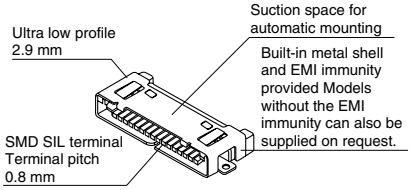
Panasonic
ideas for life

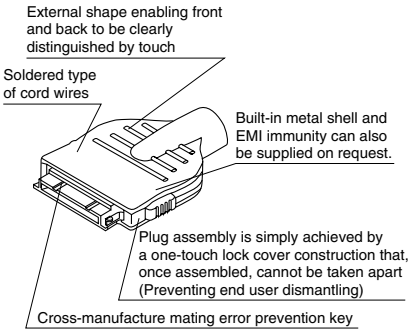
I/O CONNECTORS FOR PC CARD

I/O BACK CONNECTORS FOR PC CARD

• Receptacle



• Plug



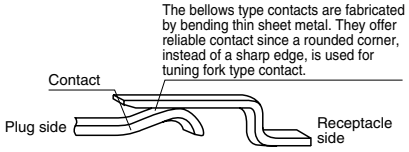
Compliance with RoHS Directive
http://www.mew.co.jp/ac/e/

FEATURES

1. Receptacle is only 2.9 mm

2. Bellows-type contacts

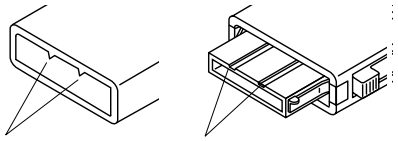
Bellows-type contacts resist mating stress and offer high contact reliability.



3. A metal shell has been incorporated to yield a construction which is rugged and immune from EMI (for protection from external noise).

4. Cross-manufacturer mating error prevention key

The keys are configured in different positions for each manufacturer to prevent cross-manufacturer mating errors.



Cross-manufacturer mating error prevention key

5. Expected operational life

In excess of 10,000 insertions and removal. (used inside of an office)

6. Compatibility with automatic mounting machines: Surface-mount design includes

7. Compliance with RoHS' Directive

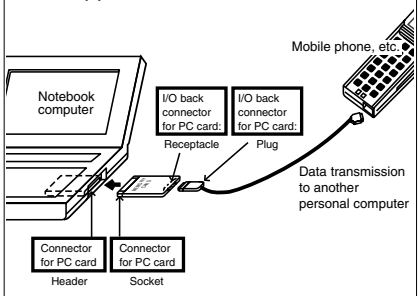
Environmentally friendly, the connectors' comply with Europe's RoHS' Directive. Cadmium, lead, mercury, hexavalent, chromium, PBB and PBDE are not used.

APPLICATIONS

PC CARD, PDA etc.

• What are PC cards?

They are credit card-sized IC cards which are compliant with the PCMCIA standards. They contain memory to expand the memory capabilities of personal computers, modem functions to enable data to be transmitted to and from external sources, and achieve other applications.



Note) PCMCIA standards for the PC Memory Card International Association which is an American trade association dedicated to promoting IC memory cards.

ORDERING INFORMATION

AXR [6] [ ] [1] [5] [ ]

6: I/O back connectors for PC card

<Receptacle/Plug>

	A type/B type	Receptacle/plug
1	B type	Receptacle
2	A and B common type	Plug

<No. of contacts (2 digits)>
15: 15 contacts

• Receptacle
4: With positioning boss, offset 1.45mm
• Plug
1: With earth side shell, solder connecting wires
6: Without earth side shell, solder connecting wires

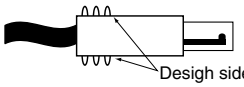
<Packing>
• Only the receptacle is applied
Nil: 1,000 pcs. embossed tape and paper reel × 2

RECEPTACLE AND PLUG COMPATIBILITY TABLE

• Plug (Cable connection type)

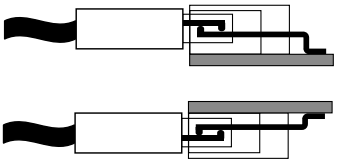
A and B common type

*The plug is a reversible type in which the design side can be set to either side when assembling.



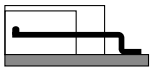
15 contacts: AXR62151, AXR62156

• Combination table



• Receptacle

B type



15 contacts (on board mounting): AXR61154

Note: This product can be mounted on the bottom side of the board because the cable plug can be used on both the front and rear.

Note: Please see page 124 for information about A Type and B Type.

PRODUCT TYPES

1. Receptacle (B type)

No. of contacts	Part No.	Packing quantity (emboss)	
		Inner carton (1 reel)	Outer carton
15	AXR61154	1,000 pcs.	2,000 pcs.

Notes) 1. These products come with a boss design and EMI-immune construction as standard specifications.
2. For cellular phones and other applications where problems of insertion into the wrong device is possible, the location of the key will be changed for each order. An order number will be set for each separate order.

2. Plug (Set) (A and B common type)

No. of contacts	EMI resistance	Part No.	Packing quantity	
			Inner carton	Outer carton
15	Available	AXR62151	—	200 pcs.
	Not available	AXR62156	—	200 pcs.

Note) For cellular phones and other applications where problems of insertion into the wrong device is possible, the location of the key will be changed for each order. An order number will be set for each separate order.

SPECIFICATIONS

1. Characteristics

Item		Specifications	Conditions
Electrical characteristics	Rated current	0.5A	
	Insulation resistance	Min. 1,000MΩ (Initial)	Using 500V DC megger (applied for 1 min.)
	Breakdown voltage	250V AC for 1 min.	Detection current: 1mA
	Contact resistance	Max. 70mΩ	Measured based on the HP4338B measurement method of JIS C 5402, except for the resistance of the cord on the plug side.
Ambient temperature		–55 to +85°C	
Insertion and removal lifetime characteristics	Inside an office	10,000 times	
	Outside an office	5,000 times	
Resistance to soldering heat	Receptacle	Reflow soldering peak temperature Max. 245°C	Receptacle's surface temperature
	Plug	Manual soldering Max. 300°C 5 sec.	
Applicable cord (plug)		AWG #28 (Use shielded wire type when using EMI countermeasure type.)	
Unit weight (receptacle)		0.5 g	

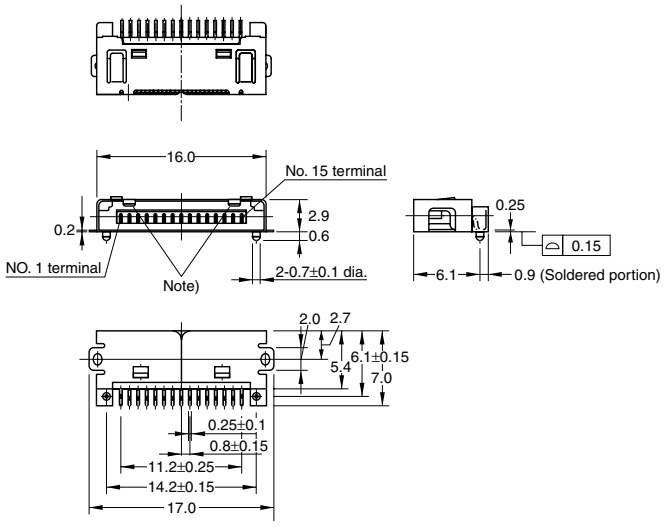
2. Material and surface treatment

Portion		Material	Surface
Receptacle	Resin-molding portion	Heat resistant resin (UL94V-0)	—
	Shell	Stainless steel	Cu plating base, Sn plating on surface
	Post	Copper alloy	Contact portion: Ni plating base, Au plating on surface Terminal portion: Ni plating base, Au plating on surface (Except for thick of terminal)
Plug	Resin-molding portion	Heat resistant resin (UL94V-0)	—
	Shell	Stainless steel	—
	Contact	Copper alloy	Contact portion: Ni plating base, Au plating on surface Terminal portion: Ni plating base, Au plating on surface

DIMENSIONS

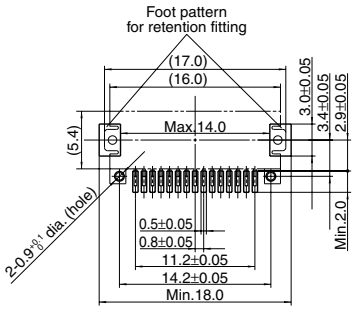
mm General tolerance: ±0.3

• Receptacle (B type)



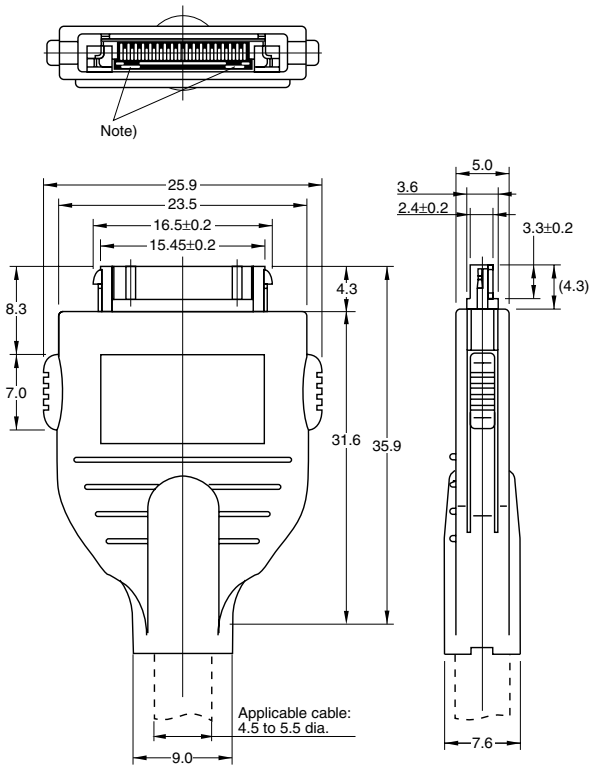
Note) Cross-manufacture mating error prevention key is determined to each customer.
Please consult us for the details.

Recommended PC board pattern
(TOP VIEW)



Notes) 1. The dimensions for types that do not have a positioning boss are those above with the boss section subtracted. In addition, a 2-0.9 +0.1 0 dia. for the recommended PC board pattern is not required.
2. Since product bottom is a metal shell, do not make pattern circuits (to prevent shorting).

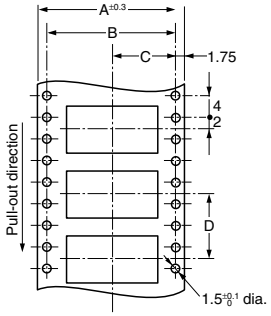
• Plug (assembled condition) (A and B common type)



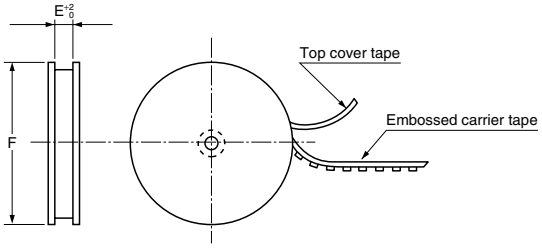
Note) The place of incorrect insertion prevention key will be determined according to each customer.

EMBOSSED TAPE DIMENSIONS (unit: mm)

• Tape dimensions (Conforming to JIS C 0806, 1995. However, some tapes have mounting hole pitches that do not comply with the standard.)

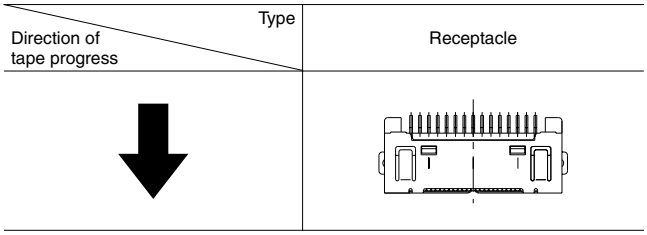


• Reel dimensions (Conforming to JIS C 0806, 1995)



	A	B	C	D	E	F	Quantity per reel
Receptacle	32.0	28.4	14.2	16.0	32.4	370 dia.	1,000

• Connector orientation with respect to direction of progress of embossed tape



NOTES

1. Receptacle

1) This product comes with a positioning boss. A positioning hole must be provided at the PCB design stage. The connector has two projections for positioning. When designing PC board pattern, holes for the projections are necessary.

2) This product features a metal shell around the molded part in order to provide ruggedness and immunity from EMI. However, when the case is designed to enable mating to be accomplished even more reliably, the following points should be borne in mind.

- Provide a guide at the plug insertion opening to prevent excessive mating stress when the plug is mated.
- In order to reinforce the shell part of the receptacle, guide the shell part using the case.
- Ensure that the equipment case and receptacle are configured in such a way that the clearance between them is minimal—in the 0.1 mm range, for instance.

3) This product has a holder to prevent the pin soldering from lifting off. However, care should be taken in designing the equipment so that an excessive lift-off force will not be applied to the soldered area of each pin.

4) Cross-manufacture mating error prevention key is built-in, so that the key positions of receptacle and plug should be confirmed that they would meet.

2. Plug

2-1. Regarding plug connection and disconnection

Cross-manufacture mating error prevention key is built-in, so that the key positions of receptacle and plug should be confirmed that they would meet.

2-2. Precautions for cord soldering

1) Take steps to prevent the soldering iron from melting the plastic parts.

2) Take care not to allow bulbes into the solder or short-circuiting between neighboring pins to occur.

3) Do not allow the solder flux to run into the contact area since this will cause defective contact.

4) Upon completion of the lead wire soldering, crimp the cable clamp area of the lock arm shell to achieve a strain relief function.

Regarding general notes, please refer to page 14.

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