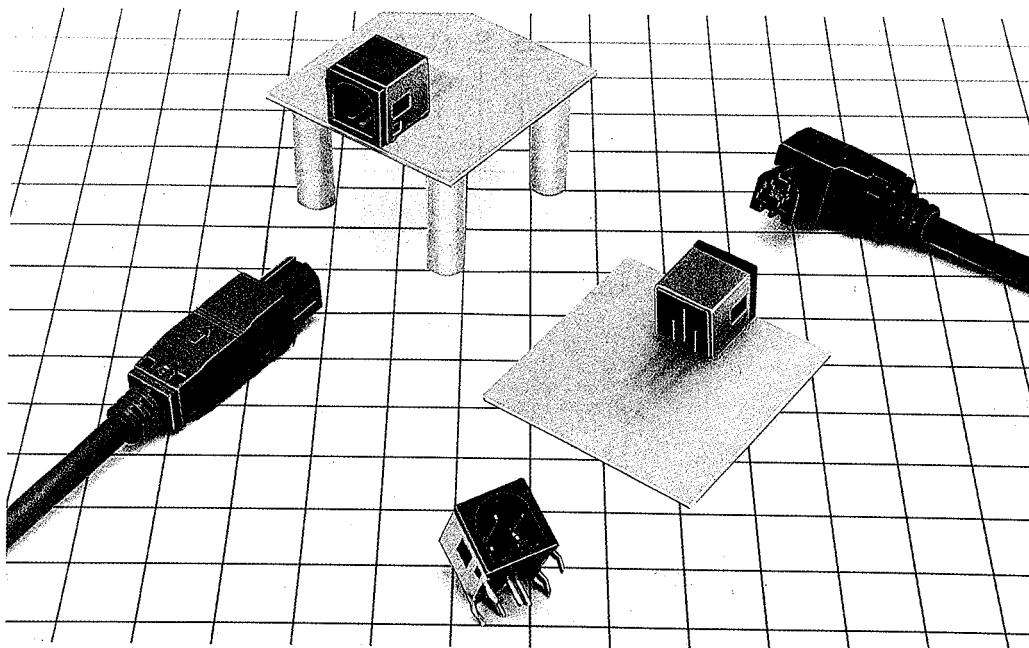


# HRS RP34 SERIES COMPACT PLASTIC CONNECTOR FOR AC ADAPTER

## ■ Scope

Model RP34 Connector is a compact, lightweight, 3-pole plastic connector specially designed for the AC adapter interface for notebook type personal computers.

Plug is available in either straight type or right-angle type. Right angle type offers low insertion profile. The receptacle is a very compact part with a 10mm-square mating surface and 11.3mm depth.



## ■ Features

- (1) Snap-lock locking permits easy insertion and disconnection.
- (2) Right-angle plug permits cable take-out on either right side or left side depending on the application.
- (3) One of the three poles is designed for grounding terminal which makes contact before the other two poles.
- (4) D-shaped mating section permits easy insertion.
- (5) Six different guide locations are available. Connectors can be installed in line permitting correct matching of receptacle and plug.
- (6) Snap-fit assembling method for plug, eliminating use of screws, is easy and simple.
- (7) The external appearance is simplified cubical shape and fits well to any equipment.

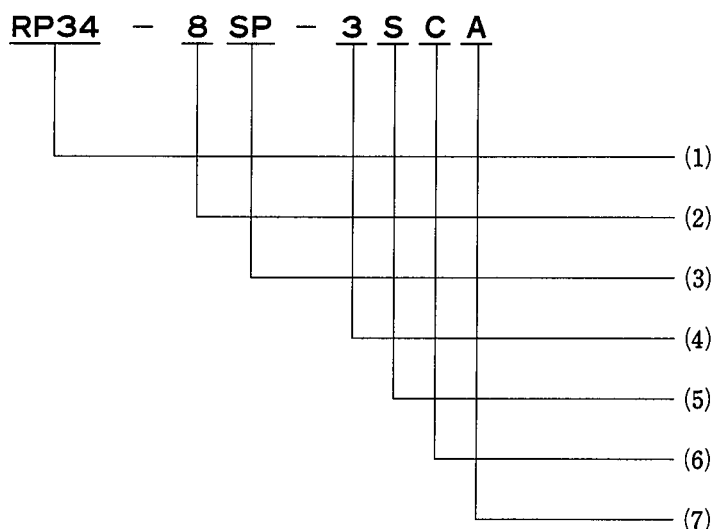
## ■ Application

OA equipment, communications equipment, audio equipment and small size electronic products.

## Material and Finish

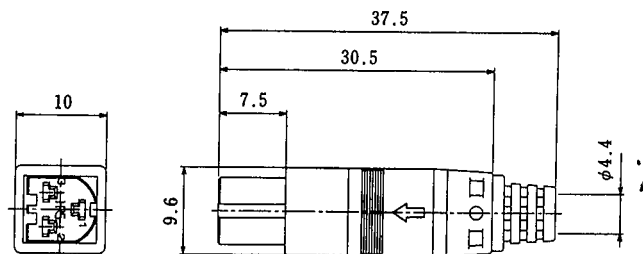
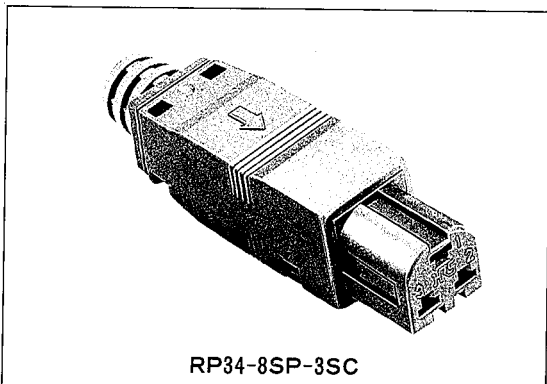
Part Name	Material	Finish
Main Frame and Insulator	Polycarbonate resin containing glass, and PBT resin UL94V-0	(Black)
Male Terminal	Brass	Silver plating
Female Terminal	Phosphor bronze	Silver plating

## Ordering Information



- |  |  |
|--|--|
| <p>(1) RP34 : Name of series</p> <p>(2) 8 : Size of shell, or outer dia. of mating section.<br/>Size 8 is only available for this connector.</p> <p>(3) SP : Type of connector.<br/>SP : Straight plug<br/>P : Right-angle plug<br/>R : Receptacle</p> <p>(4) 3 : Number of terminals.<br/>3 and 4 pole is available for this connector.</p> | <p>(5) S : Contact Type.<br/>P : Male contact<br/>S : Female contact</p> <p>(6) C : Wire-to-contact connecting method, or shape of terminal.<br/>C : Crimping type<br/>DL : Right-angle dip type</p> <p>(7) A : Defines location of mating guide as A, B, D, E and F. Refer to figures on page 148 for detail. Mating is possible only between the same guide locations.</p> |
|--|--|

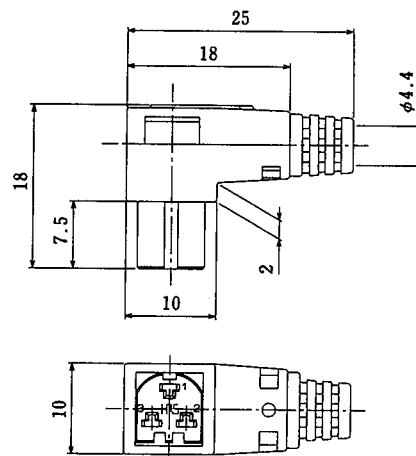
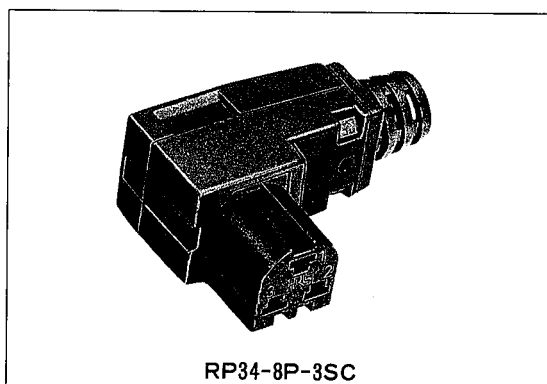
## ■ Straight Plug



(An example in shape)

HRS No.	Part No.	No. of pins	A	Remark
113-5049-1	RP34-8SP-3SC	3	9.6	Standard Part
113-5059-5	RP34-8SP-3SCA	3	9.6	Mating Guide A
113-5060-4	RP34-8SP-3SCB	3	9.6	Mating Guide B
113-5061-7	RP34-8SP-3SCD	3	9.6	Mating Guide D
113-5062-0	RP34-8SP-3SCE	3	9.6	Mating Guide E
113-5063-2	RP34-8SP-3SCF	3	9.6	Mating Guide F
113-5097-4	RP34-8SP-4SC	4	11	Standard Part
113-5103-5	RP34-8SP-4SCA	4	11	Mating Guide A
113-5104-8	RP34-8SP-4SCB	4	11	Mating Guide B
113-5105-0	RP34-8SP-4SCC	4	11	Mating Guide C

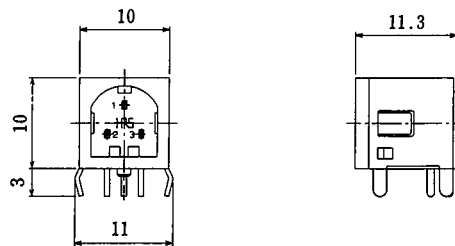
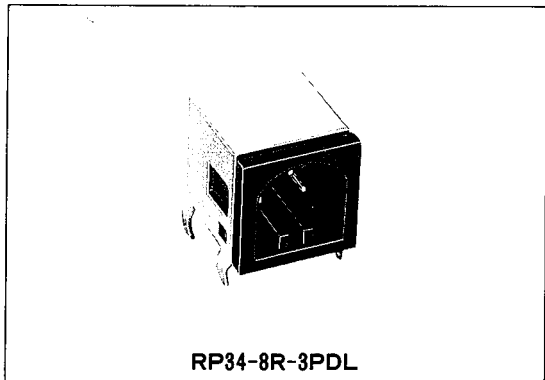
## ■ Right-Angle Plug



(An example in shape)

HRS No.	Part Number	Mating Guide
113-5041-0	RP34-8P-3SC	Standard Part
113-5054-1	RP34-8P-3SCA	Mating Guide A
113-5055-4	RP34-8P-3SCB	Mating Guide B
113-5056-7	RP34-8P-3SCD	Mating Guide D
113-5057-0	RP34-8P-3SCE	Mating Guide E
113-5058-2	RP34-8P-3SCF	Mating Guide F

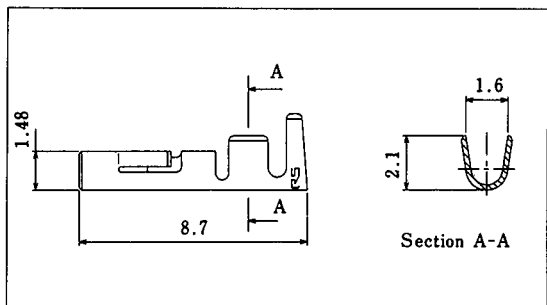
## ■ Receptacle



(An example in shape)

HRS No.	Part No.	No. of pins	A	B	Remark
113-5042-2	RP34-8R-3PDL	3	10	11	Standard Part
113-5064-5	RP34-8R-3PDLA	3	10	11	Mating Guide A
113-5065-8	RP34-8R-3PDLB	3	10	11	Mating Guide B
113-5066-0	RP34-8R-3PDLD	3	10	11	Mating Guide D
113-5067-3	RP34-8R-3PDLE	3	10	11	Mating Guide E
113-5068-6	RP34-8R-3PDLF	3	10	11	Mating Guide F
113-5098-7	RP34-8R-4PDL	4	11	12	Standard Part
113-5106-3	RP34-8R-4PDLA	4	11	12	Mating Guide A
113-5107-6	RP34-8R-4PDLB	4	11	12	Mating Guide B
113-5108-9	RP34-8R-4PDLC	4	11	12	Mating Guide C

## ■ Contact (Female Terminal)

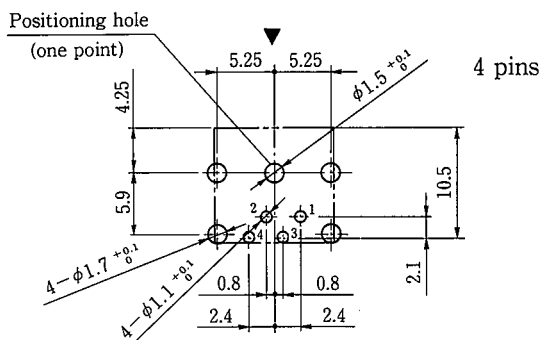
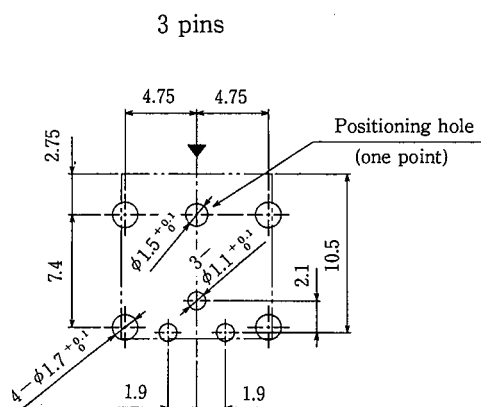


HRS No.	Parts No.	Remarks
113-5043-5	RP34-SC-212	Chain Contact
113-5076-4	RP34-SC-112	Loose Contact

**Note:**

- Loose terminals are available in packs of 100 pieces. Strip terminals are available in reels of 10,000 pieces.

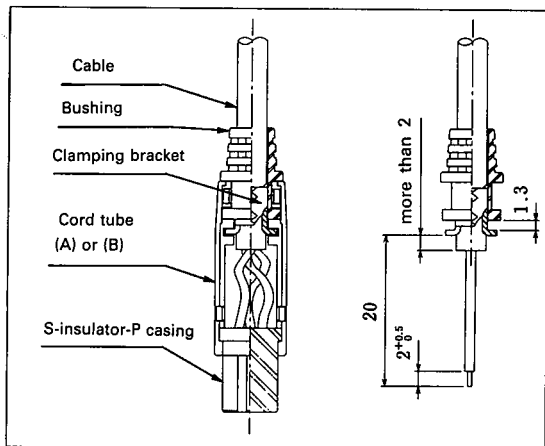
## ■ PCB Layout



- Applicable board range is 0.8-1.6 mm in thickness.
- Recommended dimensional arrangement tolerance for the board is  $\pm 0.05$ mm.
- The figure shows the board surface in which connector dip posts are to be inserted. ▼ shows the mating surface.

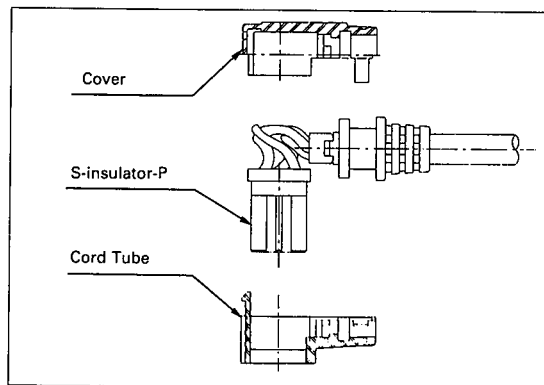
## ◆ Assembly Procedure

### ● Straight Plug



1. Insert bushing over terminated cable, and install terminal by crimping.
2. Put crimped terminal into the terminal hole of S-insulator-P casing. Lightly pull the cable to confirm crimped terminal is firmly engaged in the terminal hole.
3. Use proper tool (RP34-TC-01) to crimp fit clamping bracket to cable.
4. Assemble S-insulator-P casing, clamping bracket and bushing to cord tube (A) or (B) where applicable. S-insulator-P casing can be installed inverted 180°. Use suitable orientation as required.
5. Finally, assemble cord tube (A) or (B), whichever is remaining, to complete assembly.

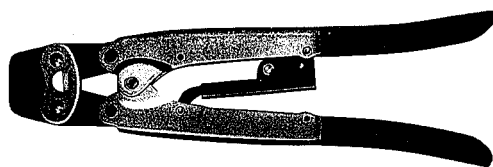
### ● Right-angle Plug



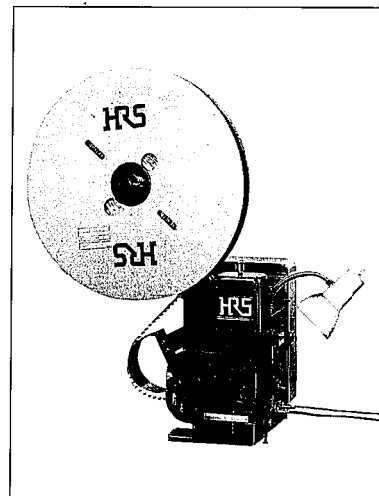
1. Same assembly procedures apply to either right-angle plug or straight plug. S-insulator-P casing can be installed 180° inverted against cord tube. Install the casing in the cable take-out direction as required.

## ◆ Applicable Tools

Type	Item	HRS No.	Part No.	Applicable terminal	Applicable wire
Automatic	Automatic crimping machine body	901-0005-4	CM-105	—	—
	Applicator	901-2025-2	105-RP34-1	RP34-SC-212	AWG# 18~ #22
	Cable crimping tool	150-0074-1	RP34-TC-01	—	—
	Extractor	150-0072-6	RP34-SC-TP	—	—



Cable Crimping Tool RP34-TC-01



Automatic Crimping Machine CM-105

## ◆ Terminal Arrangement, guide locations and principal performance

Terminal Arrangement, 3 pins Guide locations						
	Standard Type	Type A	Type B	Type D	Type E	Type F
Terminal Arrangement, 4 pins Guide locations						
	Standard Type	Type A	Type B	Type C		
No. of Poles	3,4 (Terminal No.1 is contacted faster than other terminal)					
Withstanding voltage	AC150V 1 min					
Current capacity	3A					
Insulation resistance	1,000M $\Omega$ Min (DC100V)					
Contact resistance	30m $\Omega$ Max(DC 100V)					
Applicable cable dia.	$\phi$ 4					
Applicable cable	AWG # 18~ # 22					

- (Remarks) 1. Figures above show guide locations viewed from receptacle mating surface (from cable-connecting section of plug).  
 2. Voltage rating for normal use is 30VAC or 42VDC and under.