

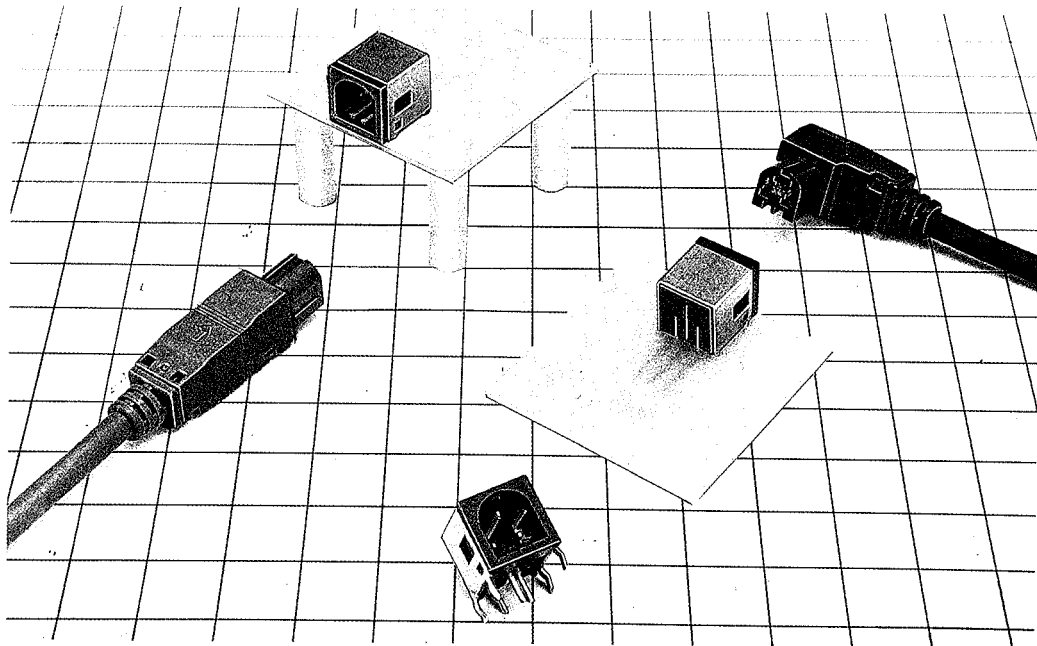


RP34 SERIES COMPACT PLASTIC CONNECTOR FOR AC ADAPTER

■ 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.

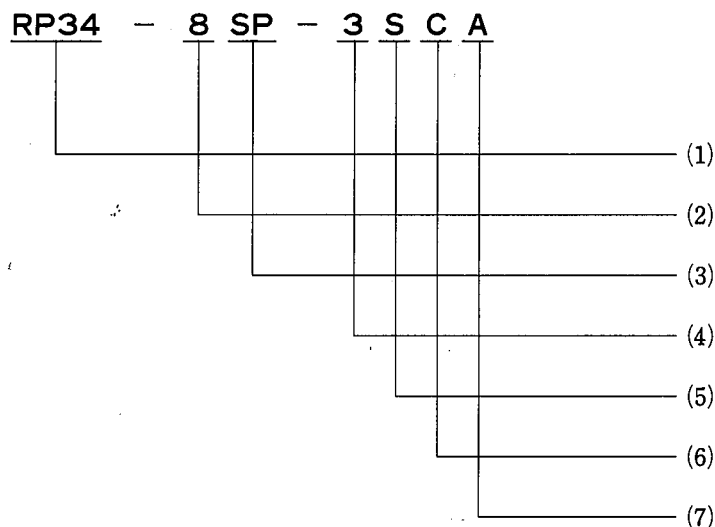
■ Application

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 |

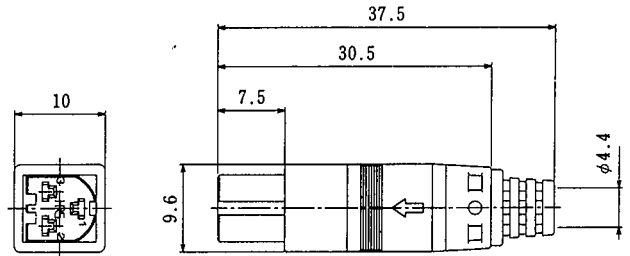
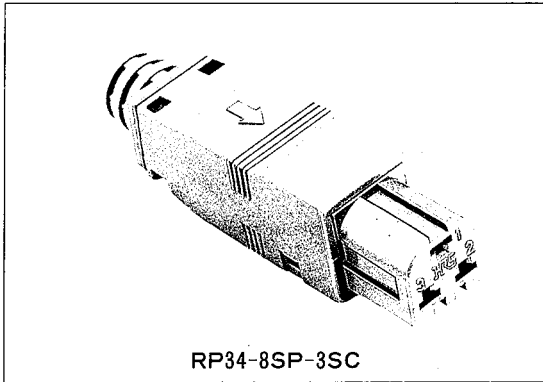
Ordering Information



- (1) RP34 : Name of series
- (2) 8 : Size of shell, or outer dia. of mating section.
Size 8 is only available for this connector.
- (3) SP : Type of connector.
SP : Straight plug
P : Right-angle plug
R : Receptacle
- (4) 3 : Number of terminals.
3 and 4 pole is available for this connector.

- (5) S : Contact Type.
P : Male contact
S : Female contact
- (6) C : Wire-to-contact connecting method, or shape of terminal.
C : Crimping type
DL : Right-angle dip type
- (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.

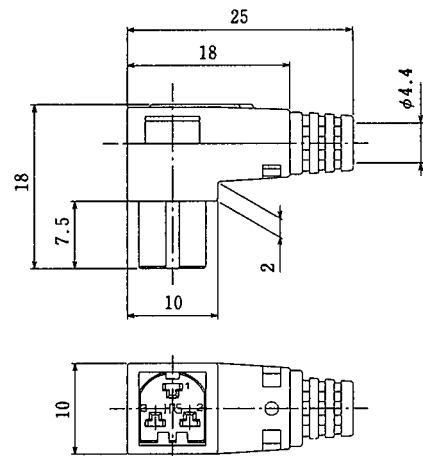
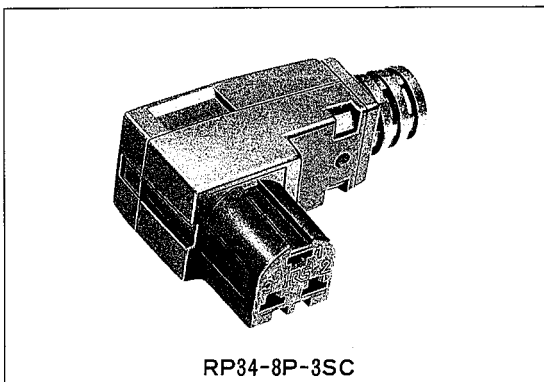
■ Straight Plug



(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 |

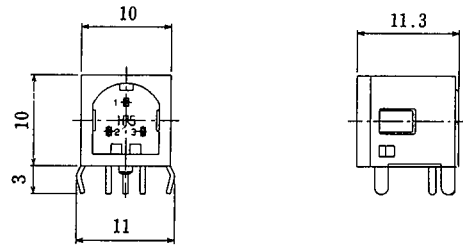
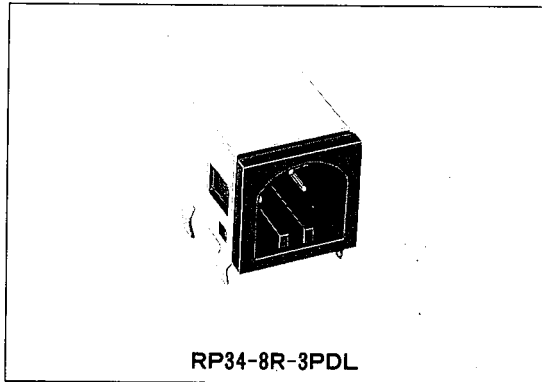
■ Right-Angle Plug



(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 |

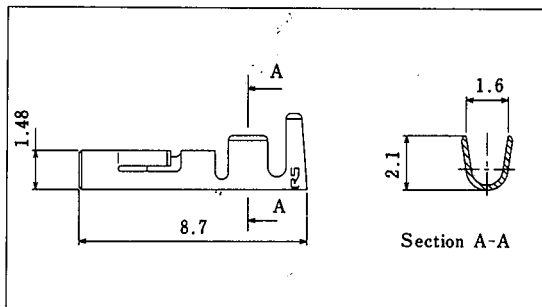
■ Receptacle



(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-4PDL C | 4 | 11 | 12 | Mating Guide C |

■ Contact (Female Terminal)

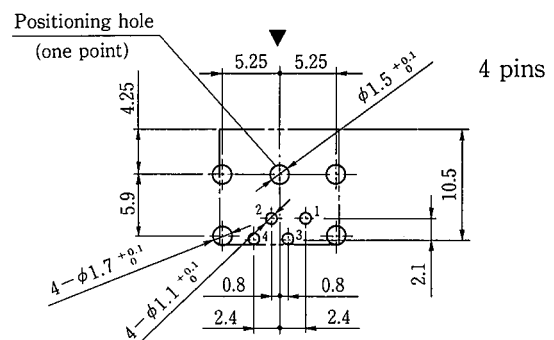
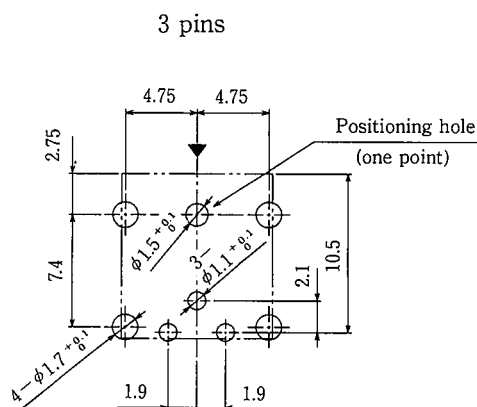


| HRS No. | Parts No. | Remarks |
|------------|-------------|---------------|
| 113-5043-5 | RP34-SC-212 | Chain Contact |
| 113-5076-4 | RP34-SC-112 | Loose Contact |

Note:

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

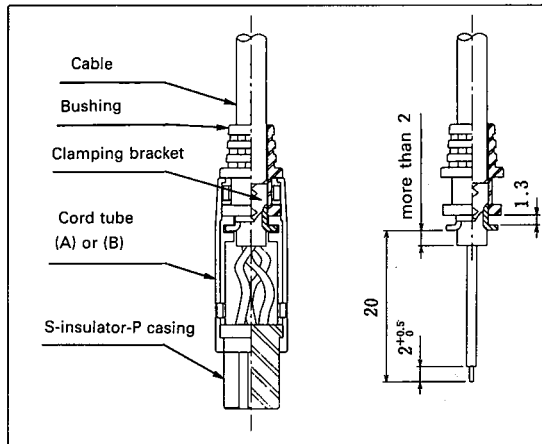
■ PCB Layout



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

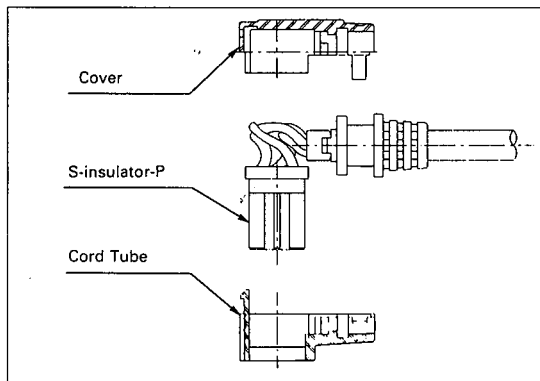
◆ Assembly Procedure

● 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.

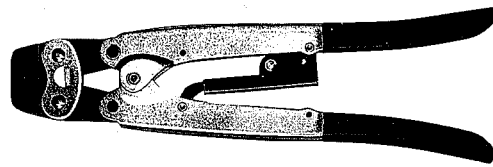
● Right-angle Plug



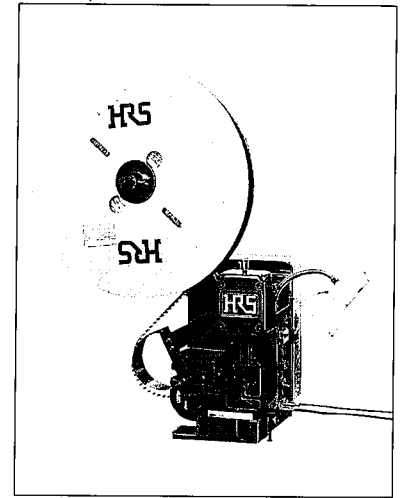
1. Same assembly procedures apply to either right-angle plug or straight plug. S-insulator-P casing can be installed 180° inverted against cord tube. Install the casing in the cable take-out direction as required.

◆ 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 | | | | | | |
| Terminal Arrangement, 4 pins Guide locations | | | | | | |
| No. of Poles | 3,4 (Terminal No.1 is contacted faster than other terminal) | | | | | |
| Withstanding voltage | AC150V 1 min | | | | | |
| Current capacity | 3A | | | | | |
| Insulation resistance | 1,000MΩ Min (DC100V) | | | | | |
| Contact resistance | 30mΩ Max(DC 100V) | | | | | |
| Applicable cable dia. | φ4 | | | | | |
| 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.