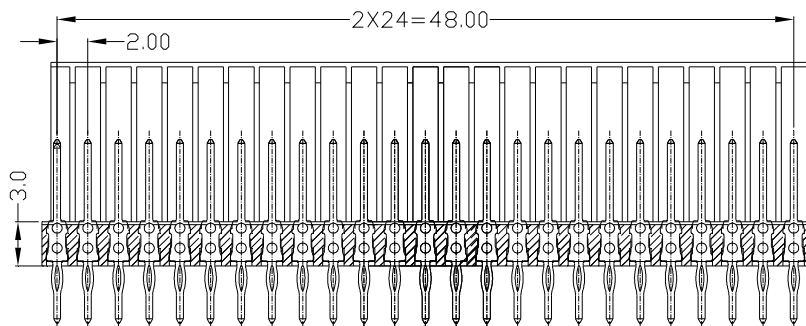
Type B₂₅

Socket, pin, straight

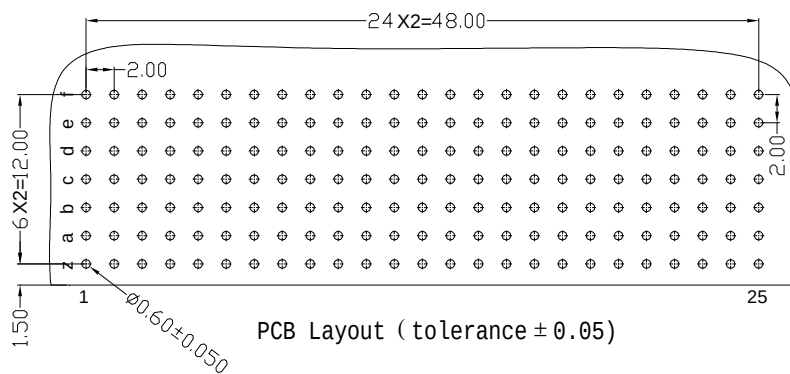
125 core



B-B

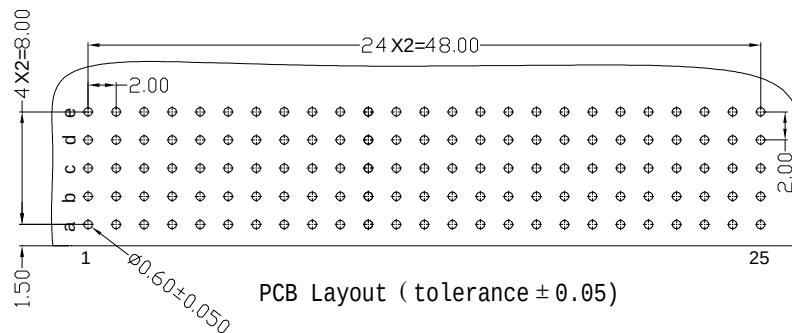


A-A



Recommended PCB board hole size (with shielding needle)





Recommended PCB board hole size (without shielding needle)

**Note: 1) PCB board hole size is $\Phi 0.7 \pm 0.02$;
After electroplating, the through-hole size is $\Phi 0.6 \pm 0.05$;**

Product model	Schematic diagram	Number of cores	Fit length
HLHMMB125001112A	 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 a b c d e z a b c d e f	125	-/- 3.7/9.75 3.7/9.75 3.7/9.75 3.7/9.75 3.7/9.75 -/-
HLHMMB125001012B	 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 a b c d e z a b c d e f	125	-/- 3.7/9.75 3.7/9.75 3.7/9.75 3.7/9.75 3.7/9.75 -/-
HLHMMB175P01012C	 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 a b c d e f g z a b c d e f g	175	3.7/11.25 3.7/8.25 3.7/8.25 3.7/8.25 3.7/8.25 3.7/8.25 3.7/11.25
HLHMMB175P01012D	 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 a b c d e f g z a b c d e f g	175	3.7/11.25 3.7/8.25 3.7/8.25 3.7/8.25 3.7/8.25 3.7/8.25 3.7/11.25
HLHMMB125001012E	 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 a b c d e z a b c d e f	125	-/- 3.7/8.25 3.7/8.25 3.7/8.25 3.7/8.25 3.7/8.25 -/-



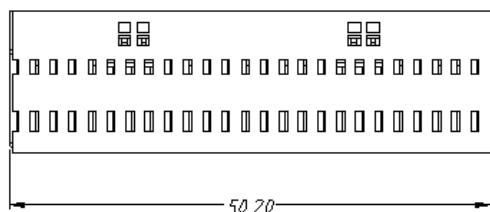
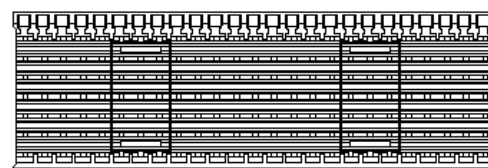
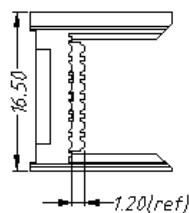
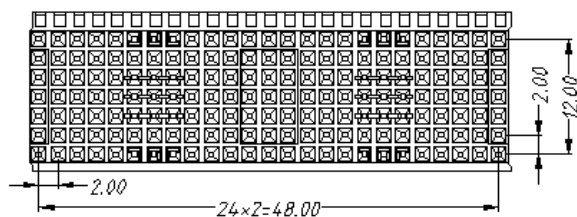
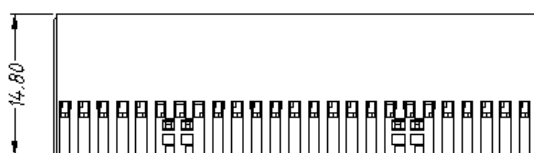
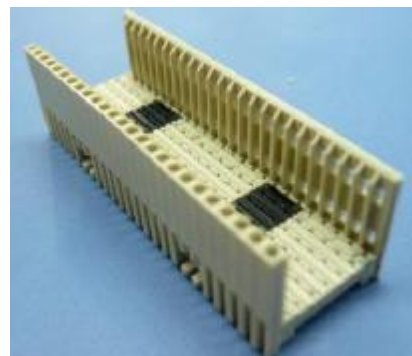


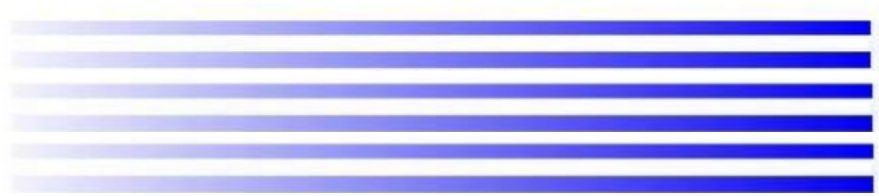
Type B₂₅

Sheath, straight type

175 core

(Product model: HLHMSJ0613-0616A)





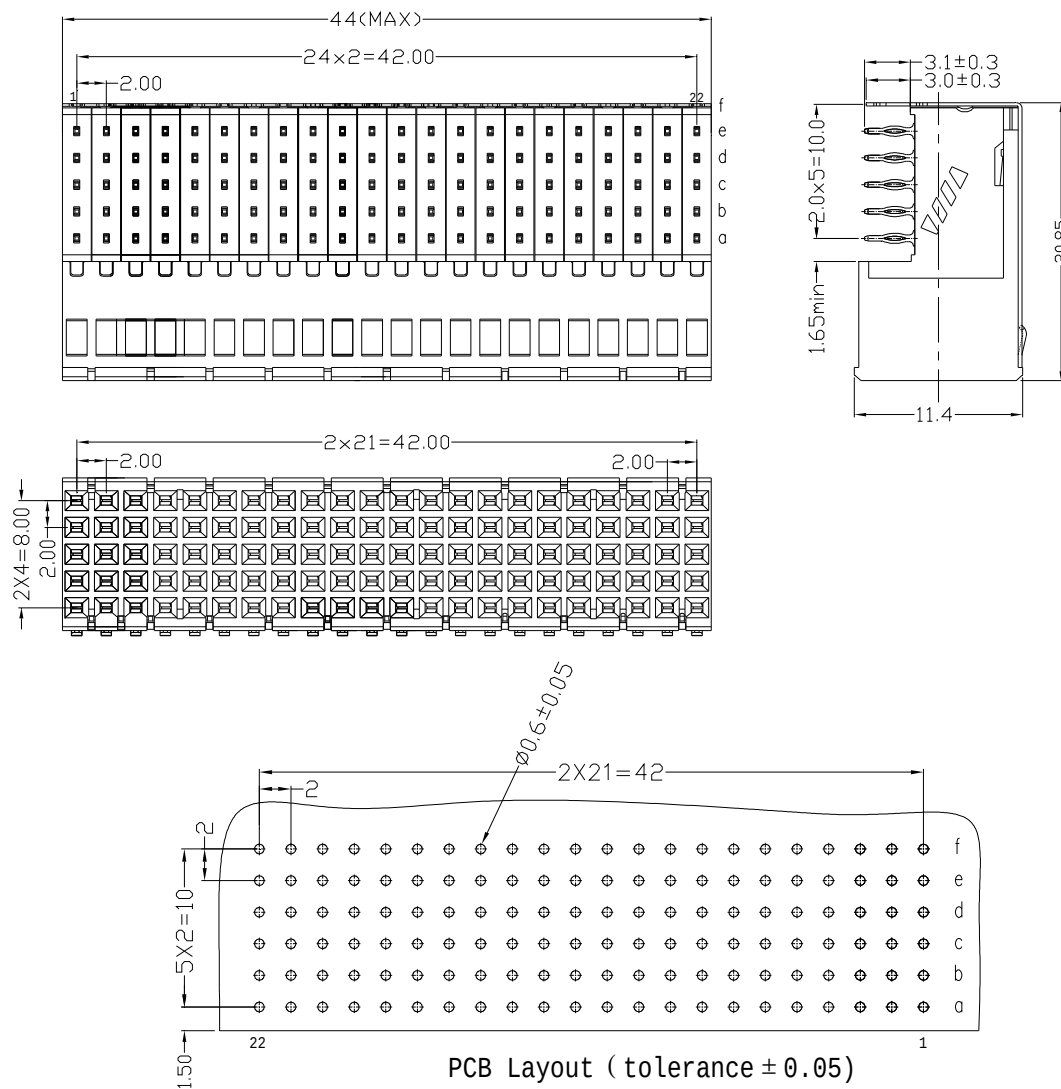
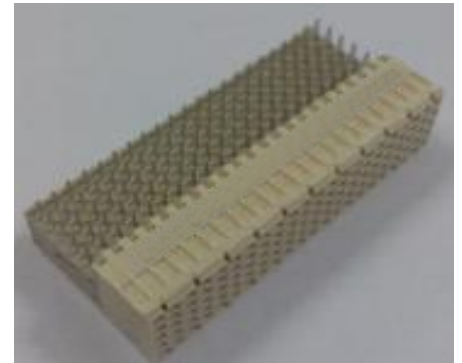
2.12 Type B₂₂

Plug, jack, right Angle bent

110core without/with shield

(with shielding sheet)

(Product model: HLHMF110P02412A)

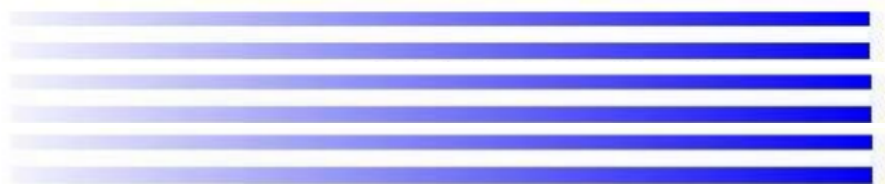


Recommended PCB hole size

Note: 1) PCB board hole size is $\Phi 0.7 \pm 0.02$;

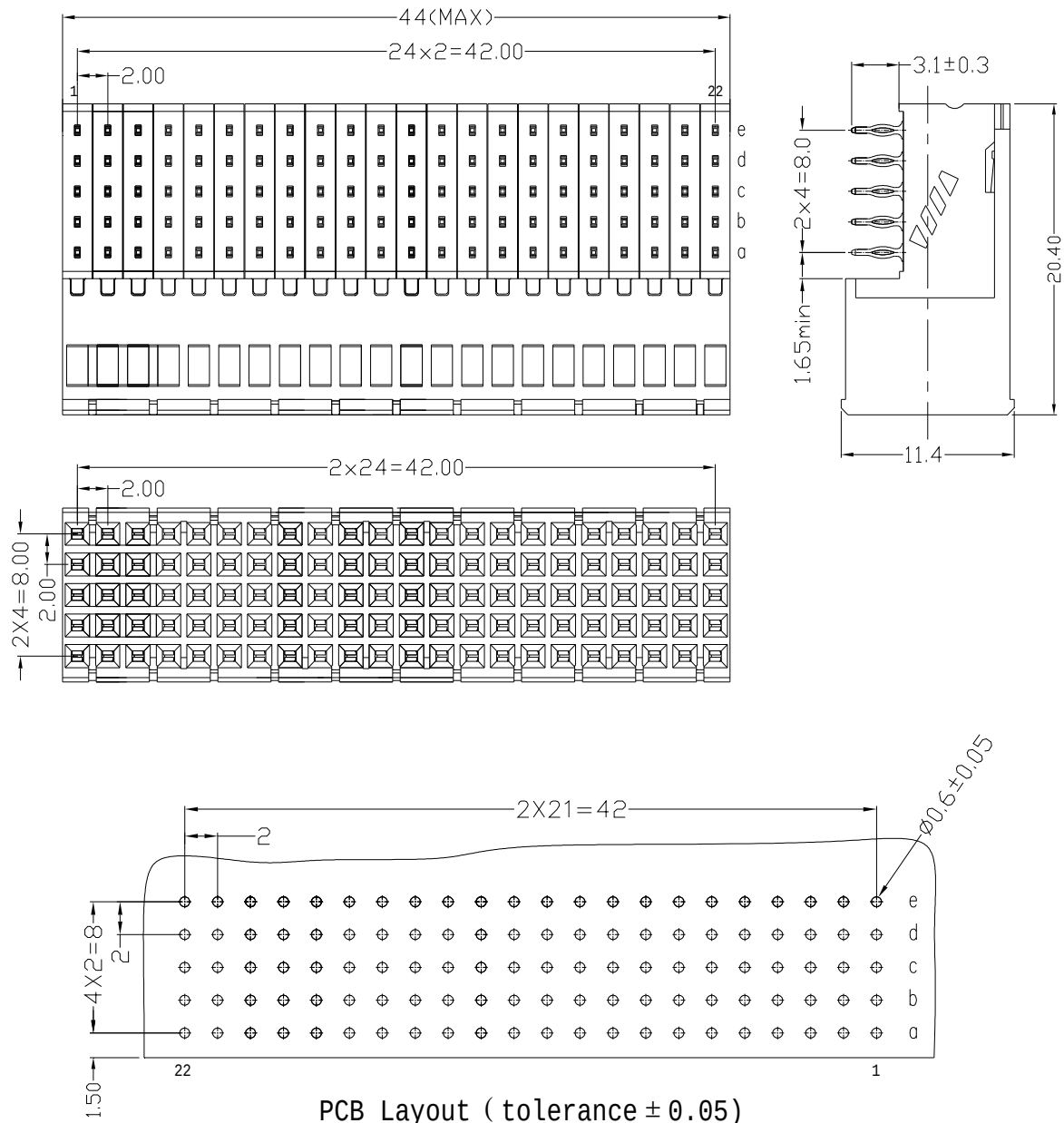
After electroplating, the through-hole size is $\Phi 0.6 \pm 0.05$;





(without shield)

(Product model: HLHMF110002412B)



Recommended PCB hole size

Note: 1) PCB board hole size is $\Phi 0.7 \pm 0.02$;

After electroplating, the through-hole size is $\Phi 0.6 \pm 0.05$;

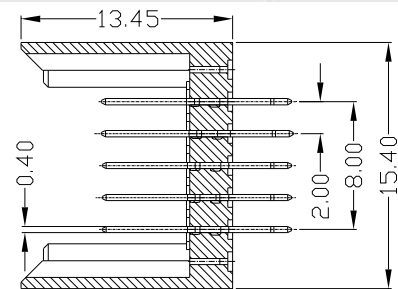
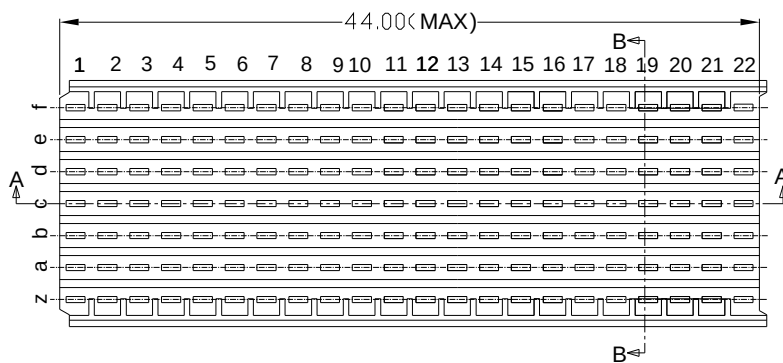
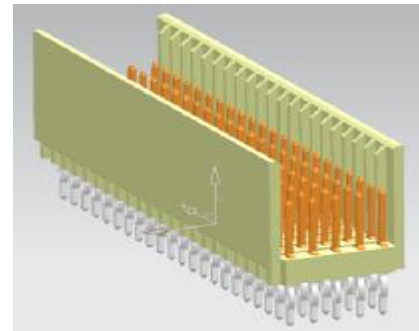




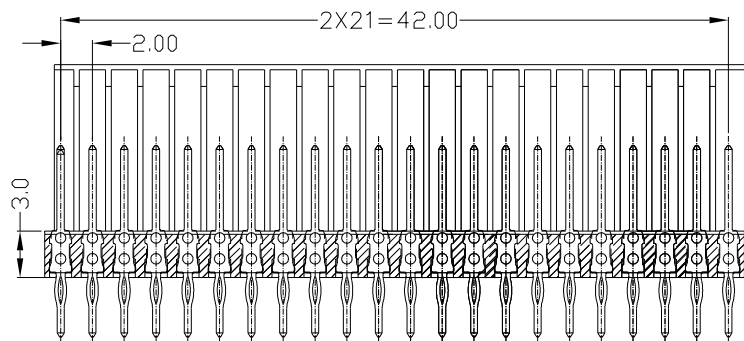
Type B₂₂

Socket, pin, straight

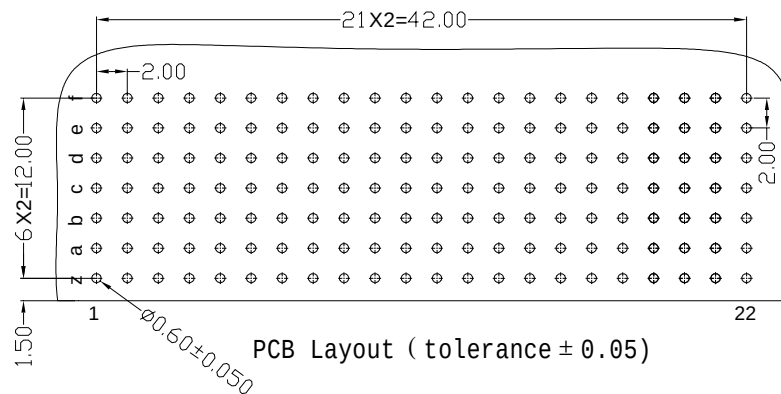
110 core



B-B

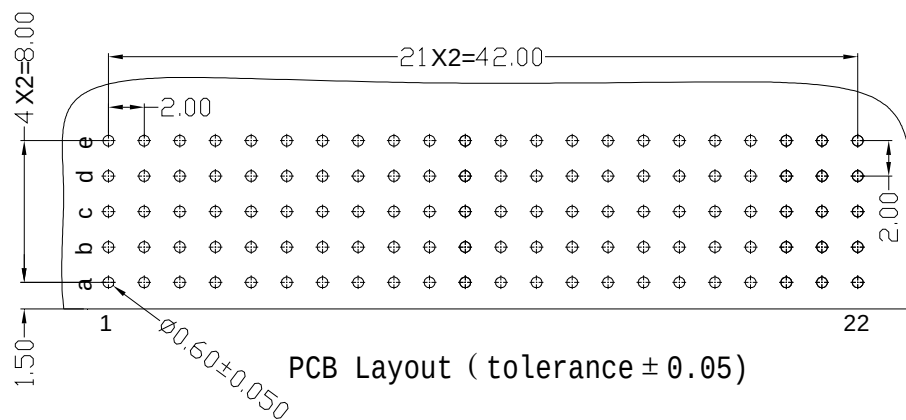


A-A

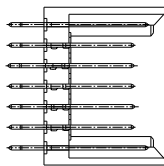
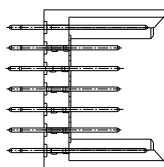


Recommended PCB board hole size (with shielding needle)





Recommended PCB board hole size (without shielding needle)

Product model	Schematic diagram	Number of cores	Fit length																																																																																																																																																																																								
HLHMMB154P01112A	 <table><tr><td></td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td><td>17</td><td>18</td><td>19</td><td>20</td><td>21</td><td>22</td></tr><tr><td>f</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td></tr><tr><td>e</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td></tr><tr><td>d</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td></tr><tr><td>c</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td></tr><tr><td>b</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td></tr><tr><td>a</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td><td>B</td></tr><tr><td>z</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td></tr></table>		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	f	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	e	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	d	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	c	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	b	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	a	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	z	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	110	3.7/11.25 3.7/9.75 3.7/9.75 3.7/9.75 3.7/9.75 3.7/9.75 3.7/11.25
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HLHMMB154P01012B	 <table><tr><td></td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td><td>17</td><td>18</td><td>19</td><td>20</td><td>21</td><td>22</td></tr><tr><td>f</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td></tr><tr><td>e</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td></tr><tr><td>d</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td></tr><tr><td>c</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td></tr><tr><td>b</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td></tr><tr><td>a</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td><td>A</td></tr><tr><td>z</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td><td>C</td></tr></table>		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	f	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	e	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	d	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	c	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	b	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	a	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	z	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	110	3.7/11.25 3.7/8.25 3.7/8.25 3.7/8.25 3.7/8.25 3.7/8.25 3.7/11.25
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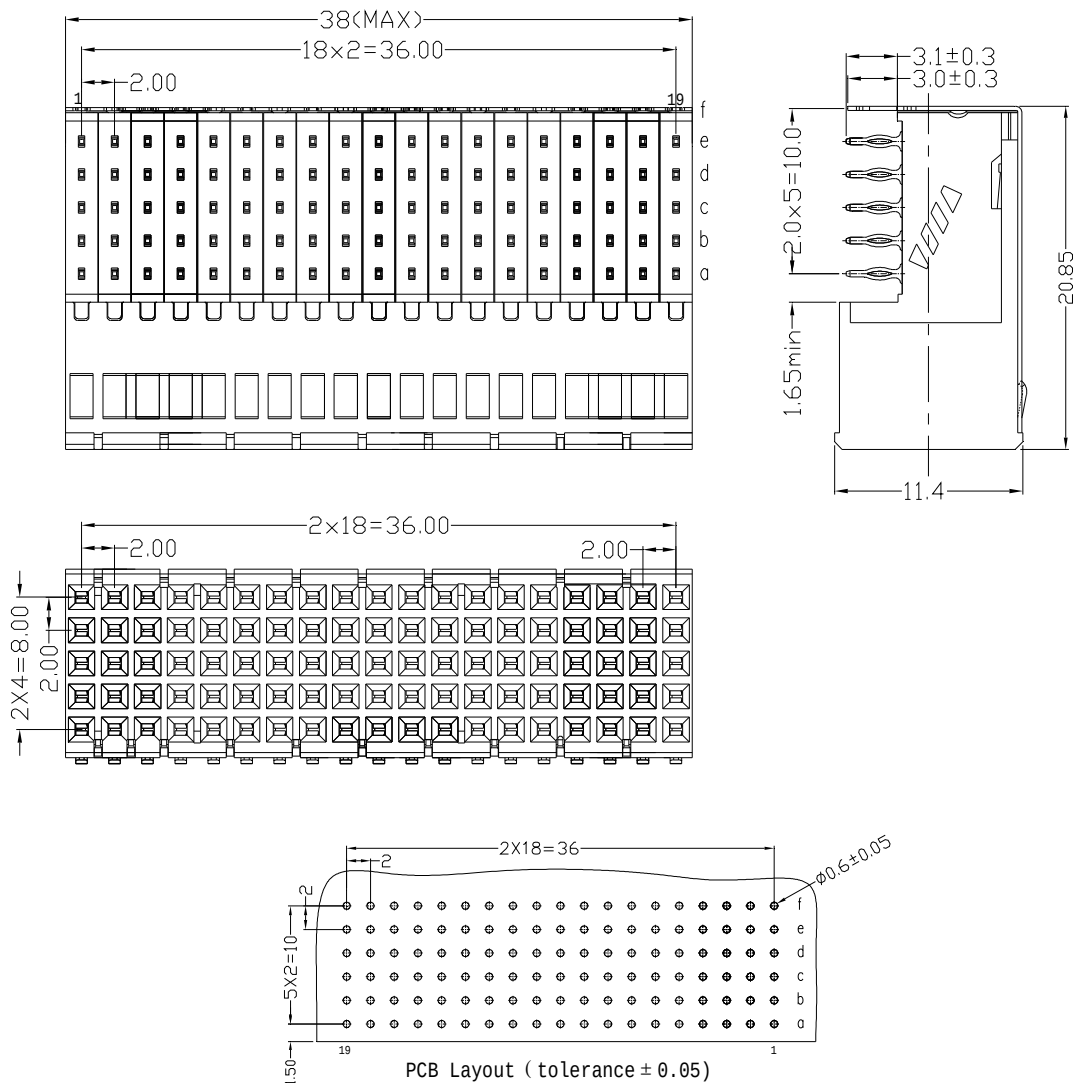
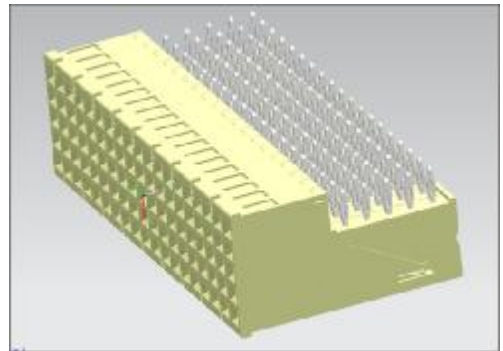
2.13 Type B₁₉

Plug, jack, right Angle bent

95 core without/with shield piece

(with shielding sheet)

(Product model: HLHMF95P02412A)



Recommended PCB hole size

Note: 1) PCB board hole size is $\Phi 0.7 \pm 0.02$;

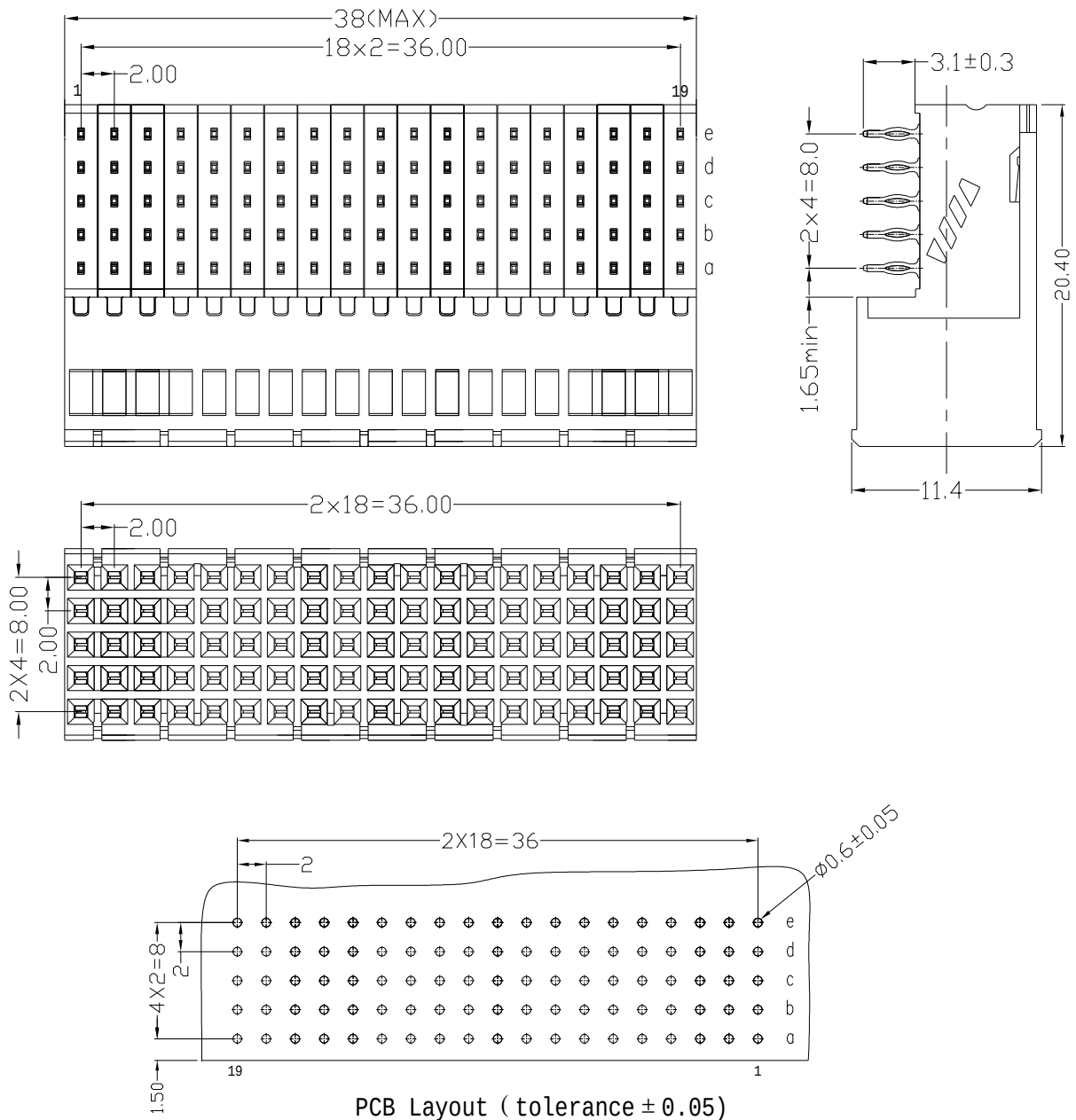
After electroplating, the through-hole size is $\Phi 0.6 \pm 0.05$;





(without shield)

(Product model: HLHMF95002412B)



Recommended PCB hole size

Note: 1) PCB board hole size is $\Phi 0.7 \pm 0.02$;
After electroplating, the through-hole size is $\Phi 0.6 \pm 0.05$;

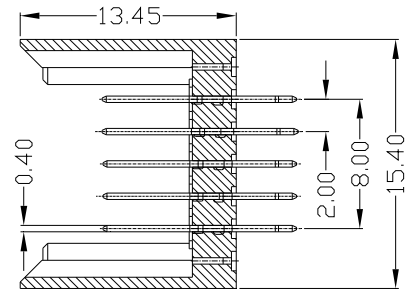
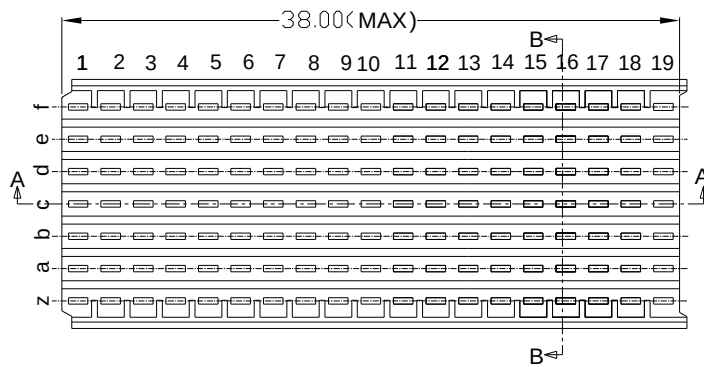
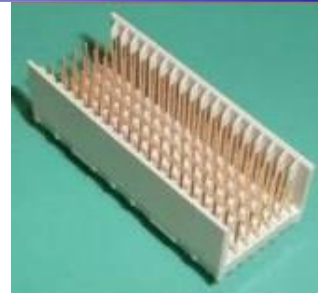




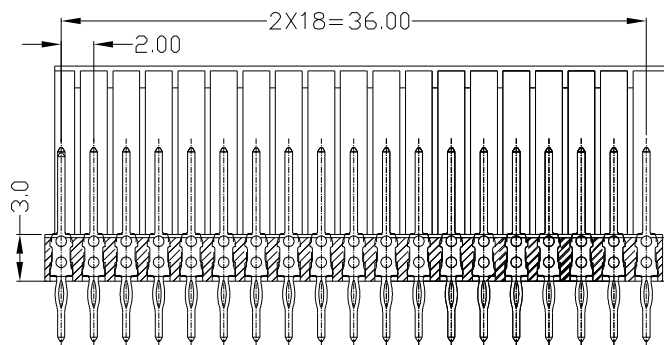
Type B₁₉

Socket, pin, straight

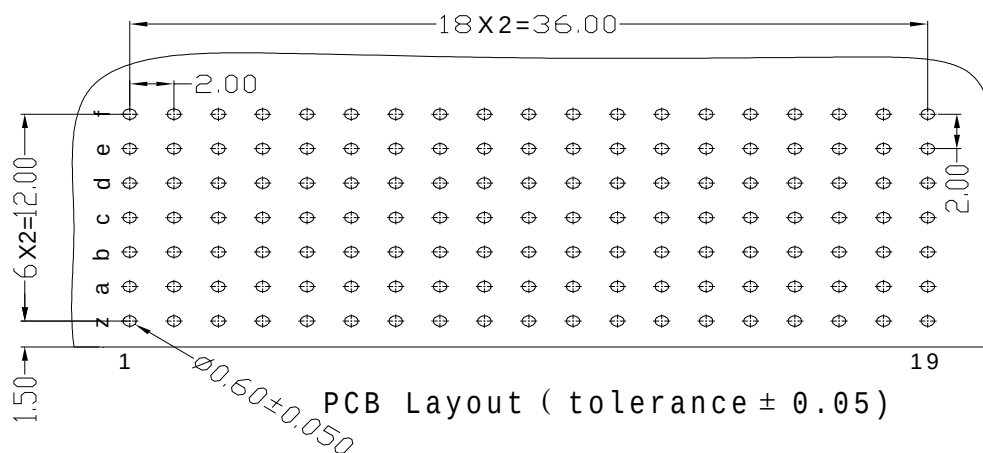
95core



B-B

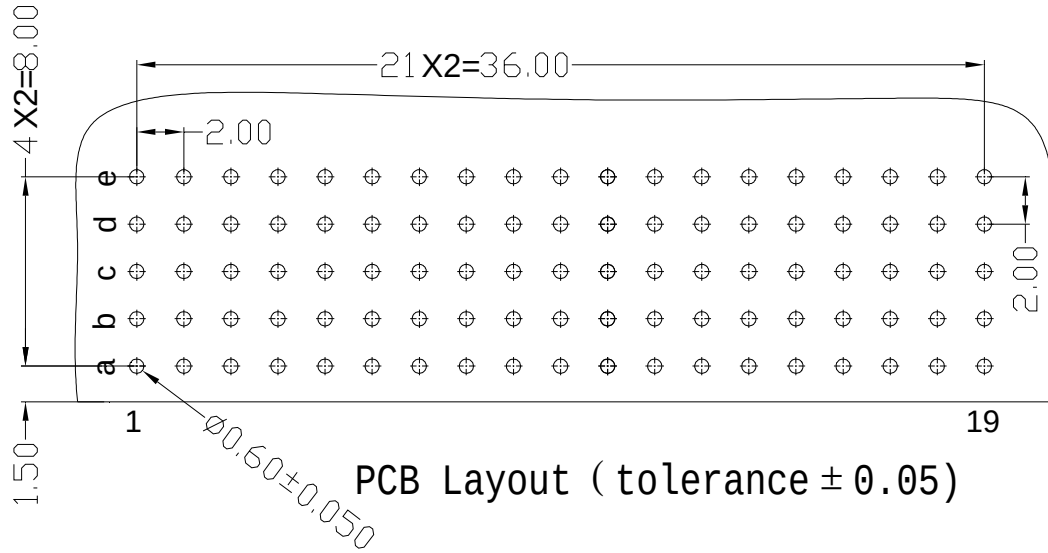
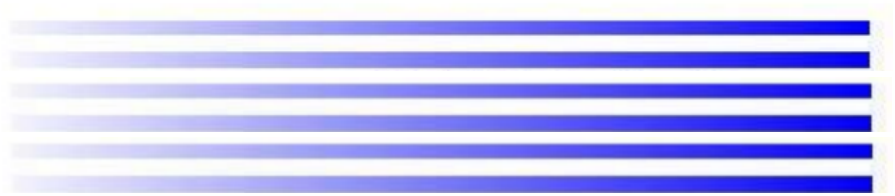


A-A

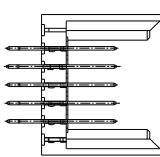
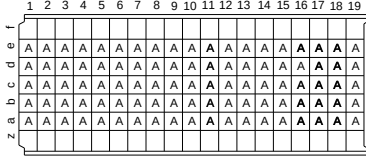
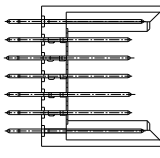
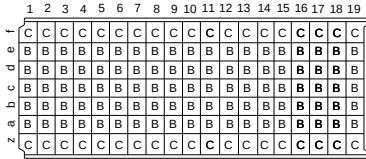
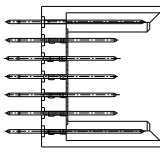
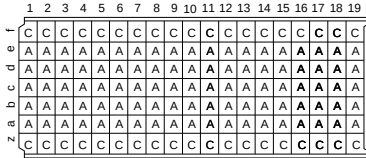


Recommended PCB board hole size (with shielding needle)





Recommended PCB board hole size (without shielding needle)

Product model	Schematic diagram	Number of cores	Fit length
HLHMMB95001012A	 	95	-/- 3.7/8.25 3.7/8.25 3.7/8.25 3.7/8.25 3.7/8.25 -/-
HLHMMB133P01112B	 	133	3.7/11.25 3.7/9.75 3.7/9.75 3.7/9.75 3.7/9.75 3.7/9.75 3.7/11.25
HLHMMB133P01012C	 	133	3.7/11.25 3.7/8.25 3.7/8.25 3.7/8.25 3.7/8.25 3.7/8.25 3.7/11.25

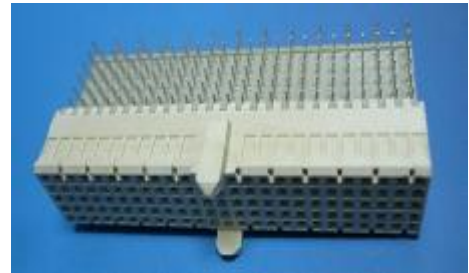




2.14 Type AB₂₅

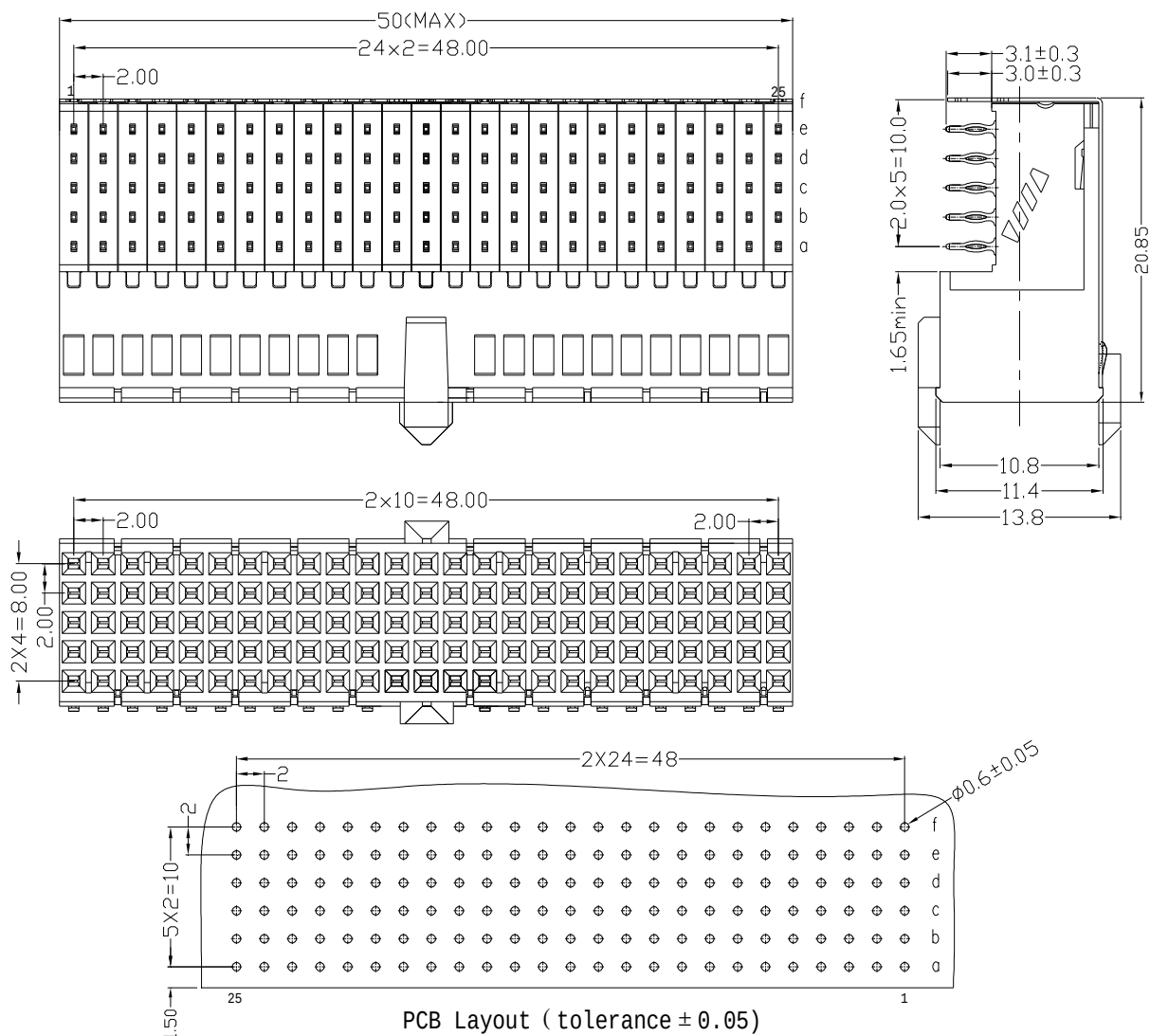
Plug, jack, right Angle bent

125 core without/with shield



(with shielding sheet)

(Product model: HLHMFAB125P02412A)



Recommended PCB hole size

Note: 1) PCB board hole size is $\Phi 0.7 \pm 0.02$;

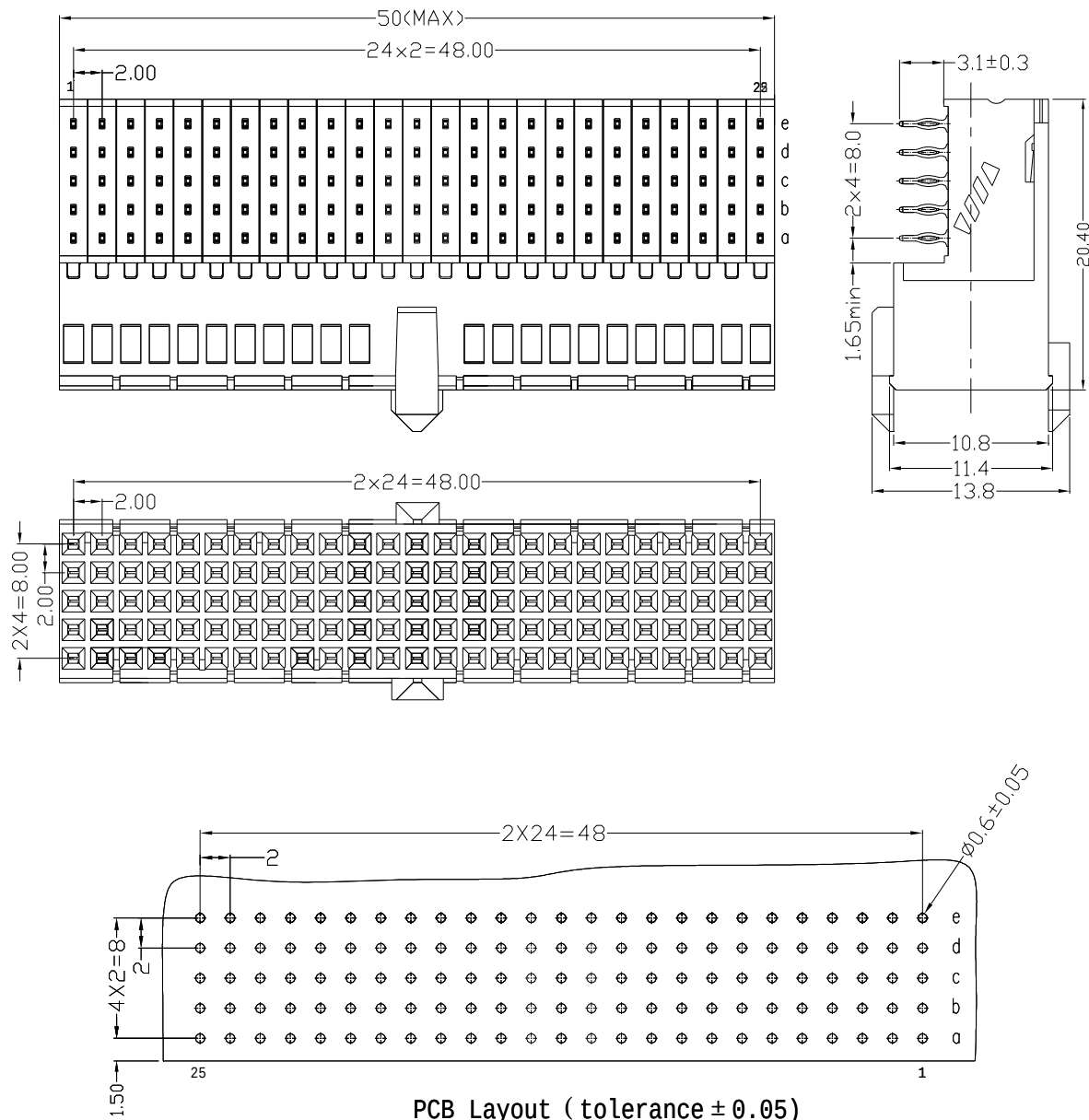




After electroplating, the through-hole size is $\Phi 0.6 \pm 0.05$;

(without shield)

(Product model: HLHMFAB125002412B)



Recommended PCB hole size

Note: 1) PCB board hole size is $\Phi 0.7 \pm 0.02$;

After electroplating, the through-hole size is $\Phi 0.6 \pm 0.05$;



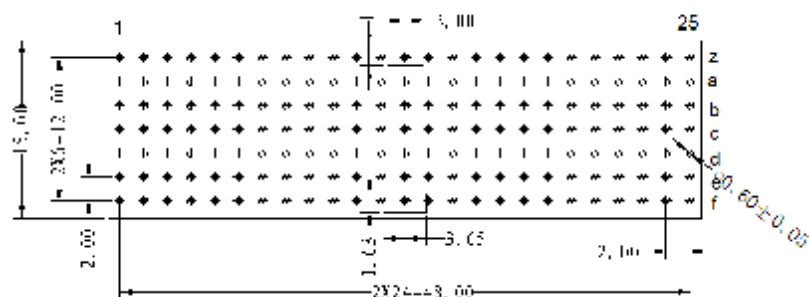
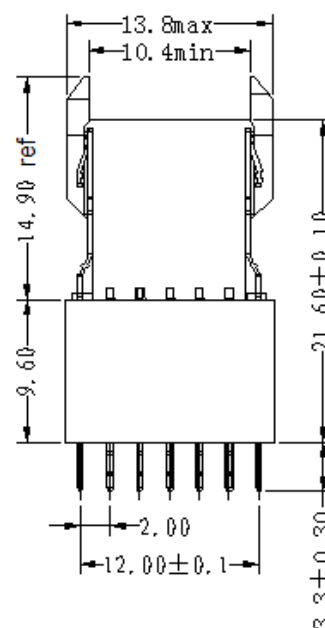
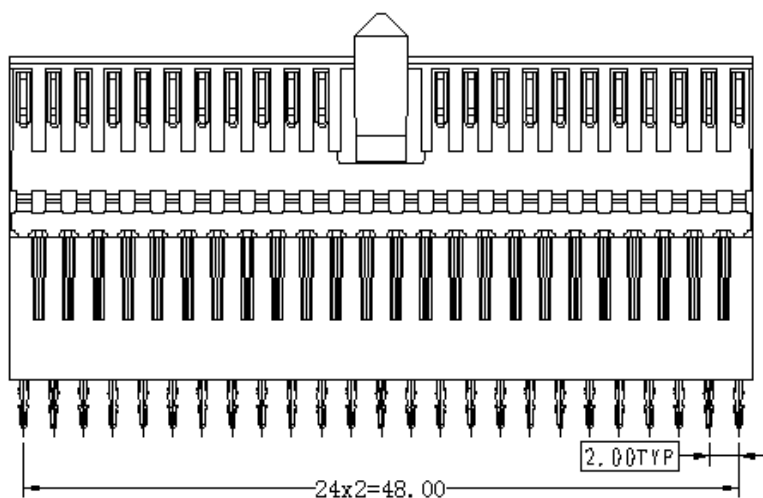
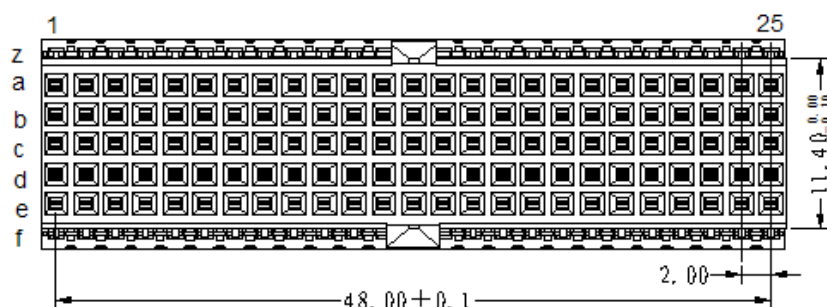
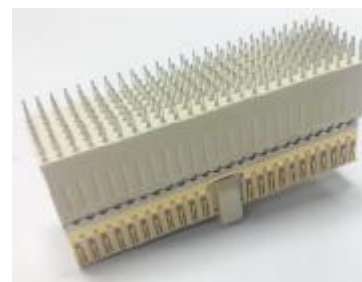


Plug, jack, straight

125 core straight master tape shield

(with shielding sheet)

(Product model: HLHMFAB125P01412A)

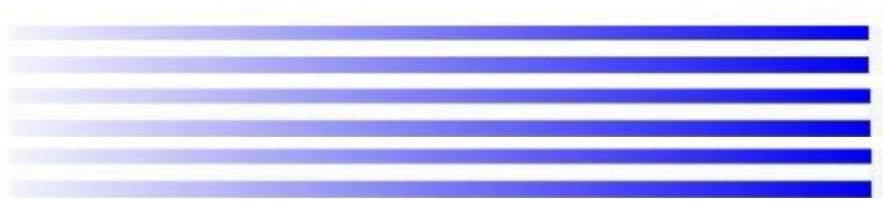


Recommended PCB hole size

Note: 1) PCB board hole size is $\Phi 0.7 \pm 0.02$;

After electroplating, the through-hole size is $\Phi 0.6 \pm 0.05$;

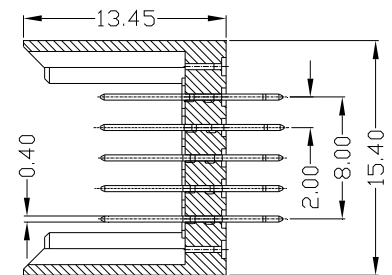
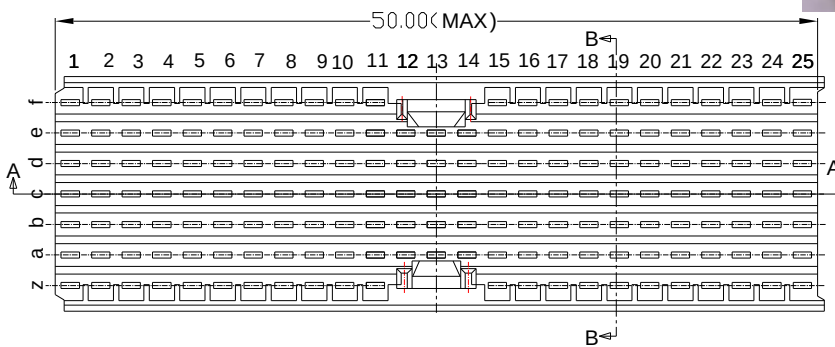




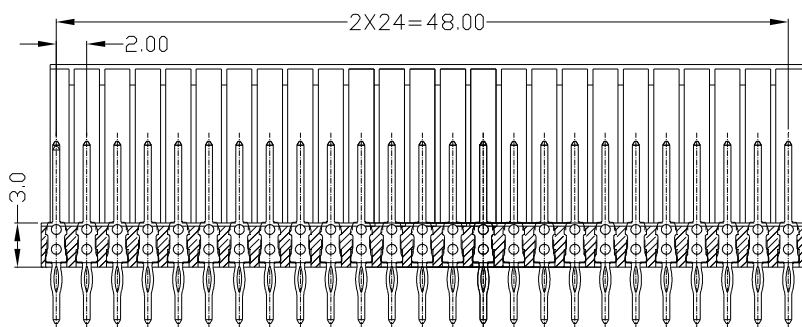
Type AB₂₅

Socket, pin, straight

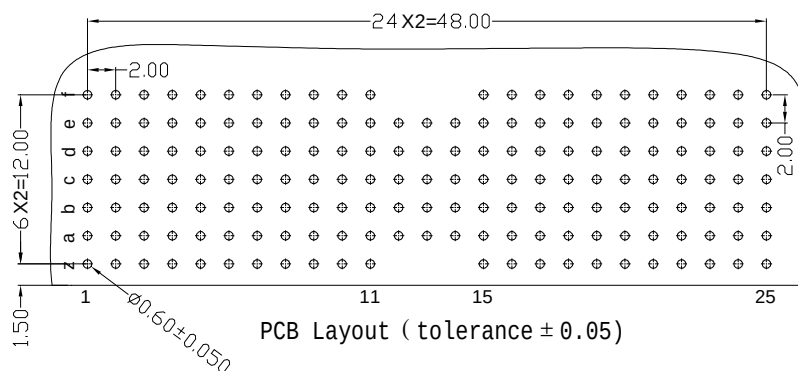
125 core



B-B

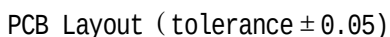


A-A



Recommended PCB board hole size (with shielding needle)





Recommended PCB board hole size (without shielding needle)

[illegible]



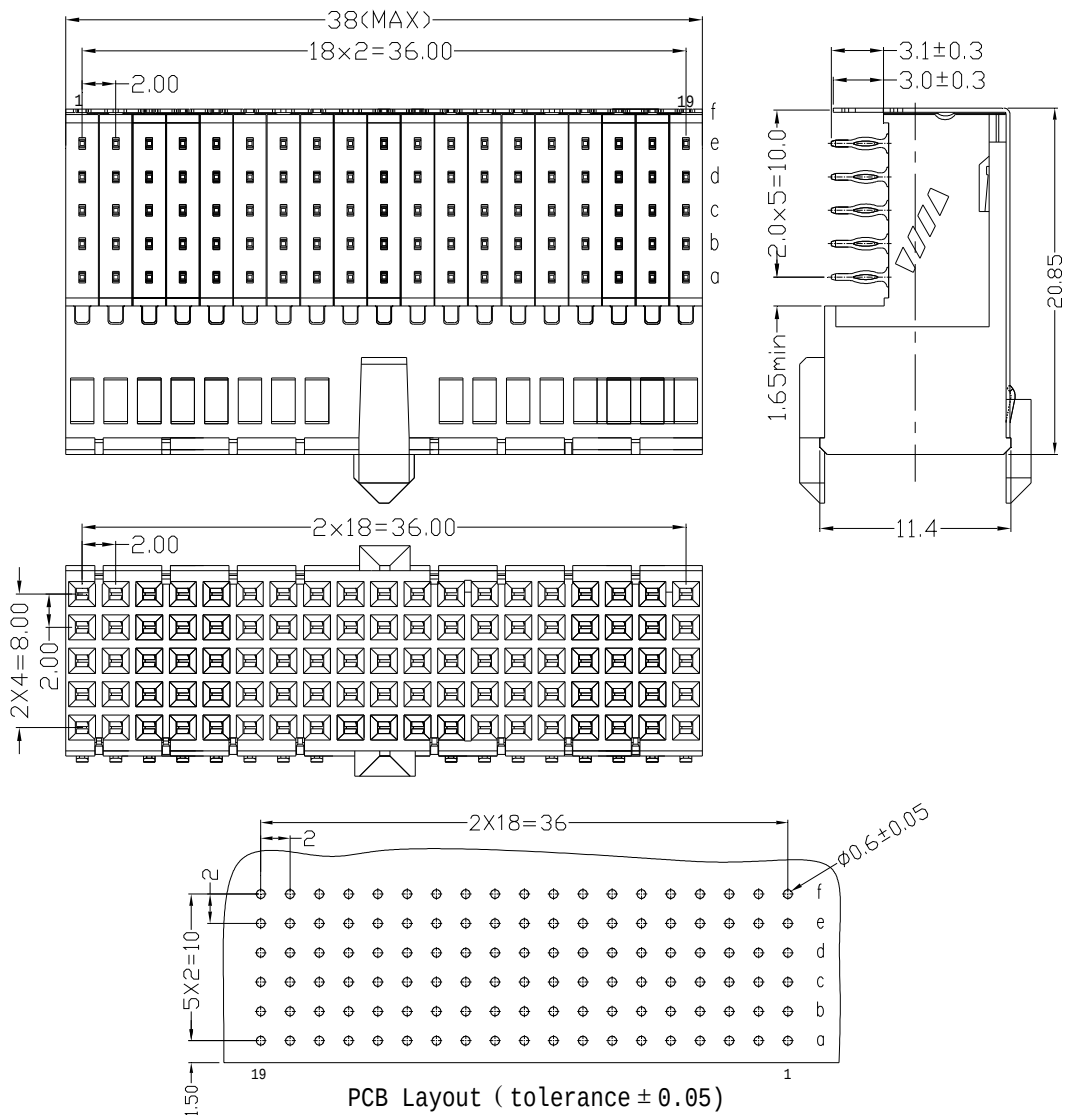
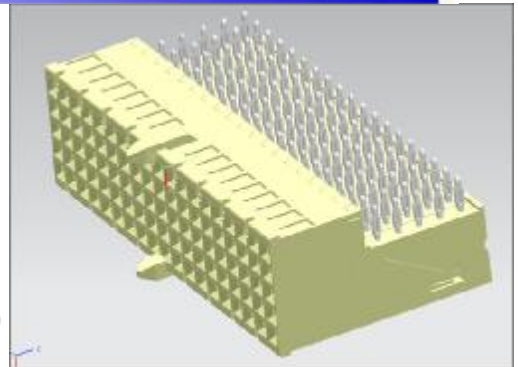
2.15 Type AB₁₉

Plug, jack, right Angle bent

95 core without/with shield piece

(with shielding sheet)

(Product model: HLHMFAB95P02412A)



Recommended PCB hole size

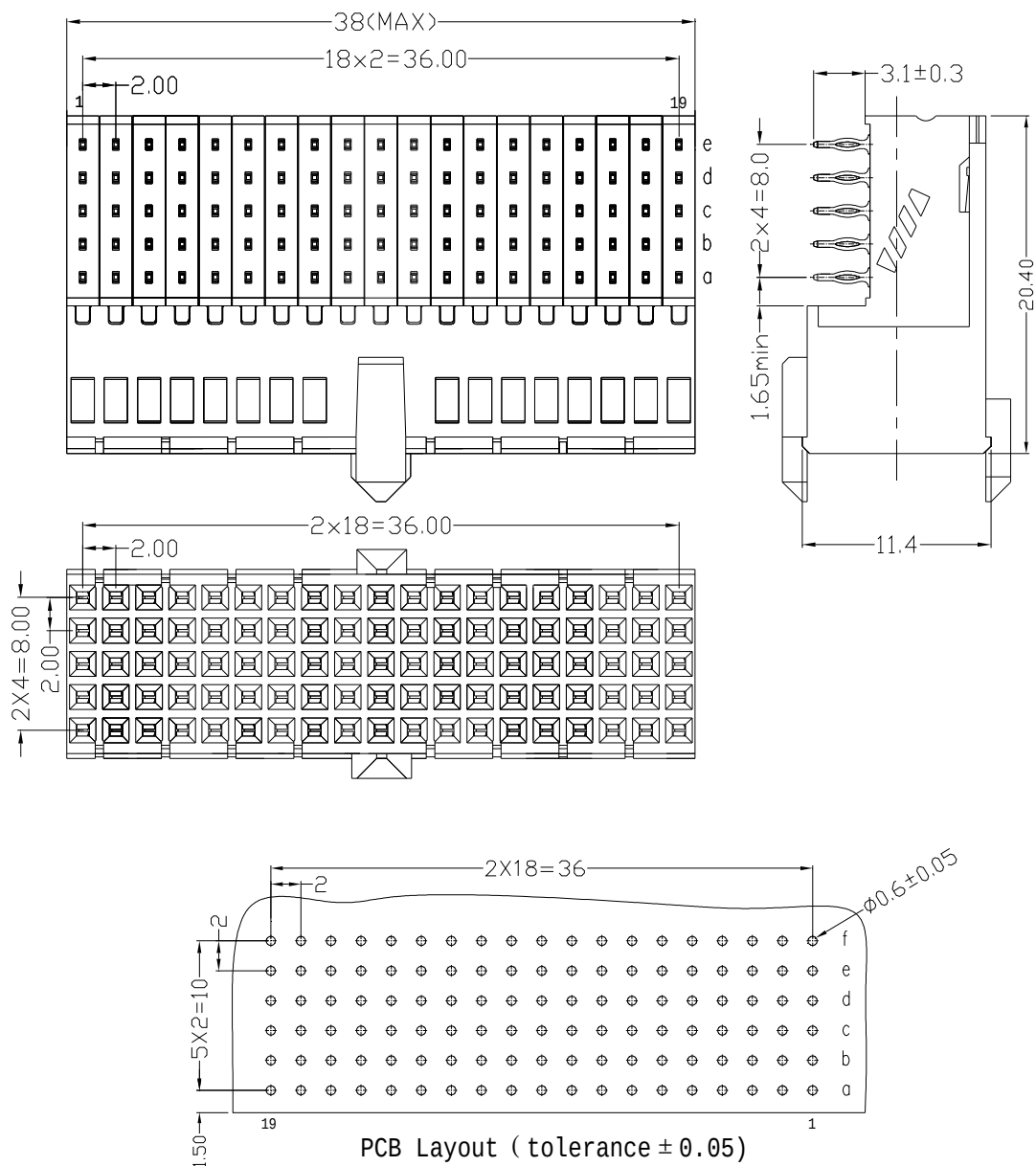
Note: 1) PCB board hole size is $\Phi 0.7 \pm 0.02$;
After electroplating, the through-hole size is $\Phi 0.6 \pm 0.05$;





(without shield)

(Product model: HLHMFAB95002412B)



Recommended PCB hole size

Note: 1) PCB board hole size is $\Phi 0.7 \pm 0.02$;
After electroplating, the through-hole size is $\Phi 0.6 \pm 0.05$;

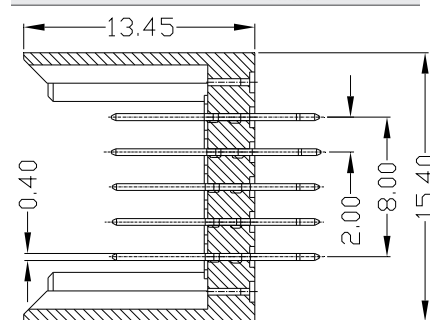
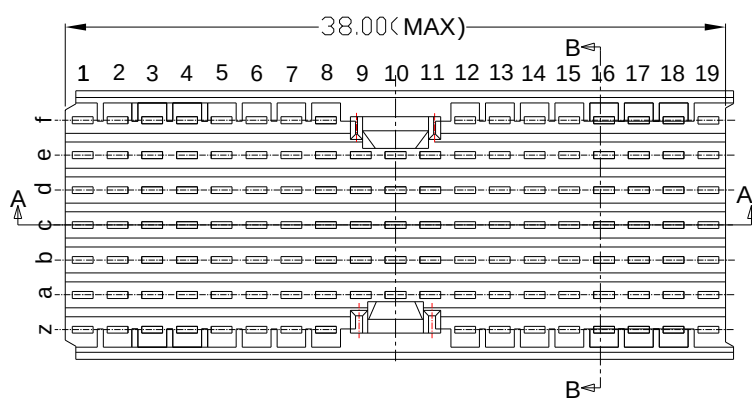
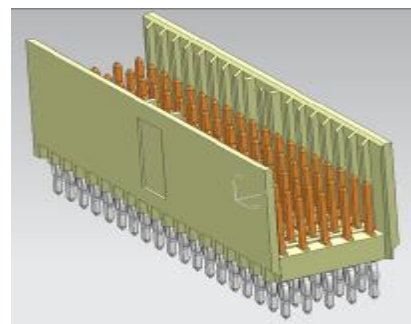




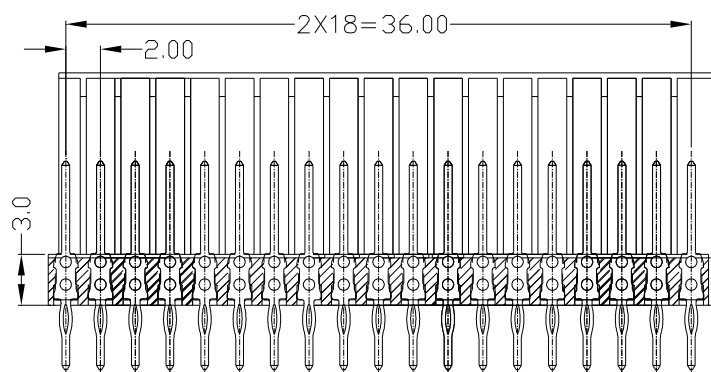
Type AB₁₉

Socket, pin, straight

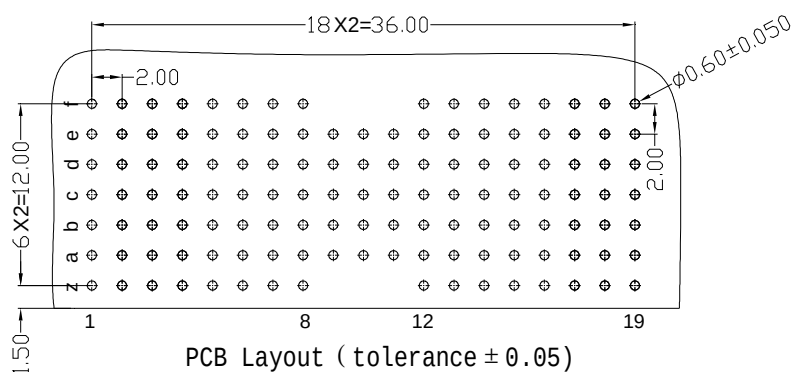
95 core



B-B



A-A



Recommended PCB board hole size (with shielding needle)







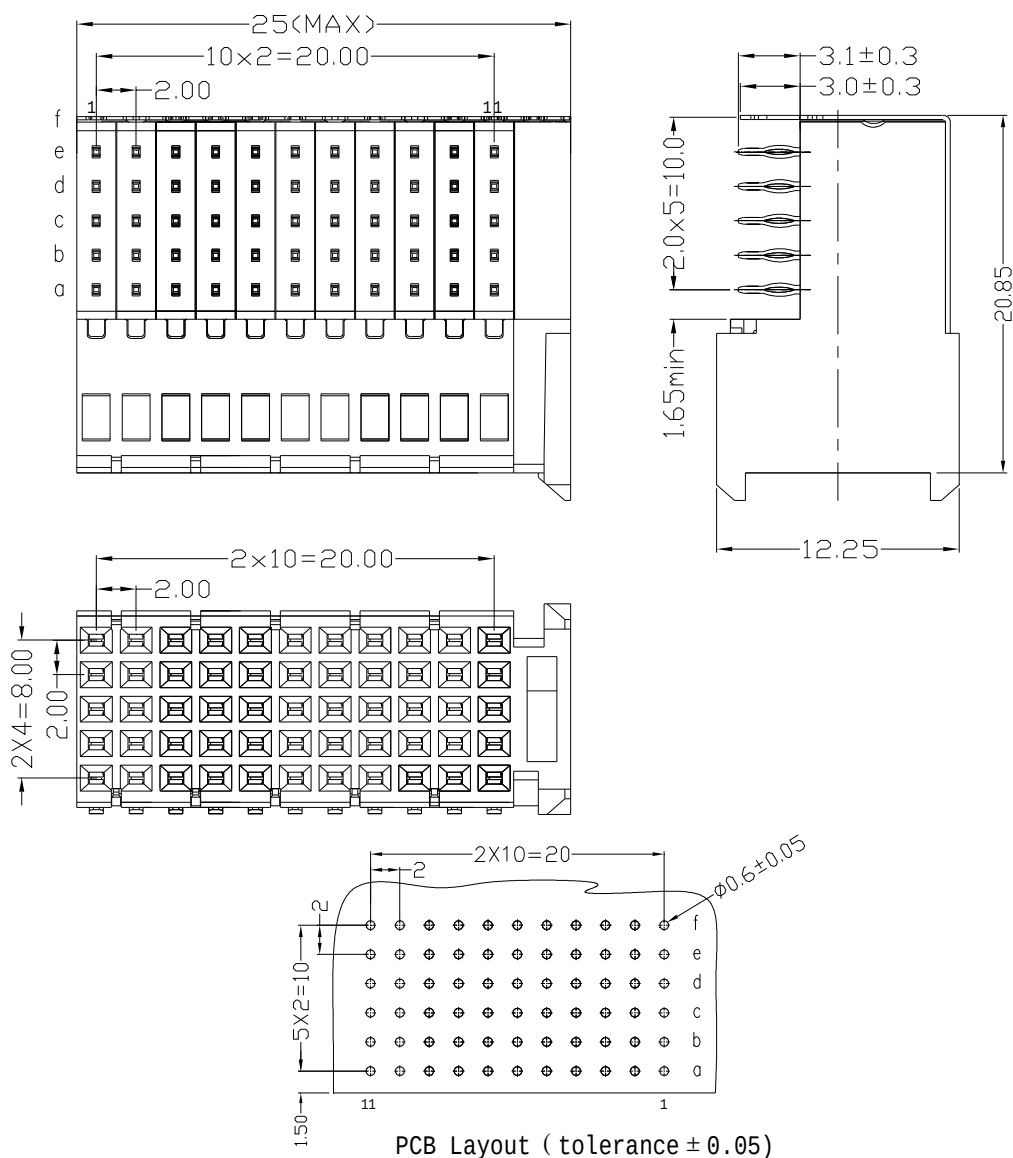
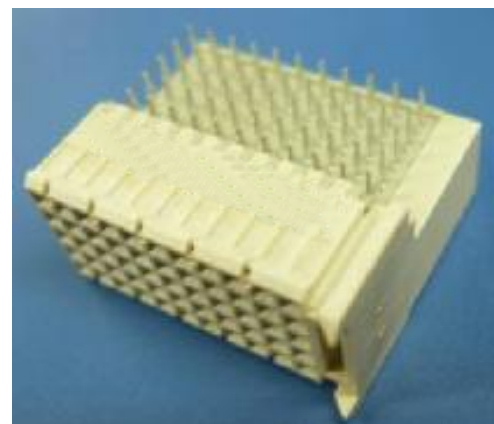
2.16 Type C₁₁

Plug, jack, right Angle bent (without positioning post)

55 core without/with shield piece

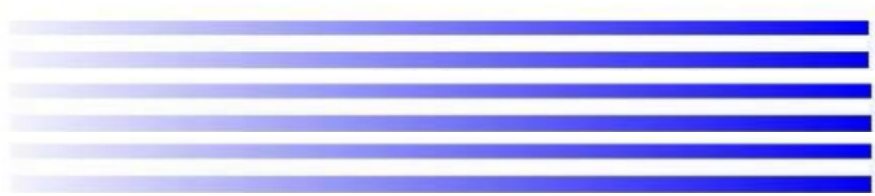
(with shielding sheet)

(Product model: HLHMF55P02412A)



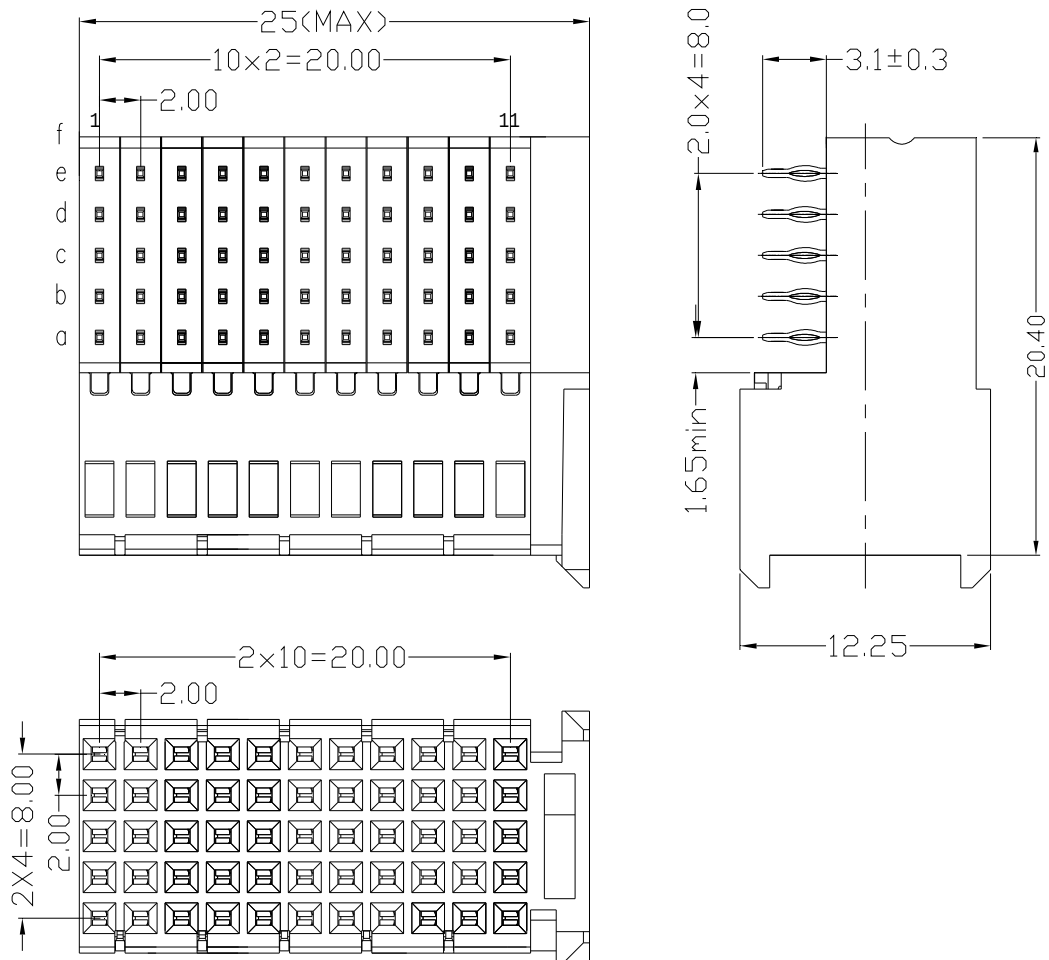
Recommended PCB hole size





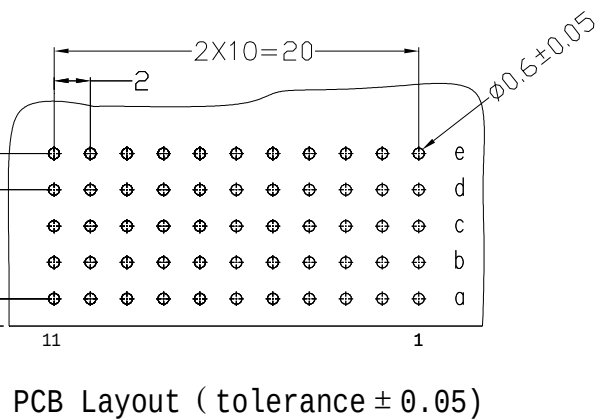
(without shield)

(Product model: HLHMF55002412B)



Recommended PCB hole size

Note: 1) PCB board hole size is $\Phi 0.7 \pm 0.02$;
After electroplating, the
through-hole size is $\Phi 0.6 \pm 0.05$;



PCB Layout (tolerance ± 0.05)



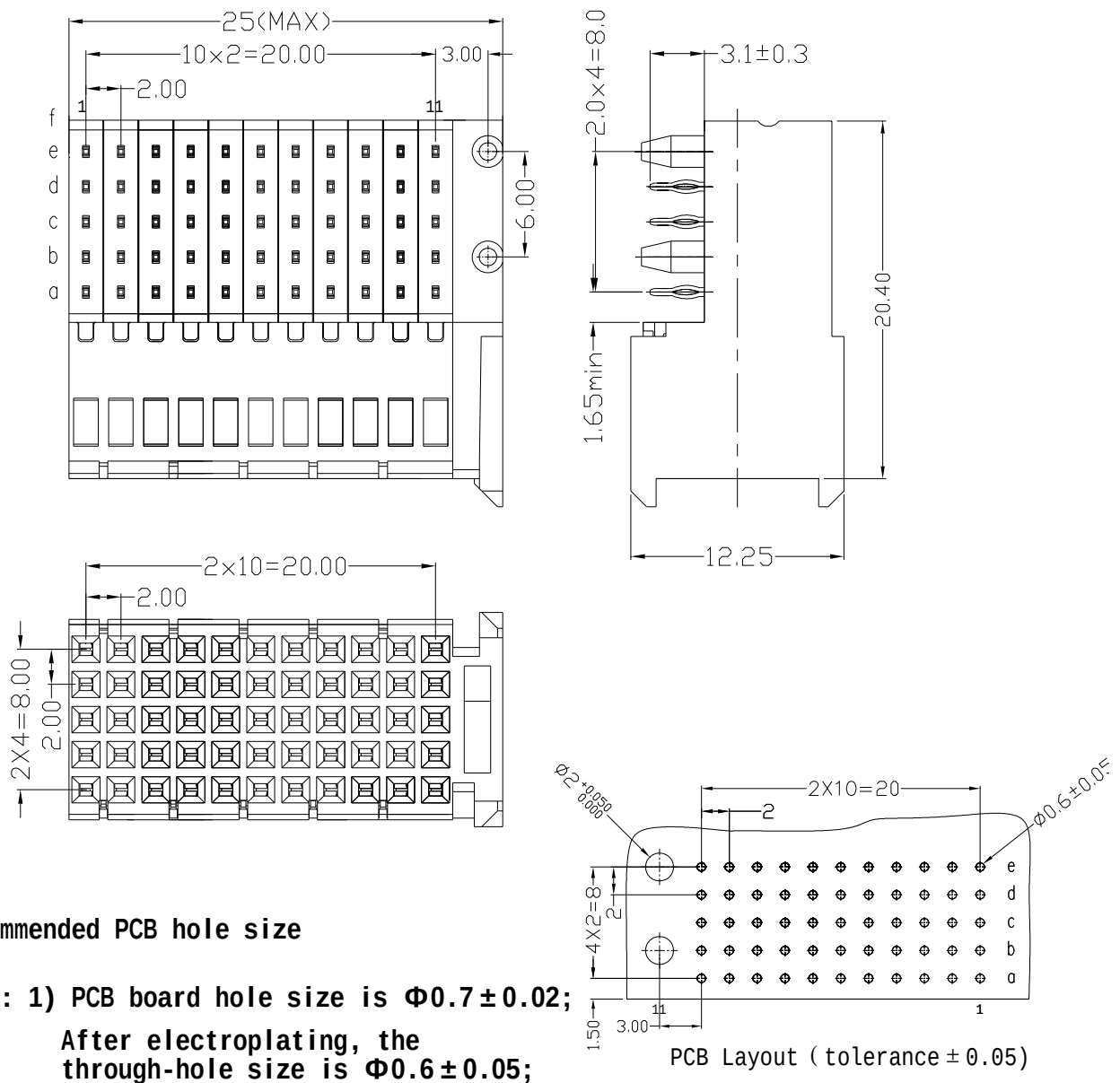


Plug, jack, right Angle bent (with positioning column)

55 core without shield

(without shield)

(Product model: HLHMF55012412AZ)

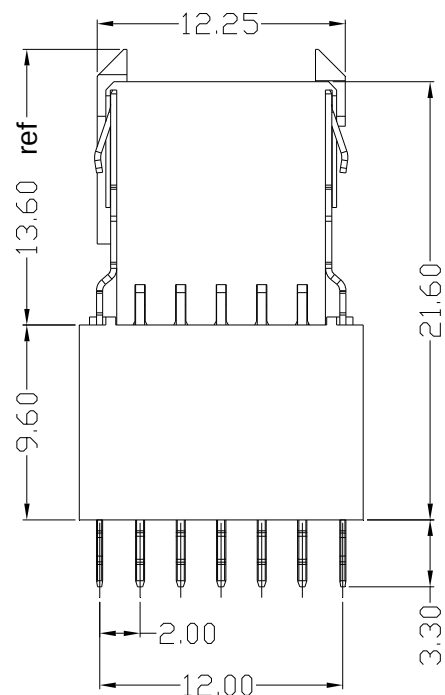
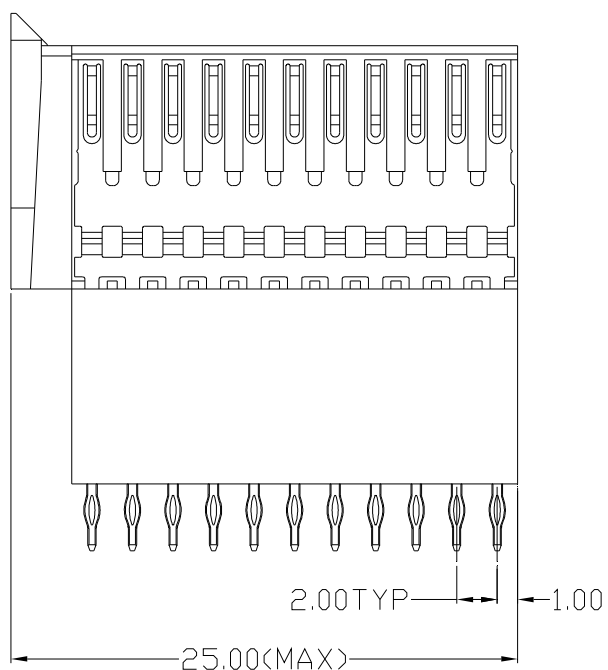
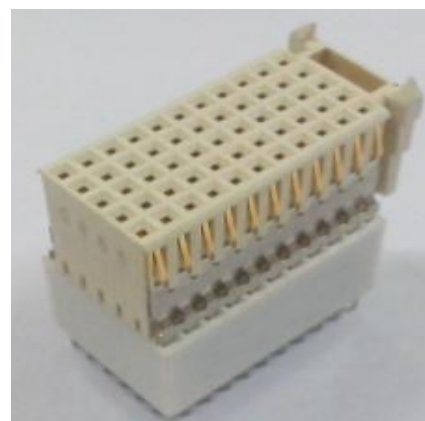
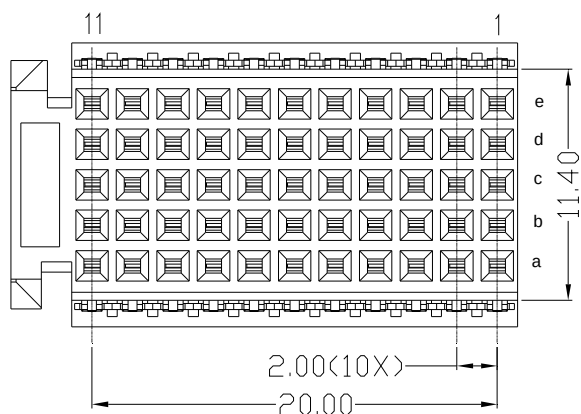


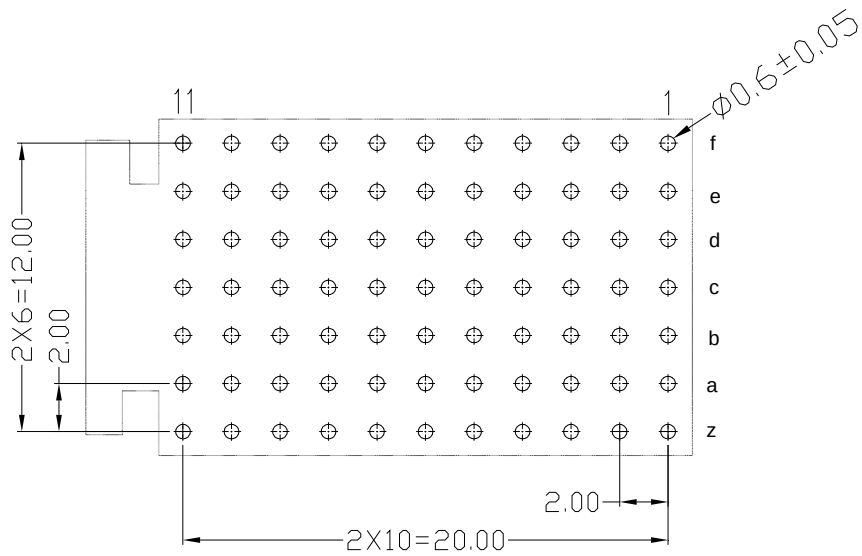
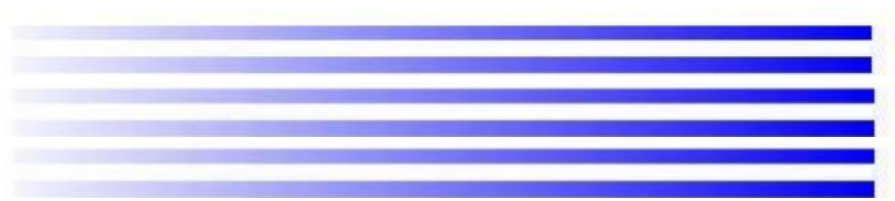


Plug, insert jack, straight long sheath

55 core with shield piece

(Product model: HLHMF55P01412A)





PCB Layout (tolerance ± 0.05)

Recommended PCB hole size

Note: 1) PCB board hole size is $\Phi 0.7 \pm 0.02$;

After electroplating, the through-hole size is $\Phi 0.6 \pm 0.05$;

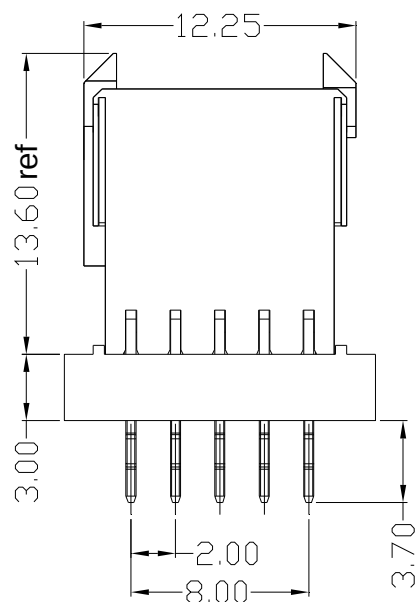
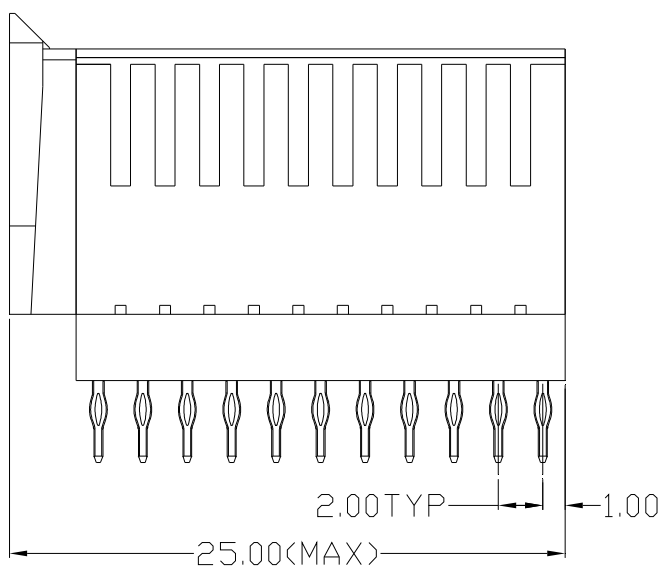
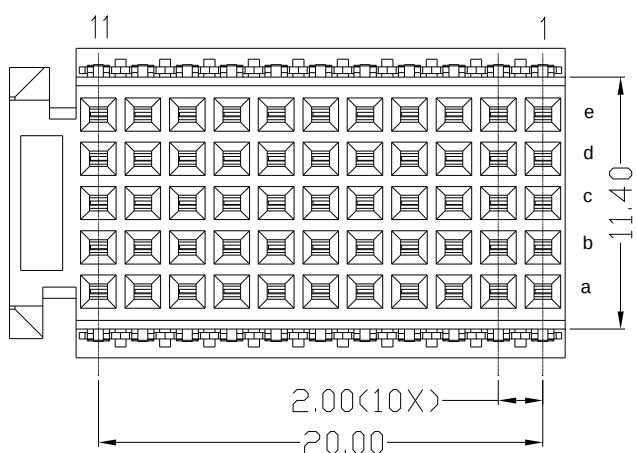


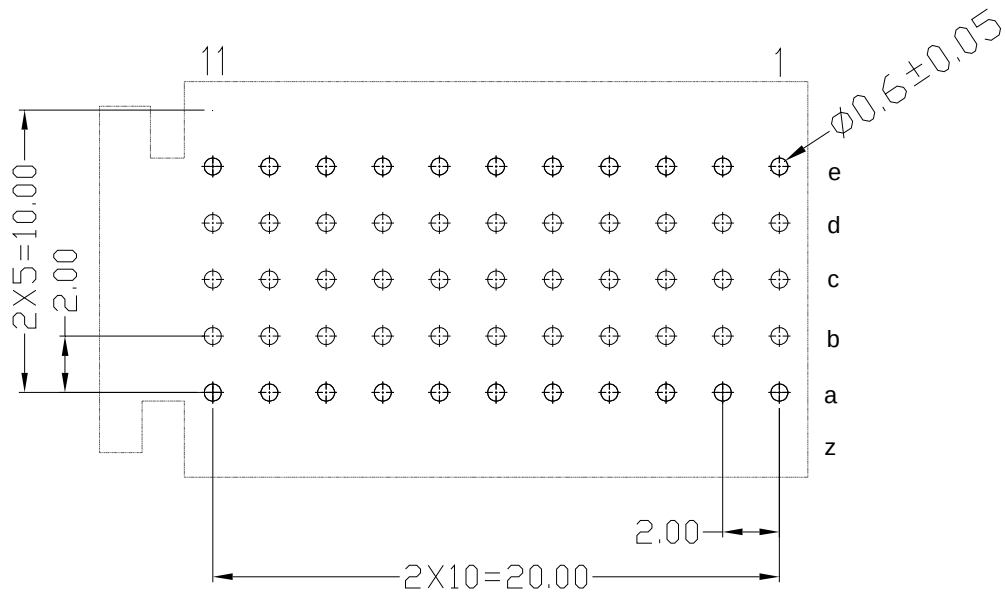
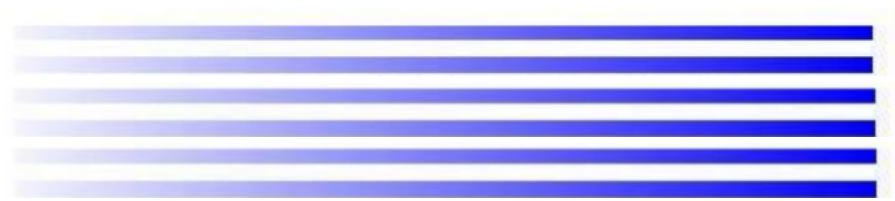


Plug, jack, straight short jacket

55 core without shield

(Product model: HLHMF55P01412A)





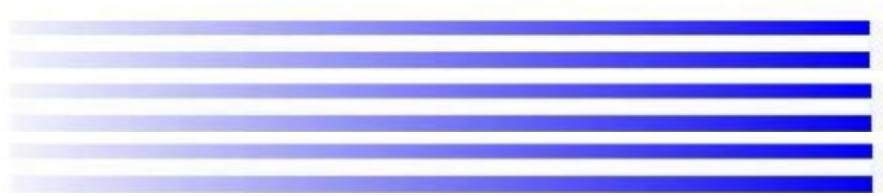
PCB Layout (tolerance ± 0.05)

Recommended PCB hole size

Note: 1) PCB board hole size is $\Phi 0.7 \pm 0.02$;

After electroplating, the through-hole size is $\Phi 0.6 \pm 0.05$;

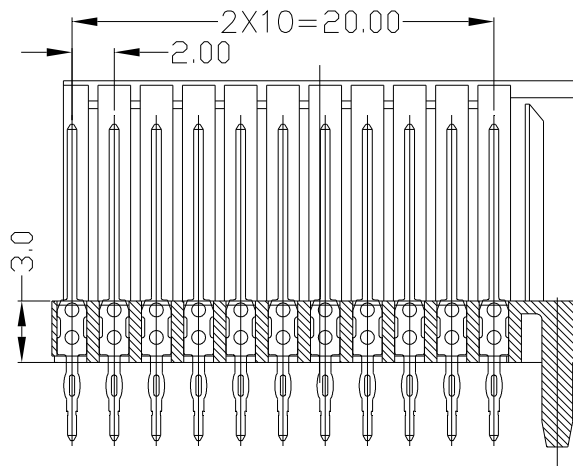
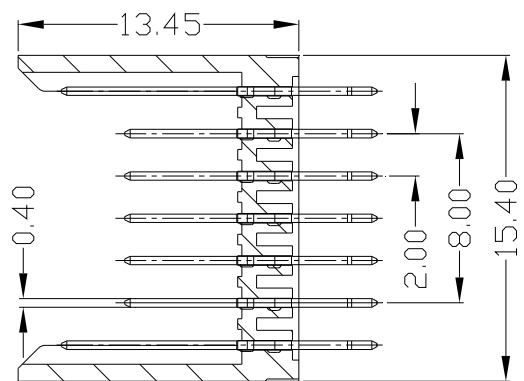
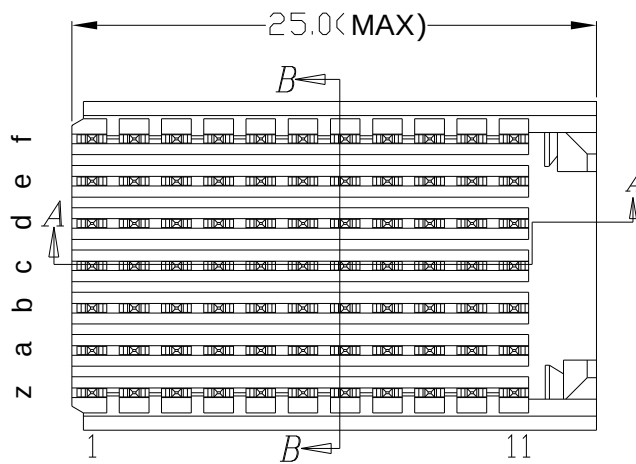
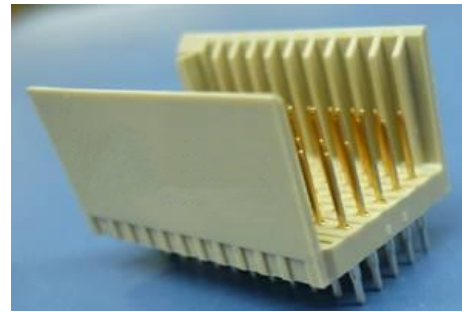


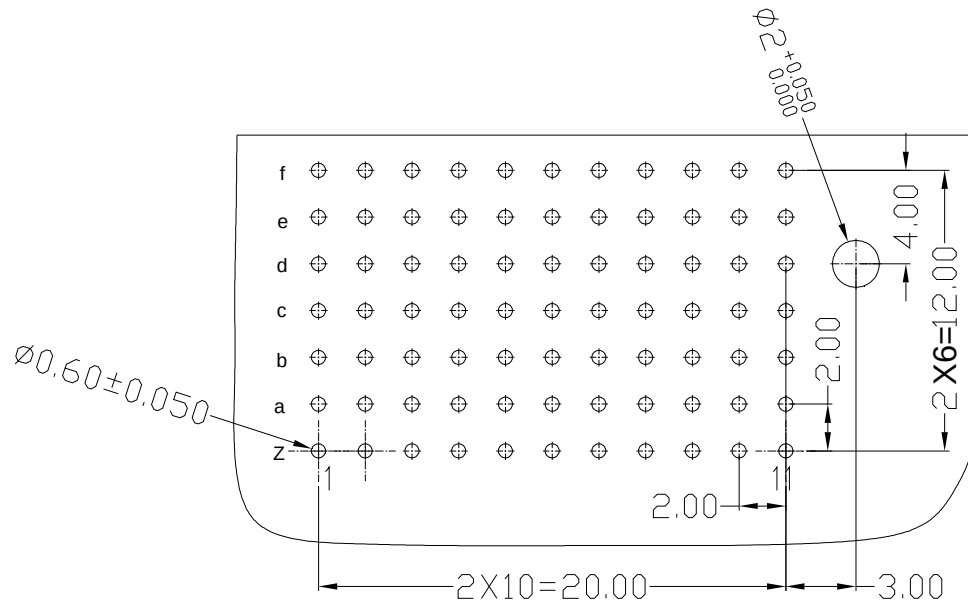


Type C₁₁

Socket, pin, straight

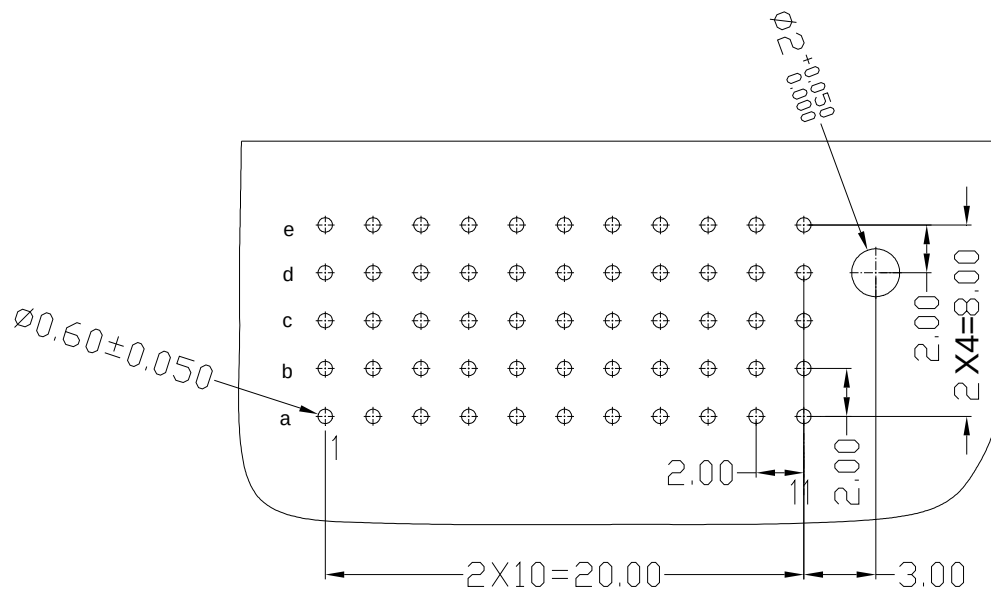
55 core





PCB Layout (tolerance ± 0.05)

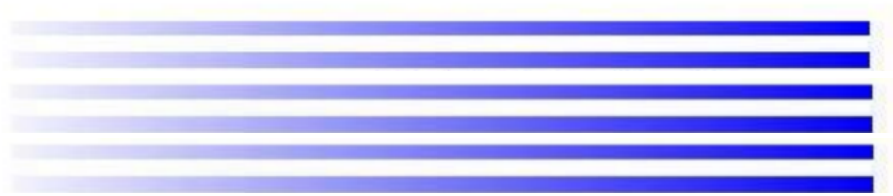
Recommended PCB board hole size (with shielding needle)

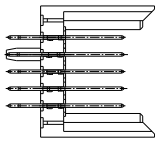
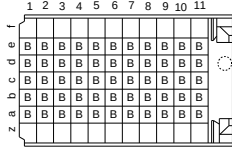
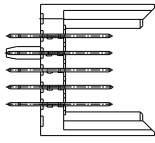
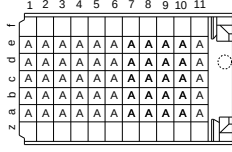
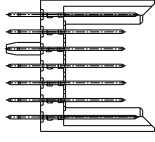
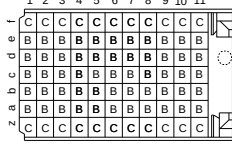
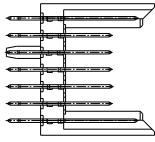
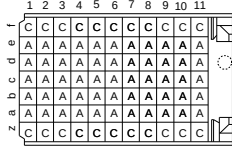
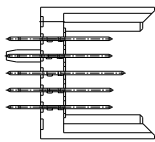
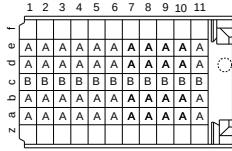


PCB Layout (tolerance ± 0.05)

Recommended PCB board hole size (without shielding needle)





Product model	Schematic diagram	Number of cores	Fit length
HLHMMC55011112A	 	55	-/- 3.7/9.75 3.7/9.75 3.7/9.75 3.7/9.75 3.7/9.75 -/-
HLHMMC55011012B	 	55	-/- 3.7/8.25 3.7/8.25 3.7/8.25 3.7/8.25 3.7/8.25 -/-
HLHMMC55P11112C	 	77	3.7/11.25 3.7/9.75 3.7/9.75 3.7/9.75 3.7/9.75 3.7/9.75 3.7/11.25
HLHMMC77P11012D	 	77	3.7/11.25 3.7/8.25 3.7/8.25 3.7/8.25 3.7/8.25 3.7/8.25 3.7/11.25
HLHMMC55011012E	 	55	-/- 3.7/8.25 3.7/8.25 3.7/9.75 3.7/8.25 3.7/8.25 -/-





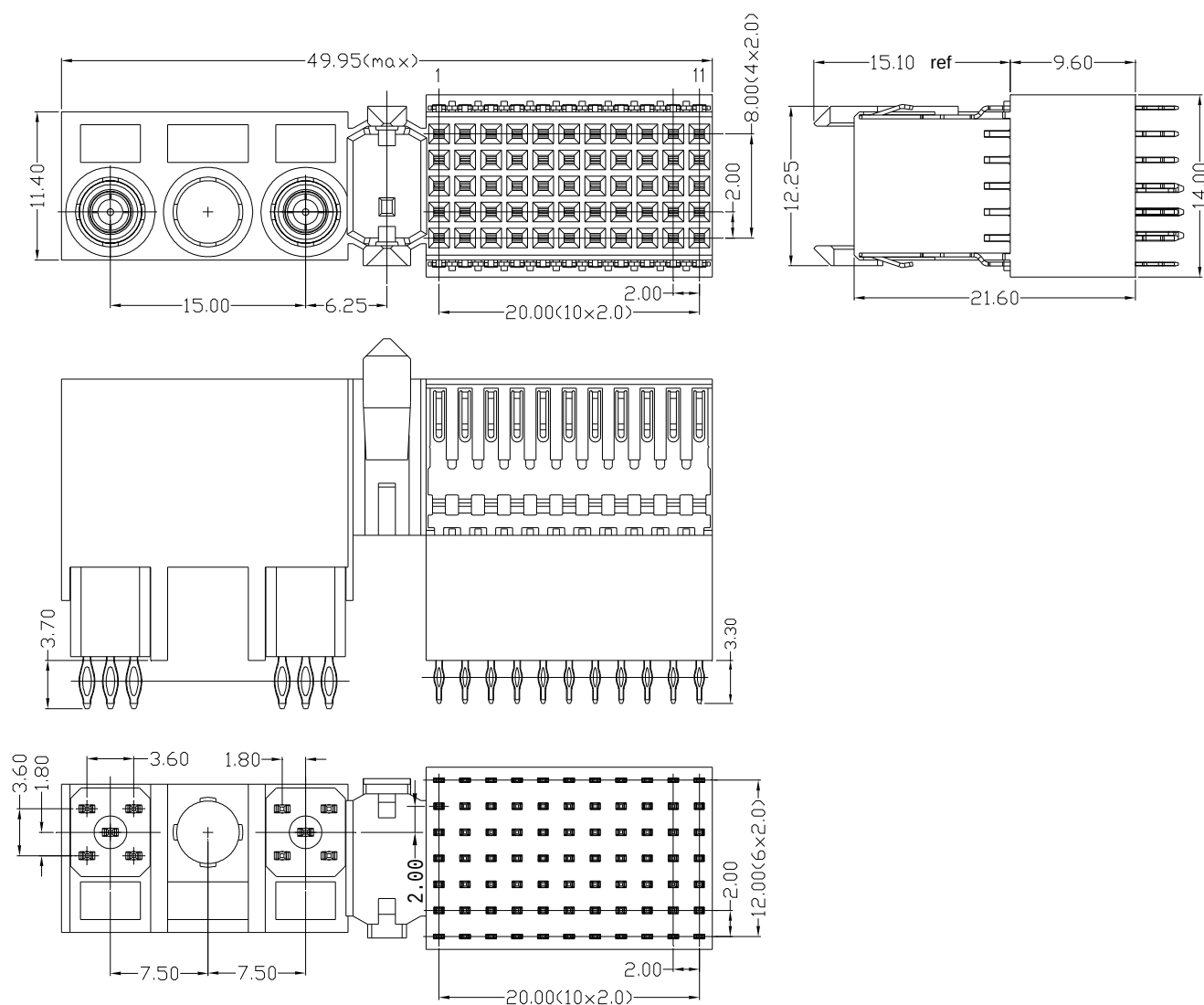
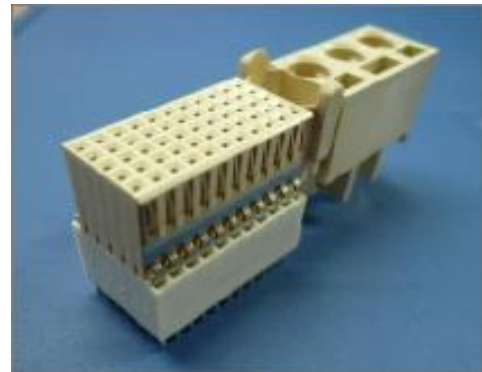
2.17 M type

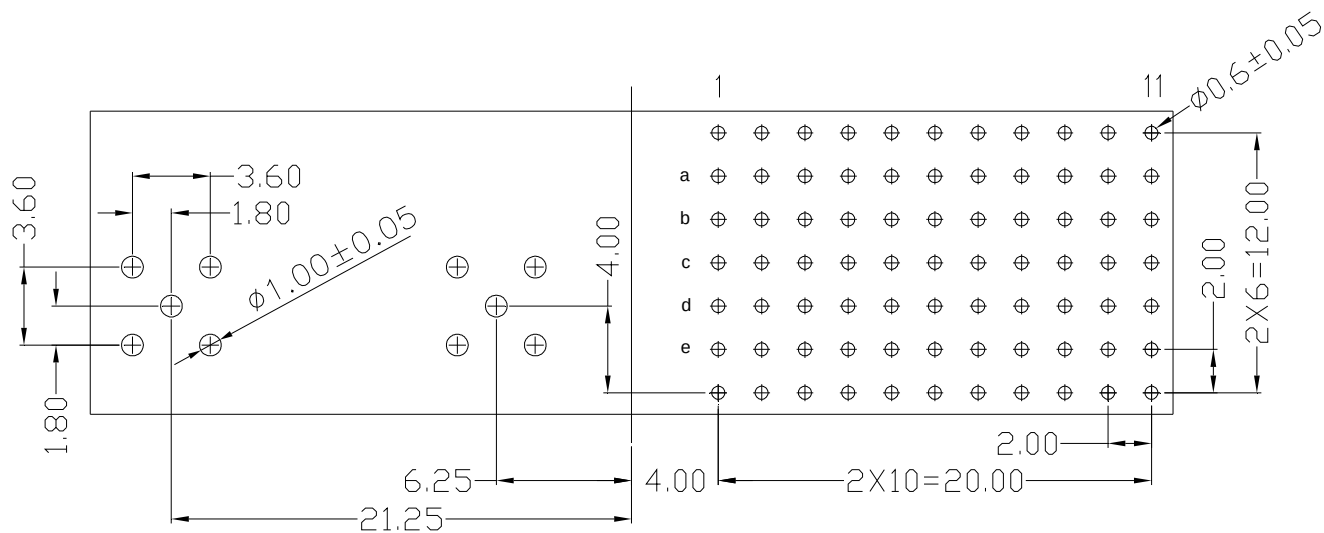
Plug, jack, straight with RF terminal

55 core with shield piece

(with shielding sheet)

(Product model: HLHMF55+2P01412B)





PCB Layout (tolerance ± 0.05)

Recommended PCB hole size



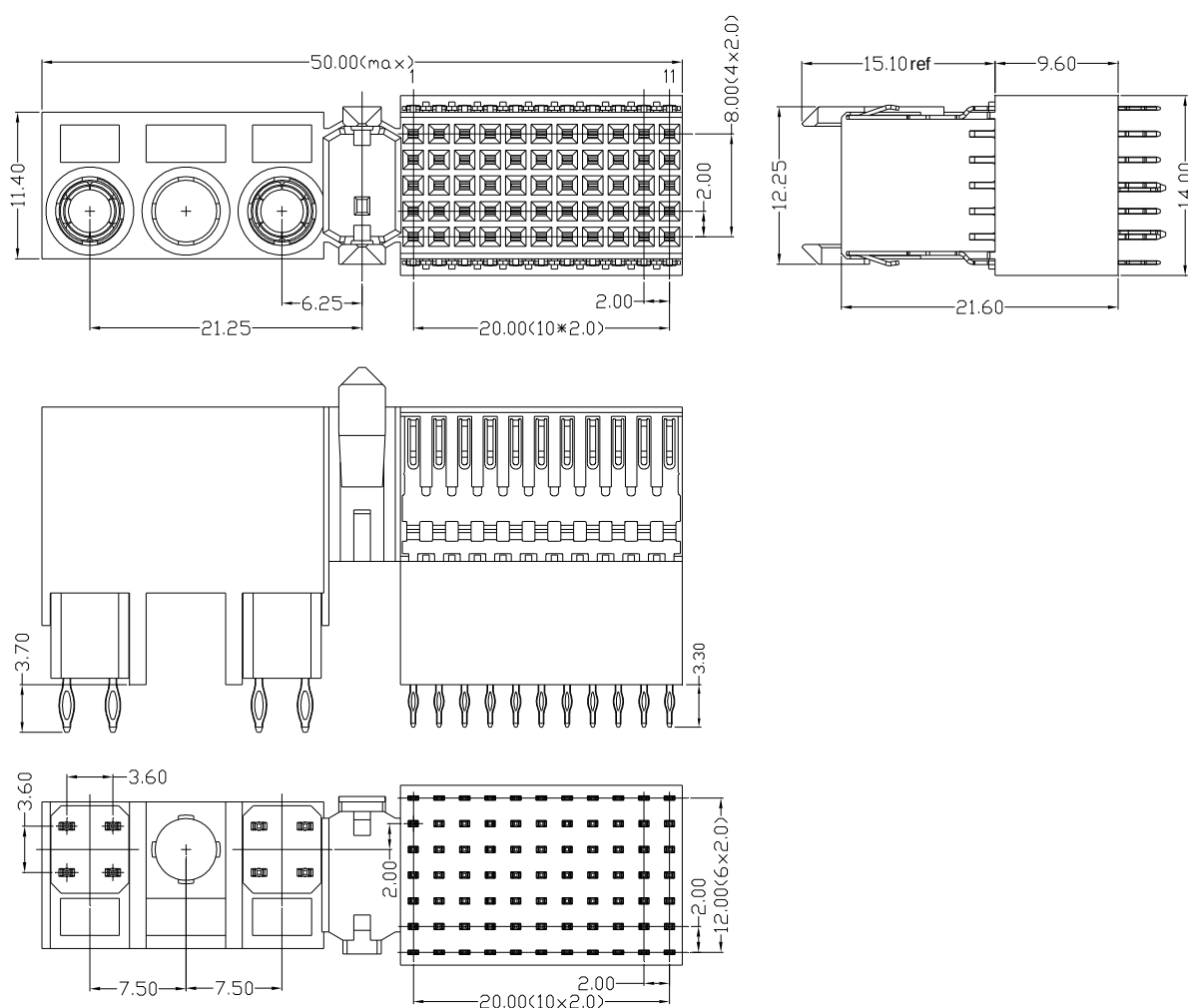


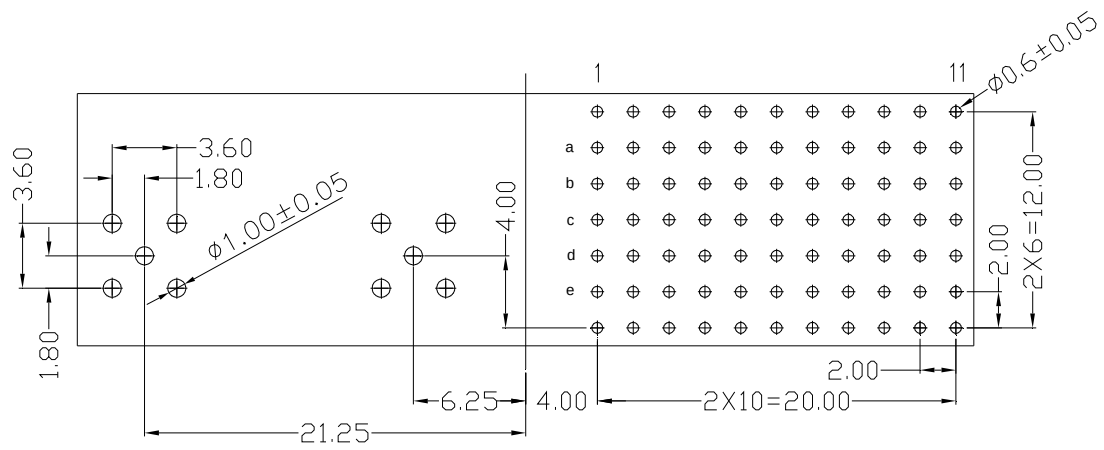
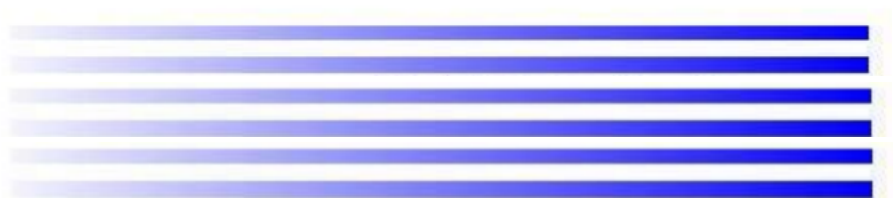
Plug, jack, straight with power terminal

55 core with shield piece

(with shielding sheet)

(Product model: HLHMF55+2P01412A)

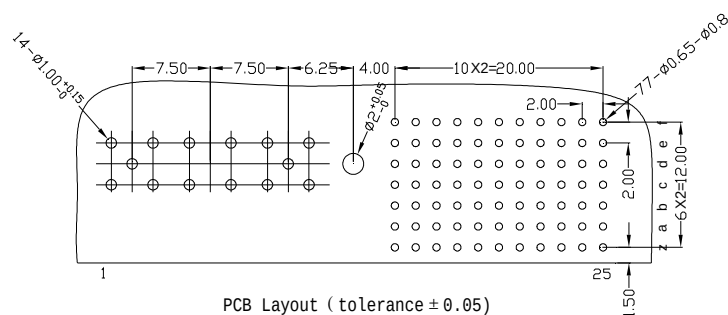
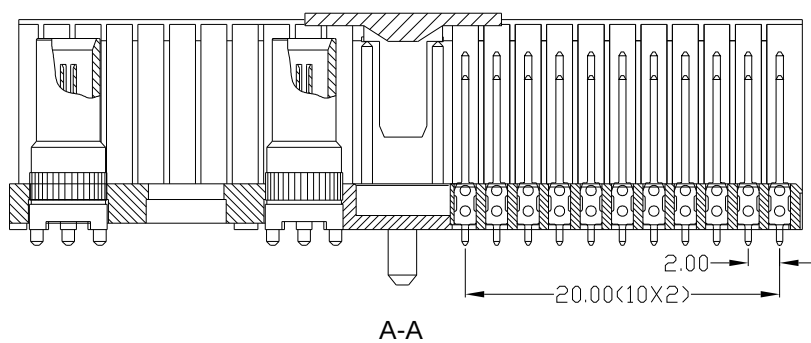




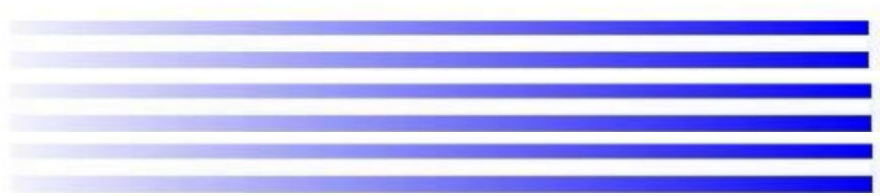
PCB Layout (tolerance ± 0.05)

Recommended PCB hole size





Recommended PCB hole size



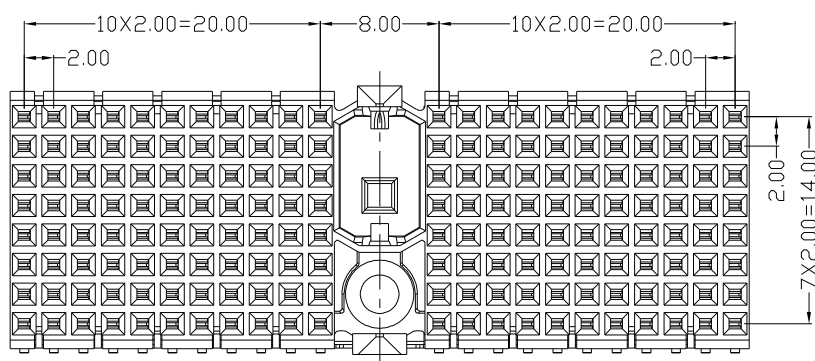
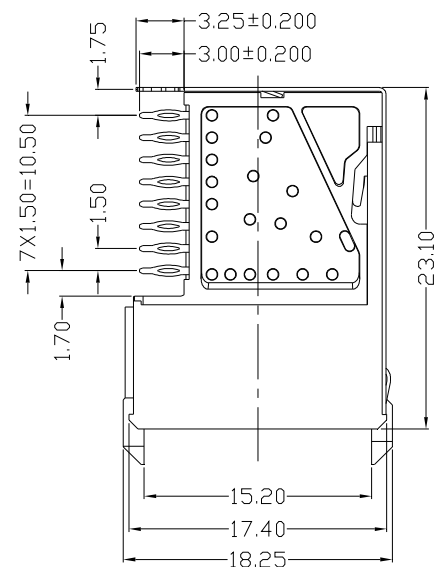
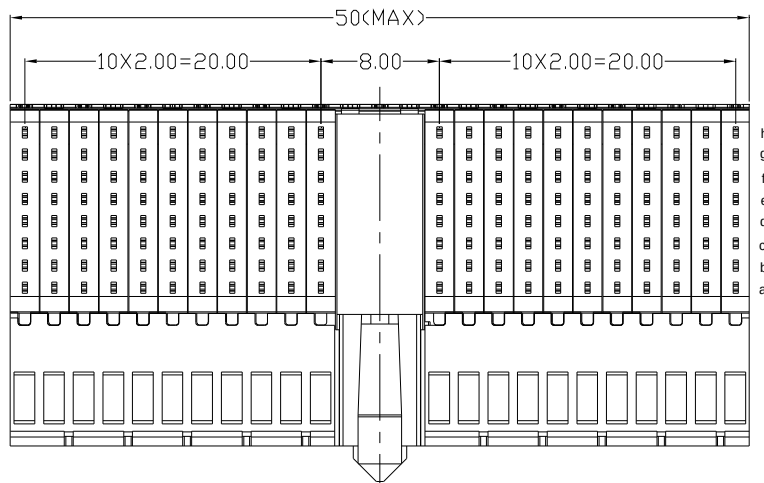
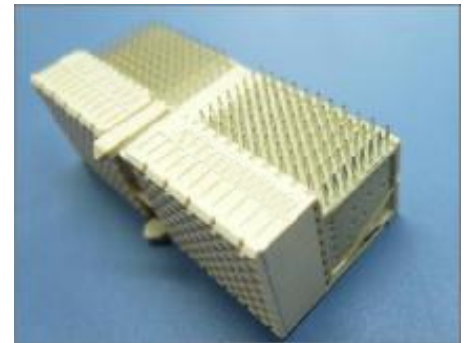
2.18 Type D₂₂

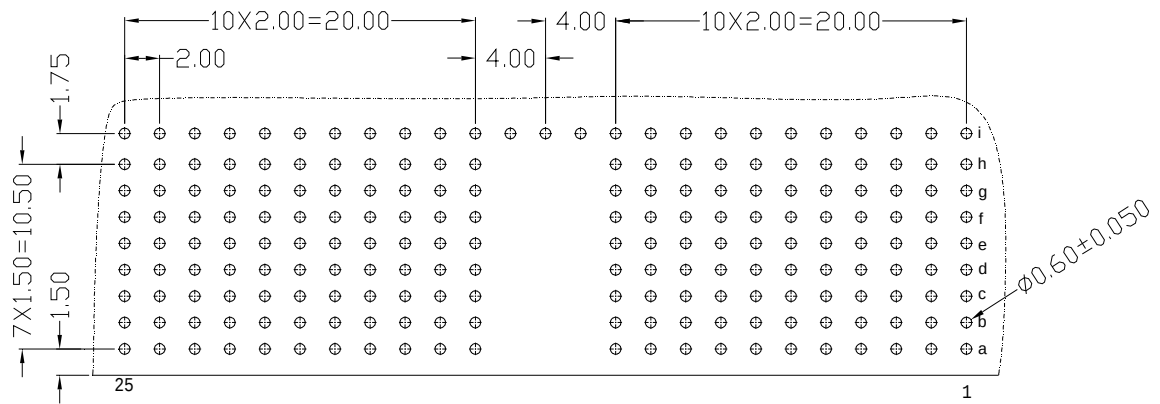
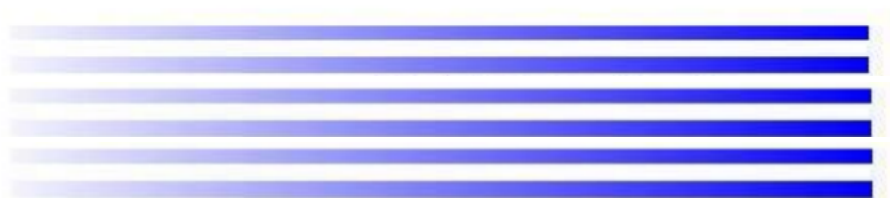
Plug, jack, right Angle bent

176 cores without/with shield piece

(with shielding sheet)

(Product model: HLHMF176P12412B)





PCB Layout (tolerance ± 0.05)

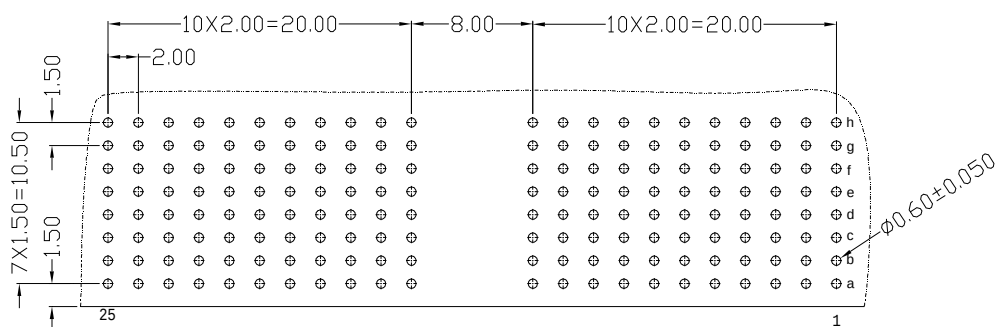
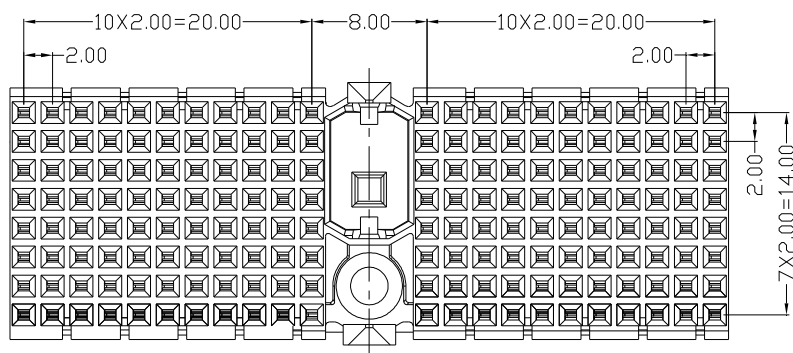
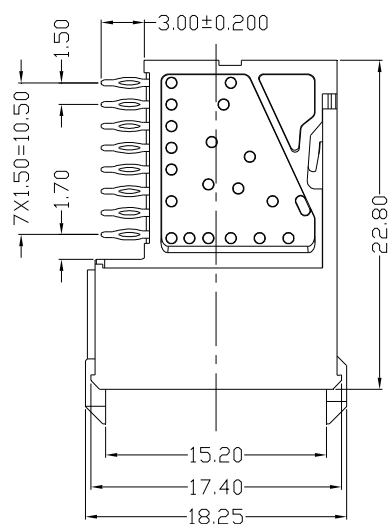
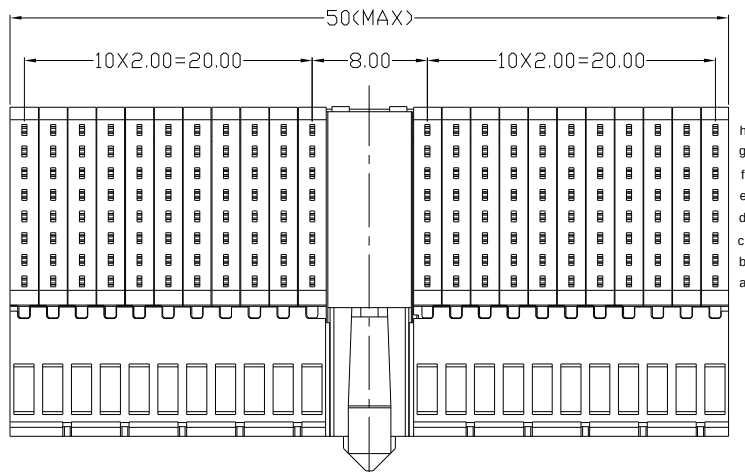
Recommended PCB hole size





(without shield)

(Product model: HLHMF176012412A)



PCB Layout (tolerance ± 0.05)

Recommended PCB hole size

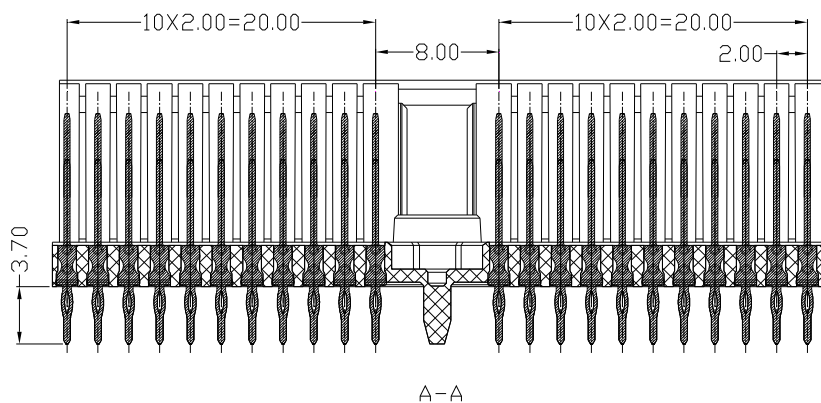
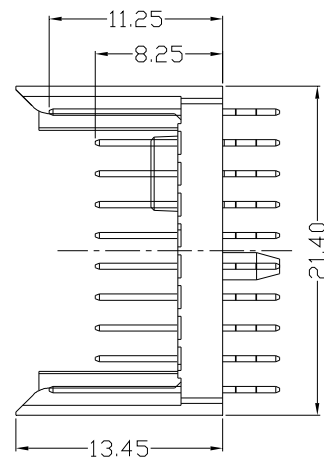
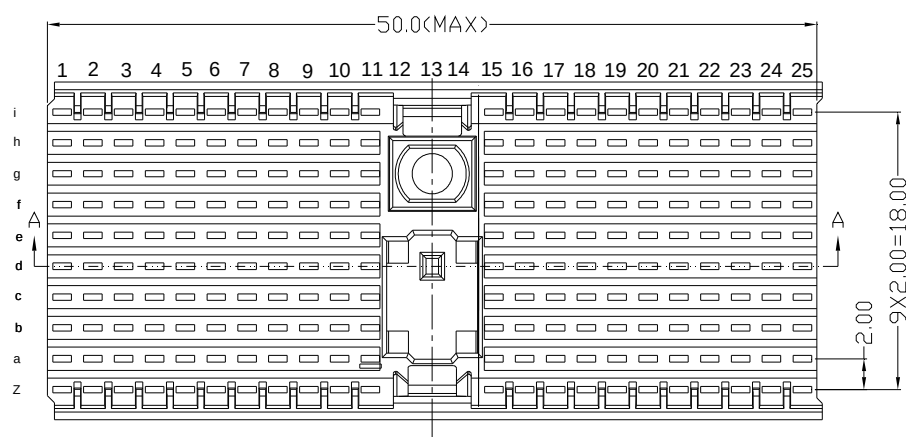
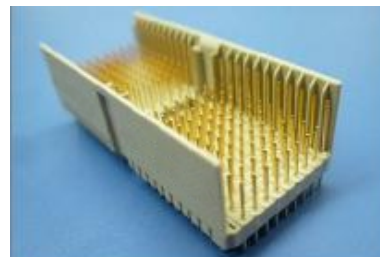


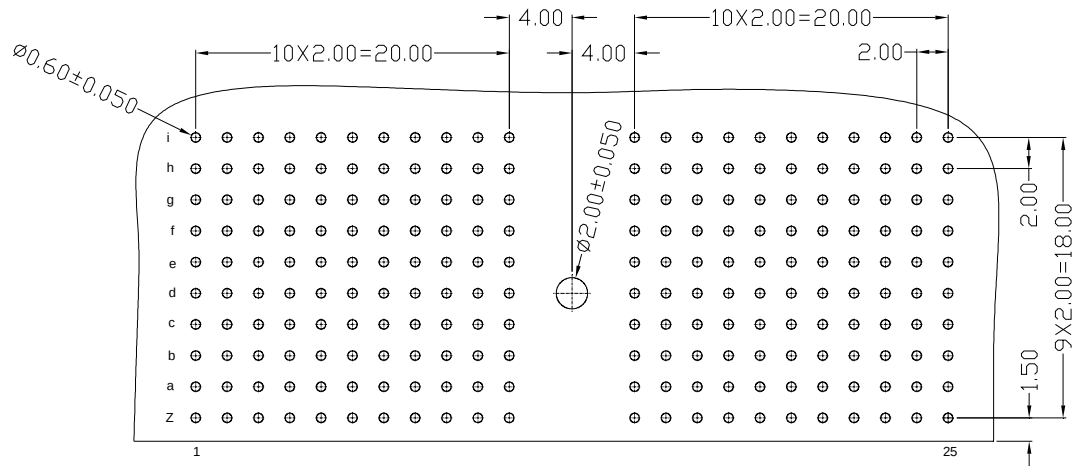
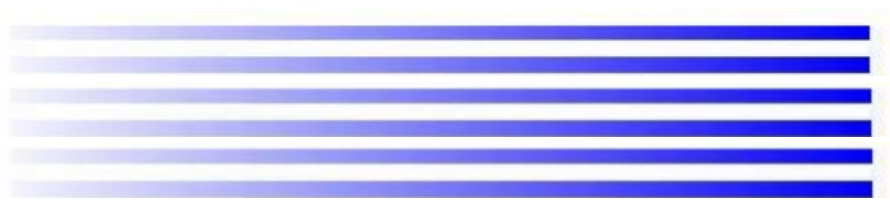


Type D₂₂

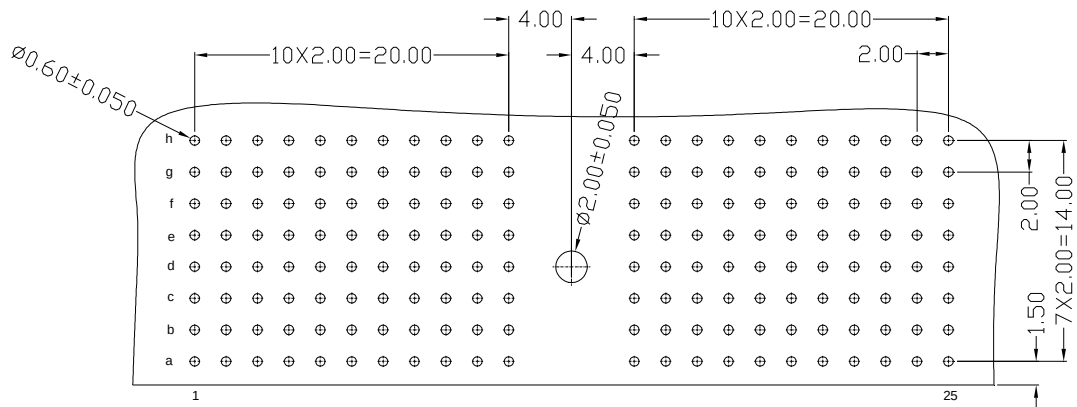
Socket, pin, straight, with dowel pin

176/220 core





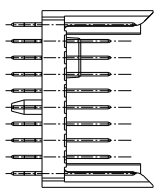
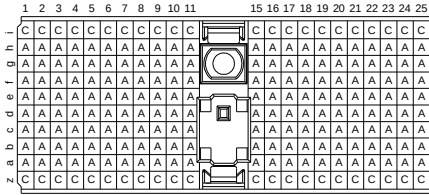
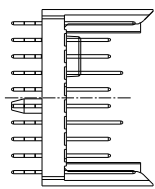
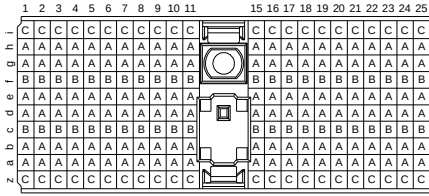
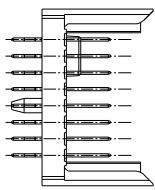
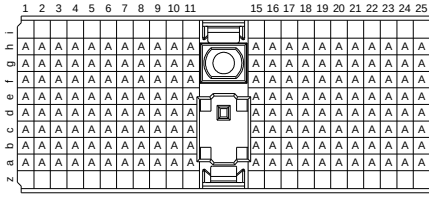
PCB Layout (tolerance ± 0.05)
Recommended PCB hole size



PCB Layout (tolerance ± 0.05)
Recommended PCB hole size





Product model	Schematic diagram	Number of cores	Fit length
HLHMMD220P11012A	 	220	3.7/11.25 3.7/8.25 3.7/8.25 3.7/8.25 3.7/8.25 3.7/8.25 3.7/8.25 3.7/8.25 3.7/8.25 3.7/11.25
HLHMMD220P11012B	 	220	3.7/11.25 3.7/8.25 3.7/8.25 3.7/9.75 3.7/8.25 3.7/8.25 3.7/8.25 3.7/9.75 3.7/8.25 3.7/8.25 3.7/11.25
HLHMMD176011012E	 	176	-/- 3.7/8.25 3.7/8.25 3.7/8.25 3.7/8.25 3.7/8.25 3.7/8.25 3.7/8.25 3.7/8.25 3.7/8.25 -/-





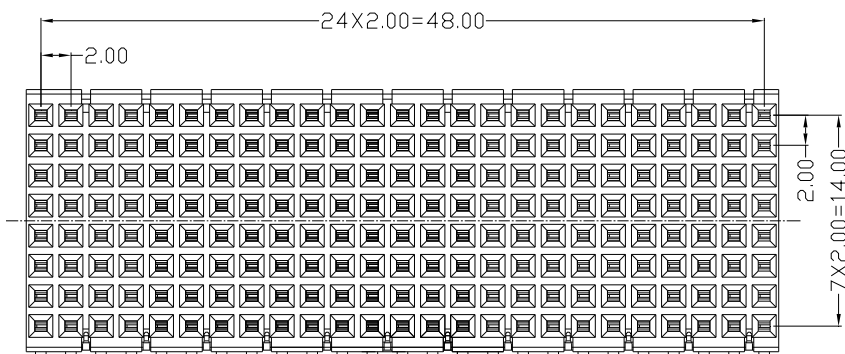
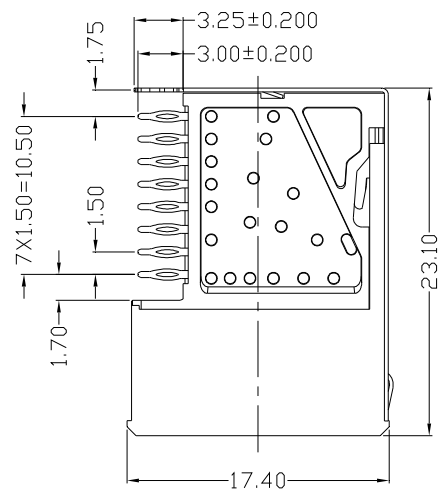
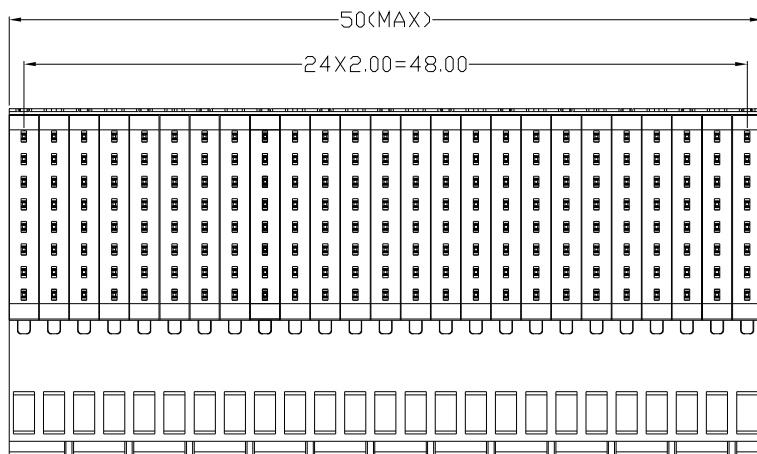
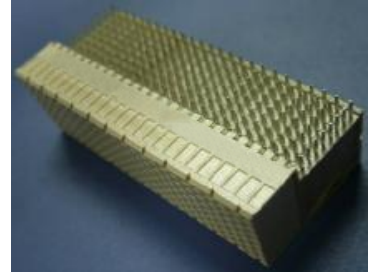
2.19 Type E₂₅

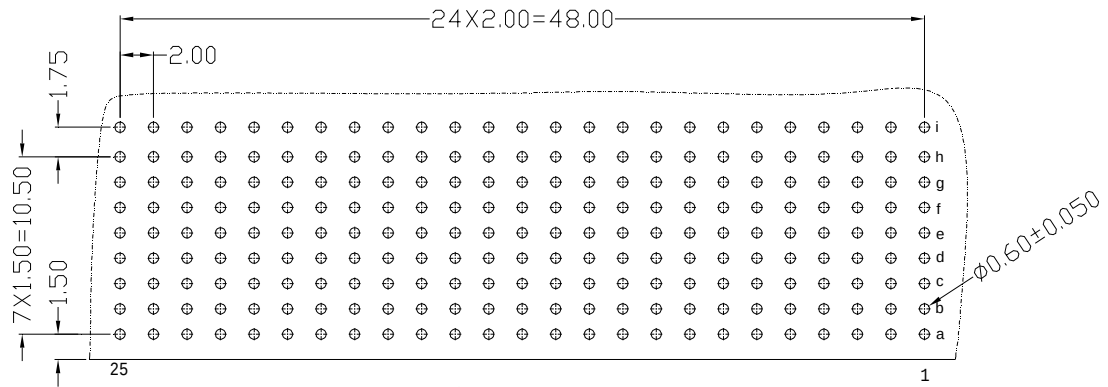
Plug, jack, right Angle bent

200 core without/with shield piece

(with shielding sheet)

(Product model: HLHMF200P02412A)





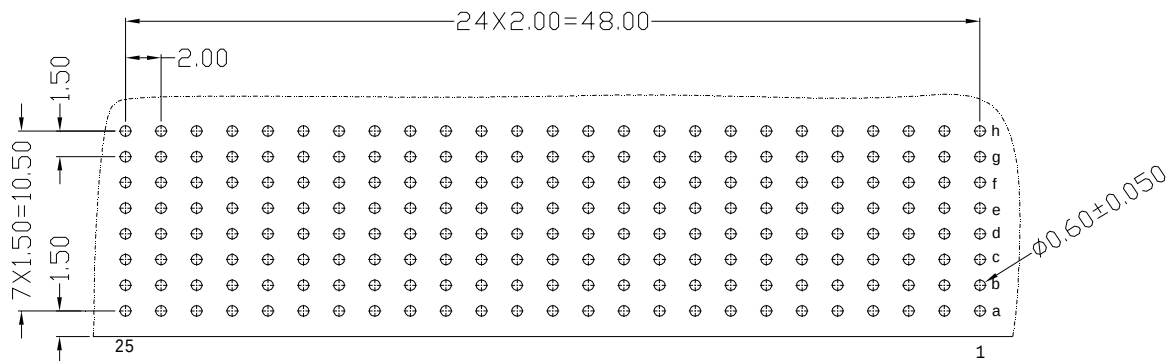
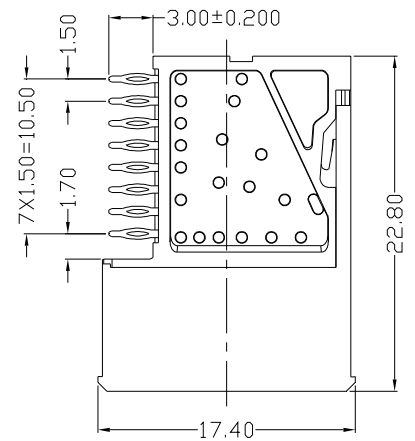
PCB Layout (tolerance ± 0.05)

Recommended PCB hole size

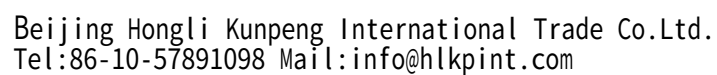




(Product model: HLHMF200002412B)



Recommended PCB hole size

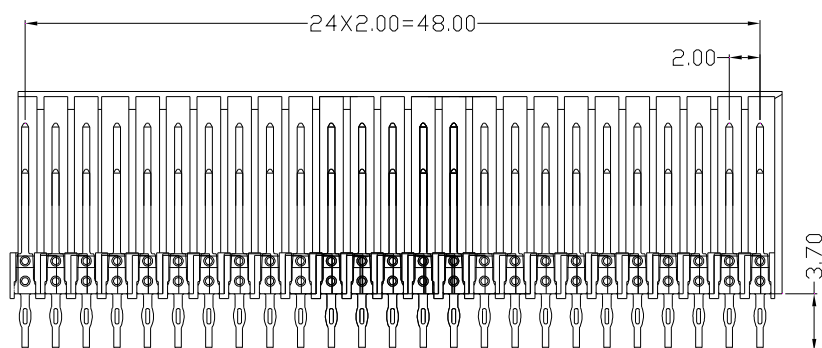
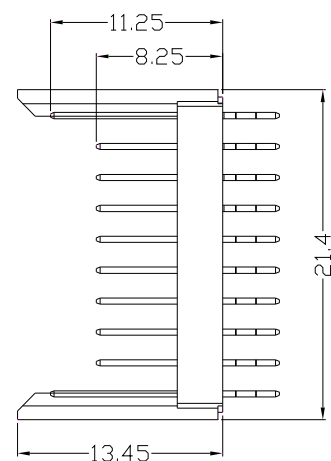
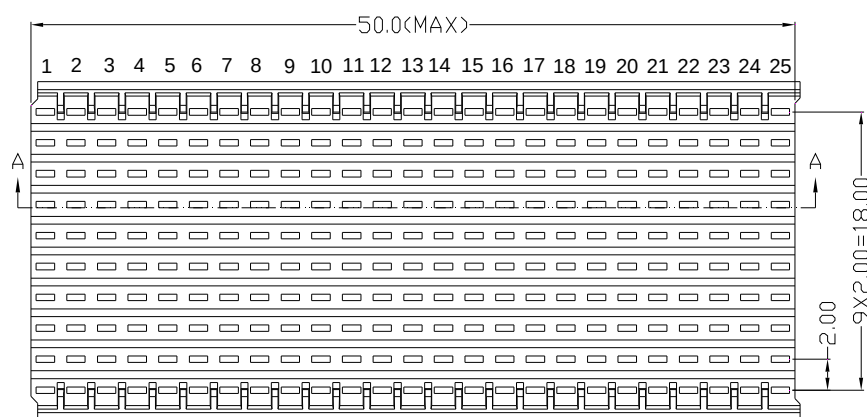
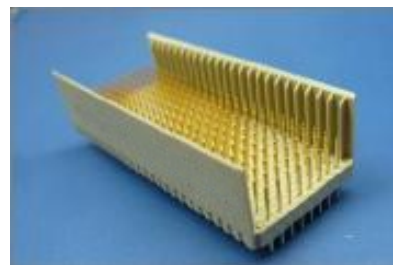




Type E₂₅

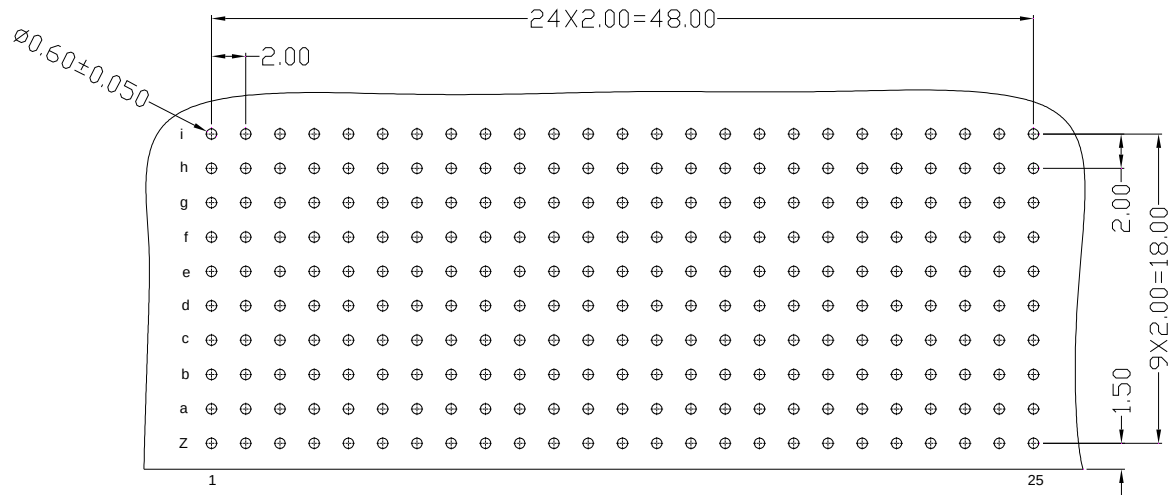
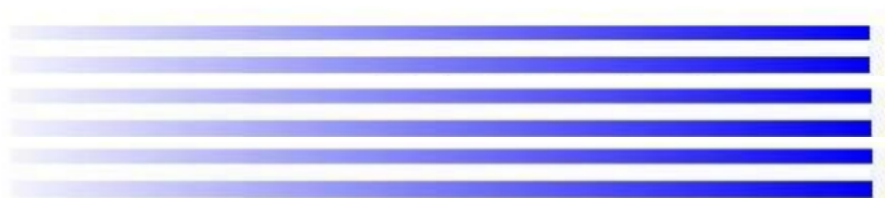
Socket, pin, straight

250 core/200 core

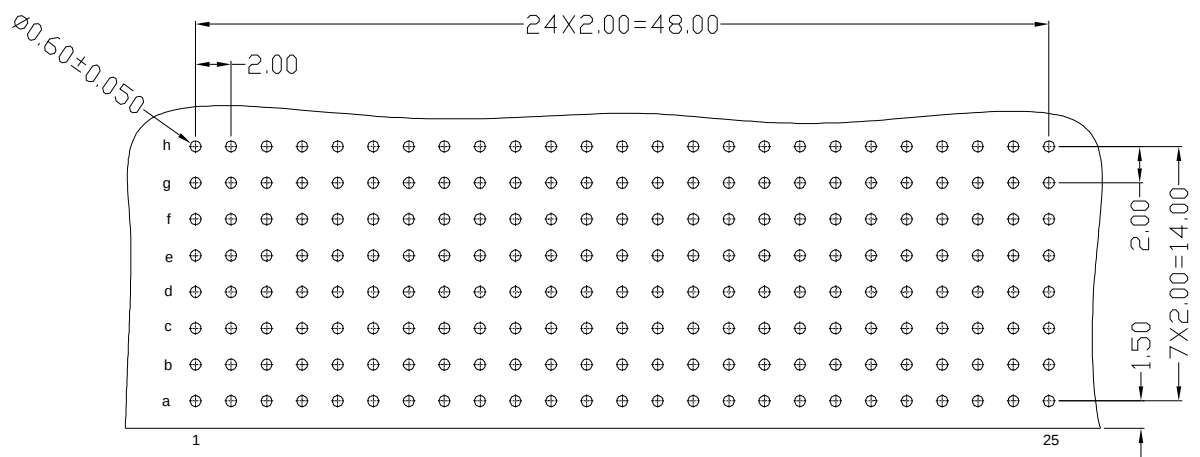


A-A



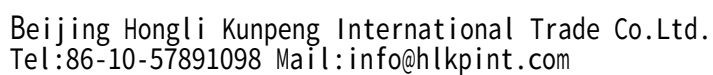


Recommended PCB board hole size (with shielding needle)



Recommended PCB board hole size (without shielding needle)



[illegible]



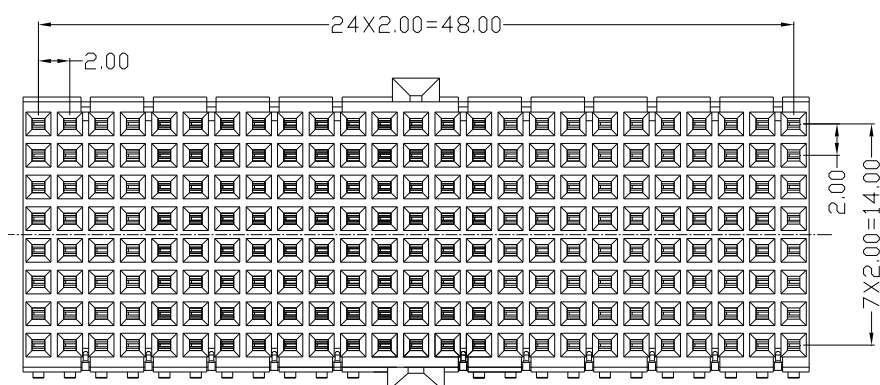
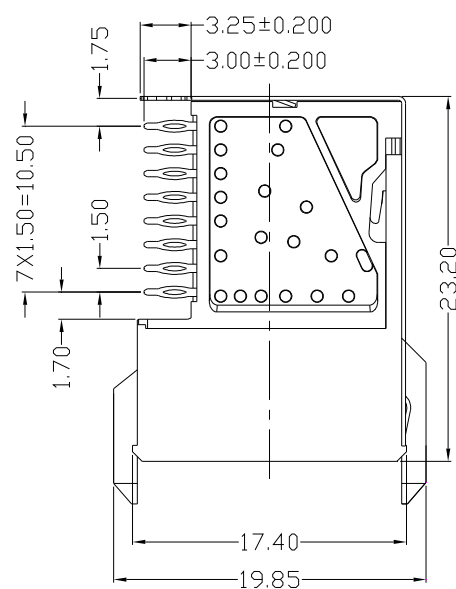
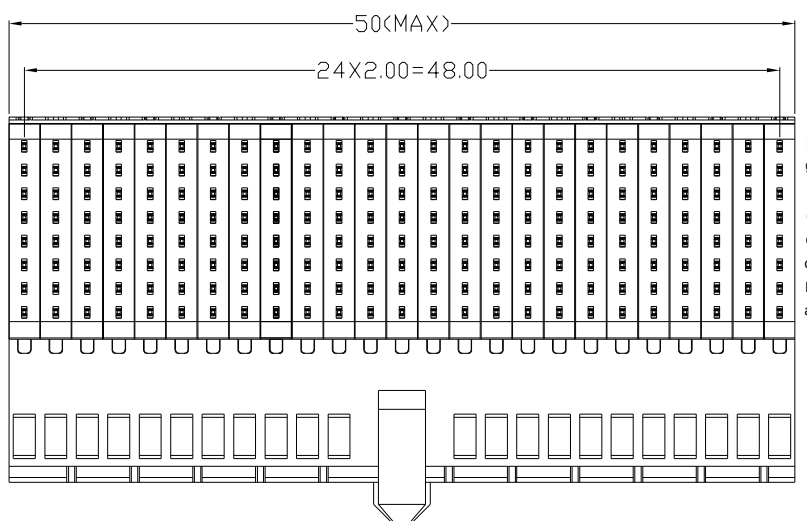
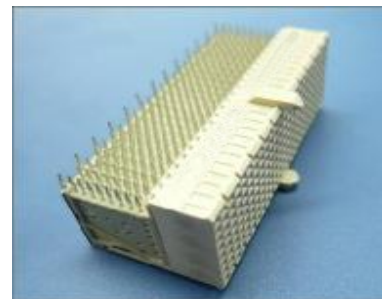
2.20 Type DE₂₅

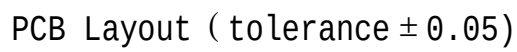
Plug, jack, right Angle bent

200 core without/with shield piece

(with shielding sheet)

(Product model: HLHMFDE200P02412A)

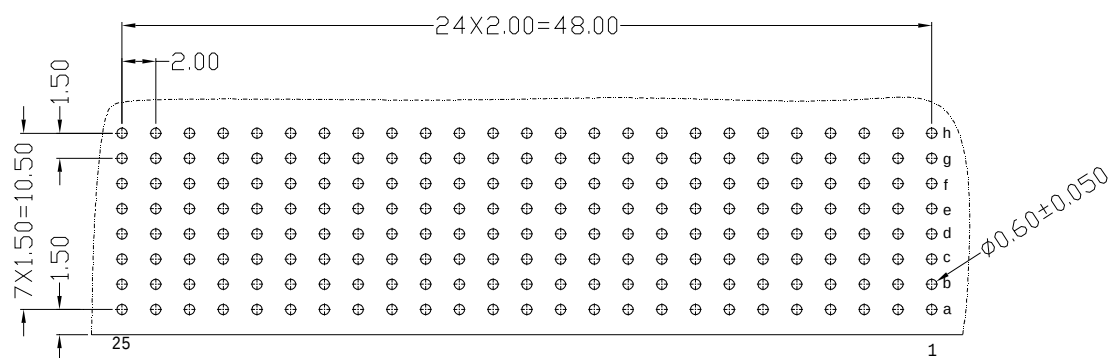
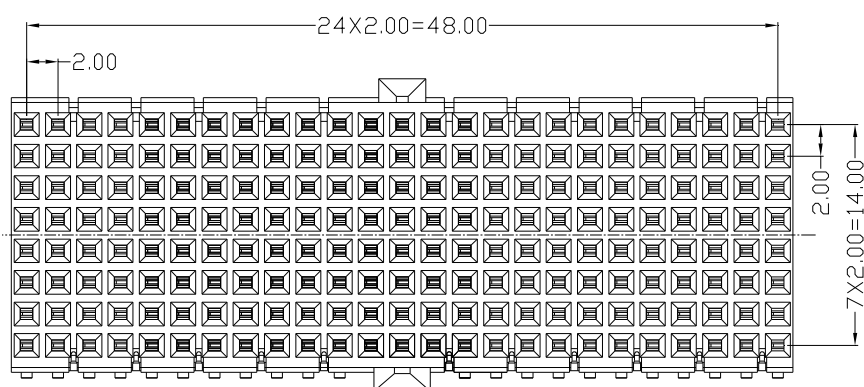




Recommended PCB hole size



(Product model: HLHMFDE200002412B)



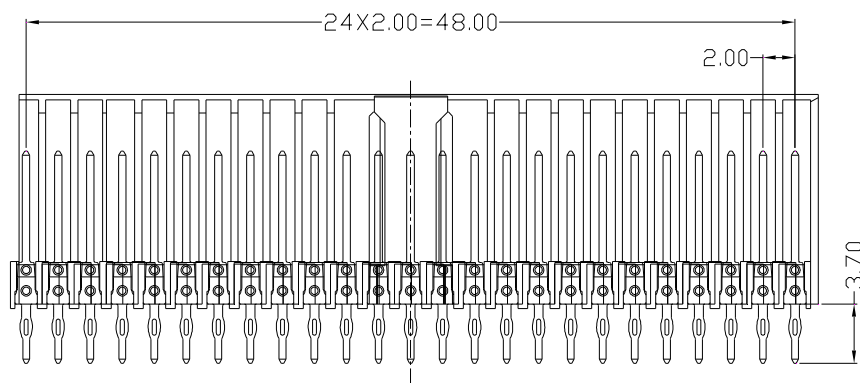
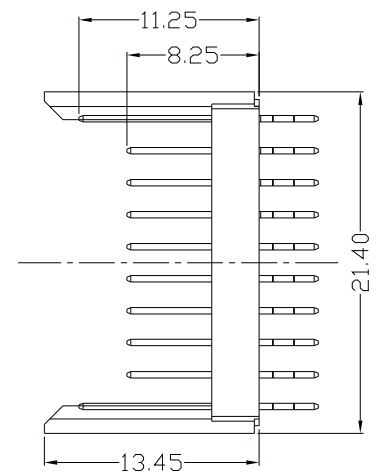
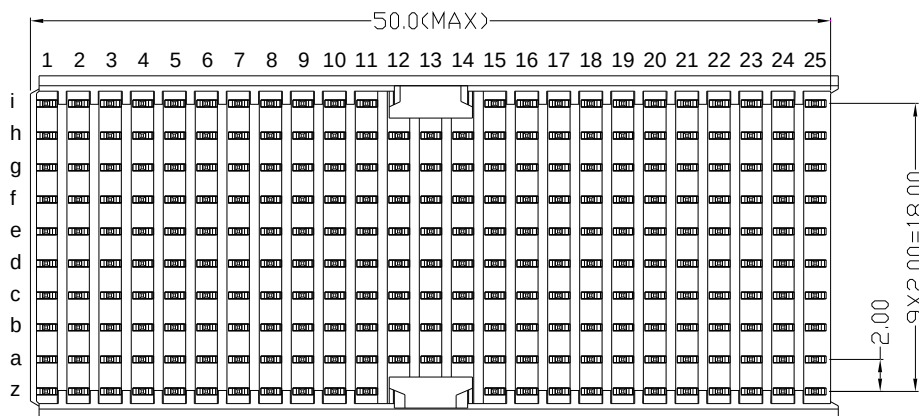
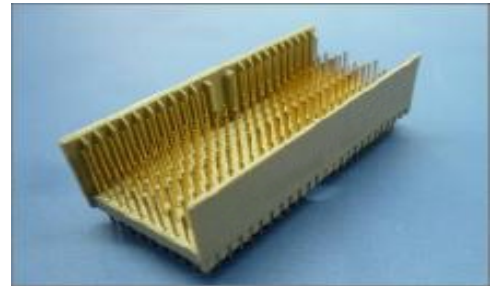
Recommended PCB hole size

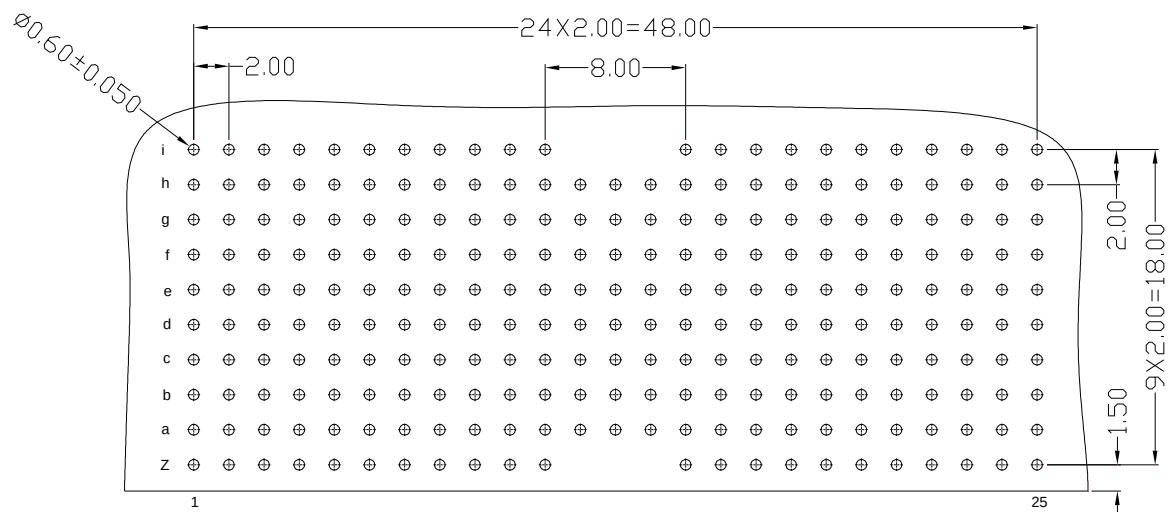


Type DE₂₅

Socket, pin, straight

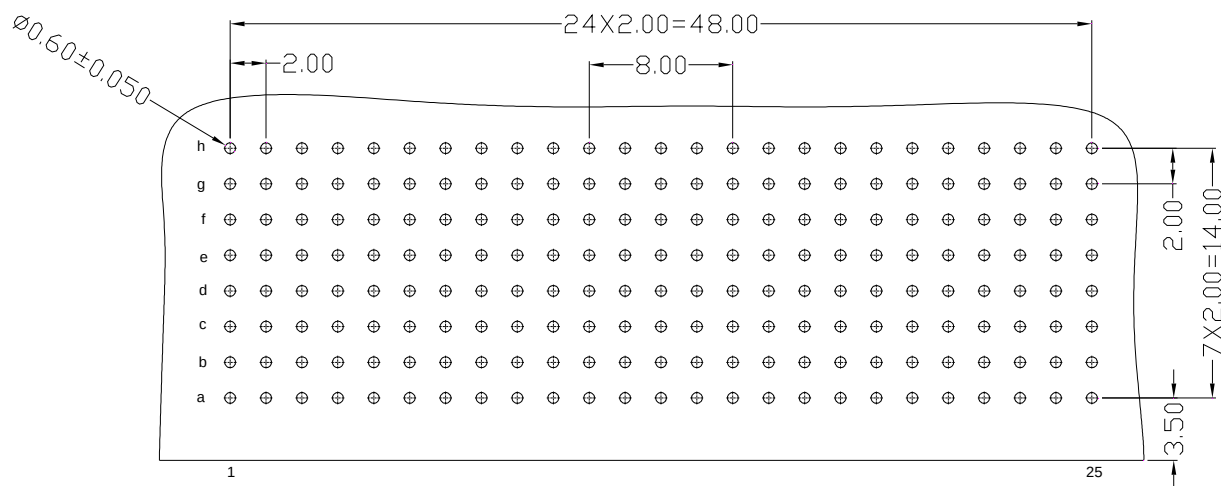
244 core/200 core





PCB Layout (tolerance ± 0.05)

Recommended PCB board hole size (with shielding needle)

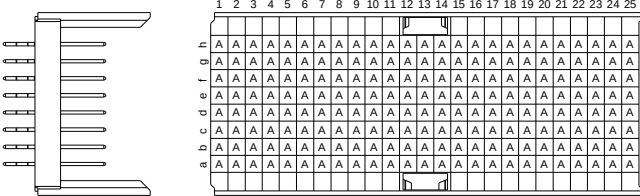
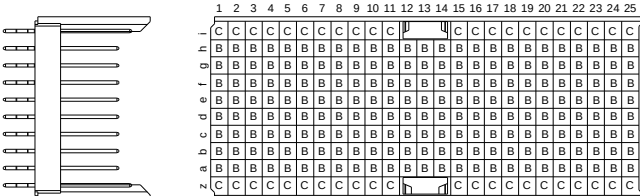
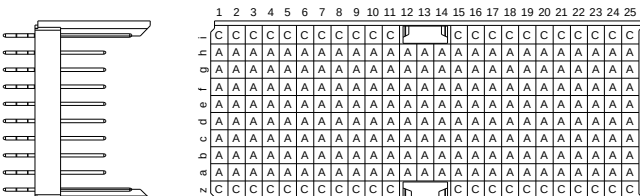
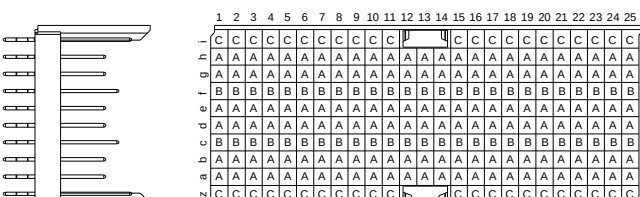
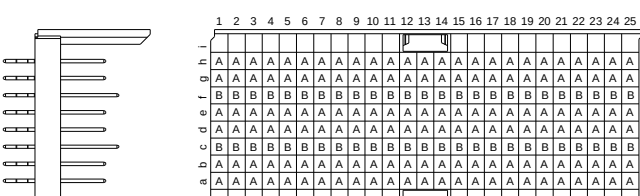


PCB Layout (tolerance ± 0.05)

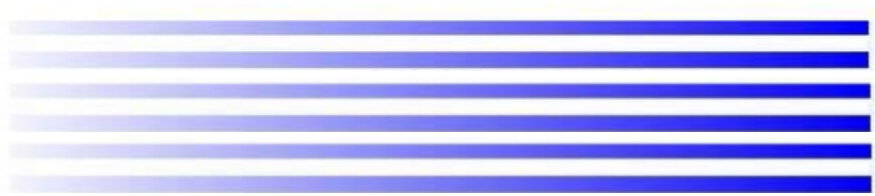
Recommended PCB board hole size (without shielding needle)





Product model	Schematic diagram	Number of cores	Fit length
HLHMMDE200001012A		200	-/- 3.7/8.25 3.7/8.25 3.7/8.25 3.7/8.25 3.7/8.25 3.7/8.25 3.7/8.25 3.7/8.25 -/-
HLHMMDE244P01112B		244	3.7/11.25 3.7/9.75 3.7/9.75 3.7/9.75 3.7/9.75 3.7/9.75 3.7/9.75 3.7/9.75 3.7/9.75 3.7/11.25
HLHMMDE244P01012C		244	3.7/11.25 3.7/8.25 3.7/8.25 3.7/8.25 3.7/8.25 3.7/8.25 3.7/8.25 3.7/8.25 3.7/8.25 3.7/11.25
HLHMMDE244P01012D		244	3.7/11.25 3.7/8.25 3.7/8.25 3.7/8.25 3.7/8.25 3.7/8.25 3.7/8.25 3.7/8.25 3.7/8.25 3.7/11.25
HLHMMDE200001012E		200	-/- 3.7/8.25 3.7/8.25 3.7/9.75 3.7/8.25 3.7/8.25 3.7/9.75 3.7/8.25 3.7/8.25 -/-





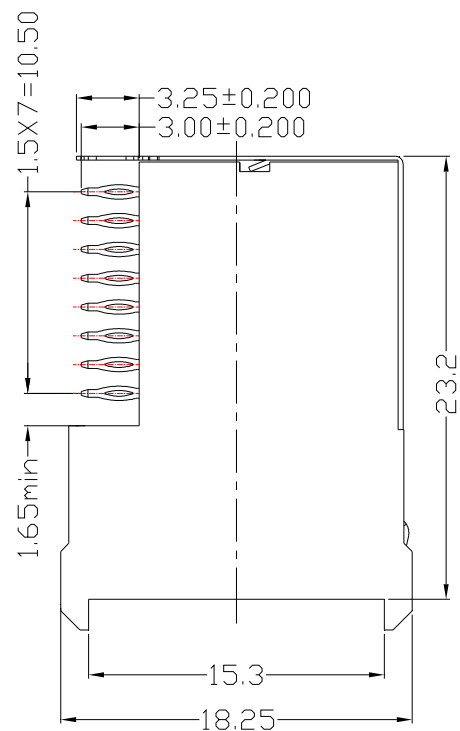
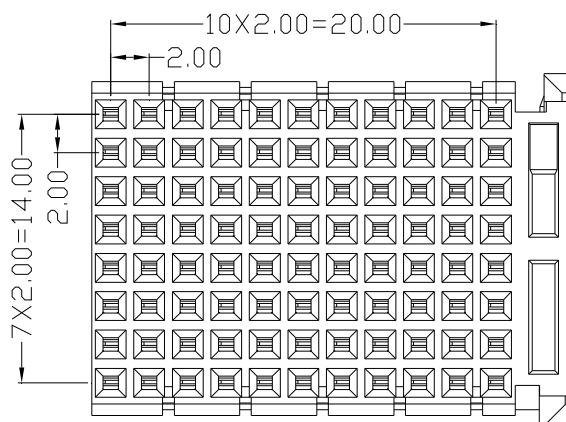
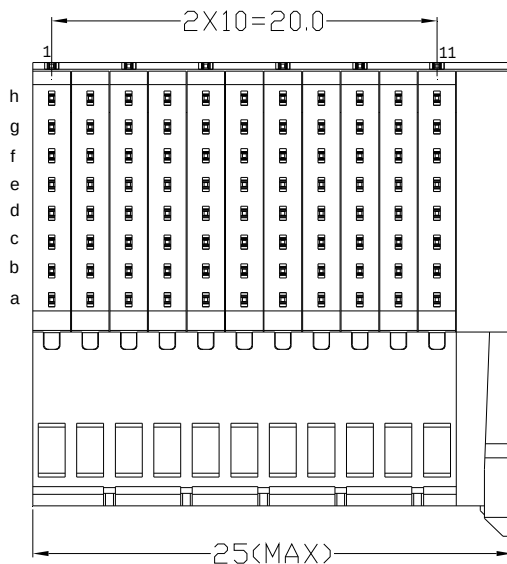
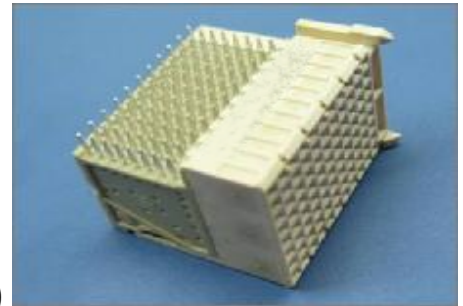
2.21 Type F11

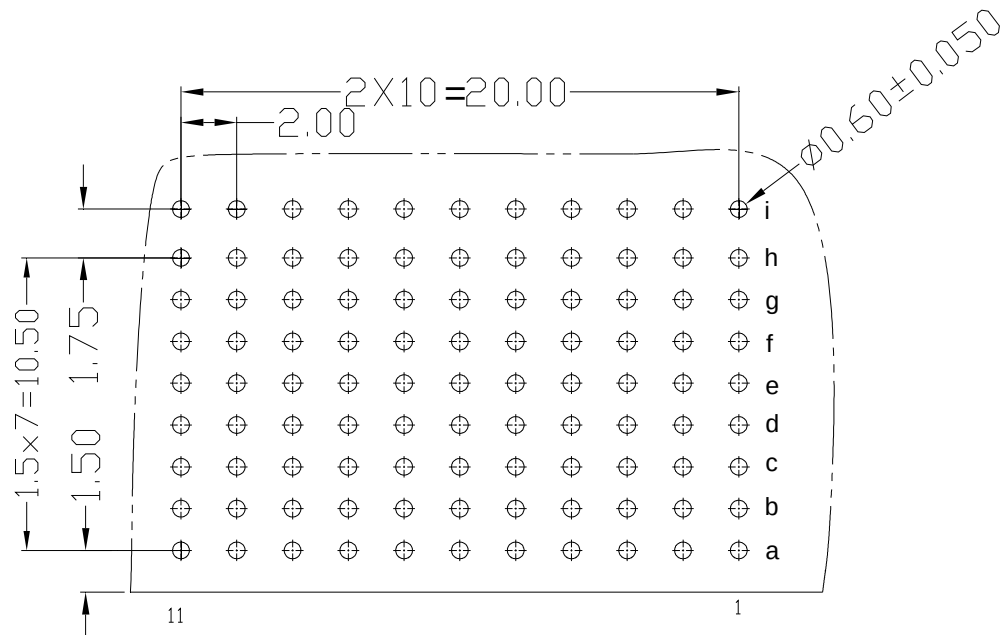
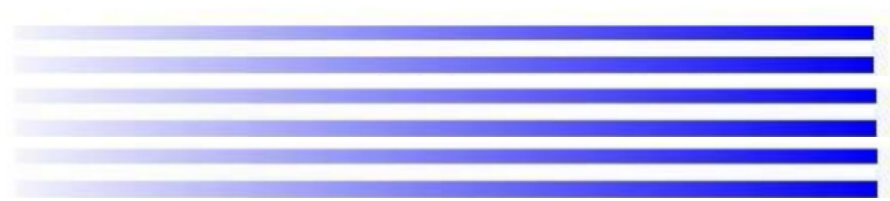
Plug, jack, right Angle bent

88 core without/with shield piece

(with shielding sheet)

(Product model: HLHMF88P02412A)





PCB Layout (tolerance ± 0.05)

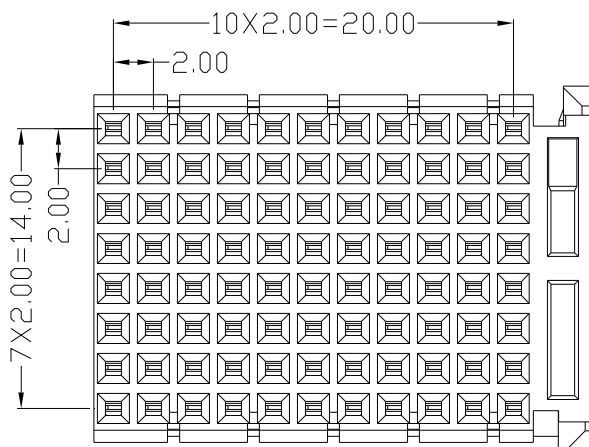
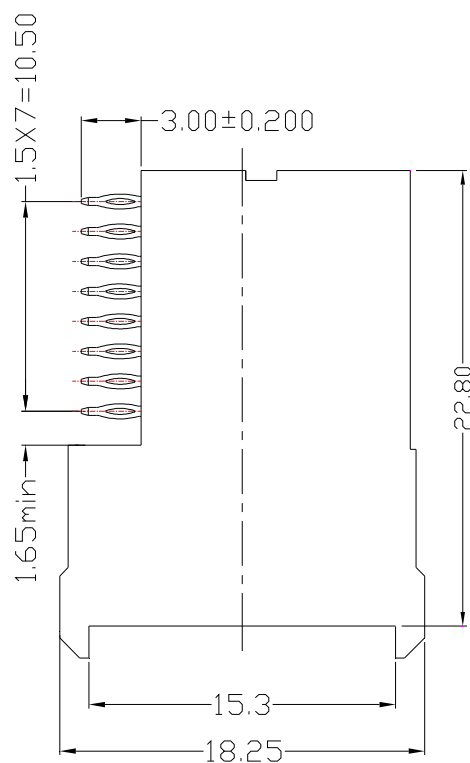
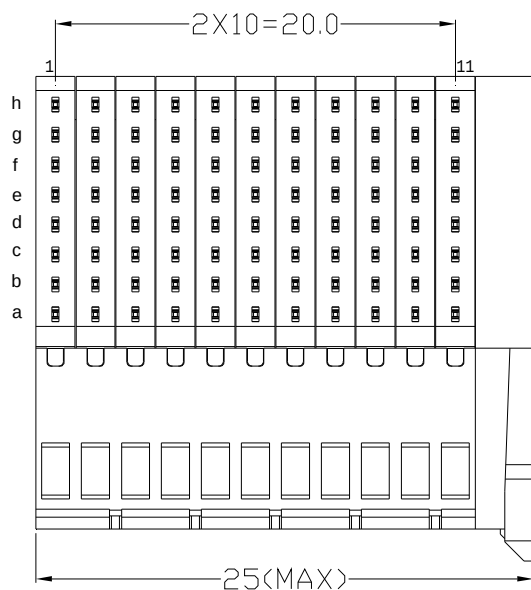
Recommended PCB hole size

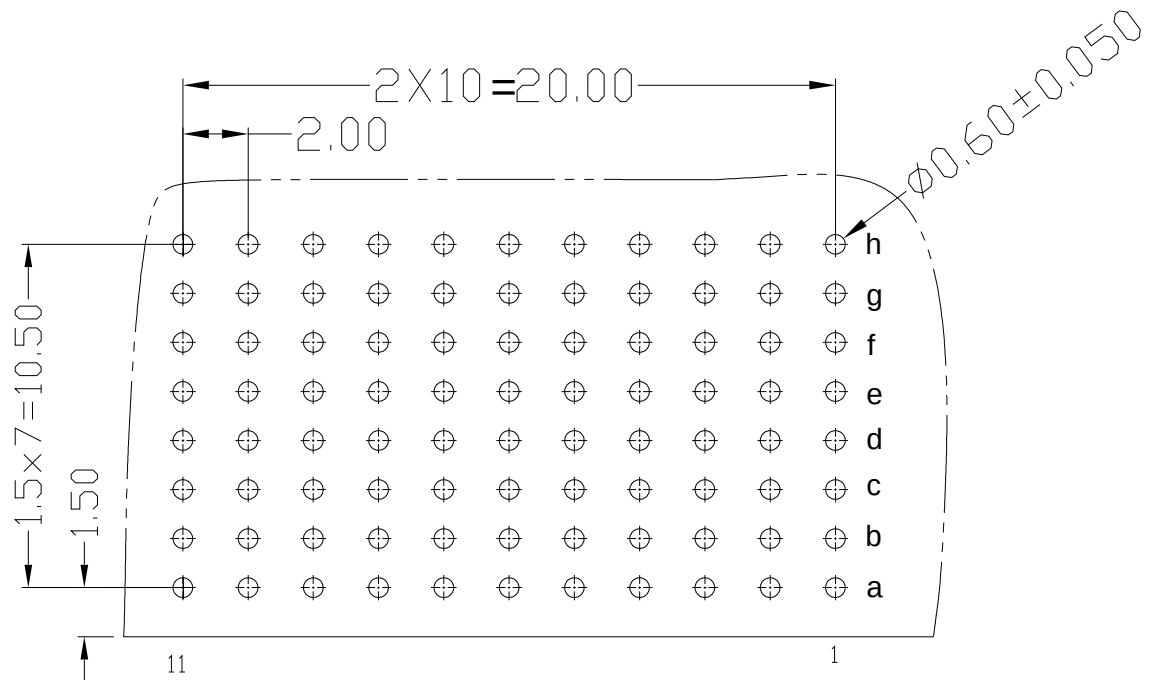
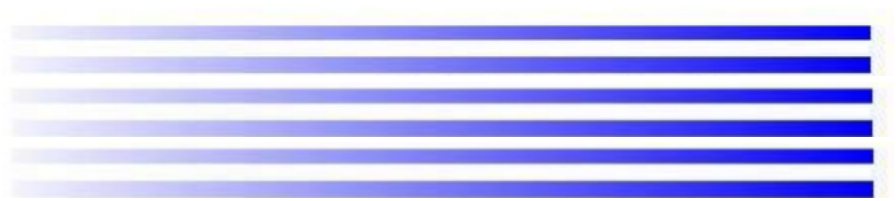




(without shield)

(Product model: HLHMF88002412B)





PCB Layout (tolerance ± 0.05)

Recommended PCB hole size

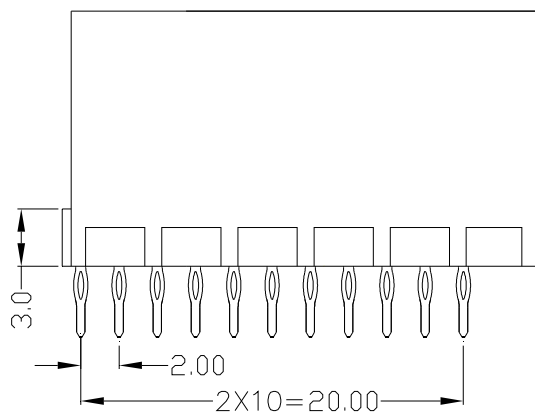
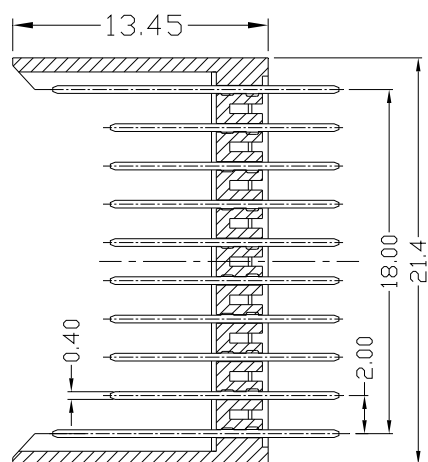
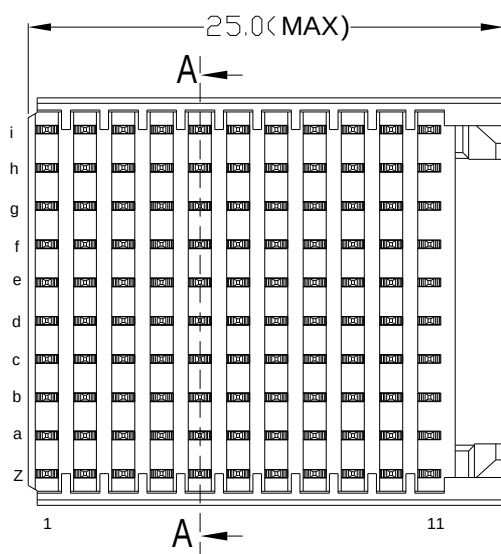


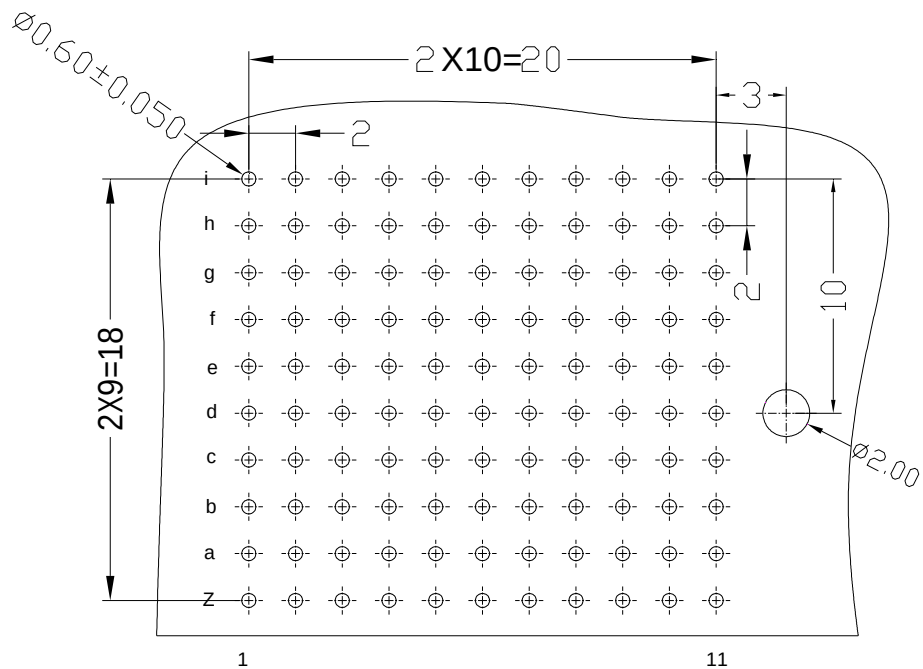
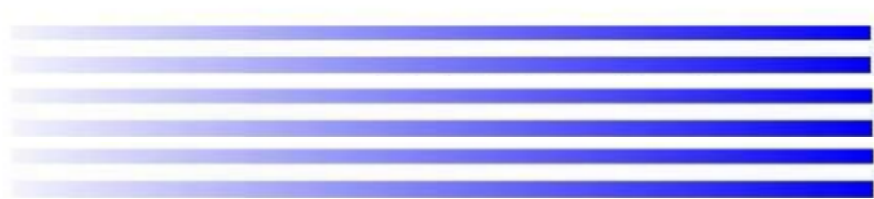


Type F₁₁

Socket, pin, straight

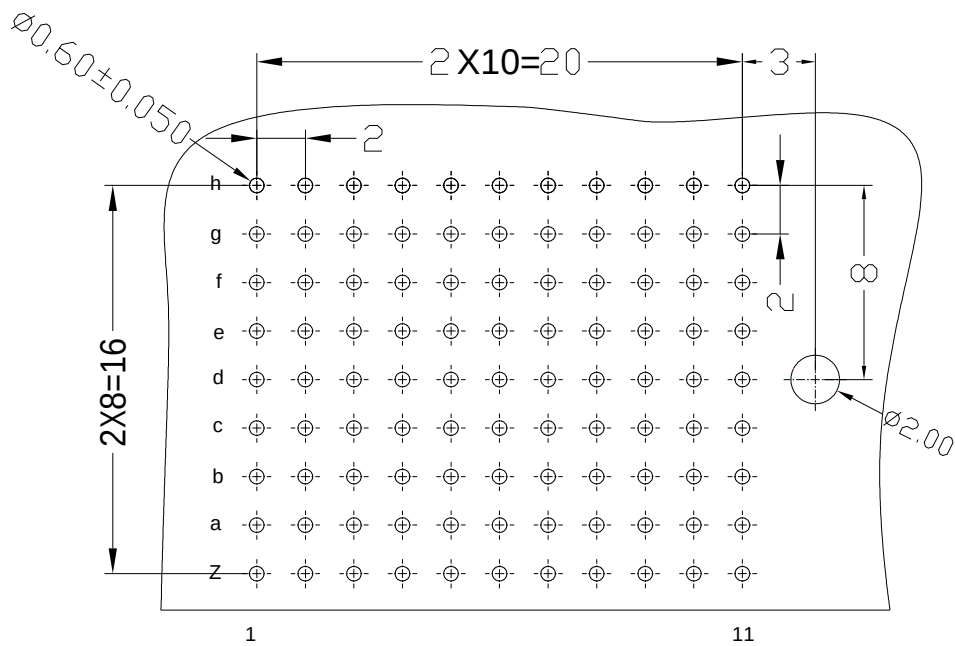
88 core/110 core





Fixed PCB board size (tolerance ± 0.05)

Recommended PCB board hole size (with shielding needle)



Fixed PCB board size (tolerance ± 0.05)

Recommended PCB board hole size (without shielding needle)





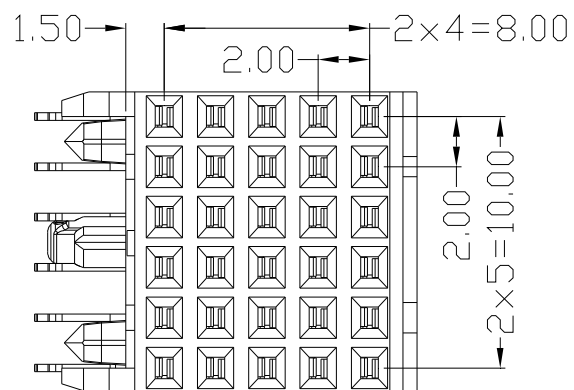
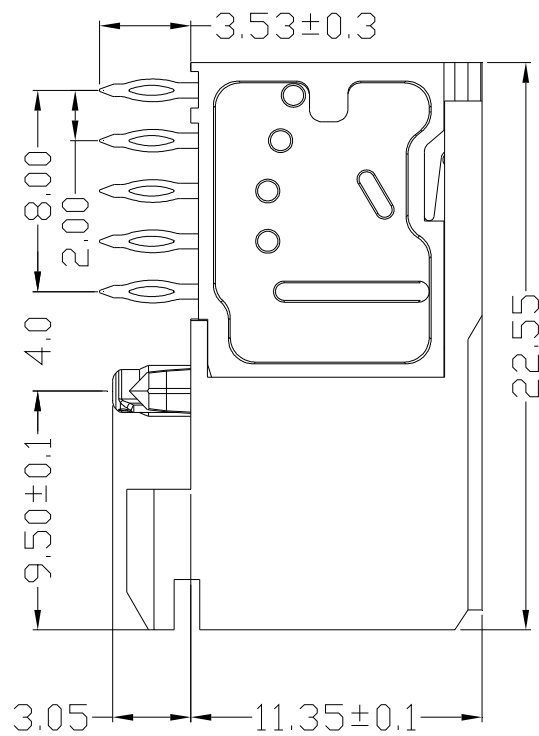
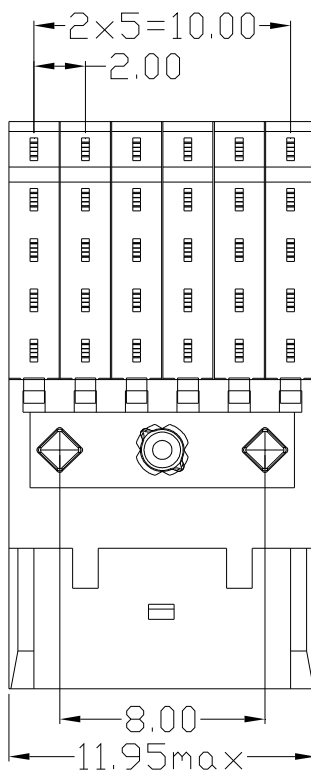
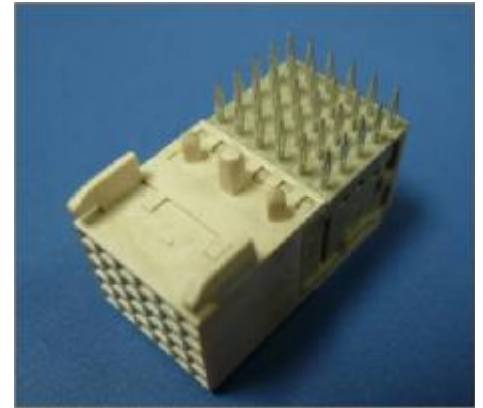


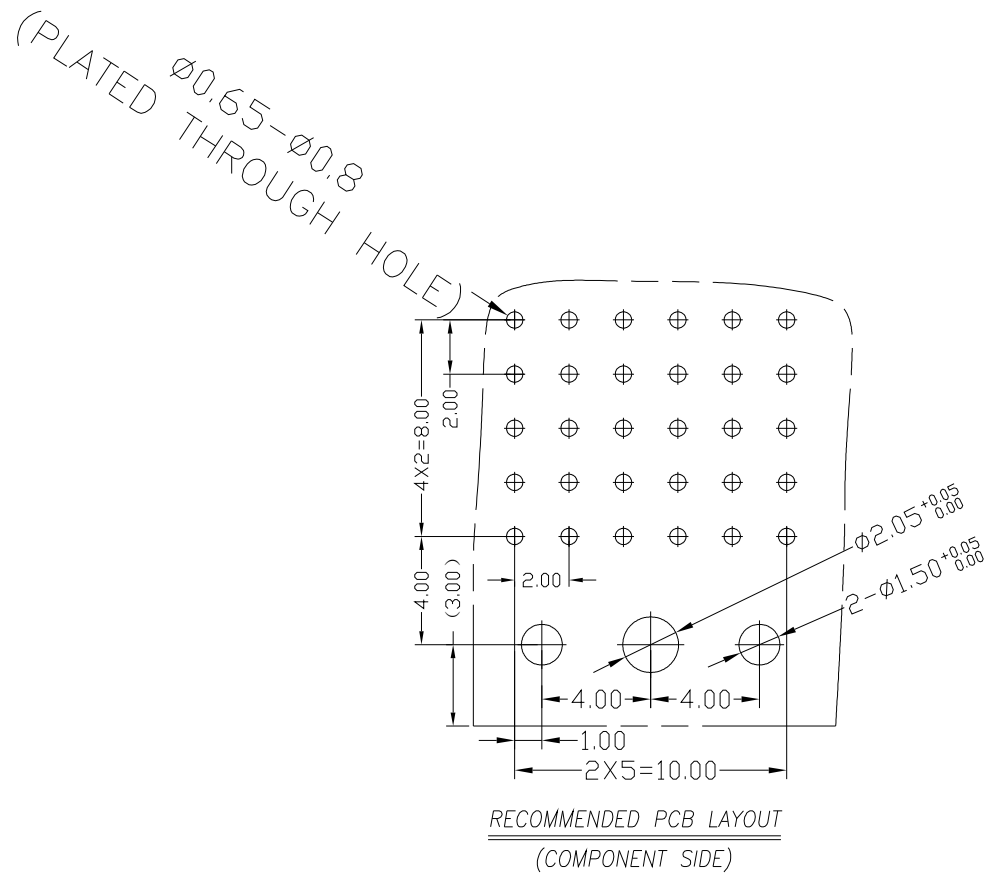
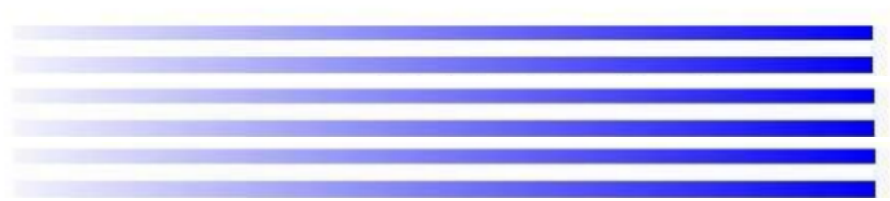
2.22 I generation 30 core

Plug, jack, right Angle bent

30 core

(Product model: HLHMIF30002)





Recommended PCB hole size

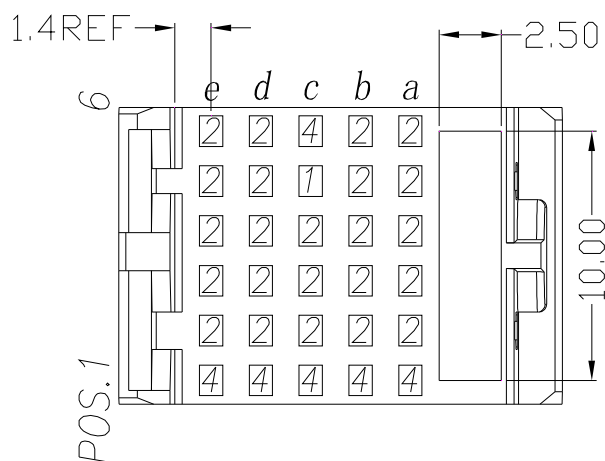
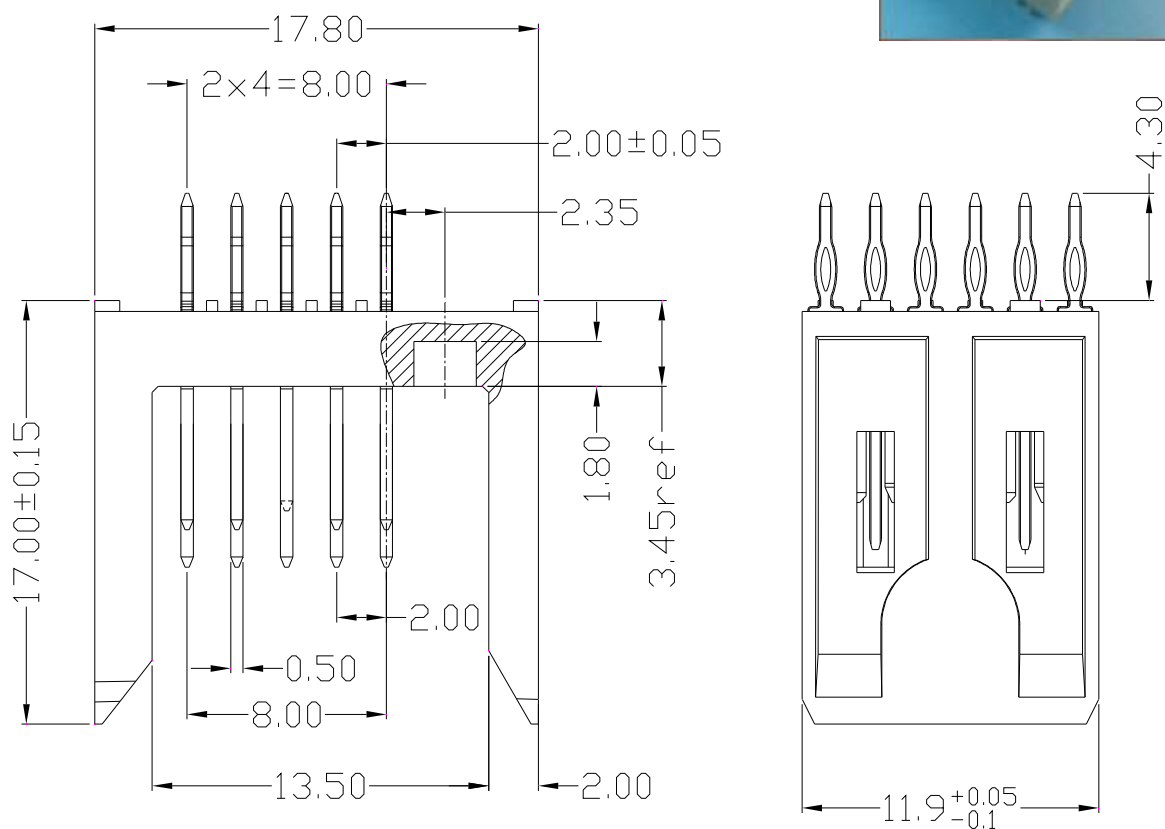




Socket, pin, straight

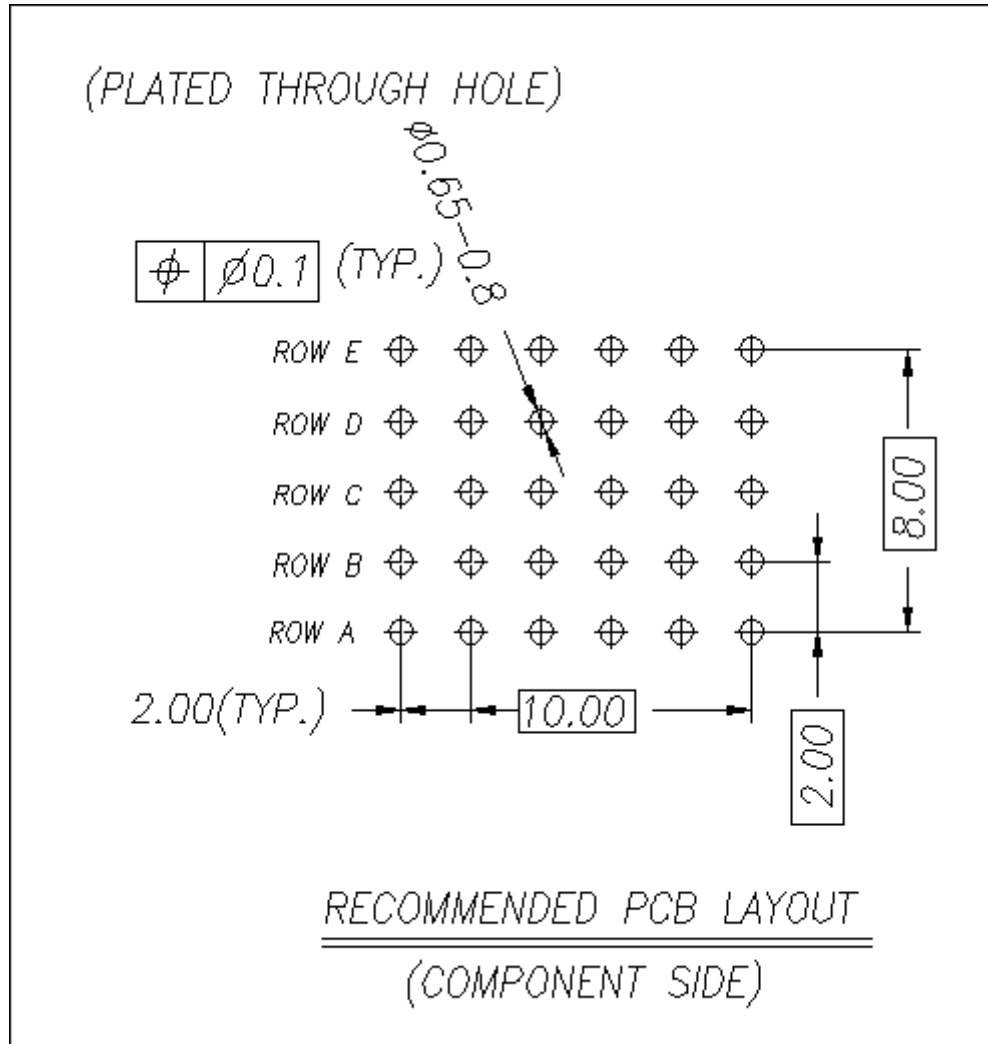
30 core

(Product model: HLHMIM30003)



Note: We can install different types of needles in different positions according to customers' requirements.





Recommended PCB hole size

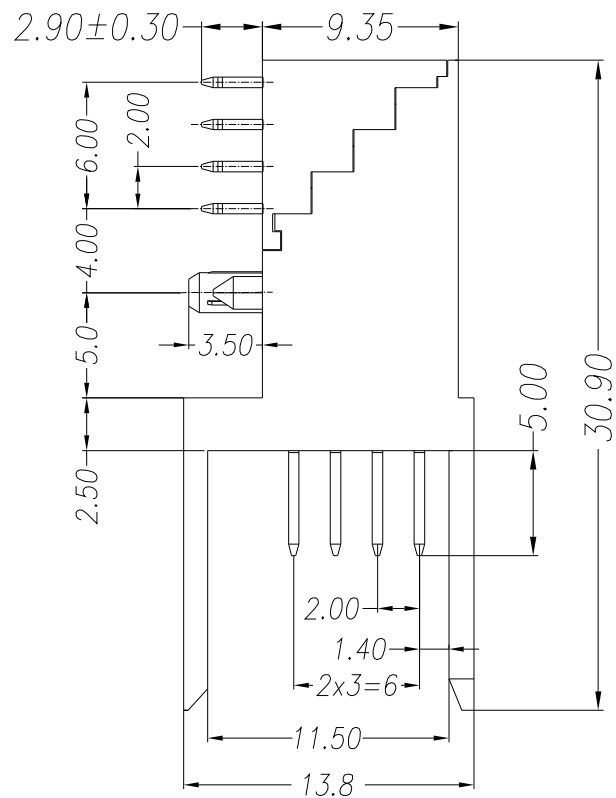
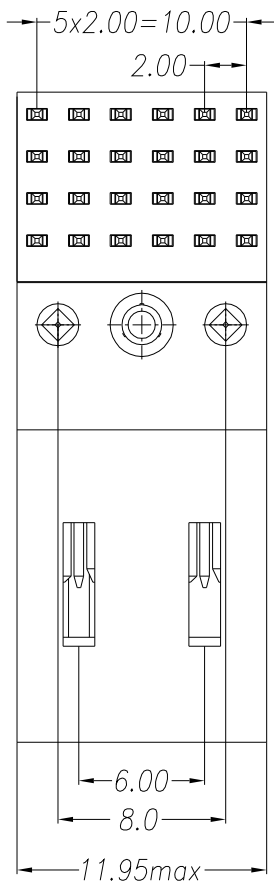
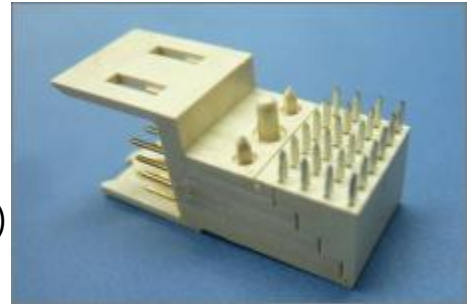




2.23 I generation 24 core

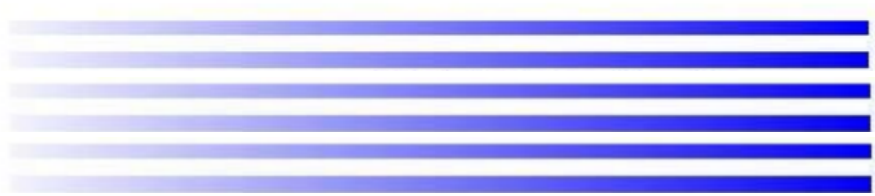
Socket, pin, right Angle bent, 24 core

(Product model: HLHMIM24003)





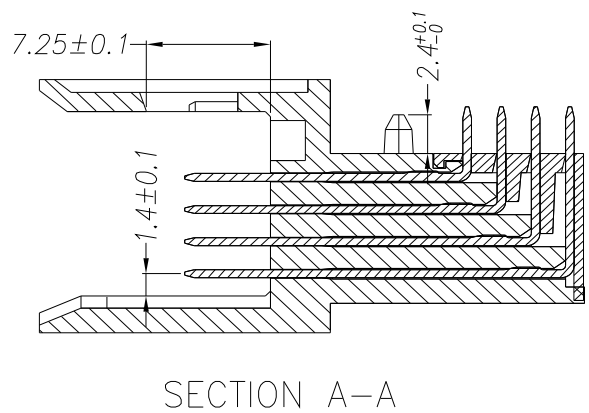
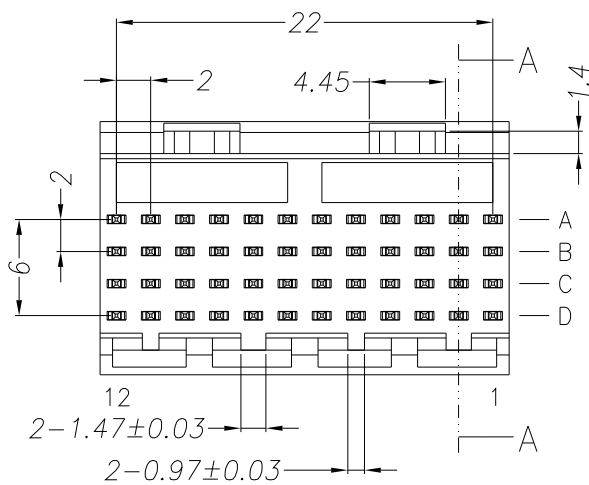
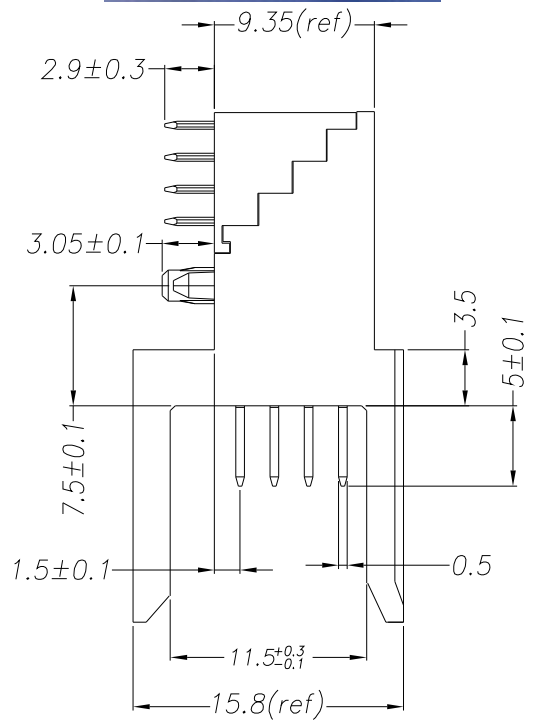
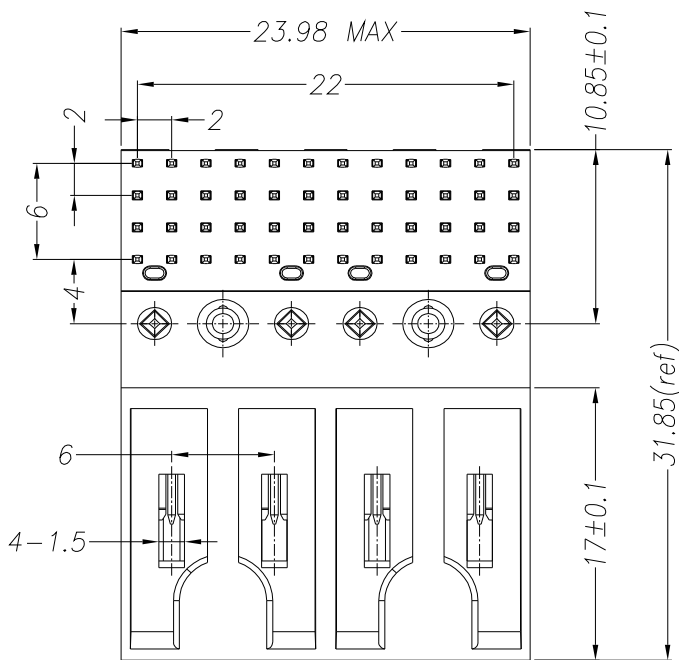
Recommended PCB hole size

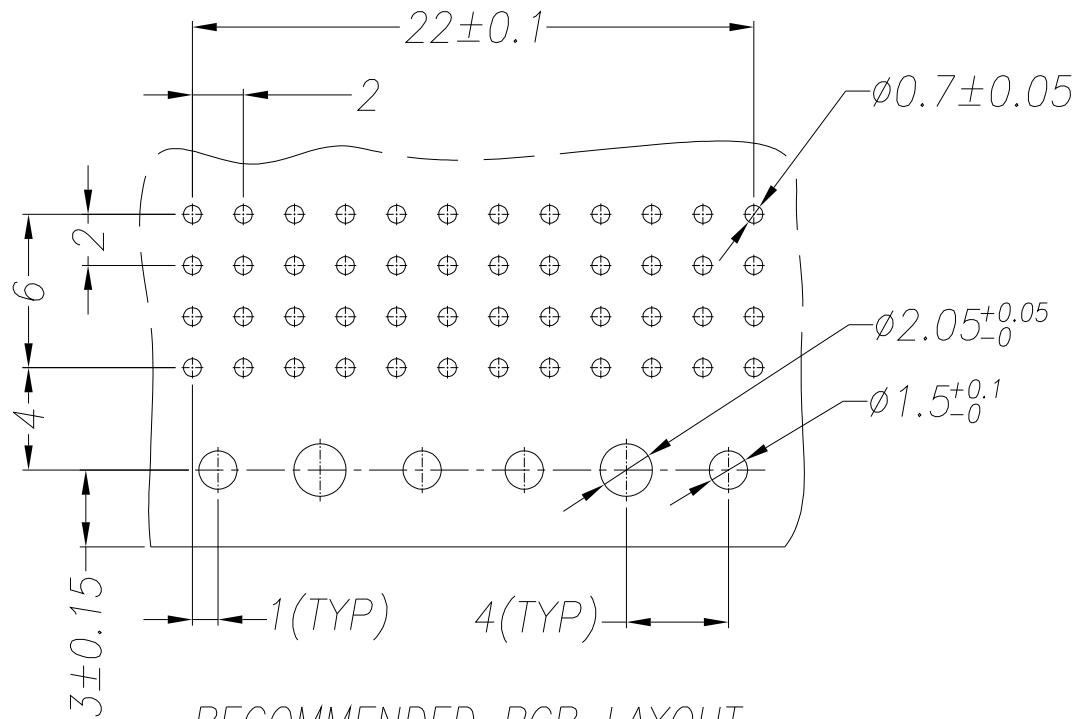


2.24 I generation 48 core

Socket, Insert pin, right Angle bent, 48 core

(Product model: HLHMIM48001)

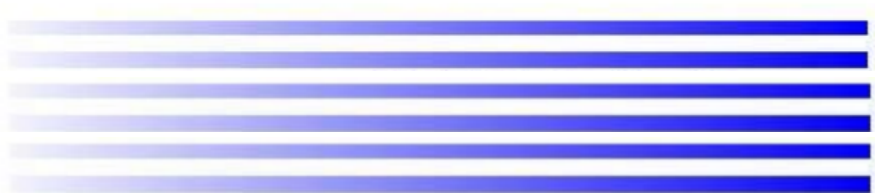




RECOMMENDED PCB LAYOUT
(TOLERANCES ± 0.05)

Recommended PCB hole size

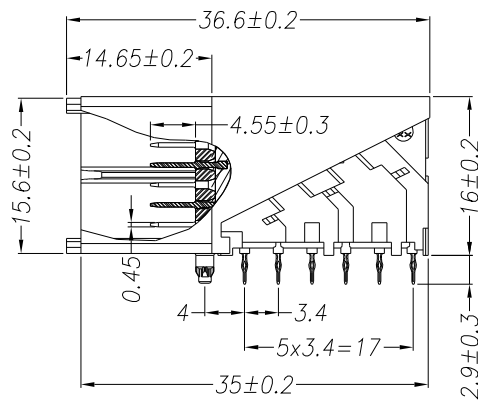
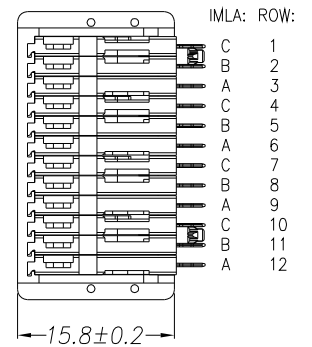
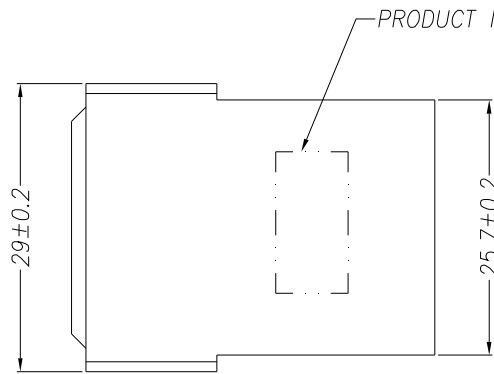
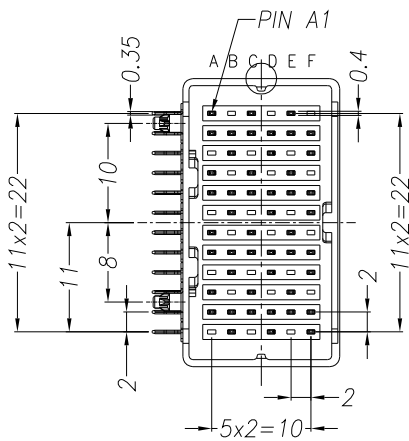
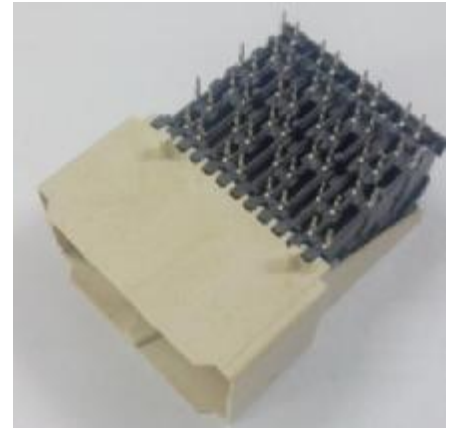


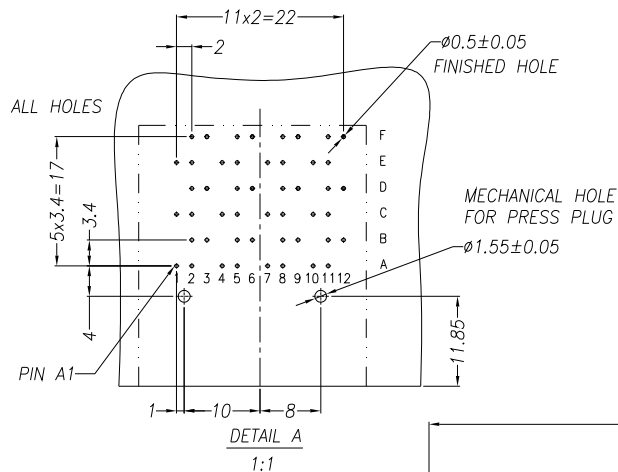


Socket, pin, right Angle bent

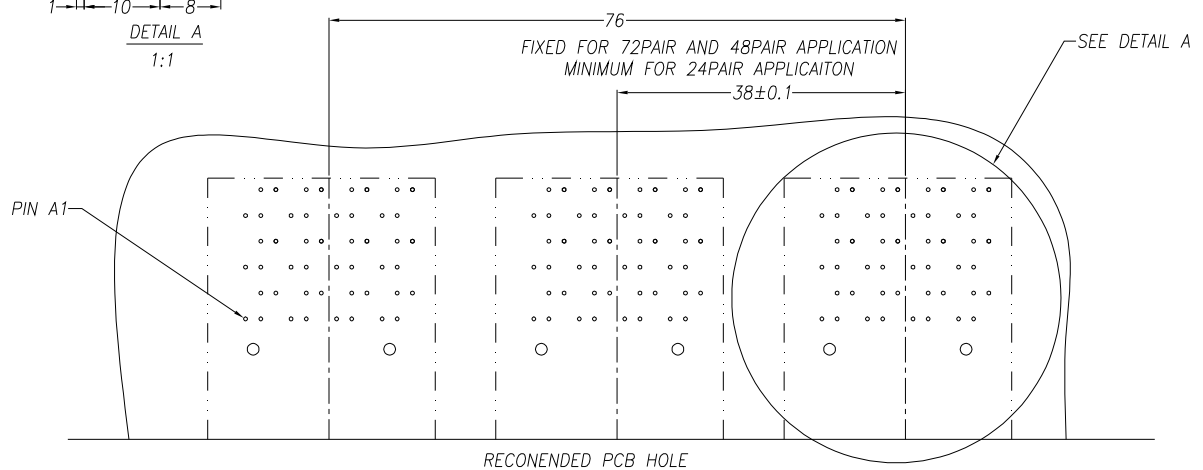
48 core

(Product model: HLHMIM48002)





	SIGNAL PTH DETAILS
DRILLED HOLE	0.58-0.62 mm
COPPER PLATING	25-50 μ m
TIN PLATING	0.8-1.2 μ m
FINISHED HOLE DIA.	0.46-0.55 mm



Recommended PCB hole size



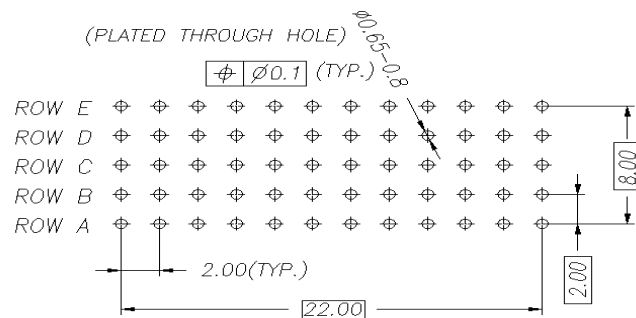
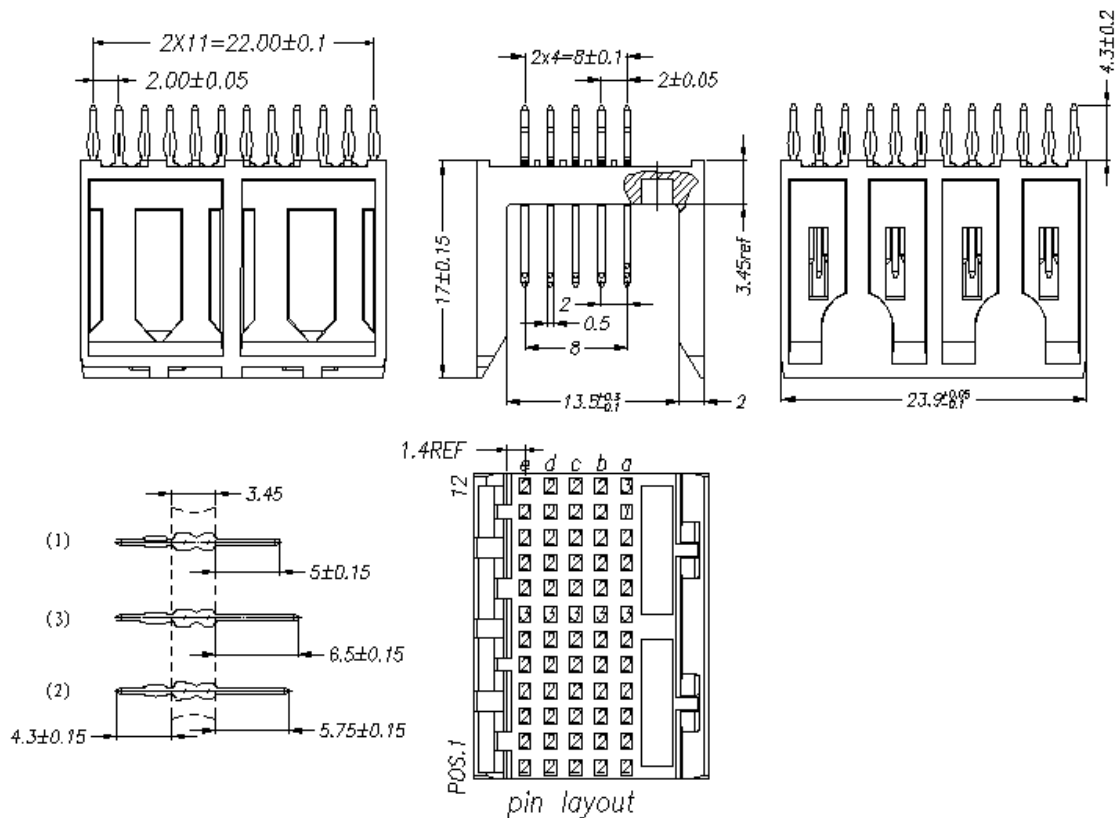
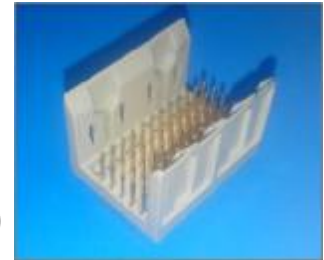


2.25 I generation 60 core

Socket, pin, straight

60 core

(Product model: HLHMIM6003)

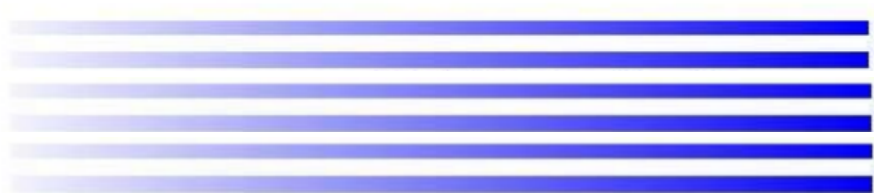


RECOMMENDED PCB LAYOUT
(COMPONENT SIDE)

Recommended PCB hole size

Note: We can install different types of needles in different positions according to customers' requirements.



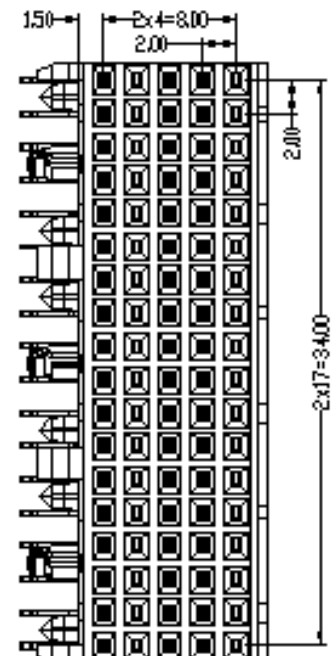
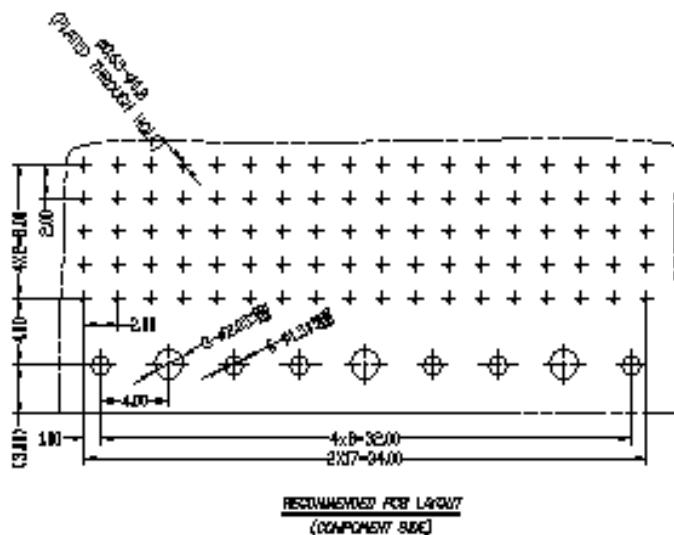
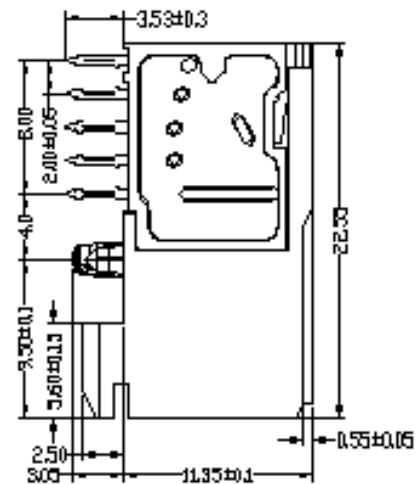
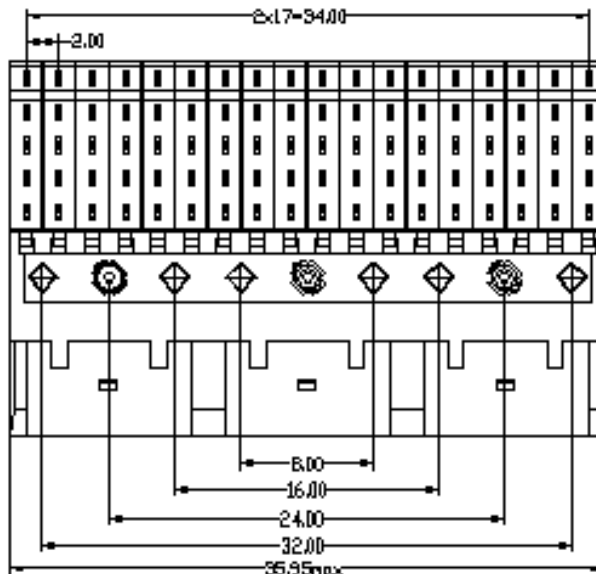
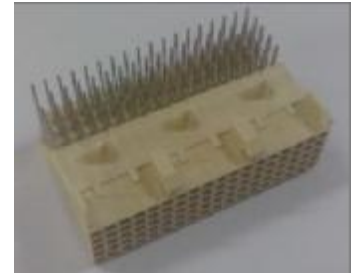


2.26 I generation 90 core

Plug, jack, right Angle bent

90 core

(Product model: HLHMIF90002)



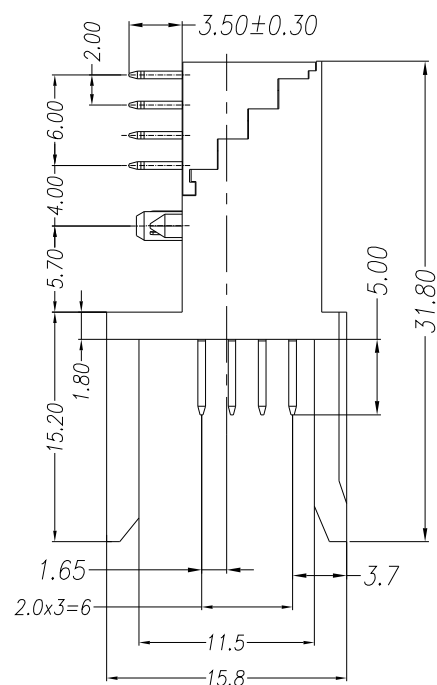
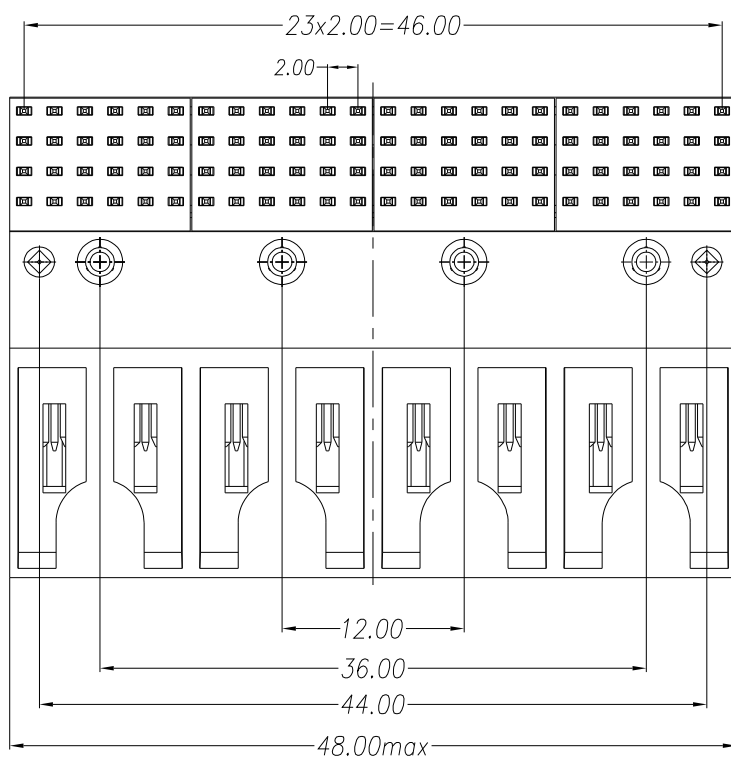


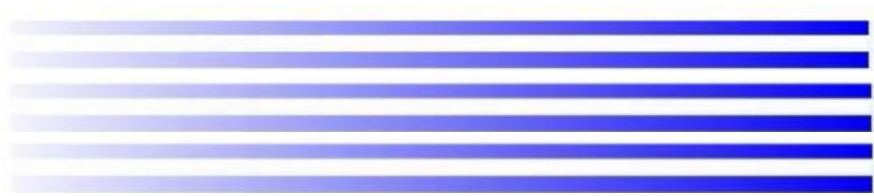
2.27 I generation 96 core

Socket, pin, right Angle bent

96 core

(Product model: HLHMIM96002)

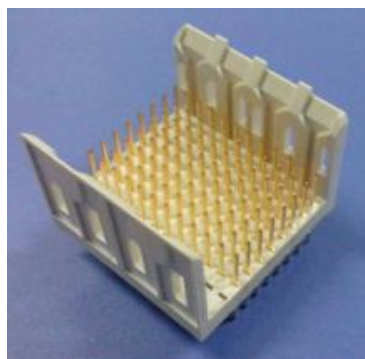




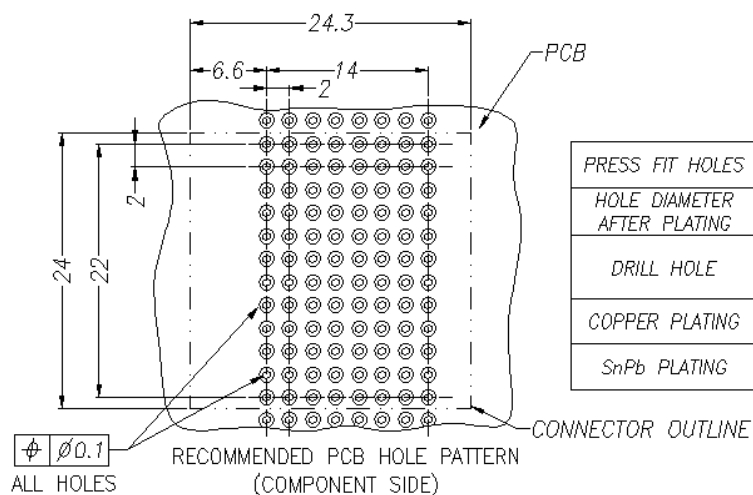
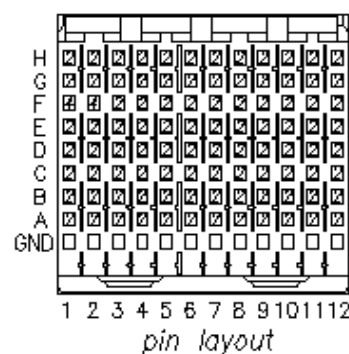
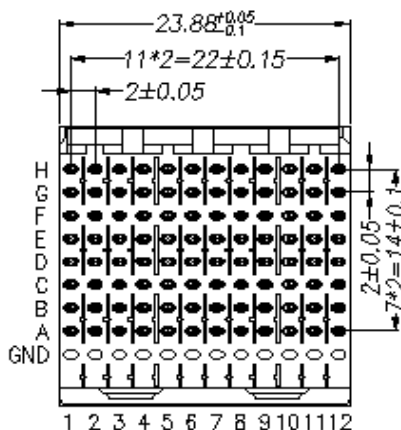
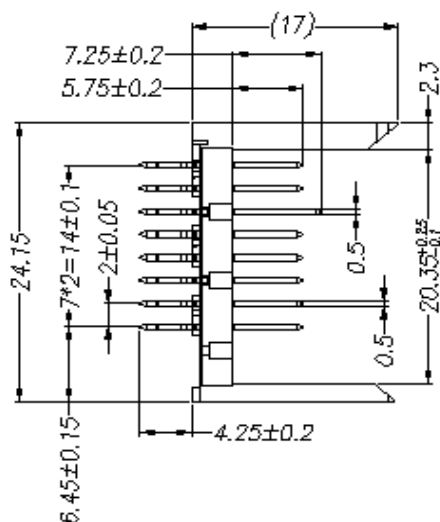
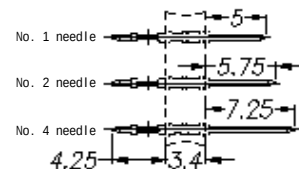
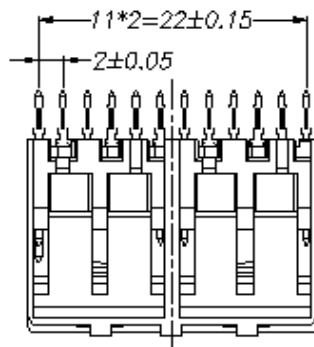


Socket, pin, straight

96 core



(Product model: HLHMIMH096001)



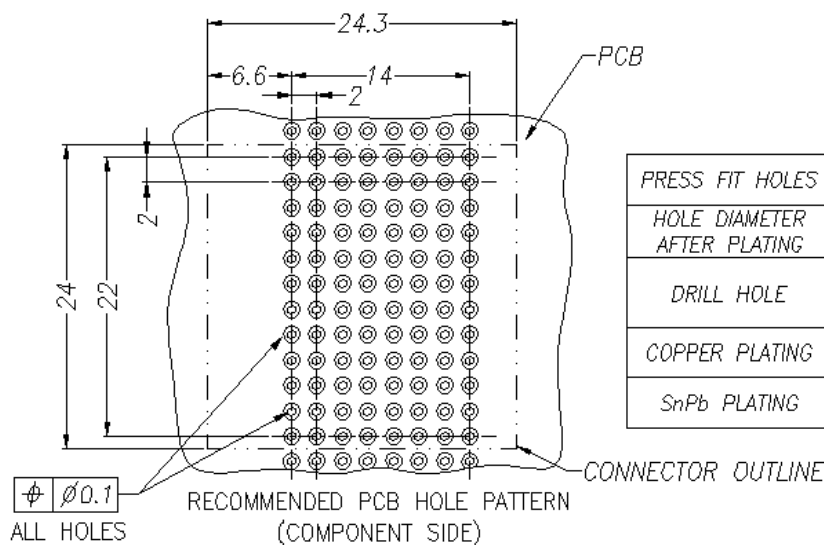
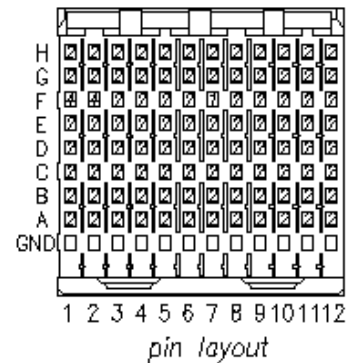
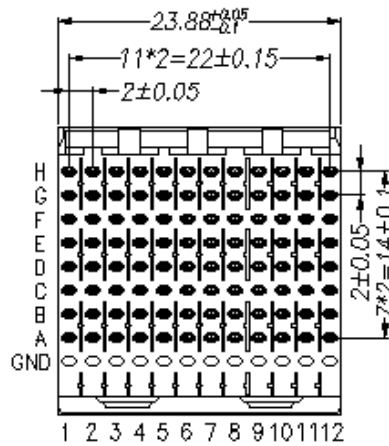
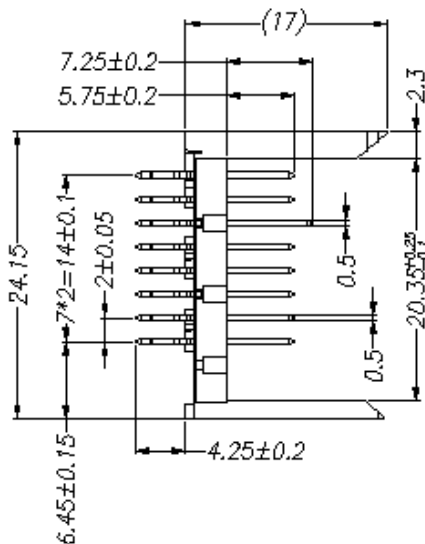
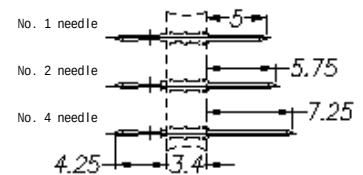
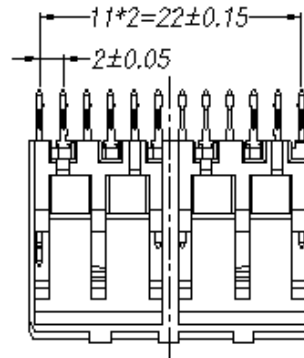
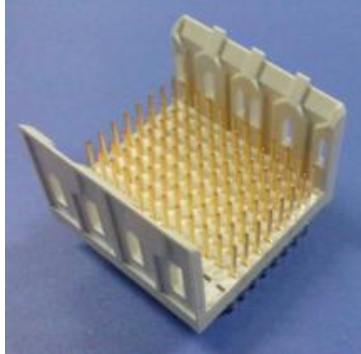
PRESS FIT HOLES	OPTION 1
HOLE DIAMETER AFTER PLATING	Ø0.85-0.80
DRILL HOLE	Ø0.81-0.86 (Ø0.85 DRILL)
COPPER PLATING	0.025 MIN
SnPb PLATING	0.005-0.015

Recommended PCB hole size





(Product model: HLHMIMH096002)



PRESS FIT HOLES	OPTION 1
HOLE DIAMETER AFTER PLATING	Ø0.85-0.80
DRILL HOLE	Ø0.81-0.86 (Ø0.85 DRILL)
COPPER PLATING	0.025 MIN
SnPb PLATING	0.005-0.015

Recommended PCB hole size

Note: We can install different types of needles in different positions according to customers' requirements.



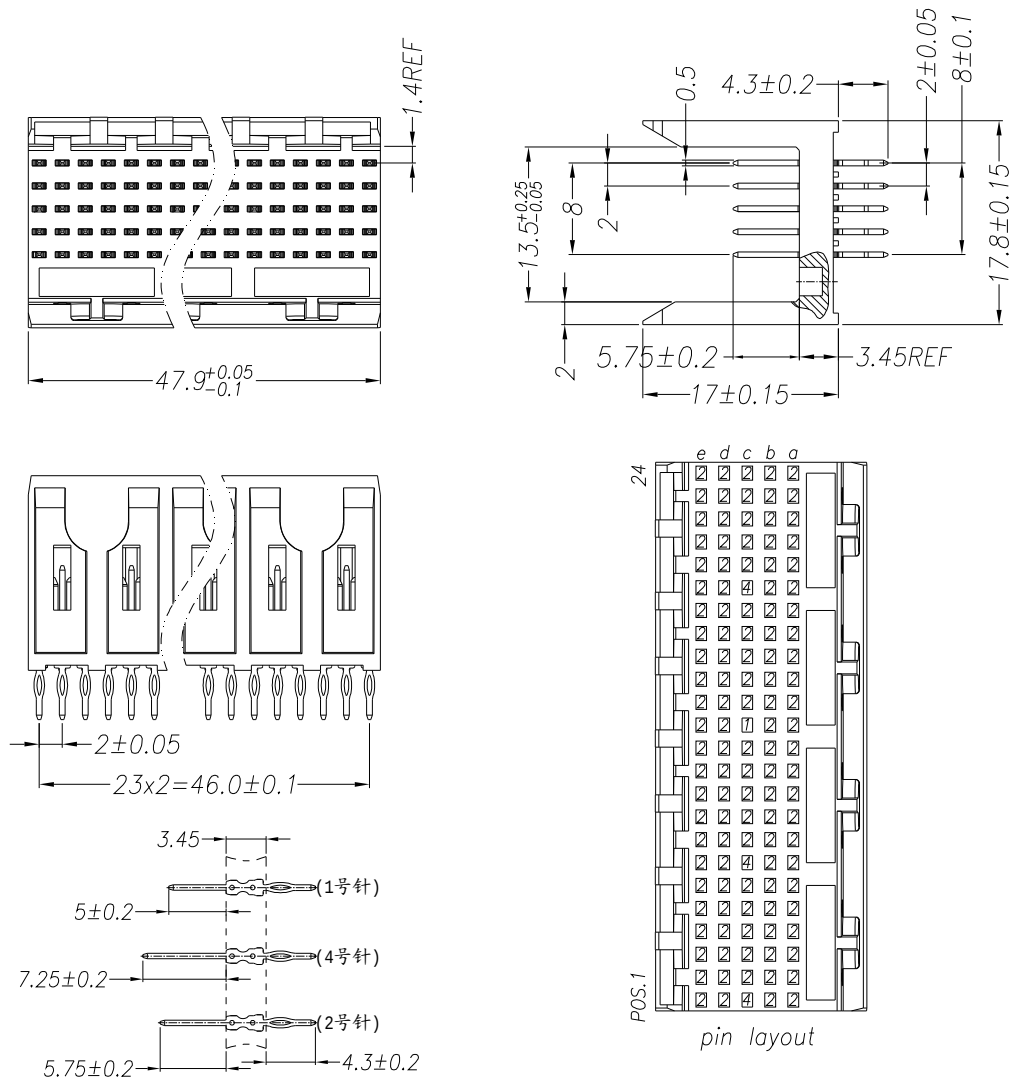


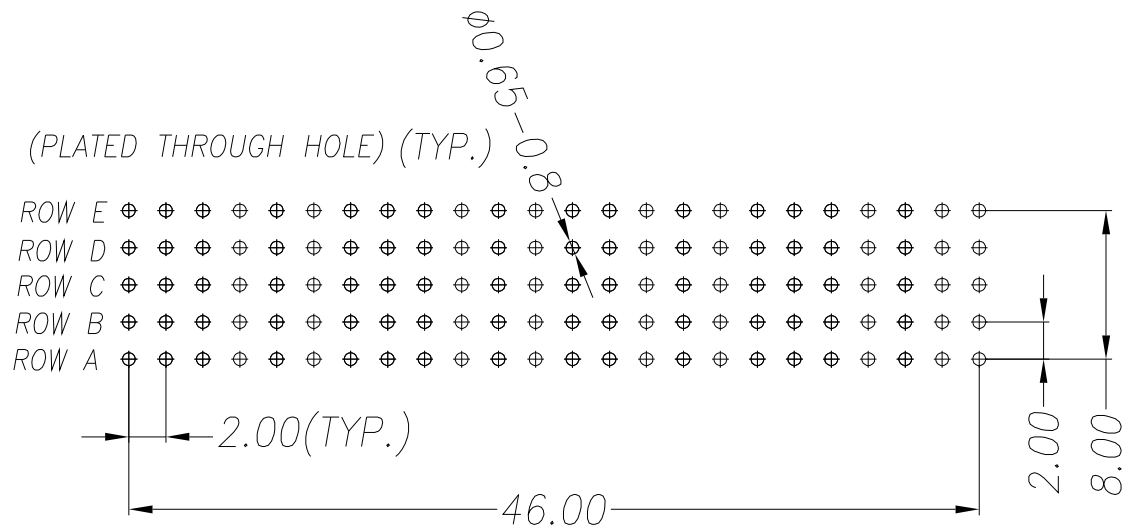
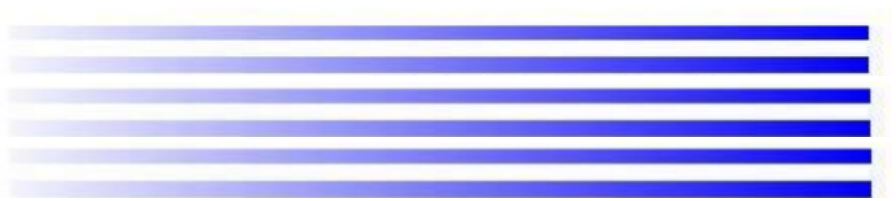
2.28 I generation 120 core

Socket, pin, straight

120 core

(Product model: HLHMIM120002)





RECOMMENDED PCB LAYOUT
(COMPONENT SIDE)

Recommended PCB hole size

Note: We can install different types of needles in different positions according to customers' requirements.



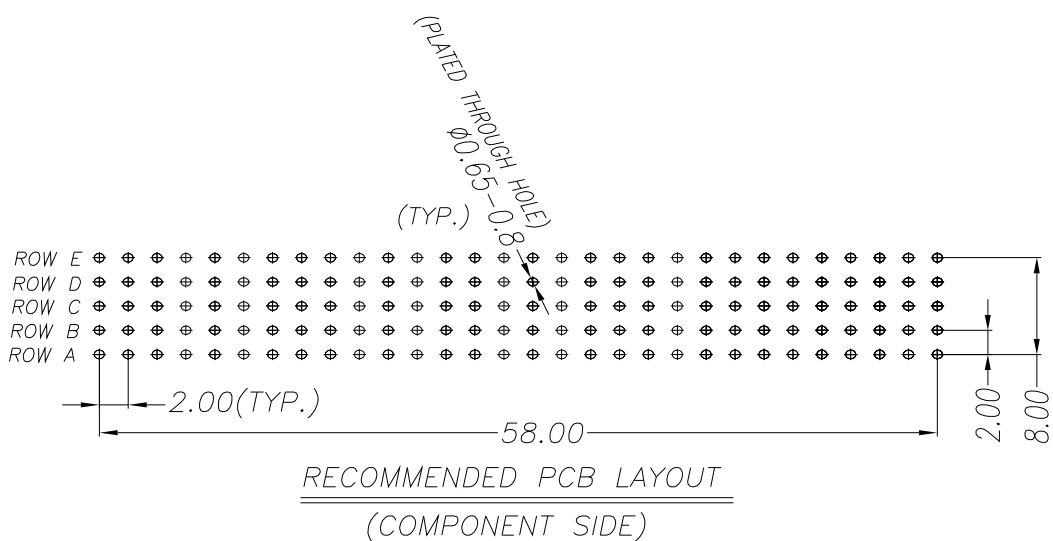
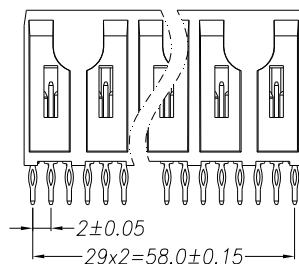
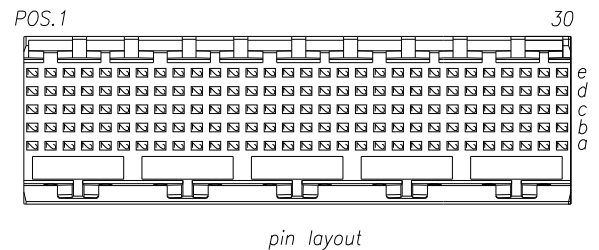
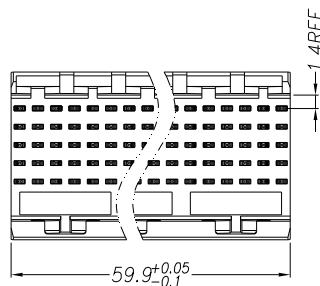
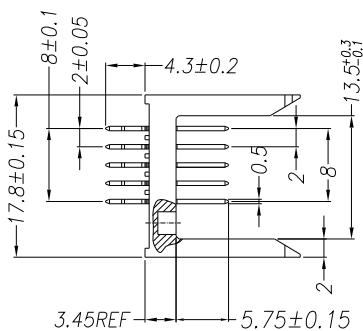
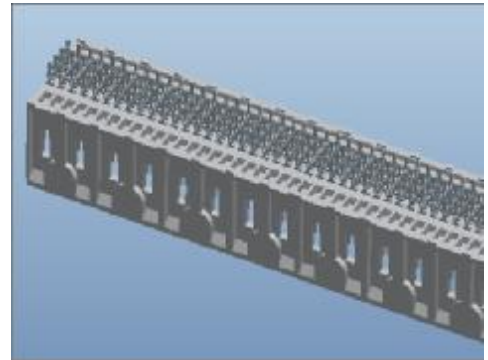


2.29 I Generation 150 core

Socket, pin, straight

150 core

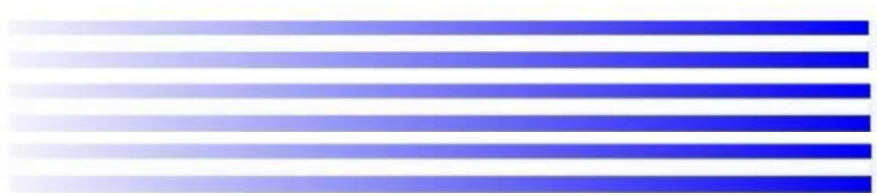
(Product model: HLHMIM150001)



Recommended PCB hole size

Note: We can install different models in different locations according to customers' requirements



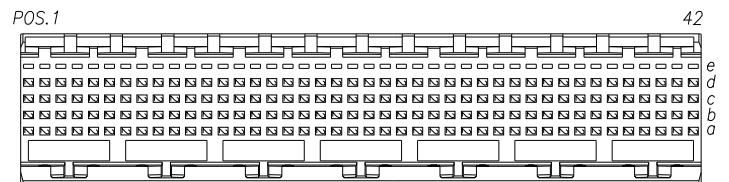
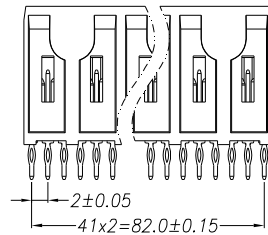
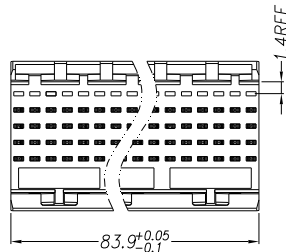
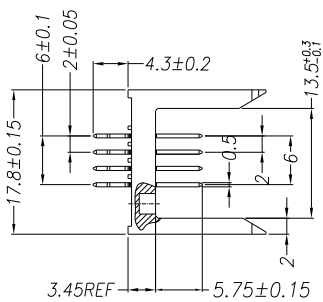


2.30 I generation 210 core

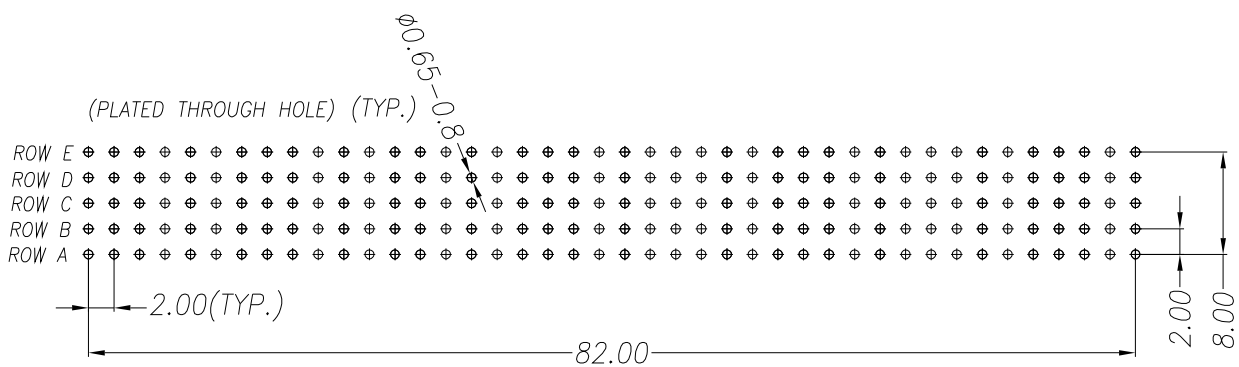
Socket, pin, straight

210 core

(Product model: HLHMIM210001)



pin layout



RECOMMENDED PCB LAYOUT
(COMPONENT SIDE)

Recommended PCB hole size



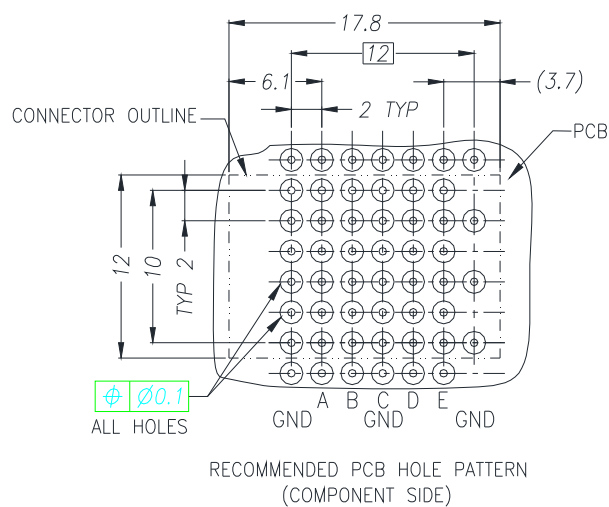
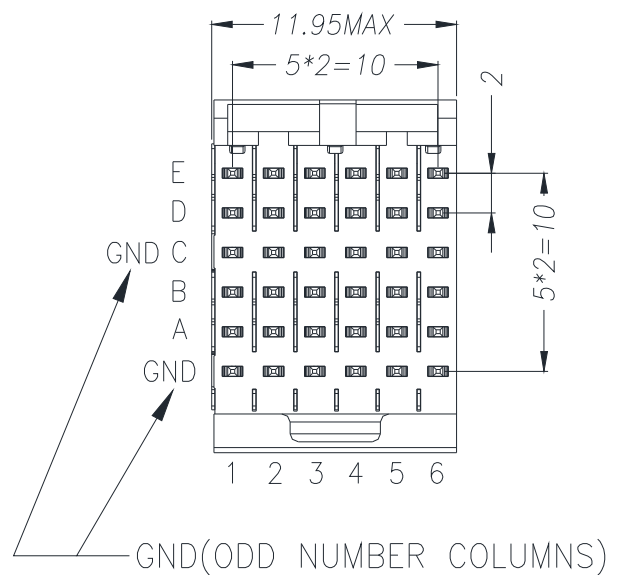
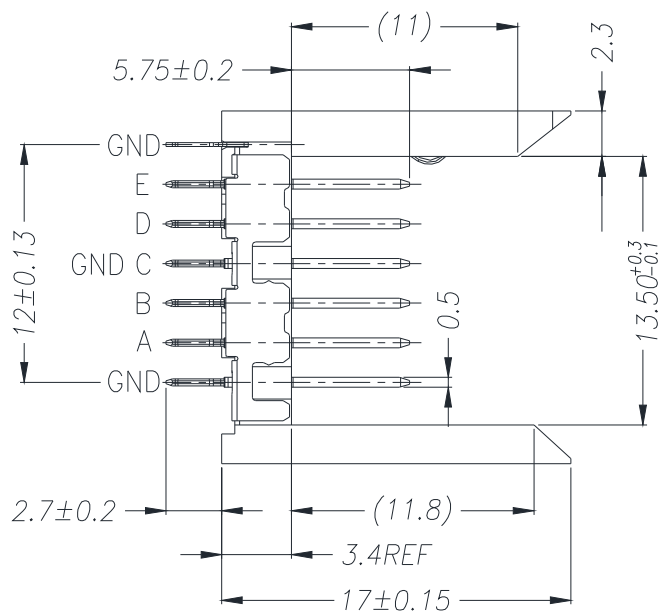


2.31 I generation 36 core

Socket, pin, straight

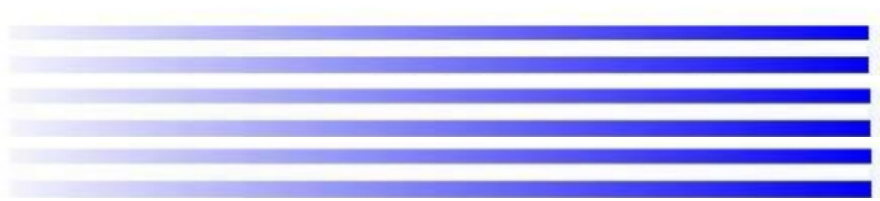
36 core

(Product model: HLHMIMH036P001)



Recommended PCB hole size





(Product model: HLHMIFH030P001)

