



## 6 Contact Row High Density LRM Signal Connectors

- Chevron-pattern six row contact arrangement, 1.905 mm center-to-center contact spacing in each row and 1.905 row-to-row spacing.
- 0.6 mm nominal pin DIA contact size; 150, 200, 300, 450 and 198 + (30 coax) contact positions, dip solder and SMT soldering contact termination types.
- Metal shelled, modular design. High shock and vibration proof (no micro interruptions - test: 2ns).
- Conforms to MIL-DTL-55302 general requirements.
- For civil/military airborne applications.

### Technical Characteristics

MATERIAL		
Body Pin Contacts Socket contacts  SMT termination Hardware Shells	PPS Type GST-40F Copper-alloy Copper-alloy Beryllium-copper alloy Flex-circuit PPS type GPT-30 Alluminium alloy	MIL-M-24519 ASTM B16 ASTM B16 ASTM B196 MIL-P-50884 MIL-M-24519 ASTM-B-209
FINISHES		
Contacts SMT termination Shells	Gold Tin-lead plating Electroless nickel	ASTM-B-488 SAE AMS-P-81728 MIL-C-26074
MECHANICAL		
Mating/Unmating force Contact life	70g/contact 30.000 insertion	MIL-STD-1344 MIL-STD-1344
MECHANICAL		
Current rating <sup>(1)</sup> Contact resistance SMT terminal resistance Dielectric withstanding voltage  Insulation resistance Capacitance	2.0 A 10.0 mΩ 30.0 mΩ 1000 VRMS (sea level) 250 VRMS (70.000 feet) ≥ 5000 MΩ at 500 VDC ≥ 1.5 pF contact to contact	IEC 512/3 MIL-STD-1344 MIL-STD-1344 MIL-STD-1344  MIL-STD-1344 MIL-STD-1344
PHYSICAL AND ENVIROMENTAL		
Shock Vibration Operating range	Method 2004, condition G Method 2005, condition III -65 °C +150 °C	MIL-STD-1344 MIL-STD-1344 -

<sup>(1)</sup> Current rating of the contacts equipped with flex circuit termination shall be as per the requirements of MIL-P-50884 (MIL-STD-2118) for cross section 0.01 mmq

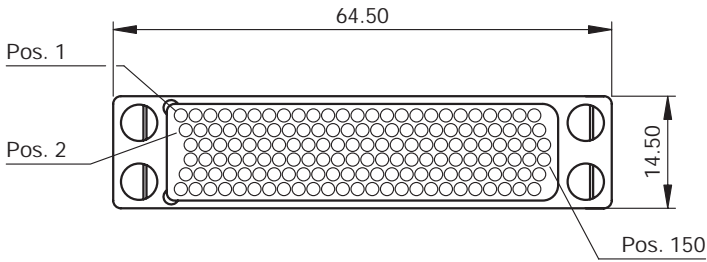
### Ordering Information

C9394 connectors are a LRM (in Line Replaceable Module) modular family. In the next pages the available versions with their relevant order reference are shown. In case of special requests, contact the factory and

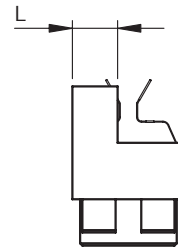
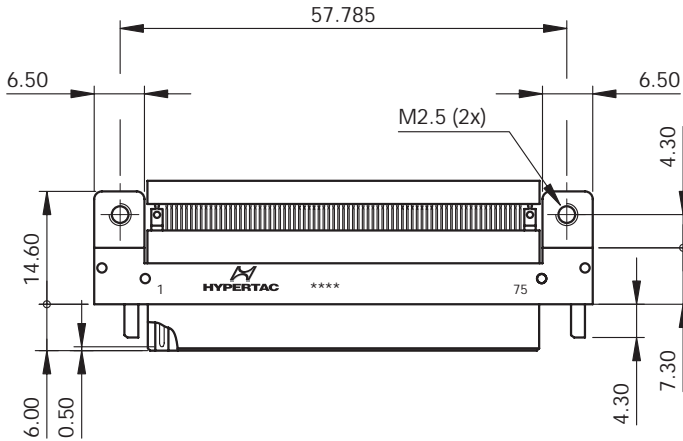
communicate the following information:

- number of bay
- type of contact terminal
- thickness of board (for SMT soldering terminal)
- type of hardware code

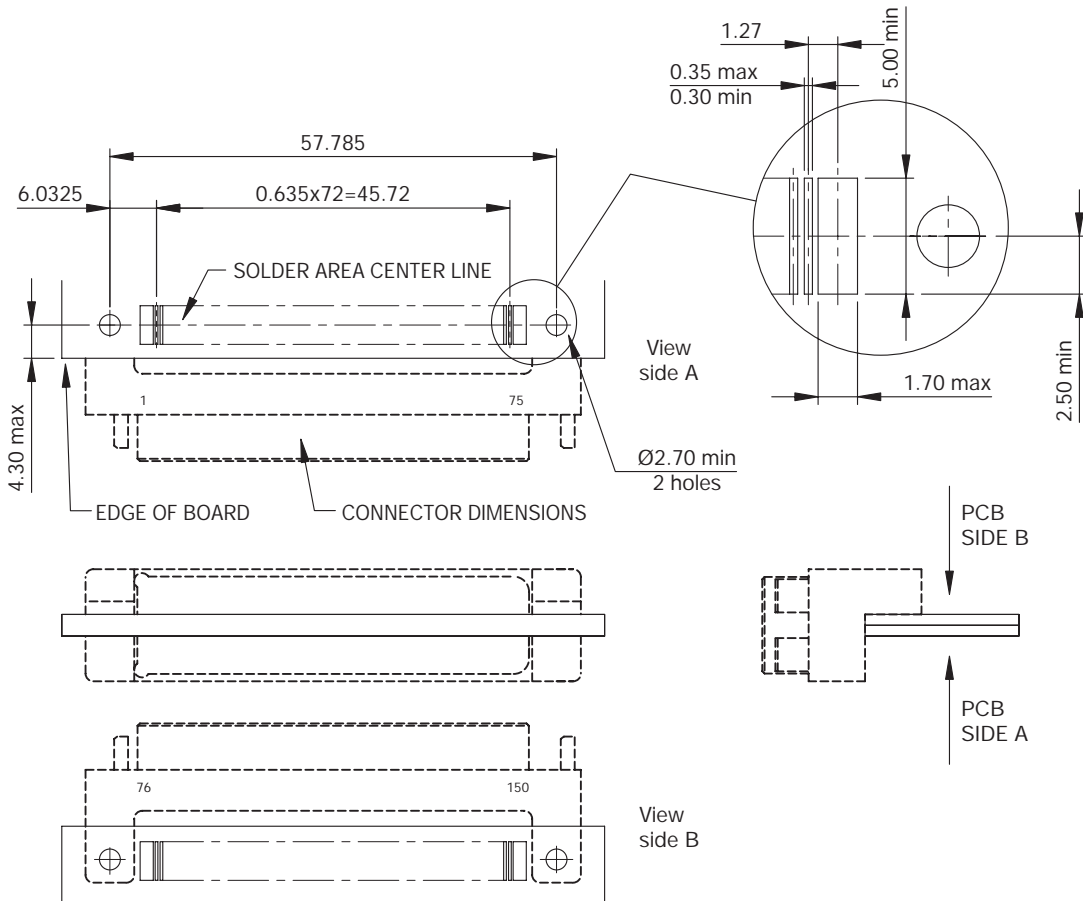
Plug connector, 150 contact positions,  
surface mount tail contact termination style



- Pcb 1.30÷2.30 L=6.35 Ref. ord. C9394/18034
- Pcb 2.30÷3.25 L=5.85 Ref. ord. C9394/16691
- Pcb 3.25÷4.20 L=5.35 Ref. ord. C9394/18035
- Pcb 4.00÷5.00 L=5.00 Ref. ord. C9394/18036
- Pcb 4.60÷5.80 L=4.65 Ref. ord. C9394/18037



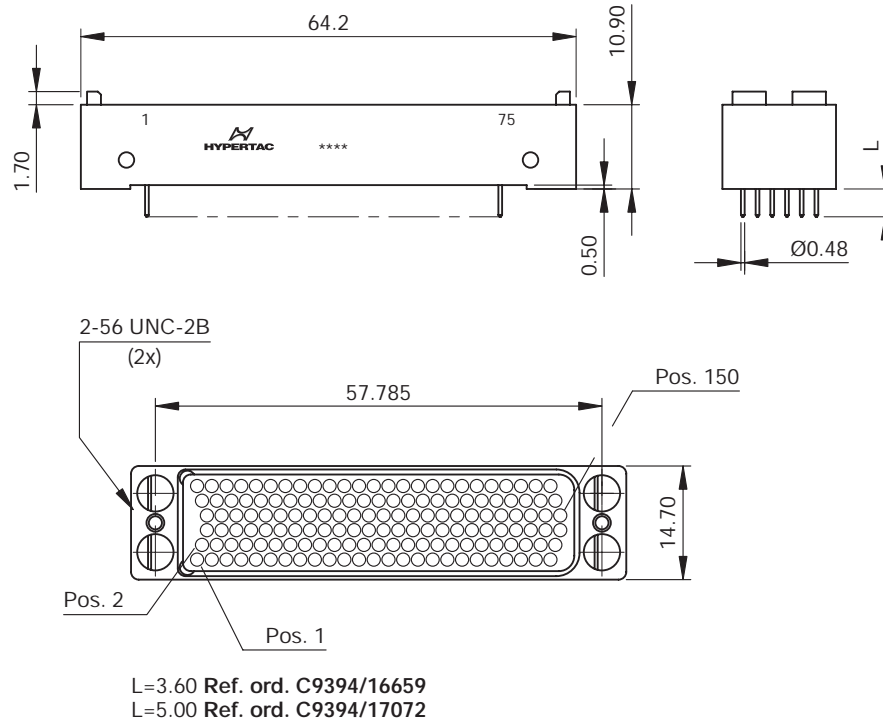
Plug connector, 150 pin contacts, surface mount tail termination style, board package thickness from 1.30 to 5.80



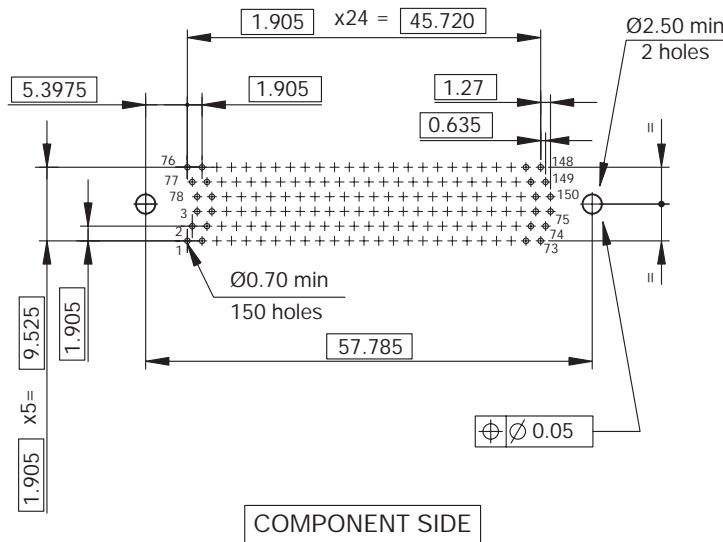
Mounting pattern, daughterboard application

Dimensions are in mm

Receptacle connector, 150 contact positions, dip solder termination style

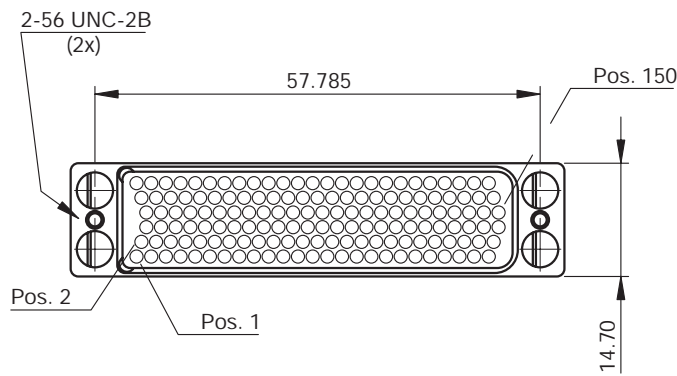
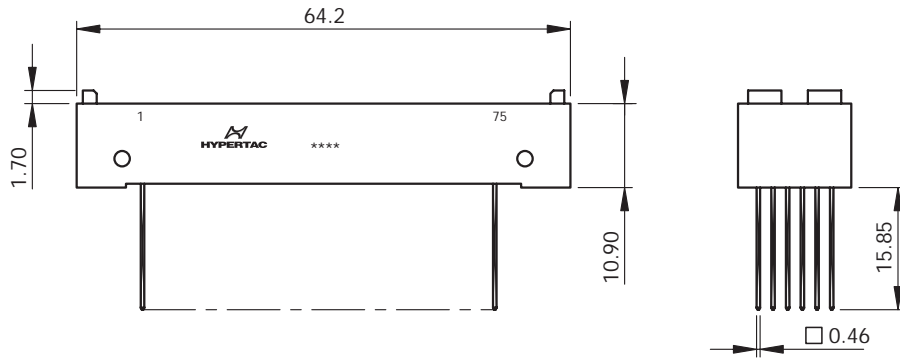


Receptacle connector, 150 socket contacts, dip solder (straight) contact termination style

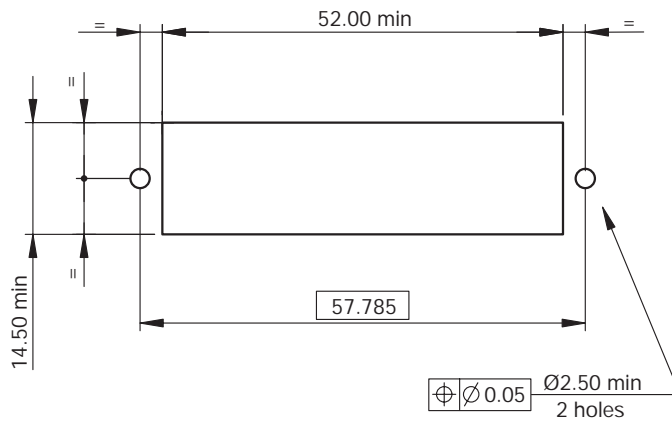


Mounting pattern, motherboard application

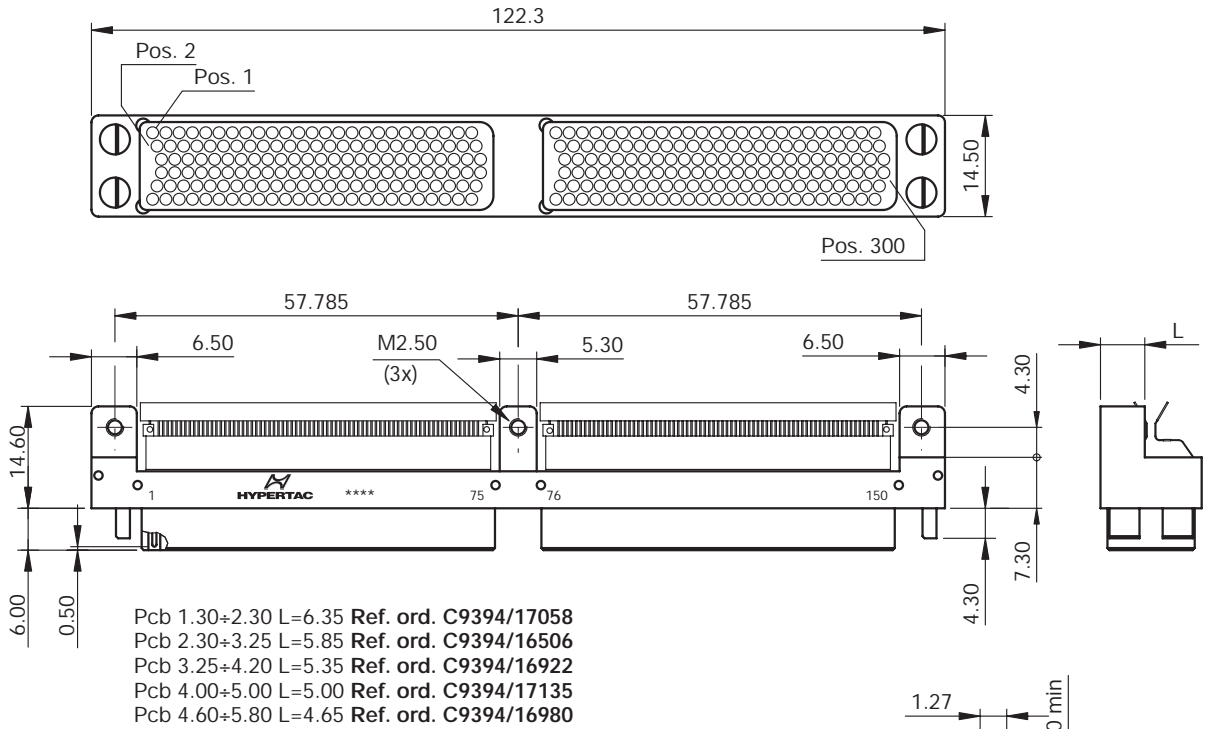
Receptacle connector, 150 contact positions,  
wire wrappost termination style



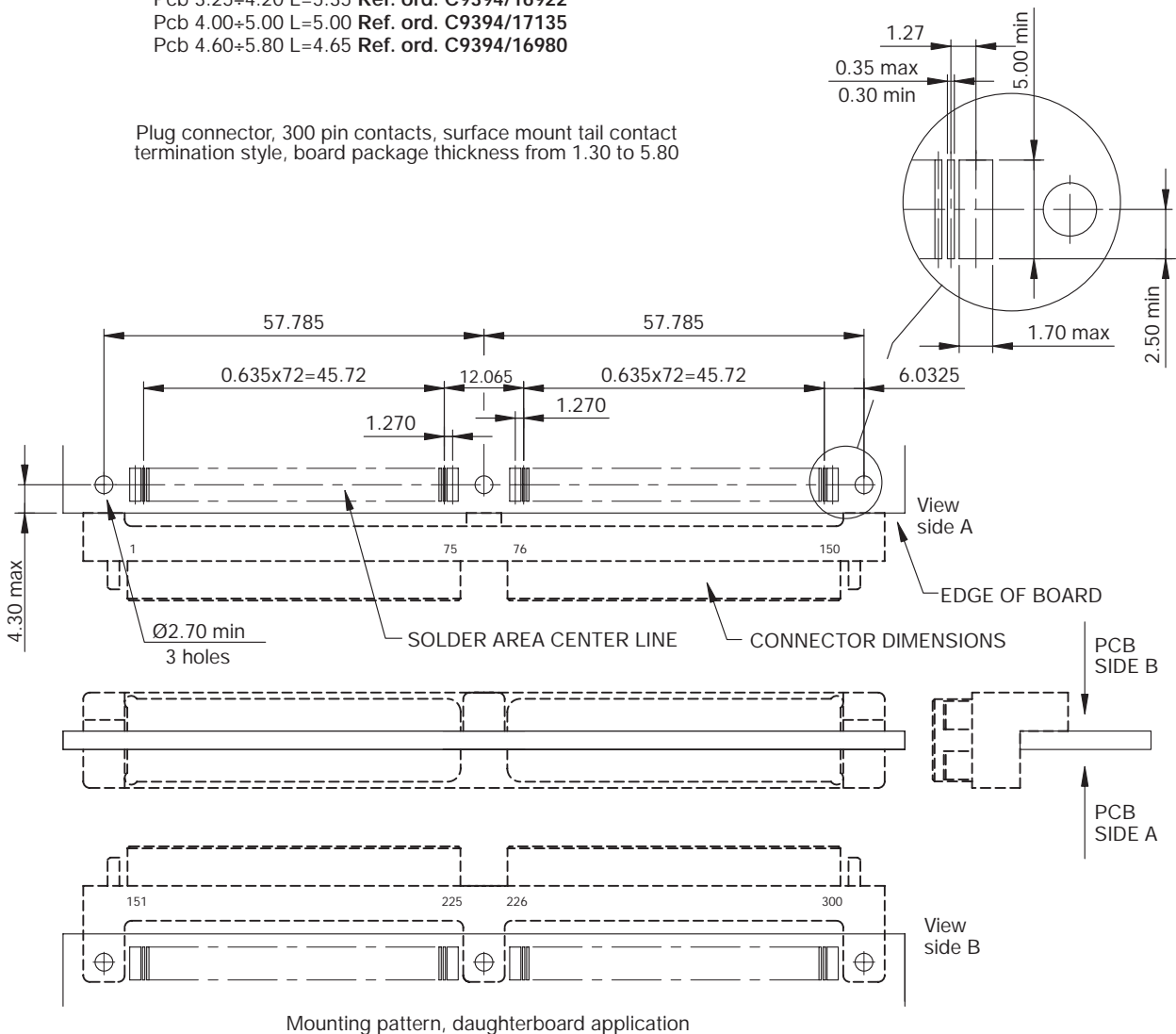
Connector receptacle, 150 socket contacts, wire wrappost contact termination style



Plug connector, 300 contact positions, surface mount tail termination style

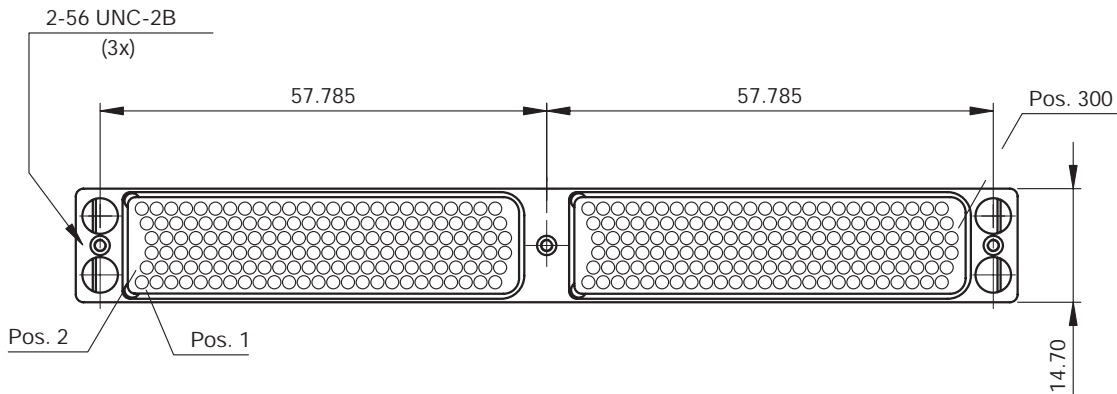
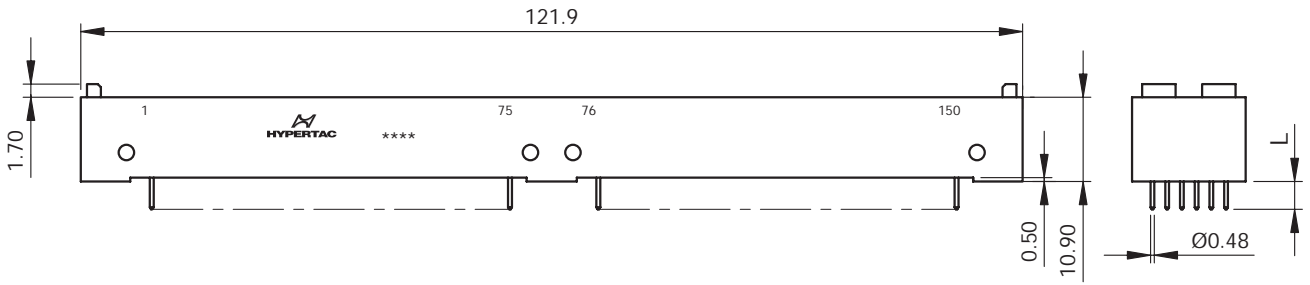


Plug connector, 300 pin contacts, surface mount tail contact termination style, board package thickness from 1.30 to 5.80



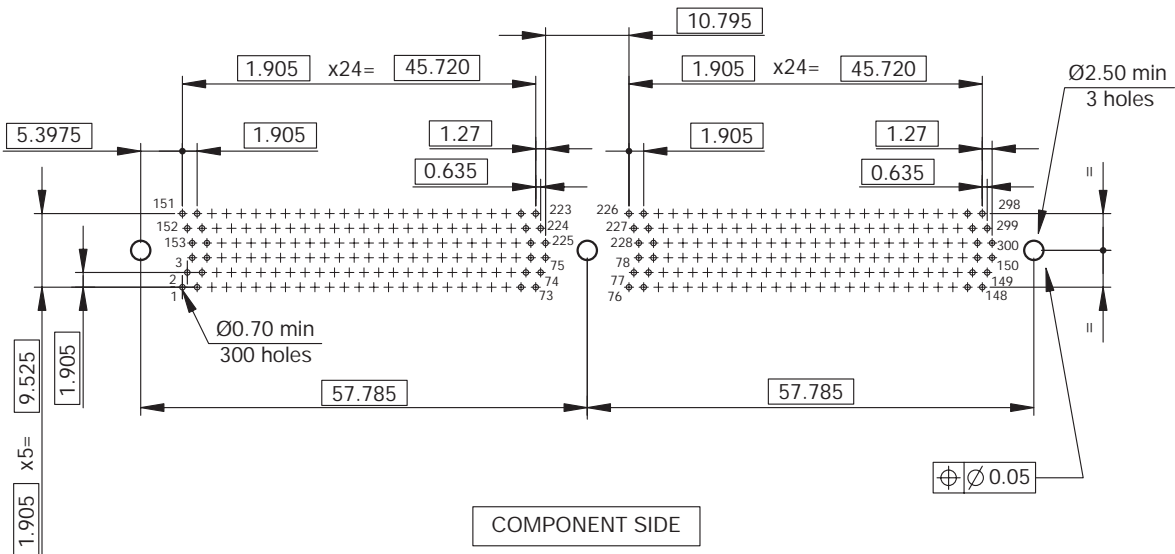
Dimensions are in mm

Receptacle connector, 300 contact positions, dip solder termination style



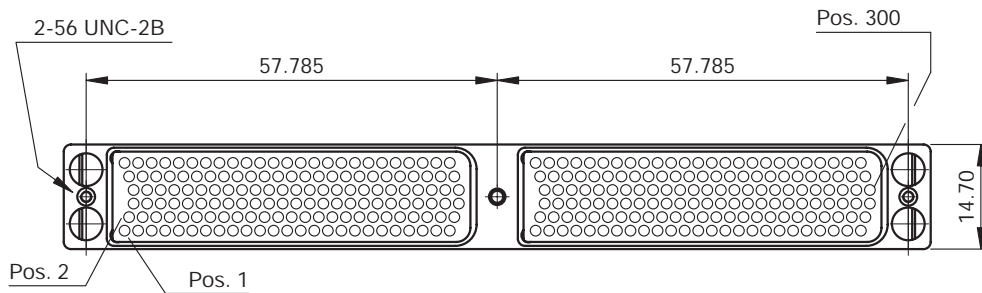
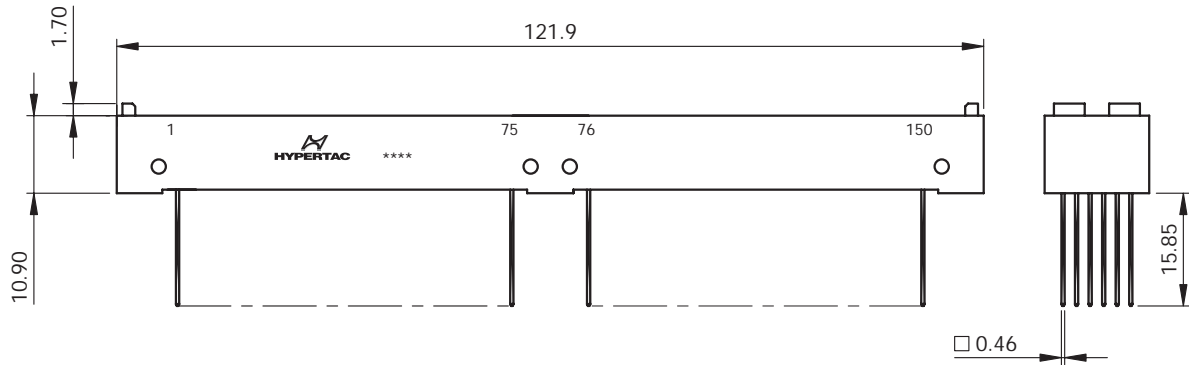
L=3.60 Ref. ord. C9394/16505  
L=5.00 Ref. ord. C9394/16929

Receptacle connector, 300 socket contacts, dip solder (straight) contact termination style



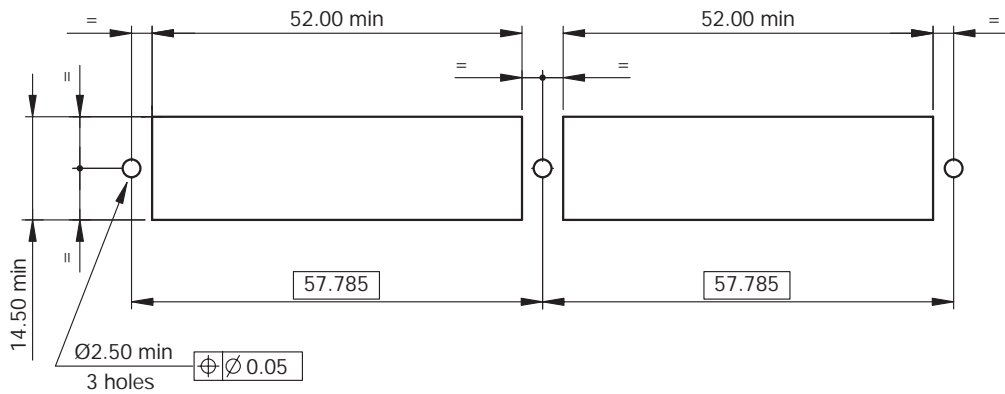
Mounting pattern, motherboard application

Receptacle connector, 300 contact positions, wire wrappost termination style



Ref. ord. C9394/16912

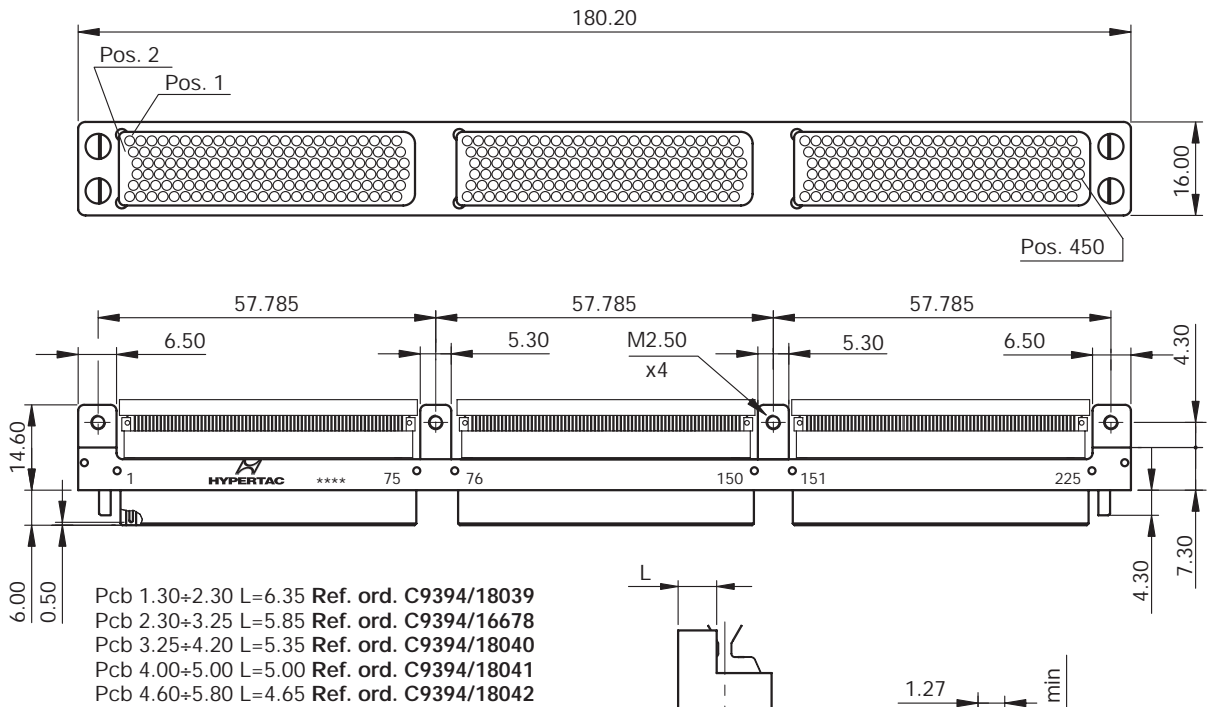
Receptacle connector, 300 socket contacts, wire wrappost contact termination style



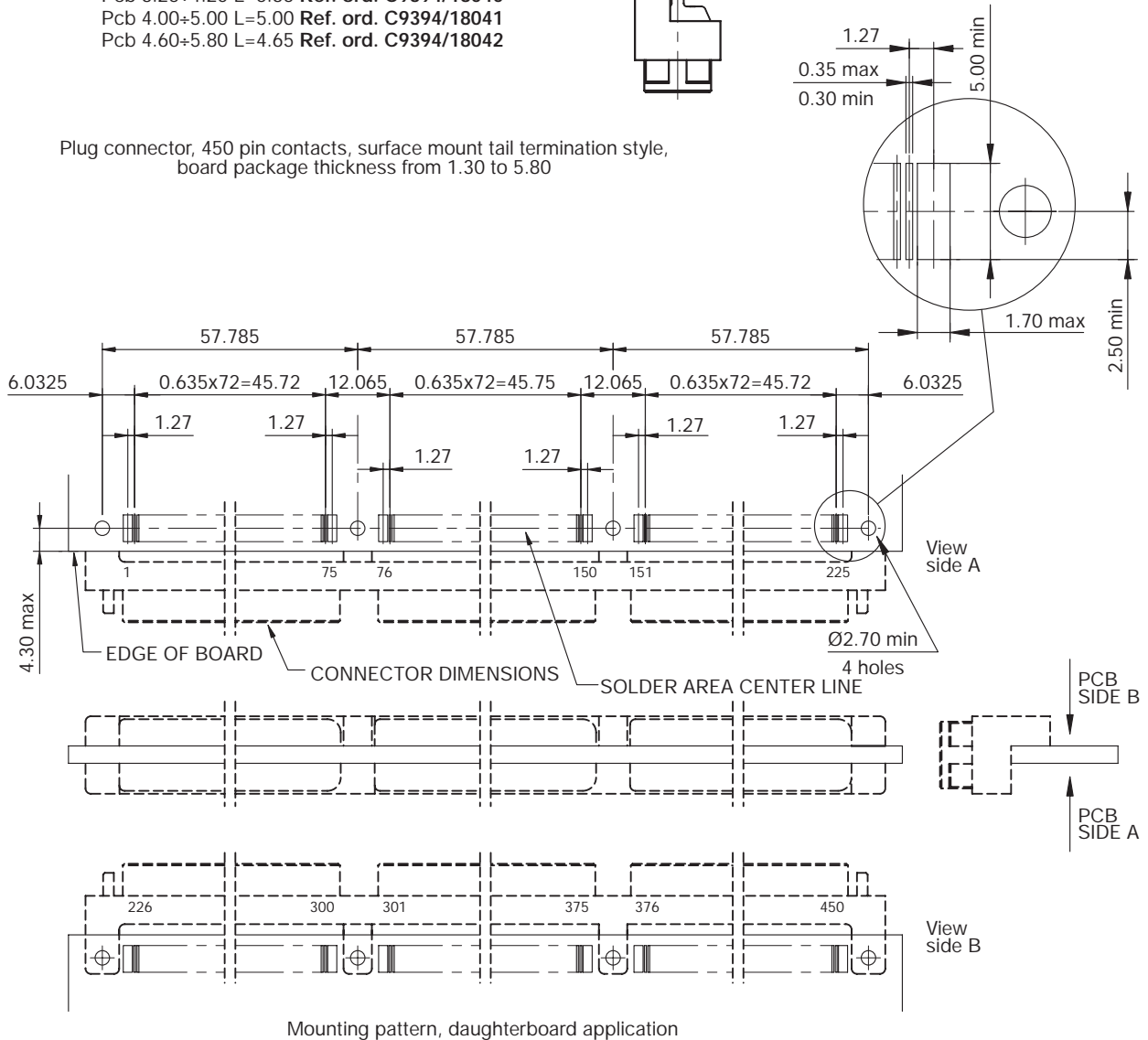
Panel cut-out

Dimensions are in mm

Plug connector, 450 contact positions, surface mount tail termination style

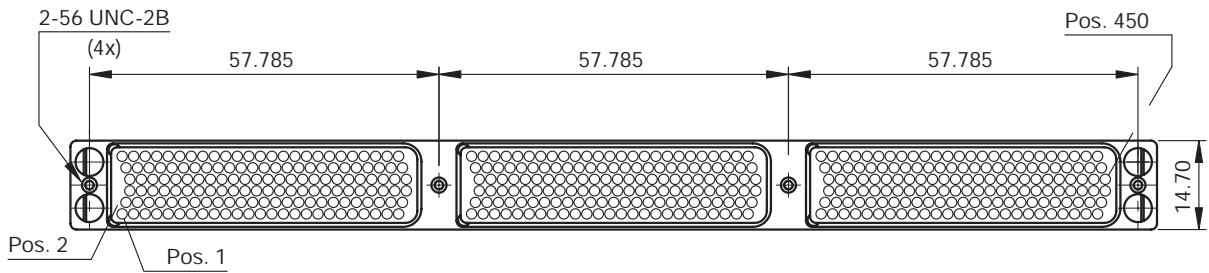
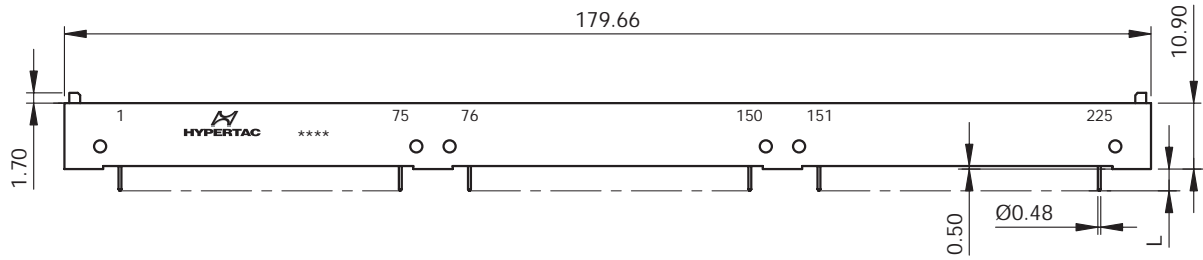


Plug connector, 450 pin contacts, surface mount tail termination style, board package thickness from 1.30 to 5.80



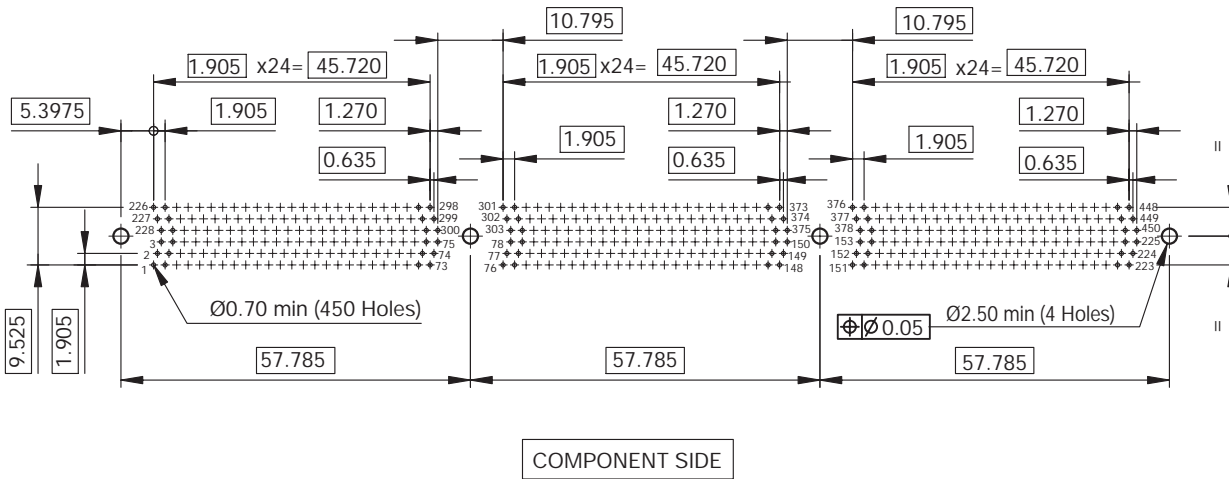


Receptacle connector, 450 contact positions, dip solder termination style



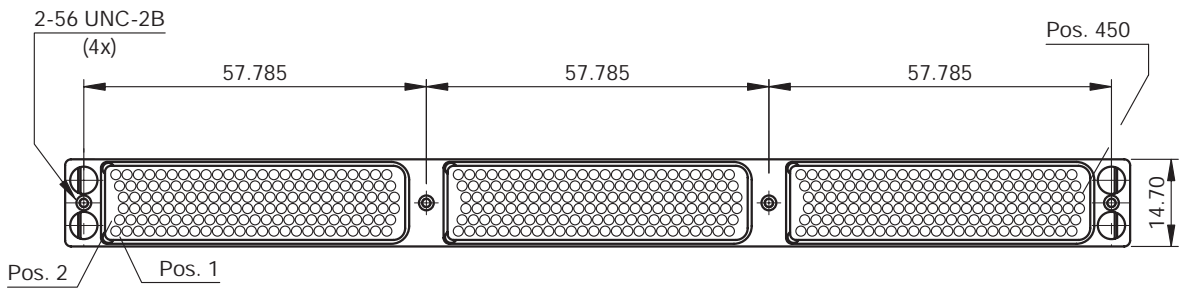
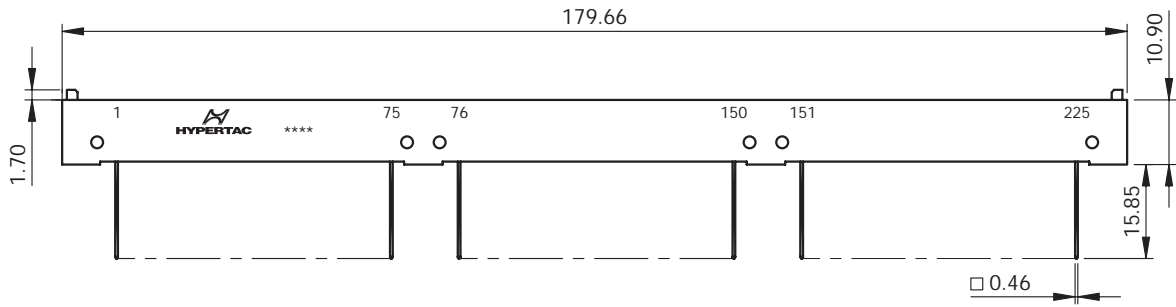
L=3.60 Ref. ord. C9394/16677  
 L=5.00 Ref. ord. C9394/17075

Receptacle connector, 450 socket contacts, dip solder (straight) contact termination style



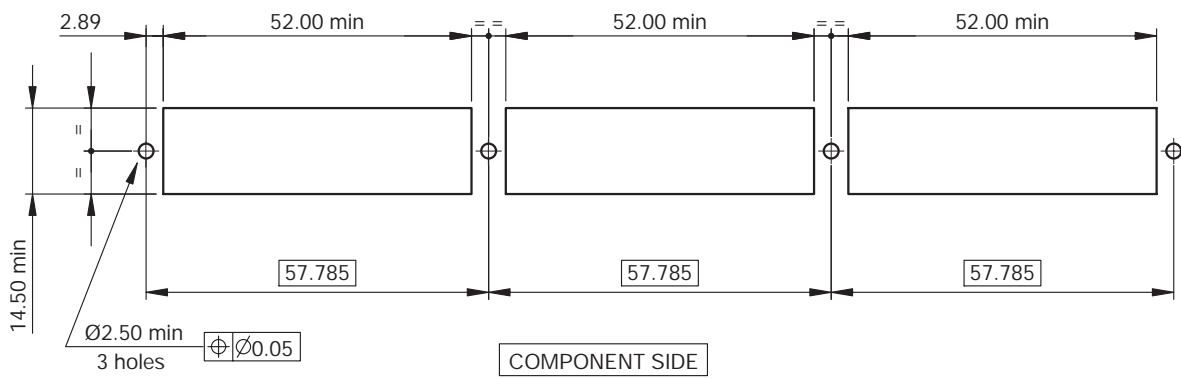
Mounting pattern, motherboard application

Receptacle connector, 450 contact positions,  
wire wrappost termination style



Ref. ord. C9394/17076

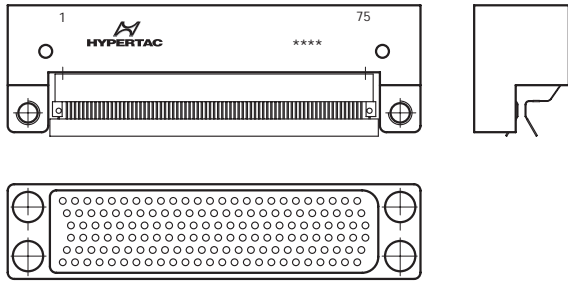
Receptacle connector, 450 socket contacts, wire wrappost contact termination style



Panel cut-out

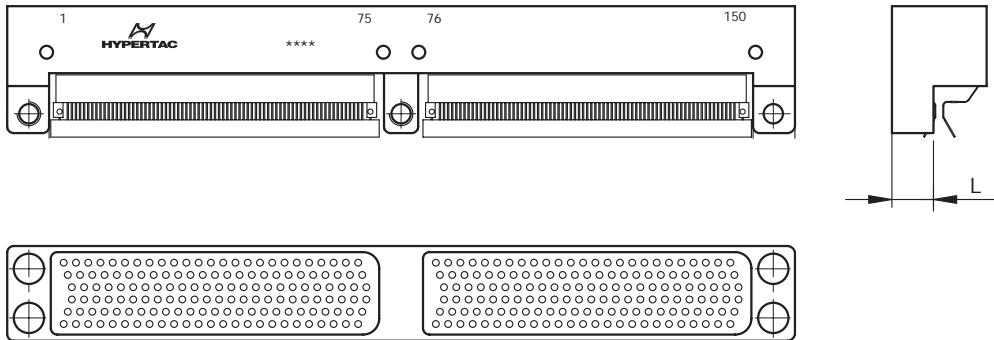
### Extender board connectors

The following connectors are shipped without coding keys hardware



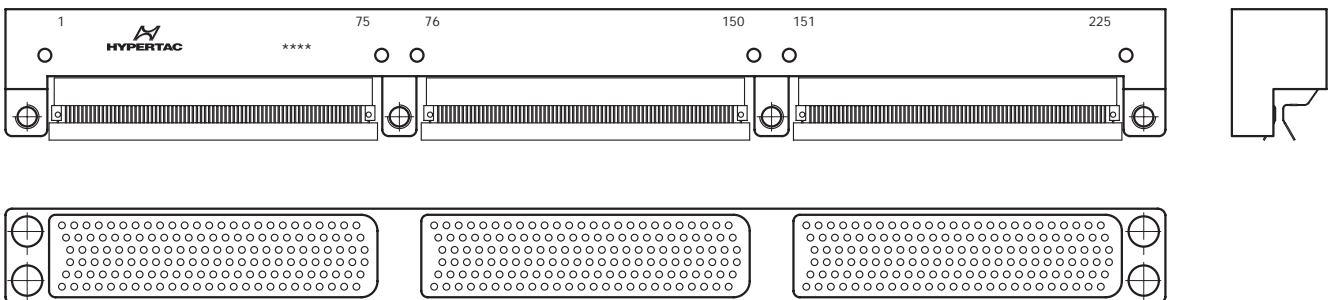
Pcb thickness 1.30+2.30 L=**pdp** Ref. ord. ASK FACTORY  
 Pcb thickness 2.30+3.25 L=**pdp** Ref. ord. ASK FACTORY  
 Pcb thickness 3.25+4.20 L=**pdp** Ref. ord. ASK FACTORY  
 Pcb thickness 4.00+5.00 L=**pdp** Ref. ord. ASK FACTORY  
 Pcb thickness 4.60+5.80 L=**pdp** Ref. ord. ASK FACTORY

Receptacle connector, 150 socket contacts, surface mount tail termination style, board package thickness from 1.30 to 5.80



Pcb thickness 1.30+2.30 L=6,45 Ref. ord. C9394/18510  
 Pcb thickness 2.30+3.25 L=**pdp** Ref. ord. ASK FACTORY  
 Pcb thickness 3.25+4.20 L=**pdp** Ref. ord. ASK FACTORY  
 Pcb thickness 4.00+5.00 L=**pdp** Ref. ord. ASK FACTORY  
 Pcb thickness 4.60+5.80 L=**pdp** Ref. ord. ASK FACTORY

Receptacle connector, 300 socket contacts, surface mount tail termination style, board package thickness from 1.30 to 5.80



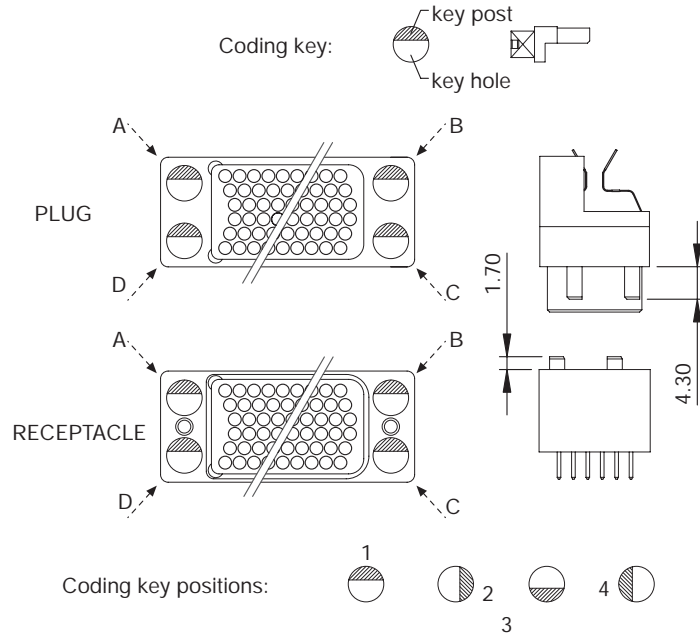
Pcb thickness 1.30+2.30 L=**pdp** Ref. ord. ASK FACTORY  
 Pcb thickness 2.30+3.25 L=**pdp** Ref. ord. ASK FACTORY  
 Pcb thickness 3.25+4.20 L=**pdp** Ref. ord. ASK FACTORY  
 Pcb thickness 4.00+5.00 L=**pdp** Ref. ord. ASK FACTORY  
 Pcb thickness 4.60+5.80 L=**pdp** Ref. ord. ASK FACTORY

Receptacle connector, 450 socket contacts, surface mount tail termination style, board package thickness from 1.30 to 5.80

Dimensions are in mm

### Standard hardware code

Coding keys are supplied together with the connector, but as unassembled kit consisting in 4 coding keys plus 1 coding key as spare part.



PLUG CONNECTOR				
N° polarization	A KEY	B KEY	C KEY	D KEY
00	Without coding keys			
01	1	1	1	1
02	1	1	2	2
03	1	1	3	3
04	1	1	4	4
05	1	2	1	2
06	1	2	2	1
07	1	3	1	3
08	1	3	3	1
09	1	4	1	4
10	1	4	4	1
11	2	1	1	2
12	2	1	2	1
13	2	2	1	1
14	2	2	2	2
15	2	2	3	3
16	2	2	4	4
17	2	3	2	3
18	2	3	3	2
19	2	4	2	4
20	2	4	4	2
21	3	1	1	3
22	3	1	3	1
23	3	2	2	3
24	3	2	3	2
25	3	3	1	1
26	3	3	2	2
27	3	3	3	3
28	3	3	4	4
29	3	4	3	4
30	3	4	4	3
31	4	1	1	4
32	4	1	4	1
33	4	2	2	4
34	4	2	4	2
35	4	3	3	4
36	4	3	4	3
37	4	4	1	1
38	4	4	2	2
39	4	4	3	3
40	4	4	4	4

Mates with

RECEPTACLE CONNECTOR				
N° polarization	A KEY	B KEY	C KEY	D KEY
00	Without coding keys			
01	1	1	1	1
02	4	4	1	1
03	3	3	1	1
04	2	2	1	1
05	4	1	4	1
06	1	4	4	1
07	3	1	3	1
08	1	3	3	1
09	2	1	2	1
10	1	2	2	1
11	4	1	1	4
12	1	4	1	4
13	1	1	4	4
14	4	4	4	4
15	3	3	4	4
16	2	2	4	4
17	3	4	3	4
18	4	3	3	4
19	2	4	2	4
20	4	2	2	4
21	3	1	1	3
22	1	3	1	3
23	3	4	4	3
24	4	3	4	3
25	1	1	3	3
26	4	4	3	3
27	3	3	3	3
28	2	2	3	3
29	2	3	2	3
30	3	2	2	3
31	2	1	1	2
32	1	2	1	2
33	2	4	4	2
34	4	2	4	2
35	2	3	3	2
36	3	2	3	2
37	1	1	2	2
38	4	4	2	2
39	3	3	2	2
40	2	2	2	2

Custom connectors

Custom connectors are available with the following modules. Please consult the factory for details

Contact Position	Connector Style/ Manufacture	Contact Terminal Types available are:			
		Dip Solder Straight-Thru	Surface Mount Tail	Wire Wrap Post	
132	PLUG (Moulded)		YES	YES	NO
	RECEPTACLE (Moulded)				
150	PLUG (Moulded)		YES	YES	NO
	RECEPTACLE (Moulded)				
198	PLUG (Moulded)		YES	YES	NO
	RECEPTACLE (Machined)				

Dimensions are in mm

### Custom connectors

Custom connectors are available with the following modules. Please consult the factory for details

Contact Position	Connector Style/ Manufacture		Contact Terminal Types available are:	
15	PLUG Machined		<p>They can be supplied with proper shielded, co-axial (conforming to UTE C93-569 model KM X3) databus, fiber optic ecc. Contact or terminus cavities and suitable their layout (please consult the factory for specific user needs)</p> <p>The contact must be ordered separate</p>	
	RECEPTACLE Machined			
4	PLUG Machined			<p>Dielectric inserts with 4 triaxial size 10 contact cavities</p> <p>The contact must be ordered separate</p>
	RECEPTACLE Machined			
6	PLUG Machined		<p>Dielectric inserts with 6 triaxial size 12 contact cavities</p> <p>The contact must be ordered separate</p>	
	RECEPTACLE Machined			

Dimensions are in mm