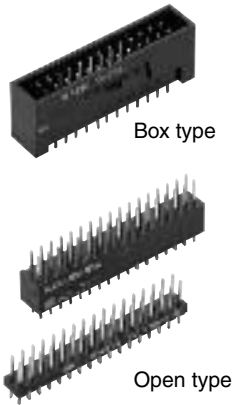


NAIS

FOR PC BOARD TO PC BOARD
FOR PC BOARD TO WIRE
FOR PC BOARD TO FLAT CABLE

LOW-PROFILE HEADERS (AXL2)



FEATURES

- 1. Simple lock mechanism provided.**
A simple lock mechanism is used for Box type. It can be used where there is light vibration or shock. Also, the socket is a one-touch insertion and removal type.
- 2. Incorrect insertion prevention mechanism is provided.**
With the box type, prevention against incorrect insertion is provided.
- 3. Flux tight type is available for open type**

- 4. Variety of combination possible.**
Box types can be used with MIL type sockets and Open types can be combined with BB (AXB) sockets.

APPLICATIONS

- Communication equipment
- Measuring equipment
- Factory automation equipment



SPECIFICATIONS

1. Characteristics

Item	Specifications		Condition
	Box type, Open type (height: 7.4mm)	Open type (height: 2.54mm)	
Electrical characteristics	Rated current	2A	
	Rated voltage	250V AC	
	Breakdown voltage	1,000V AC for 1 min.	
	Insulation resistance	Min. 1,000MΩ	
	Contact resistance	Max. 20mΩ	
Mechanical characteristics	Post holding force	Min. 19.6N {2kgf}	Min. 9.81N {1kgf}
	Insertion and removal life	500 times	
Ambient temperature	-55°C to +105°C		No freezing at low temperature

2. Materials and surface treatment

Part name	Material	Surface treatment
Molded parts	Glass reinforced PBT (UL94V-0)	—
Post	Copper alloy	Contact portion: Au plating over Ni Terminal portion: Sn plating over Ni

PRODUCT TYPES

1. Box type

No. of contact	Terminal shape	Angle	Straight
10		AXL210211	AXL210201
14		AXL214211	AXL214201
16		AXL216211	AXL216201
20		AXL220211	AXL220201
26		AXL226211	AXL226201
30		AXL230211	AXL230201
34		AXL234211	AXL234201
40		AXL240211	AXL240201
50		AXL250211	AXL250201

- Notes) 1. Try packaging: Outer carton 200 pcs.
 2. For available foreign standard product, refer to "STANDARDS CHART" on the end of catalog.
 Special order
 - With polarity slot
 - With polarity incorrect insertion prevention projection

2. Open type

No. of contact	Terminal shape	Height 7.4mm		Height 2.54mm
		Angle	Straight	Straight
10		AXL210911	AXL210901	AXL210801
14		AXL214911	AXL214901	AXL214801
16		AXL216911	AXL216901	AXL216801
20		AXL220911	AXL220901	AXL220801
26		AXL226911	AXL226901	AXL226801
30		AXL230911	AXL230901	AXL230801
34		AXL234911	AXL234901	AXL234801
40		AXL240911	AXL240901	AXL240801
50		AXL250911	AXL250901	AXL250801
60		—	—	AXL260801
64		—	—	AXL264801

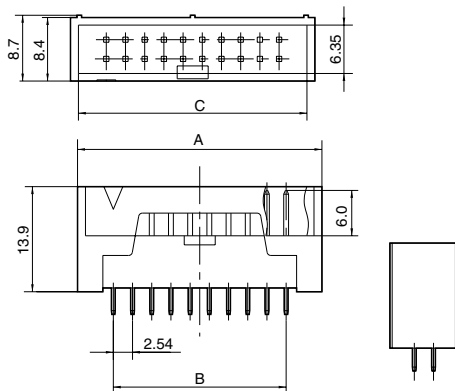
- Notes) 1. Try packaging: Outer carton 200 pcs.
 2. For available foreign standard product, refer to "STANDARDS CHART" on the end of catalog.
 Special order
 - In addition to standard number of contacts, 6 to 62 contacts compatibility is possible.

AXL(2)

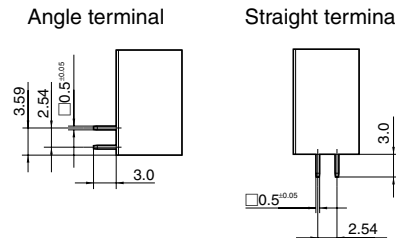
DIMENSIONS

mm General tolerance: ± 0.3

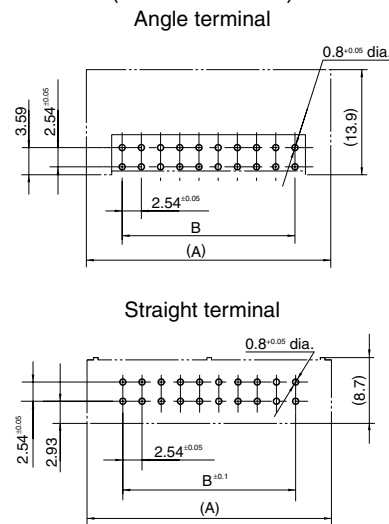
• Box type



Terminal dimensions



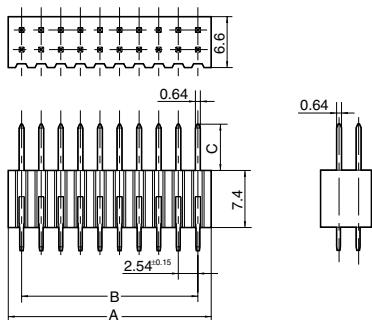
Recommended PC board pattern (BOTTOM VIEW)



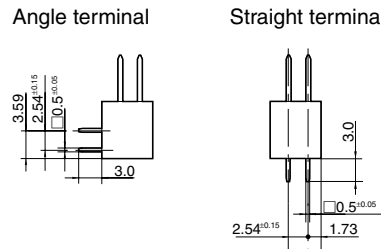
Dimension table (mm)

No. of contacts	A	B	C
10	19.6	10.16	17.53
14	24.7	15.24	22.61
16	27.3	17.78	25.15
20	32.3	22.86	30.23
26	40.0	30.48	37.85
30	45.0	35.56	42.93
34	50.1	40.64	48.01
40	57.7	48.26	55.63
50	70.4	60.96	68.33

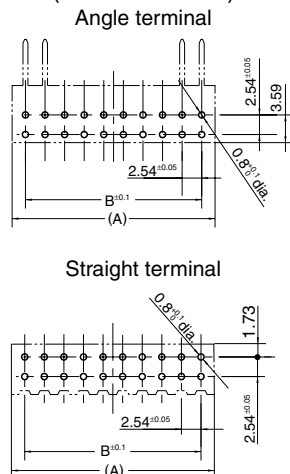
• Open type (Height: 7.4mm)



Terminal dimensions



Recommended PC board pattern (BOTTOM VIEW)



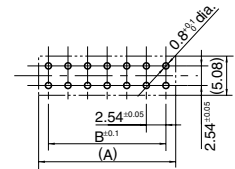
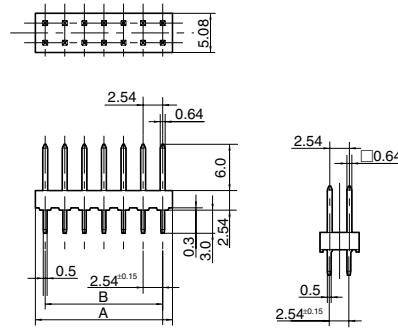
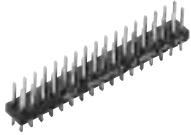
Dimension table (mm)

No. of contacts	A	B	C
10	13.6	10.16	6.0
14	18.6	15.24	
16	21.2	17.78	
20	26.3	22.86	
26	33.9	30.48	
30	39.0	35.56	
34	44.0	40.64	
40	51.7	48.26	
50	64.4	60.96	

• Open type (Height: 2.54mm)

mm General tolerance: ±0.3

Recommended PC board pattern
(Bottom view)

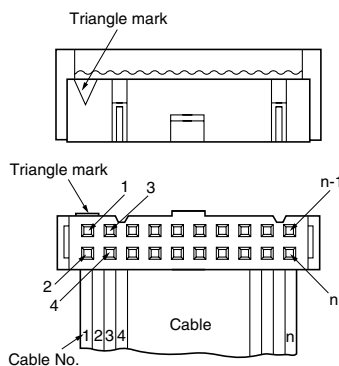


Dimension table (mm)

No. of contacts	A	B
10	12.7	10.16
14	17.78	15.24
16	20.32	17.78
20	25.4	22.86
26	33.02	30.48
30	38.1	35.56
34	43.18	40.64
40	50.8	48.26
50	63.5	60.96
60	76.2	73.66
64	81.28	78.74

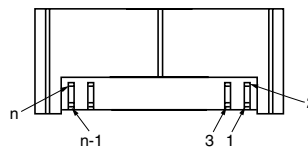
CABLE NO. AND TERMINAL CORRELATION DRAWING

When this low-profile header is fixed with MIL type socket, the header terminal positions and the corresponding cable numbers are shown in the drawing below.

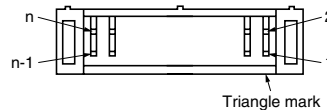


1. Box type

Angle terminal

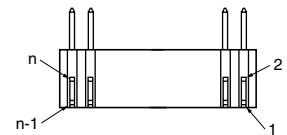


Straight terminal

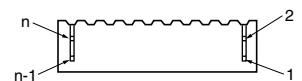


2. Open type

Angle terminal



Straight terminal



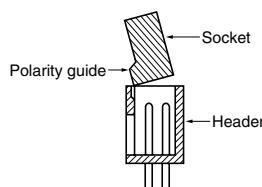
NOTES

1. Regarding socket insertion and removal

The low profile type header does not have a lever mechanism for removal of the header. The socket should be grasped with the hand for insertion and removal. In case that MIL type or wire-press socket are inserted to box type header with Min. 50 contacts, there will be a little difficulty in insertion.

This is because the polarity guide is a little higher for the protection of reverse insertion.

Please refer to the following illustration for smooth inserting.



2. Regarding soldering

Soldering should be carried out under the conditions given below.

260°C: Within 10 seconds

300°C: Within 5 seconds

350°C: Within 3 seconds

3. Regarding handling of terminals

Care should be taken in the handling of the terminals because repeated bending can lead to damage.

4. Regarding the environment for use

Header selection can be made from the table right for use under external mechanical vibration or shock, or for use where there is dust or other adverse environment.

Header type	Use environment	Vibration, shock		Dust
		Occasionally	Normally	
Low-profile header	Box type	Good	Not good	Good
	Open type	Not good	Not good	Not good
MIL header	Long lever	Good	Good	Good
	Short lever	Good	Not good	Good

Vibration: approx. 9.8m/s² {1G}/10 to 150Hz

Shock: approx. 49m/s² {5G}

6. Vibration and shock

When Low-profile headers are used together with MIL type sockets or BB sockets, there is a possibility of socket removal if they are used where always shock or vibration is applied. So care for lock mechanism or no shock application should be taken.