JAE

NEW

Connector "A" for IMT-2000 Mobile Phones

RA1 Series

CONNECTOR
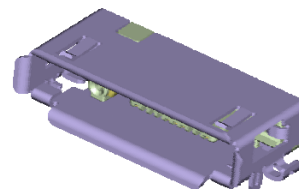
MB-0052-6

July 2006

RoHS Compliant

(RA1P011FP3)   (RA1R011HA1)

Outline

The RA1 Series is an integrated connector incorporating signal contacts and a coaxial contact compliant with the requirements for connector "A" for IMT-2000 mobile phones. Connector "A" was standardized for the IMT-2000 interface by the EIAJ.

Features

- Compliant with EIAJ RC-5238 Connector "A" for IMT-2000 mobile phones. (Integrated connector with 10 signal contacts and 1 coaxial contact.)
- Smaller and lighter than the DH Series, connector for digital mobile phones. (0.5mm signal contact pitch, volume ratio is 1/3 for receptacle, 1/2 for plug (compared to the JAE products.))
- Static electricity countermeasure and EMI shield provided by a metal shell for signal transmission connector.
- Both receptacle and plug use full-cover shells for the mating area, and a mechanism to prevent opening of the shells.
- Compatible with live insertion/ removal (sequence) by providing contacts of different length in receptacle.
- Signal contacts are compatible with high-speed transmission. (Compatible with USB 1.1)
- Coaxial contact in receptacle compatible with operating frequency up to 2.2GHz.
- Embossed tape supply ensuring 6mm x 6mm adhesion area for receptacle is available.

General Specifications

- No. of contacts:11 (including1 coaxial.)
- Rated voltage: AC 30Vr.m.s.
- Contact resistance: Initial 50m ohm max.
- Withstand voltage:
  Signal contacts: AC 300Vr.m.s. per minute
  Coaxial contacts: AC 100Vr.m.s. per minute
- VSWR: Less than 1.5 (Up to 2.2GHz)
- Insertion loss: 0.5dB max. (Up to 2.2GHz)
- Operating temperature & humidity:
  -25 to +70 Deg. C , 85% max.

- Rated current: Less than DC 0.5A
  (1.0A for 5 terminals max. ---Note)
- Insulation resistance: 1000M ohm min.
  Signal contacts: AC 300Vr.m.s.
  Coaxial contacts AC 100Vr.m.s.
- Electrostatic capacity: 2pF max.
- Life time: 10,000 times
- Applicable cable:
  Up to AWG #28 for signal contacts
  Equivalent to 1.5D for coaxial contact

(Note) "5 terminals" indicates terminals 1, 4, 5, 6, and 10

Materials/Finishes

■Receptacle
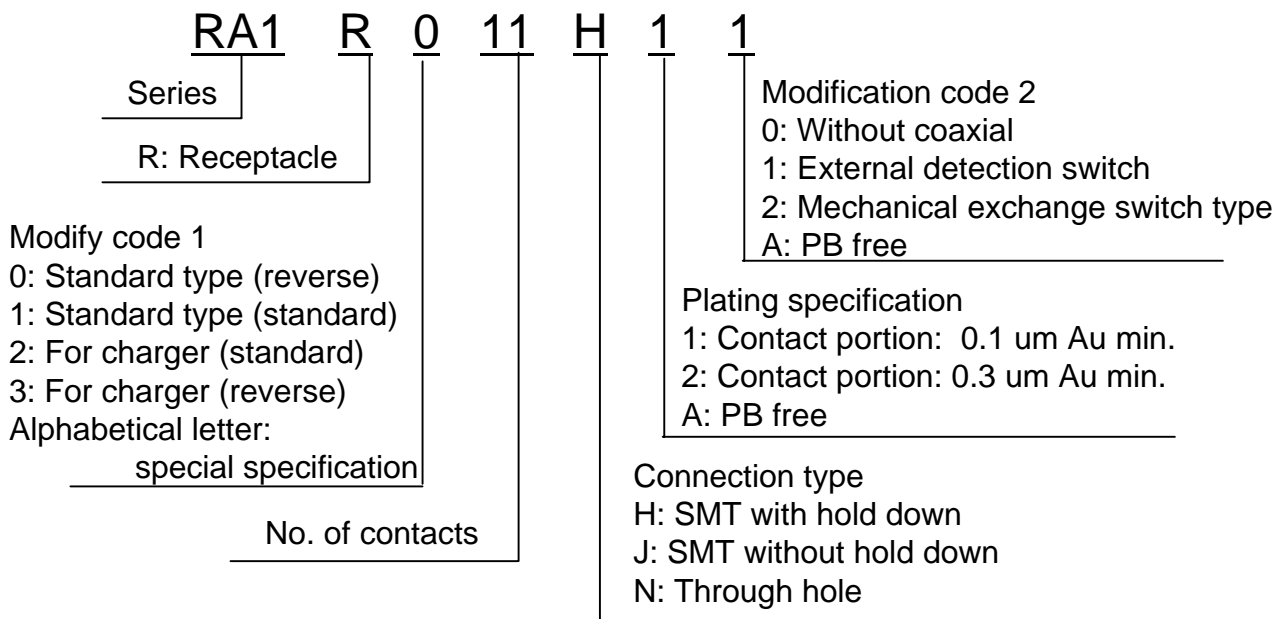
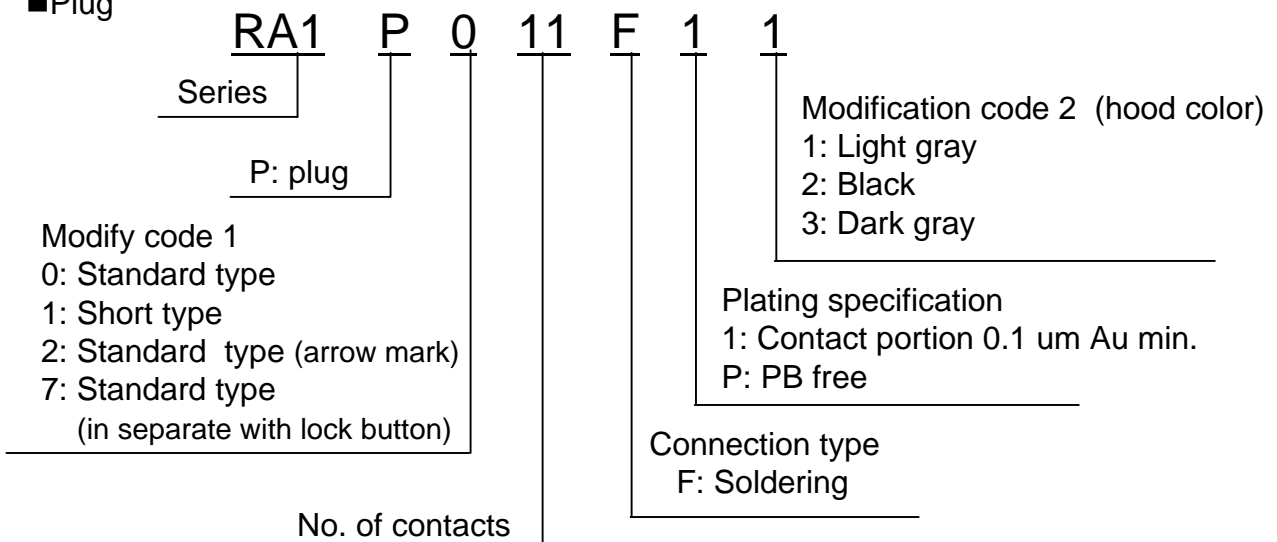| Components	Materials/Finishes
Contacts	Copper alloy / Contact: Au over Ni Terminal portion: Sn plating partially Au plating
Insulator	Glass filled nylon/color : Black PPS/ Color: Black (for charger)
Shell	Stainless steel/Sn plating

■Plug

Components	Materials/Finishes
Contacts	Copper alloy / Contact: Au over Ni Terminal portion: Sn plating partially Au plating
Insulator	Glass filled nylon/ Color: Black
Shell	Stainless steel/ with Ni plating
Hood	PC/ Color: Light gray or dark gray
Coaxial insulator	PPS/ Color: Black
Tapping screw	Silver: Steel/ Ni plating Black: Steel/ Trivalent chrome plating

Ordering Information

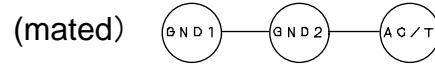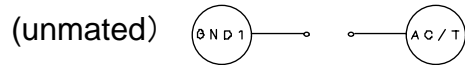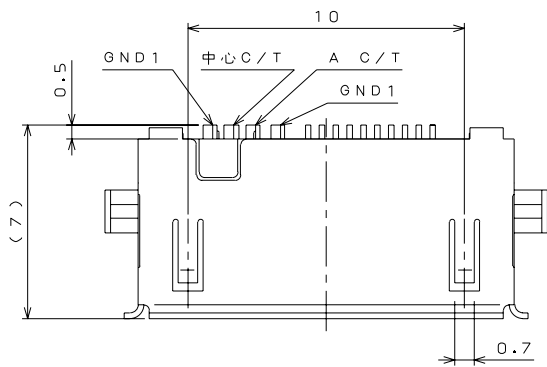■Receptacle

RA1　R　0　11　H　1　1

Series
R: Receptacle

Modify code 1
0: Standard type (reverse)
1: Standard type (standard)
2: For charger (standard)
3: For charger (reverse)
Alphabetical letter:
special specification

No. of contacts

Connection type
H: SMT with hold down
J: SMT without hold down
N: Through hole

Plating specification
1: Contact portion: 0.1 um Au min.
2: Contact portion: 0.3 um Au min.
A: PB free

Modification code 2
0: Without coaxial
1: External detection switch
2: Mechanical exchange switch type
A: PB free

■Plug

RA1　P　0　11　F　1　1

Series
P: plug

Modify code 1
0: Standard type
1: Short type
2: Standard type (arrow mark)
7: Standard type
(in separate with lock button)

No. of contacts

Connection type
F: Soldering

Plating specification
1: Contact portion 0.1 um Au min.
P: PB free

Modification code 2 (hood color)
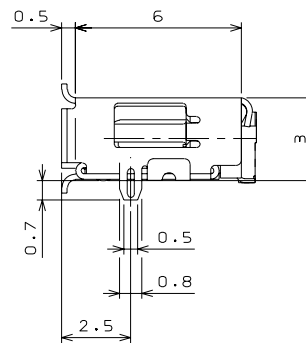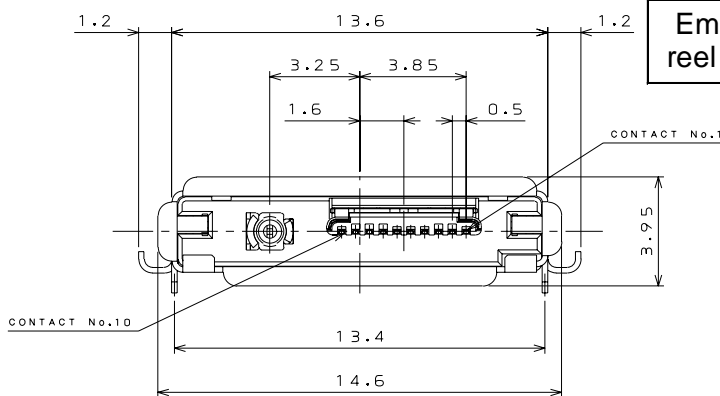1: Light gray
2: Black
3: Dark gray

■Part Number

RA1R011HA1 (Standard receptacle: external detection switch/ bottom mount type)

(unmated)

(mated)

GND1: Receptacle coaxial external C/T
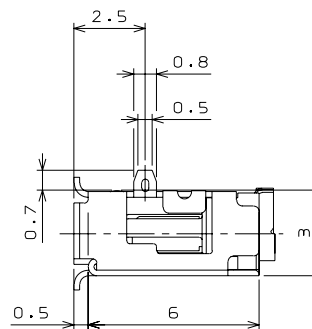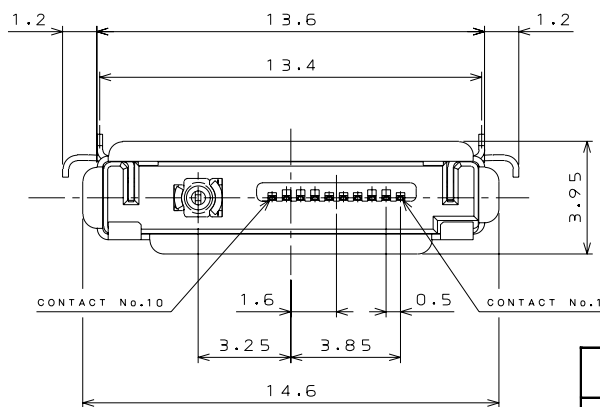GND2 : Plug coaxial external C/T
AC/T : Detection C/T

	Part Number	SJ Drawing
Single item	RA1R011HA1	SJ101719
Embossed reel product	RA1R011HA1E1000	SJ101720

CONTACT No.1

CONTACT No.10

(Unit: mm)

■ Part Number

RA1R111HA1 (Standard receptacle: external detection switch/ top-mount type)

CONTACT No.10

CONTACT No.1

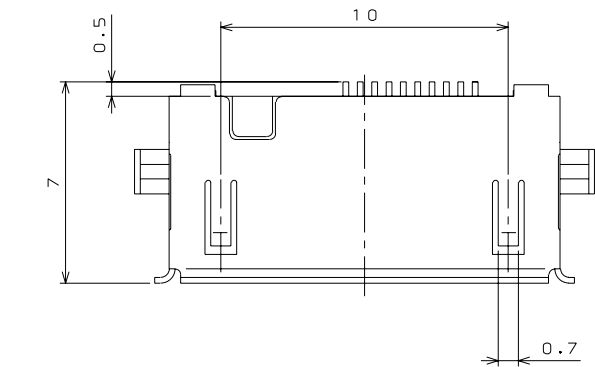|	Part Number	SJ Drawing
Single item	RA1R111HA1	SJ101721
Embossed reel product	RA1R111HA1E1000	SJ101722

(unmated)

(mated)

GND1: Receptacle coaxial external C/T
GND2 : Plug coaxial external C/T
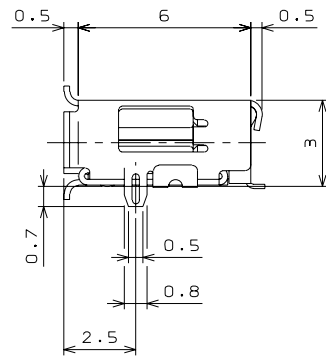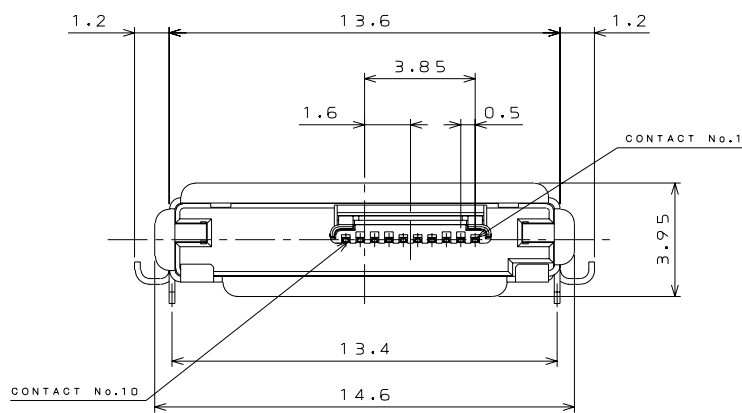AC/T : Detection C/T

GND1   中心C/T   A C/T
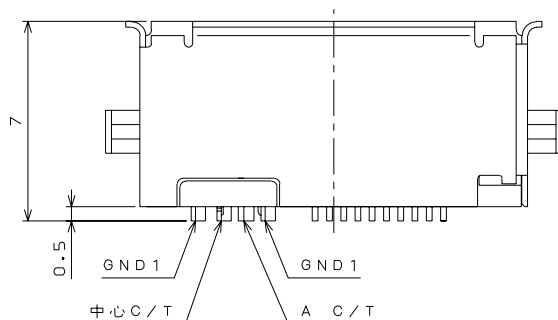
■ Part Number

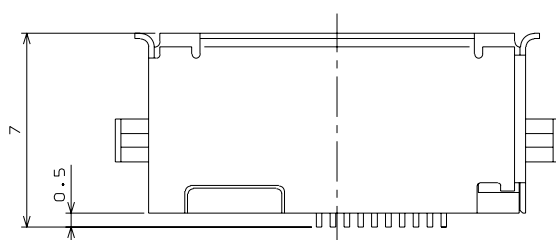RA1R010H1A (Receptacle for signal : without coaxial/ bottom mount type)

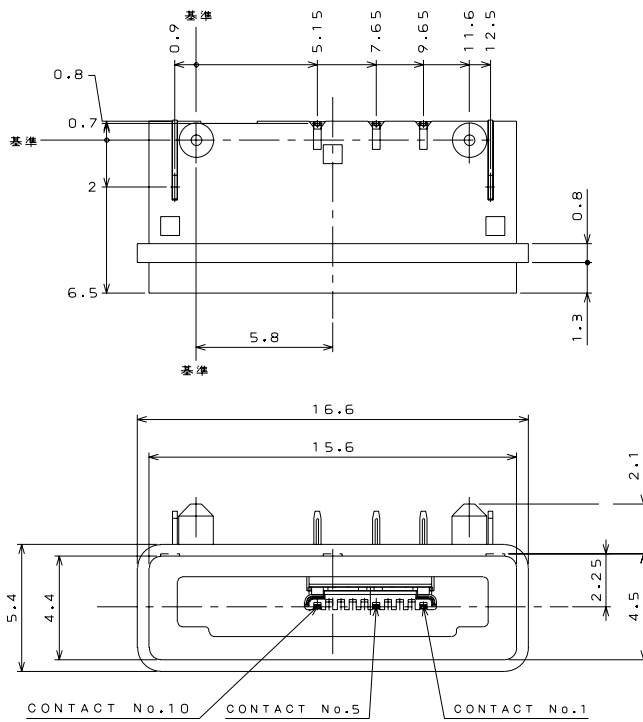|	Part Number	SJ Drawing
Single item	RA1R010H1A	SJ100588
Embossed reel product	RA1R010H1AR1000	SJ100613

(Unit: mm)

■ Part Number

RA1R110HA0 (Receptacle for signal: without coaxial/ top-mount type)
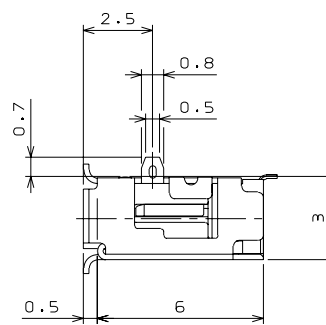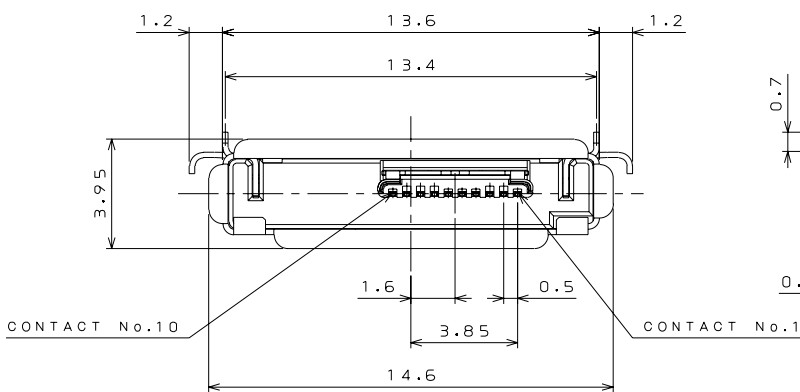
	Part Number	SJ Drawing
Single item	RA1R110HA0	SJ104402
Embossed reel product	RA1R110HA0R1000	SJ104409

■ Part Number

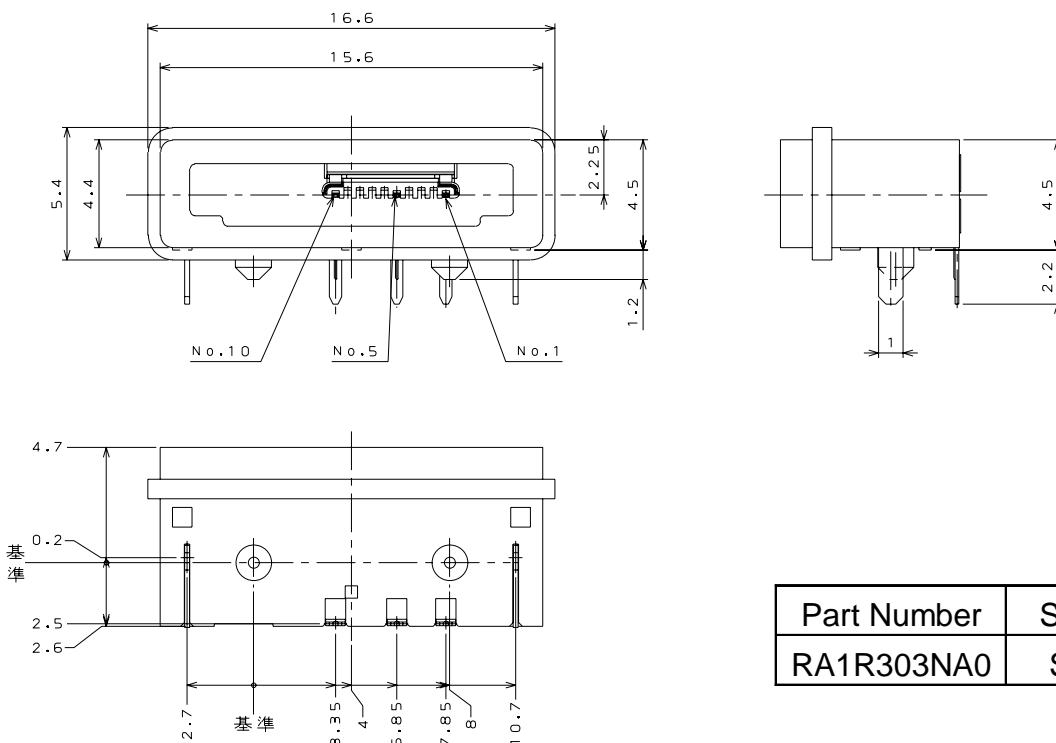RA1RN03N1A (Receptacle for charger: top-mount through hole type)

(Unit: mm)

Part Number	SJ Drawing
RA1RN03N1A	SJ100332

CONTACT No.10   CONTACT No.5   CONTACT No.1

■ Part Number

RA1R303NA0 (Receptacle for charger: bottom mount through hole type)

No.10   No.5   No.1

(Unit: mm)

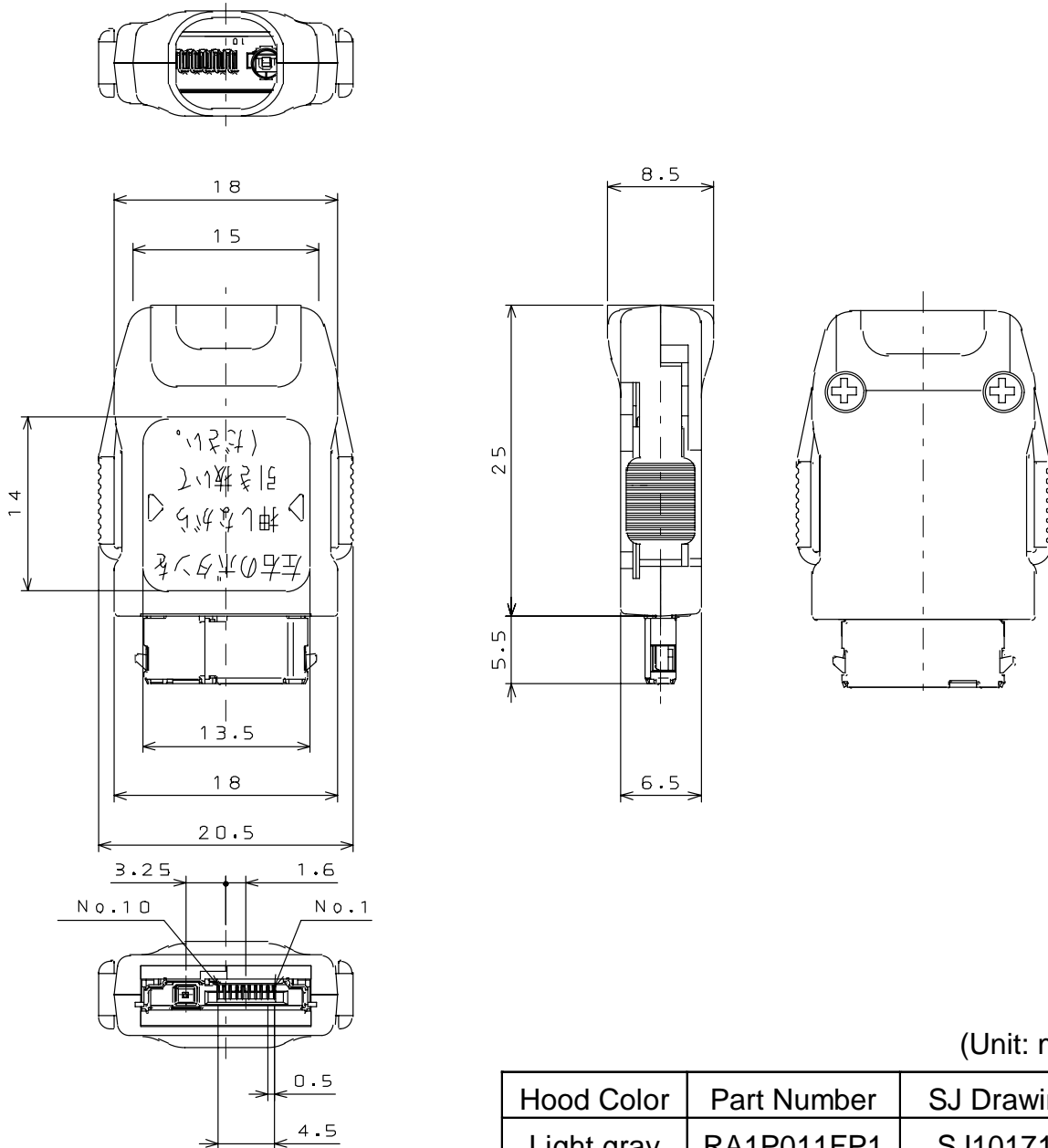| Part Number	SJ Drawing
RA1R303NA0	SJ102355

■ Part Number

RA1P011FP* (Standard plug/ solder connection type）

　　Applicable wire: AWG#28 max.　　Applicable cable diameter: 5.0 mm dia. max.

　　Coaxial cable: 1.5D equivalent

18

15

14

13.5

18

20.5

8.5

25

5.5

6.5

3.25　　1.6

No.10　　No.1

0.5

4.5

(Unit: mm)

Hood Color	Part Number	SJ Drawing
Light gray	RA1P011FP1	SJ101712
Black	RA1P011FP2	SJ101713

Note: This product does not include bushing and clamp barrel.

Please refer to Handling Instruction JAHL-3228 regarding connection, assembly process, bushing portion design and dimensions.
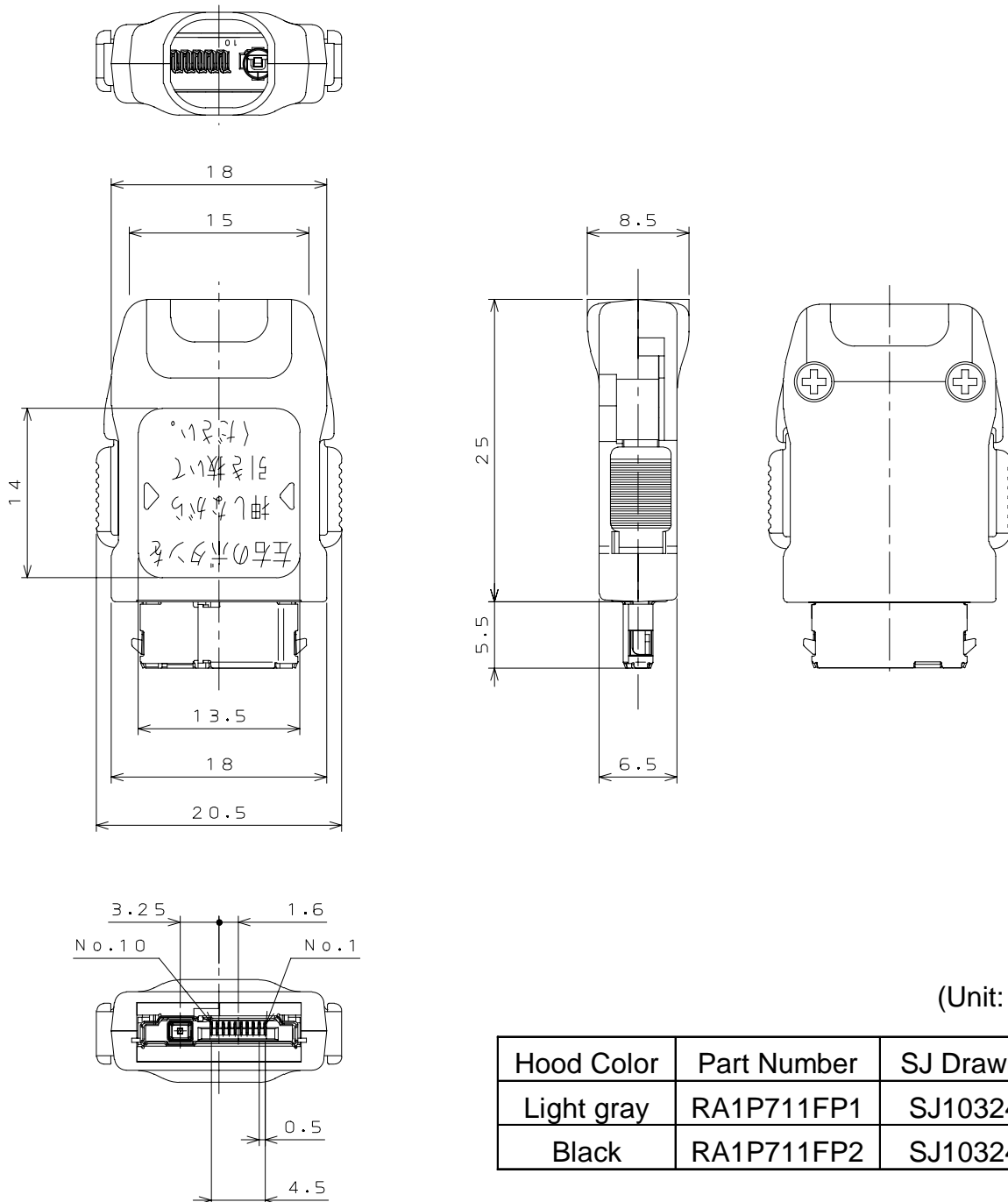
■ Part Number

RA1P711FP* (Standard plug: in separate with lock button/ soldering connection type)

　　　Applicable wire: AWG#28 max.　　　Applicable cable diameter: 5.0 mm dia. max.

　　　Coaxial cable: 1.5D equivalent

18

15

14

13.5

18

20.5

8.5

25

5.5

6.5

3.25　　　　1.6

No.10　　　　No.1

0.5

4.5

(Unit: mm)

Hood Color	Part Number	SJ Drawing
Light gray	RA1P711FP1	SJ103245
Black	RA1P711FP2	SJ103246

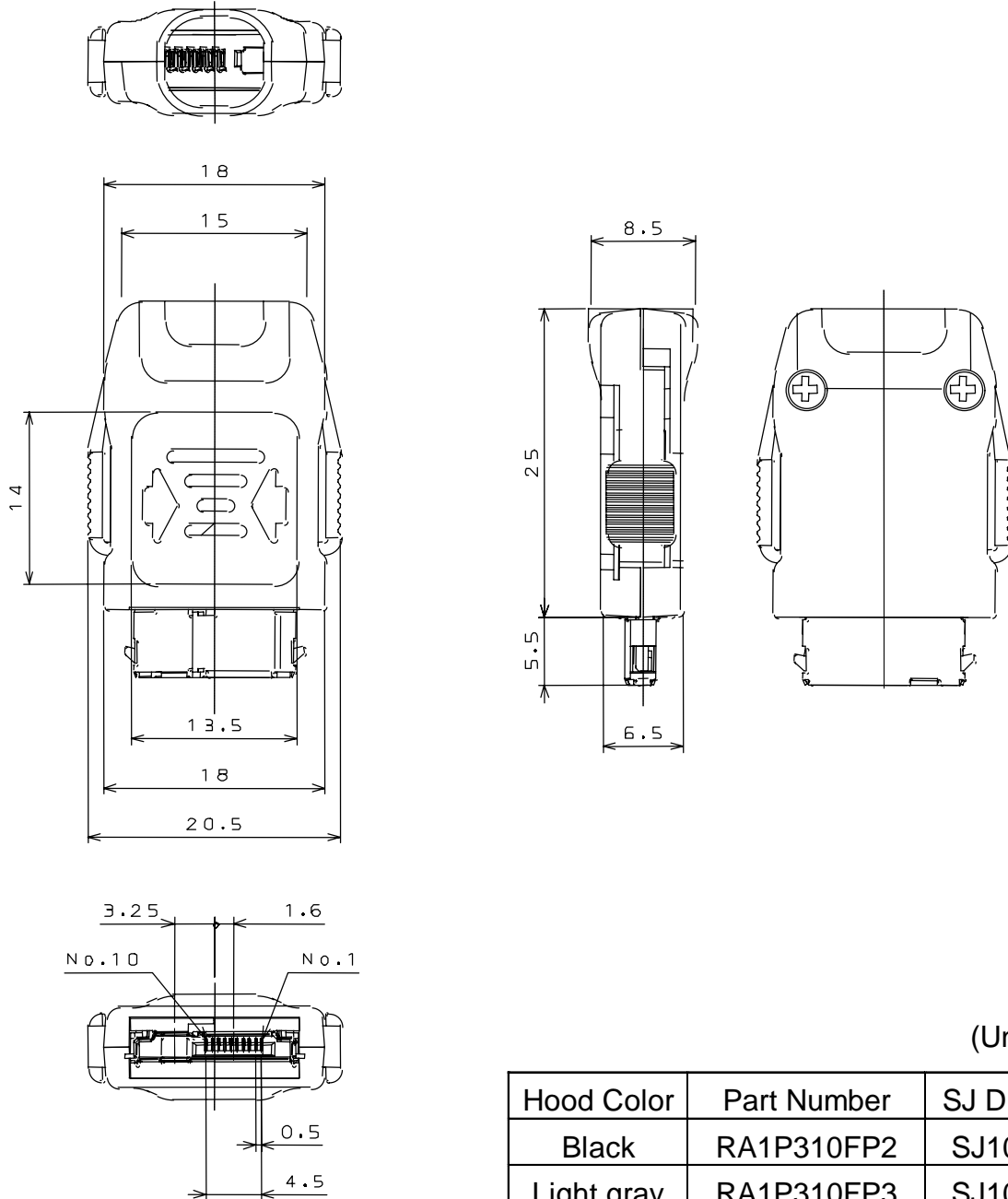　　　Note: This product does not include bushing and clamp barrel.

　　　Please refer to Handling Instruction JAHL-3228 regarding connection,
　　　assembly process, bushing portion design and dimensions.

■ Part Number

RA1P310FP※ (Standard plug: arrow mark type/ soldering connection type)

Applicable wire: AWG#28 max.　　Applicable cable diameter: 5.0 mm dia. max.

(Unit: mm)

Hood Color	Part Number	SJ Drawing
Black	RA1P310FP2	SJ100808
Light gray	RA1P310FP3	SJ101570

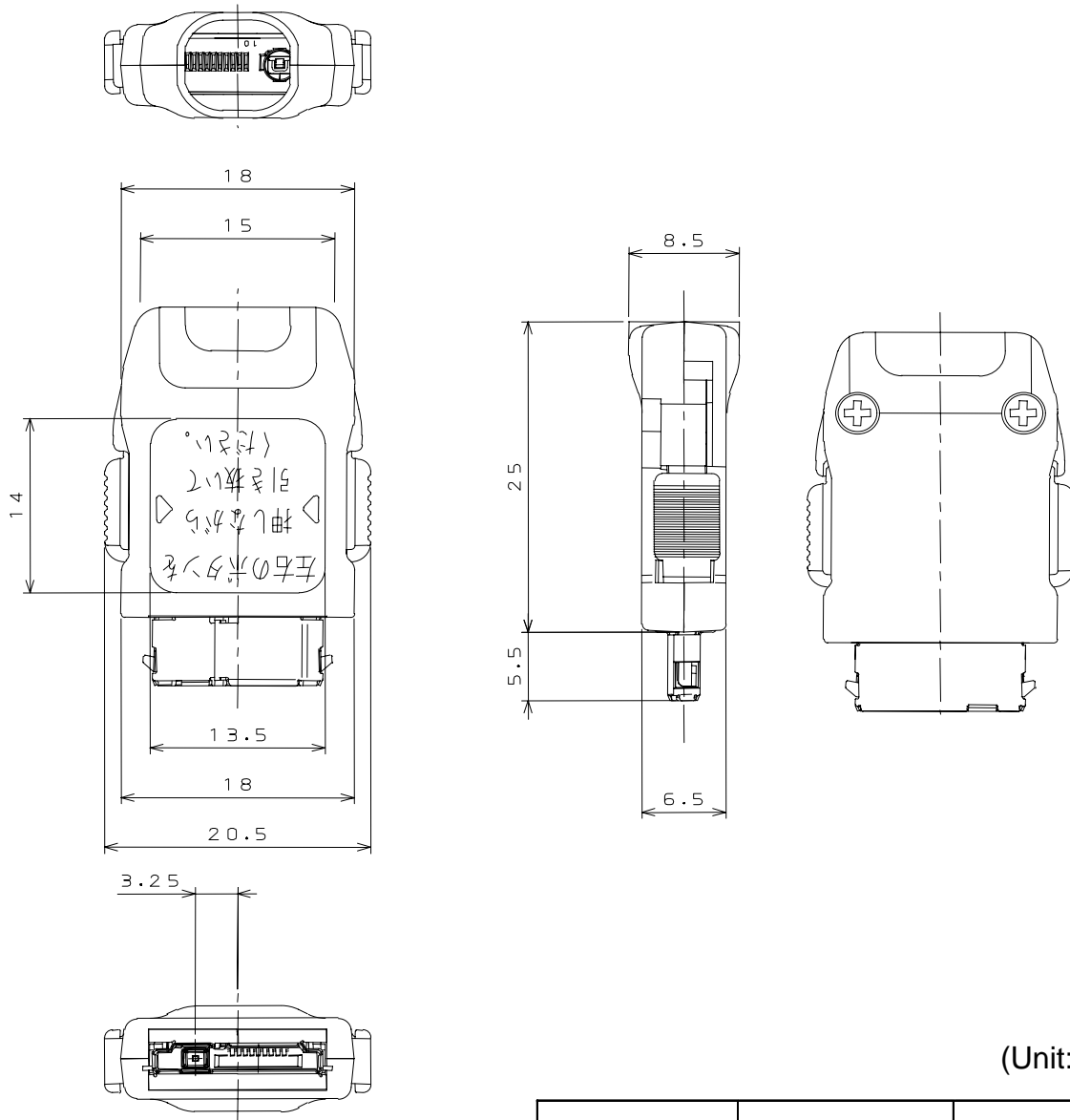Note: This product does not include bushing and clamp barrel.

Please refer to Handling Instruction JAHL-3228 regarding connection, assembly process, bushing portion design and dimensions.

■Part Number

RA1P701FP* (Standard plug: in separate with lock button, single contact coaxial type)

Coaxial cable: 1.5D equivalent

(Unit: mm)

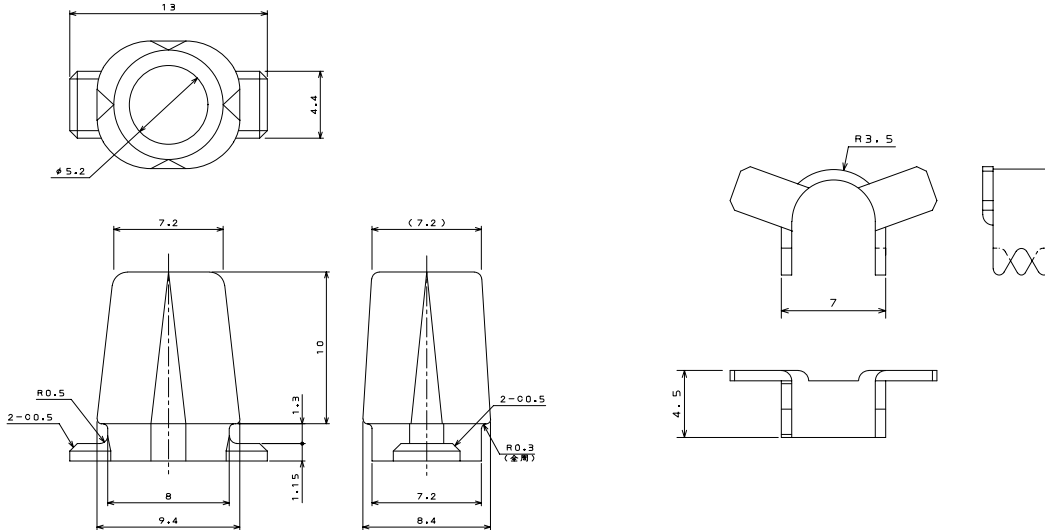| Hood Color	Part Number	SJ Drawing
Light gray	RA1P701FP3	SJ104524

Note: This product does not include bushing and clamp barrel.

Please refer to Handling Instruction JAHL-3228 regarding connection, assembly process, bushing portion design and dimensions.
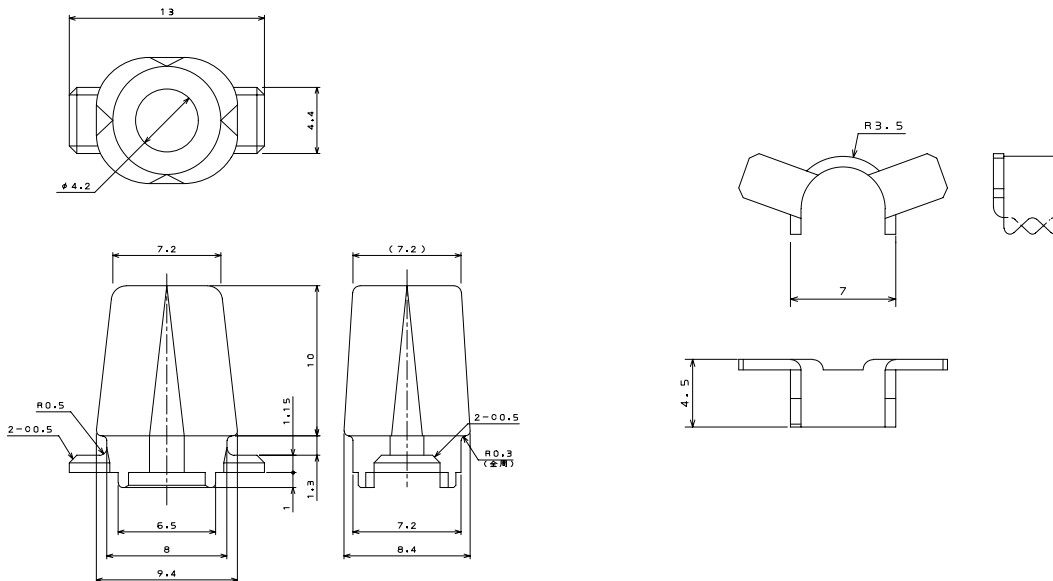
■Part Number

Bushing/ Clamp barrel (for Standard plug)

・for Cable diameter 5mm dia.

・for Cable diameter 4mm dia.

		Bushing		Applicable clamp barrel	Rivet hand tool for clamp barrel
	Color	Part Number	SJ Drawing		
for 5 dia.	Light gray	R012-50612	SJ035694	026-50837	CT150-6-RH07
	Dark gray	R012-50612-001	SJ035695		
for 4 dia.	Light gray	R012-50611	SJ035693	026-50843	CT150-6B-RH07
	Black	R012-50616	SJ036094		

Note: Please refer to below, regarding hand tools and handling instructions.
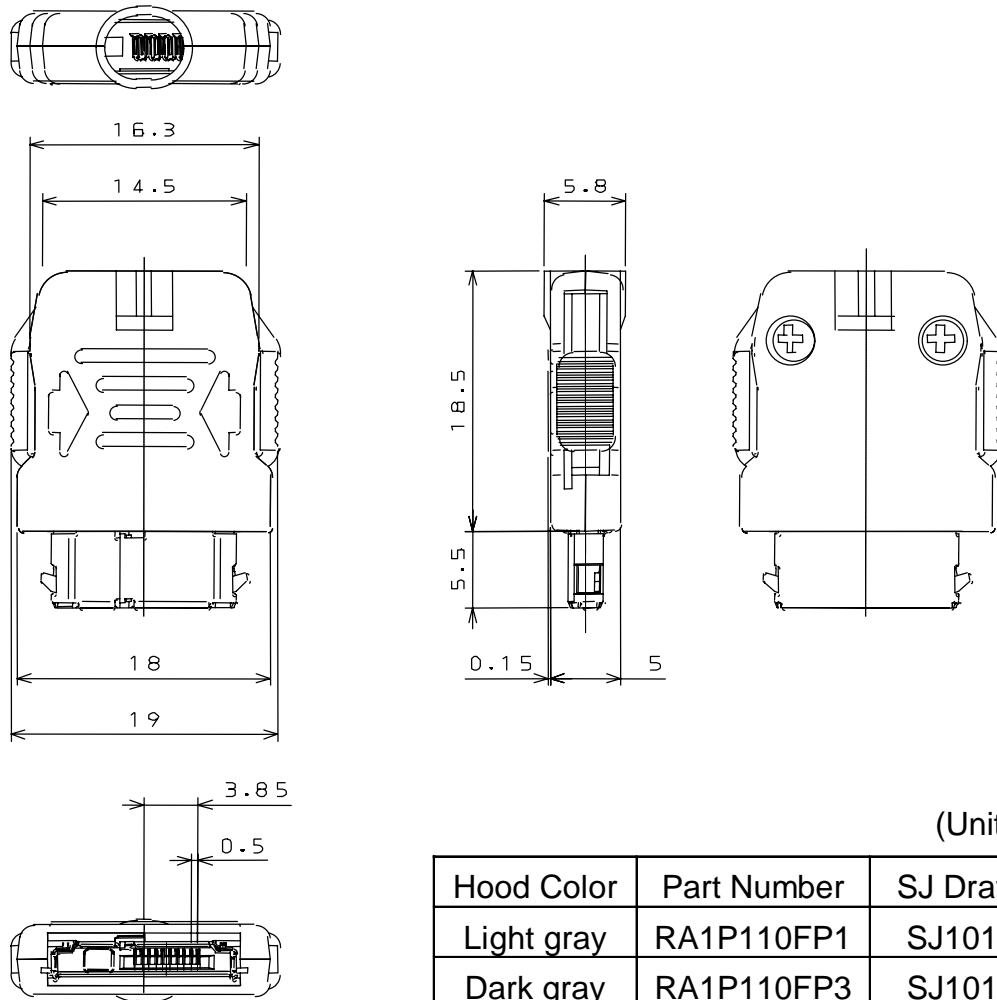CT150-6-RH07 --- Handling Instructions: T700116
CT150-6B-RH07 --- Handling Instructions: T700160

■ Part Number

RA1P110FP* (Short plug for data communication/ soldering connection type)

Applicable wire: AWG#28 max.　　Applicable cable diameter: 3.6 mm dia. max.

(Unit: mm)

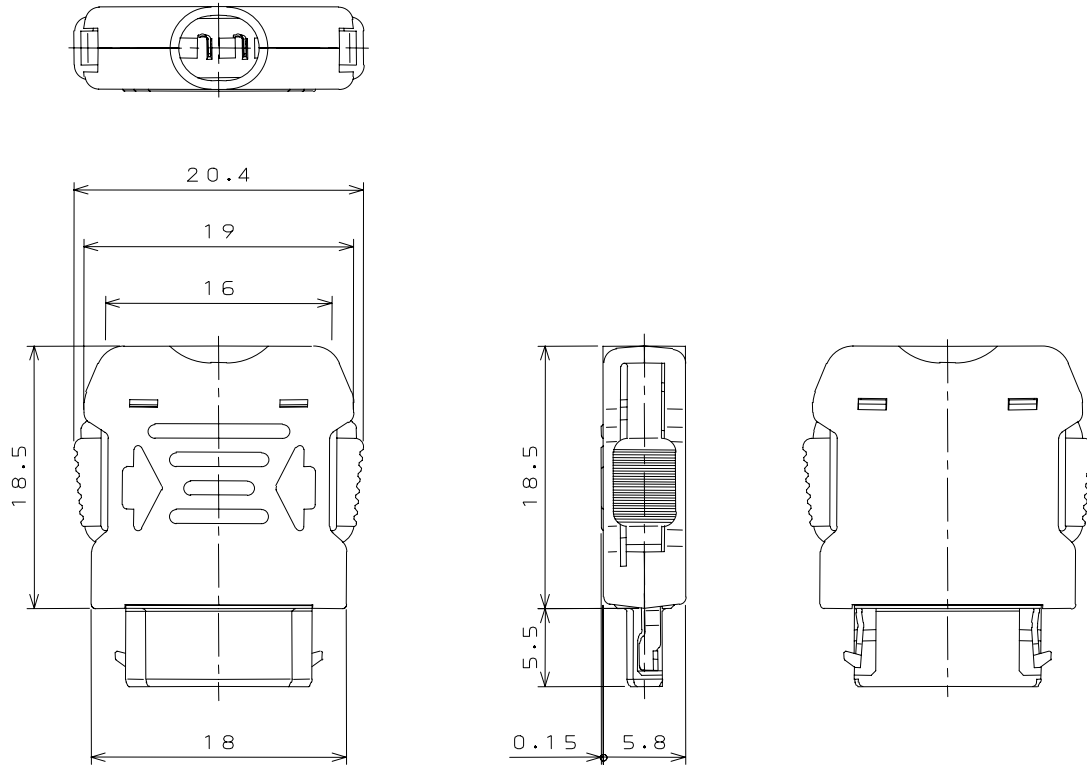| Hood Color	Part Number	SJ Drawing
Light gray	RA1P110FP1	SJ101452
Dark gray	RA1P110FP3	SJ101453

Note: Bushing for this product is cable mold-in type.

Please refer to Handling Instruction JAHL-3247 regarding connection, assembly process, bushing portion design and dimensions.

■Part Number

RA1P203F1*-A (3 contact plug for short type charger/ soldering connection type)

Applicable wire: AWG#28 max.　　　Applicable cable diameter: 3.6 mm dia. max.

（unit: mm）

Hood Color	Part Number	SJ Drawing
Black	RA1P203F12-A	SJ104237
Dark gray	RA1P203F13-A	SJ104235

Note: Bushing for this product is cable mold-in type.

Please refer to Handling Instruction JAHL-3281 regarding connection, assembly process, bushing portion design and dimensions.

Japan Aviation Electronics Industry, Limited

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Crimpers / Crimping Tools *category:*

Click to view products by JAE *manufacturer:*

Other Similar products are found below :

010-0096 M225202-37 6-1579015-5 CT150-2-D02 M322 6-304052-1 63456-0054 63484-3701 63800-8355 63819-1875 63819-2875 63819-4475 63823-3475 63827-5375 64001-0975 64001-4175 64005-0175 662903-2 690602-6 7-1579001-9 7-23471-1 762637-1 808714-1 811242-5 999-50-020083 1-21002-3 1-21002-7 12085270 1-21002-6 1-21113-6 1-22548-4 125442-1 DCE.91.073.BVC DCE.91.090.3MVM DCE.91.130.5MVU DCE.91.202.BVCM 1338300-1 1-354003-0 1338301-1 DF62/RE-MD 142321 1456088-1 1490794-1 1-45804-6 1490357-2 1490357-3 AX100749 1-59619-7 1596970-1 1-59619-8