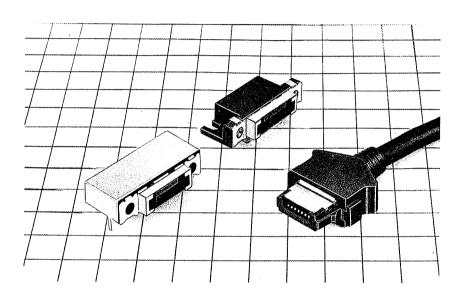
# 3100 SERIES LOW PROFILE CONNECTOR FOR PREVENTING EMI

#### General

The 3100 series low profile I/O connectors for preventing EMI are perfect for today's compact electronic equipment.

Available in 6, 8, 12, 14 and 16 pins.



#### **Features**

- (1) The metal shell guide structure for the receptacle connector reduces drastically the height for the substrate to 7mm.
- (2) The metal shell with a molded cover case is designed to shield it from electrostatic discharge (ESD).
- (3) The cantilever profile of the female contact ensures effortless coupling and long service life.
- (4) The effective engagement length is of sequence structure and sufficient to allow the shielded part to engage first when connecting.
- (5) The cable can be terminated efficiently just by crimping with a jig after passing the cable through the guide plate hole.
- (6) Cables AWG 26 to AGW 30 are applicable by partially changing the guide plate since the male cnnoector adopts a U-slit type connection.
- (7) The side latching method of the molded cover assures easy locking of the plug connector.

#### **Application**

Office Automation, Communications, Home Automation and Other equipment.

# Specification

Specification					
Current capacity	0.5A				
Rated Voltage	AC 125V				
Insulation Resistance	Min. 250MΩ at DC 100V				
Contact Resistance	Max. 35mΩ at DC 1mA				
Withstanding Voltage	AC 300Vr.m.s for 1 minute				

Relation between gulde plate and applicable coating O.D.						
Hole dia (mm) of Wire Configuration Guide Plate	ф 0.65	ф 0.85	ф 1			
Applicable Cable Cut dia (mm)	ф 0.57 <b>~</b> ф 0.63	ф 0.75 <b>~</b> ф 0.83	ф 0.88∼ ф 0.98			

### Material & Finish

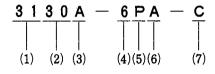
		Material Finish	
	Insulation	PBT resin	Black UL94V-0
Receptacle	Contact	Brass	Selective gold plating
	Shell	Brass	Solder plating
	Insulation	Polycarbonate Resin	White for AWG #28
	Ilisulation	Polycarbonate Resin	Black for AWG #30
Plug	Contact	Brass	Selective gold plating
riug	Guide Plate	Polycarbonate resin	Transparent
	Shell	Brass	Solder plating
	Cover	Polycarbonate resin	

#### **Ordering Information**

### Receptacle

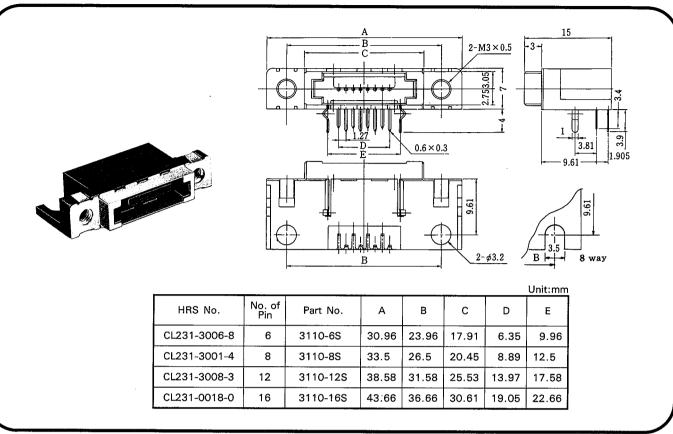
$$\frac{31}{\begin{vmatrix} 1 & 0 & -6 & S & A \\ \hline & & & & \\ (1) & (2) & & (3)(4)(5) \end{vmatrix}}$$

### Plug

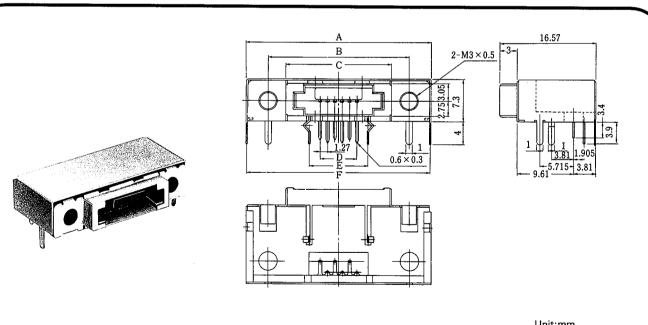


- (1) Series Number: 31
- (2) Type 10: Right Angle Dip
- (3) No. of Pins: 6, 8, 12, 14, 16
- (4) Type of opening
  - S: Receptacle
- (5) Additional Function Blank: StandardA: All Shield Type
- (1) Series Number: 31
- (2) Type 30: AWG28, 26 IDC 31: AWG30, IDC
- (3) Hole dia. of Wire Configuration Tube Plate Black: \$\phi\$ 1.0 (\$\phi\$0.88 \simes \$\phi\$0.98)
  - A: φ 0.85( φ 0.75~ φ 0.83)
  - B:  $\phi 0.65(\phi 0.57 \sim \phi 0.63)$
- (4) No. of Pins: 6, 8, 12, 14, 16
- (5) Type of opening P: Plug
- (6) Cover Type
  Blank: Straight Cable Exit
  - A: Side Cable Exit
- (7) Cover
  - C: Standard

### Receptacle (Standard)



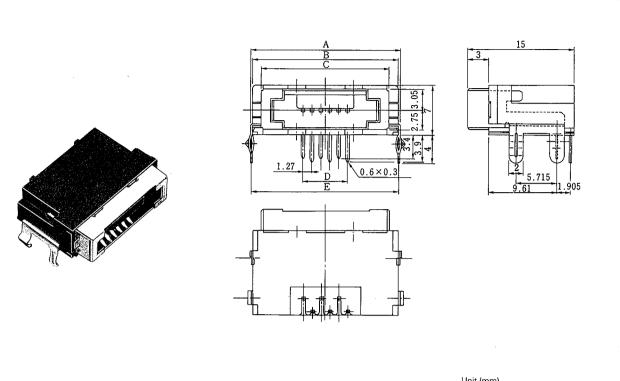
## Receptacle (All Shielded Type)



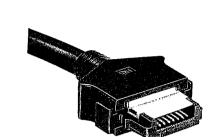
HRS No.	No. of Pin	Part No.	А	В	С	D	Е	F
CL231-3003-0	6	3110-6SA	31.56	23.96	17.91	6.35	9.96	31.26
CL231-0020-2	16	3110-16SA	44.26	36.66	30.61	19.06	22.66	43.96

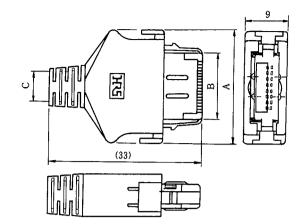
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### Receptacle (Without Mounting Hole Type)



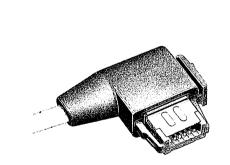
							Unit (mm)
HRS No.	No. of pin	Parts No.	А	В	С	D	E
CL231-3017-4	6	3110-6SB	20.86	20.26	17.91	6.35	20.56
CL231-0021-5	14	3110-14SB	31.02	30.42	28.07	16.51	30.72

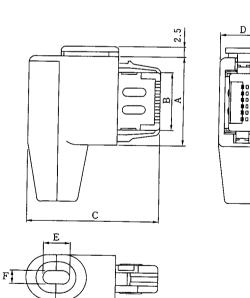




					Unit:mm
HRS No.	No. of Pin	Part No.	А	В	С
CL231-3014-6	6	3130-6P-C	21.46	11.36	ø 5.8
CL231-3002-7	8	3130-8P-C	24	13.9	ø 6.2
CL231-3009-6	12	3130-12P-C	29.08	18.98	ø 6.7
CL231-0022-8	14	3130-14P-C	31.62	21.52	φ7.0

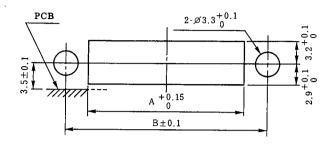
### Plug (Side Cable Exit Type)





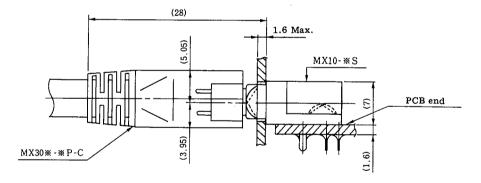
								Unit:mm
HRS No.	No. of Pin	Part No.	А	В	С	D	Е	F
CL231-3004-2	6	3130-6PA	17.46	11.36	26.15	9.0	5.2	2.8
CL231-0023-0	16	3130-16PA-C	30.16	24.06	26.75	10.2	φ	7.2

### Panel Cutout (Thickness of Panel: Max.1.6mm)



Unit: mm No. of HRS No. Part No. CL231-3006-8 6 18.06 3110- 6S 23.96 CL231-3001-4 3110- 8S 20.6 CL231-3008-3 3110-12S 25.68 31.58 CL231-0018-0 3110-16S 30.76 36.66 CL231-0021-5 3110-14SB 28.22

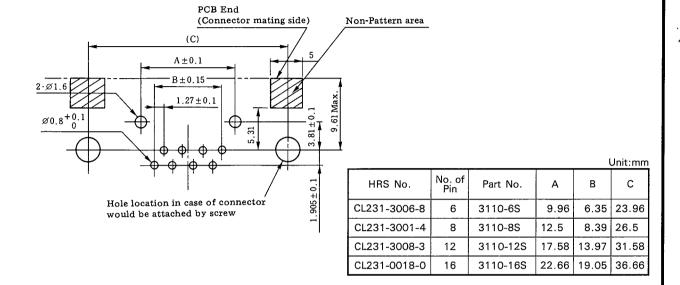
### **Coupling Status**



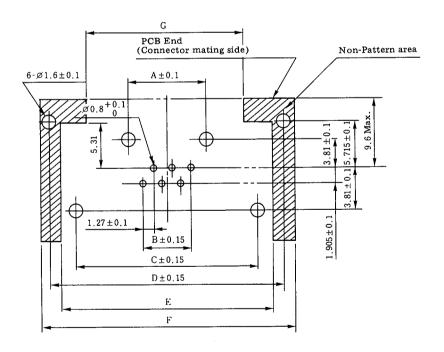
Note: Screw for Panel: M3 x 0.5 length 6 mm.

#### **Backboard Pattern**

### (Standard)

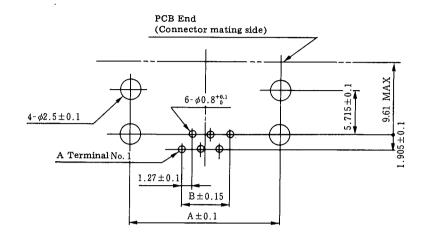


### (All Shielded Type)



									Jnit:mm
HRS No.	No. of Pin	Part No.	А	В	С	D	Е	F	G
CL231-3003-0	6	3110-6SA	9.96	6.35	23.96	31.26	27.56	31.96	18.96
CL231-0020-2	16	3110-16SA	22.66	19.05	36.66	43.96	40.26	44.66	31.66

## (Without Mounting Hole Type)



			ļ	<u>Jnit:mm</u>
HRS No.	No. of Pin	Part No.	А	В
CL231-3017-4	6	3110-6SB	20.56	6.35
CL231-0021-5	14	3110-14SB	30.72	16.51

### **Connecting Method**

		<u> </u>	1
Procedure	Specification	Procedure	Specification
1. Termination	Peel the shielded braid and terminate treatment.	4. IDC	Insert the guide plate into the plug temporarily and press it.
	(5)  Molded cover		Pre-Insertion
	Copper tape		IDC
2. Wire configuration	Configure the cable conductor to the corresponding guide plate.	5. Covering and clamping	Cover the ground plate B and fasten the cable by clamping.
	Hole dia. indication		Clamp
3. Cutting and clamping	Cut the remaining part of the wire and clamp the cable conductor.	6. Covering	
	Cximped connection		

### **Tooling**

## (Straight Cable Exit Type)

Connector	. Process	Tool	Name
3130-6P-C	Wire clamp Remaining part of cable cut		3130—6CT
	Crimping, Clamp		3130—6GP
3130–8P–C	Wire clamp Remaining part of cable cut		31308CT
	Crimping, Clamp	Hi-Flex Connecting press	31308GP
313012PC	Wire clamp Remaining part of cable cut	(CL550-0082-2)	3130-12CT
	Crimping, Clamp		3130—12GP
3130-14P-C	Wire clamp Remaining part of cable cut		3130-14CT
	Crimping, Clamp		3130-14GP

## (Side Cable Exit Type)

Connector	Process	Tool Name			
3130—6PA	Wire clamp Remaining part of cable cut		31306CTA		
3100 31 A	Crimping, Clamp	Hi-Flex	31306GPA		
3130 16PA C	Wire clamp Remaining part of cable cut  3130-16PA-C  Crimping, Clamp	3130-16CT-A			
3130-10FA-C			3130—16GP—A		

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3110-14SB(50) 3130-8P-C(50) 3130A-6P-C(50) 3130-6P-C(50) 3110-6SB(54) 3110-6SB(50) 3110-8S(50) 3130-12P-C(50) 3130-14P-C(50) 3110-14SC(50) 3110-12S(50) 3130-8GP 3130-6GP-A 3130-12CT 3130-6CT-A 3130-16GPA 3130-14GP 3130-6GP 3130-6CT 3130-16CTA 3130-6CT(62) 3130-6CT(61) 3130-14CT 3130-12GP 3130-8CT 3130-6CT(63)