



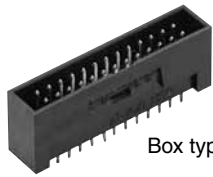
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# Panasonic

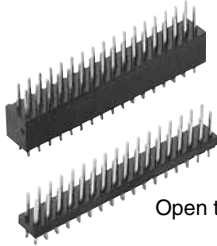
ideas for life

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

## LOW-PROFILE HEADERS (AXL2)



Box type



Open type

### 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. 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

Compliance with RoHS Directive

## ORDERING INFORMATION

AXL 2 [ ] [ ] [ ] [ ] 1

2: Low-profile headers (Header)

<No. of contacts (2 digits)>

10: 10 contacts	14: 14 contacts	16: 16 contacts
20: 20 contacts	26: 26 contacts	30: 30 contacts
34: 34 contacts	40: 40 contacts	50: 50 contacts
60: 60 contacts	64: 64 contacts	

<Header shape>

2: Box type  
8: Open type, height: 2.54 mm  
9: Open type, height: 7.4 mm

<Type>

0: Straight  
1: Angle

<Surface treatment (Contact portion/Terminal portion)>

1: Au plating/Sn plating

## SPECIFICATIONS

### 1. Characteristics

Item	Specifications		Condition
	Box type, Open type (height: 7.4mm)	Open type (height: 2.54mm)	
Electrical characteristics	2 A		
	When the header is connected to our wire-press socket, the rated current varies depending on the wire used as shown below. (AWG#22/#24: 3 A, AWG#26: 2 A, AWG#28: 1 A)		
	250V AC		
	Rated voltage		
	1,000V AC for 1 min.		Detection current: 1mA
	Min. 1,000MΩ		at 500V DC
	Max. 20mΩ		MIL type socket or BB socket are mated, measured based on the HP4338B measurement method of JIS C 5402
Mechanical characteristics	Post holding force	Min. 19.6N {2kgf}      Min. 9.81N {1kgf}	By pulling post until coming off
	Insertion and removal life	500 times However, life of the simple lock is 10 times.	
Ambient temperature	-55°C to +105°C		



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AXL(2)

## 2. Materials and surface treatment

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

## 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

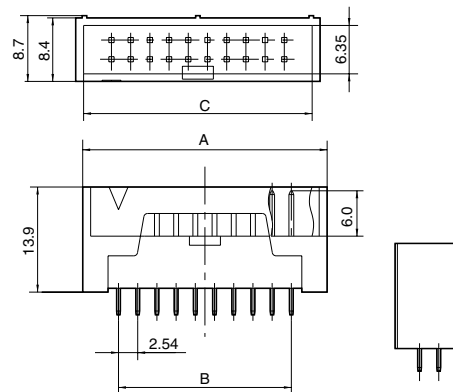
- Notes) 1. Try packaging: Outer carton 200 pcs.  
2. For available foreign standard product, refer to "STANDARDS CHART" on the end of catalog.

## DIMENSIONS (Unit: mm)

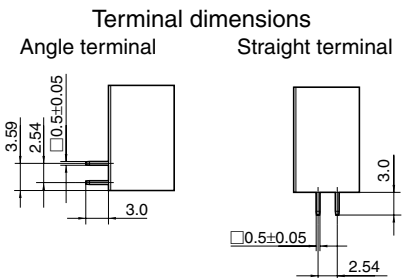
The CAD data of the products with a **CAD Data** mark can be downloaded from: <http://panasonic-electric-works.net/ac>

### • Box type

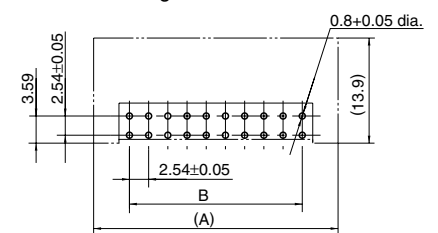
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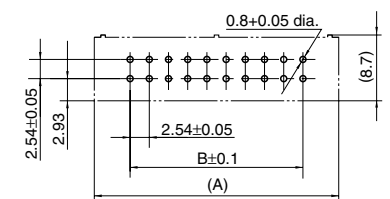
General tolerance:  $\pm 0.3$



### Recommended PC board pattern (BOTTOM VIEW)



### Straight terminal



### 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

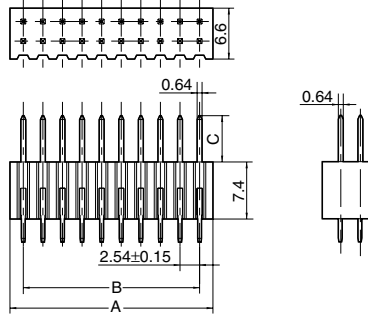
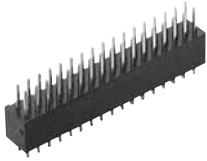
# AXL(2)



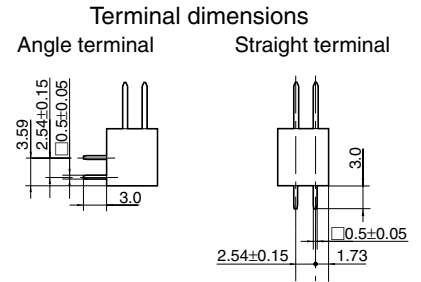
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• Open type (Height: 7.4mm)

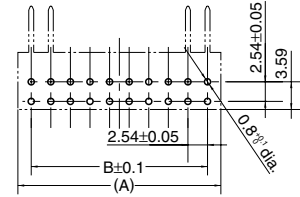
**CAD Data**



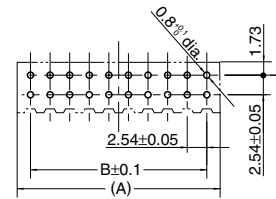
General tolerance:  $\pm 0.3$



Recommended PC board pattern  
(BOTTOM VIEW)  
Angle terminal



Straight terminal

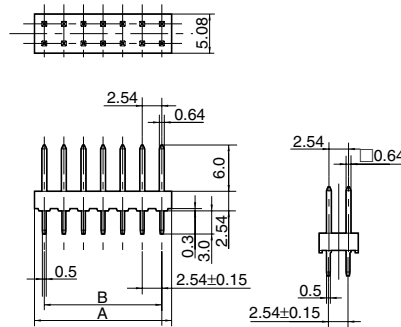
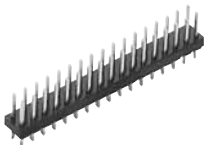


Dimension table (mm)

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	

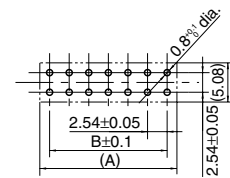
• Open type (Height: 2.54mm)

**CAD Data**



General tolerance:  $\pm 0.3$

Recommended PC board pattern  
(Bottom view)



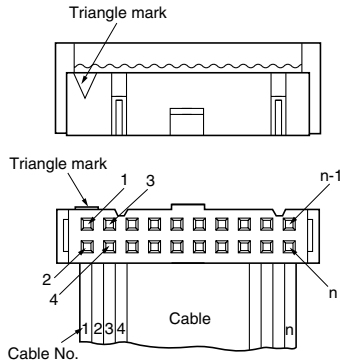
Dimension table (mm)

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

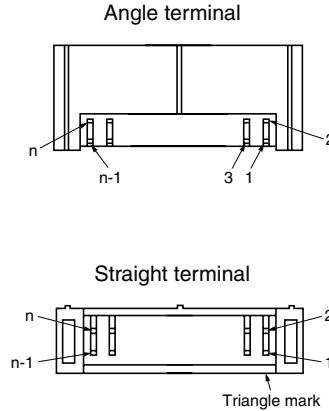


# CABLE NO. AND TERMINAL CORRELATION DRAWING

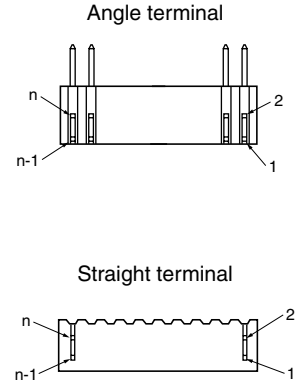
When this low-profile header is fixed with MIL type socket, the header terminal positions and the corresponding cable numbers are shown in the drawing below.



## 1. Box type



## 2. Open type



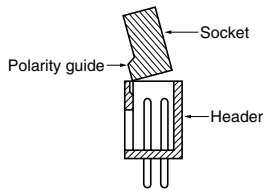
## NOTES

### 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 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.

Vibration: approx. 9.8m/s<sup>2</sup> {1G}/10 to 150Hz  
Shock: approx. 49m/s<sup>2</sup> {5G}

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

### 5. 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.

**For other details, please verify with the product specification sheets.**