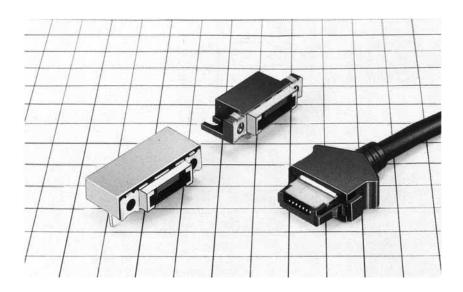
3100 SERIES LOW PROFILE CONNECTOR FOR PREVENTING EMI

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 (FSD).
- (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 connoector 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. 250M Ω at DC 100V | | | |
| Contact Resistance | Max. 35mΩ at DC 1mA | | | |
| Withstanding Voltage | AC300Vr.m.s for 1 minute | | | |

| Relation between guide plate and applicable coating O.D. | | | | | |
|--|----------------------------|----------------|--|--|--|
| Hole dia (mm) of Wire Configuration Guide Plate | ϕ 0.85 | φ1 | | | |
| Applicable Cable Cut dia (mm) | $\phi 0.75 \sim \phi 0.83$ | φ 0.88~ φ 0.98 | | | |

Material & Finish

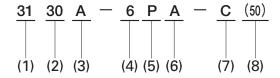
| Material Finish | | | | | | |
|----------------------|-------------|---------------------|------------------------|--|--|--|
| Insulation PBT resin | | Black UL94V-0 | | | | |
| Receptacle | Contact | Brass | Selective gold plating | | | |
| | Shell | Brass | Solder plating | | | |
| | Insulation |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

Ordering Informations

Receptacle

| 31 | 10 | _ | 6 | S | Α | (50) |
|--------|-----|---|-----|-----|-----|------|
| \top | | | | | T | |
| | | | | | | |
| (1) | (2) | | (3) | (4) | (5) | (6) |

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: Standard

A: All Shield Type

(6) Specification contents

(50): Specifications support RoHS

- (1) Series Number:31
- (2) Type 30: AWG28, 26 IDC
- (3) Hole dia. of Wire Configuration Tube Plate Black: ϕ 1.0 (ϕ 0.88 \sim ϕ 0.98)

A: $\phi 0.85 (\phi 0.75 \sim \phi 0.83)$

(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

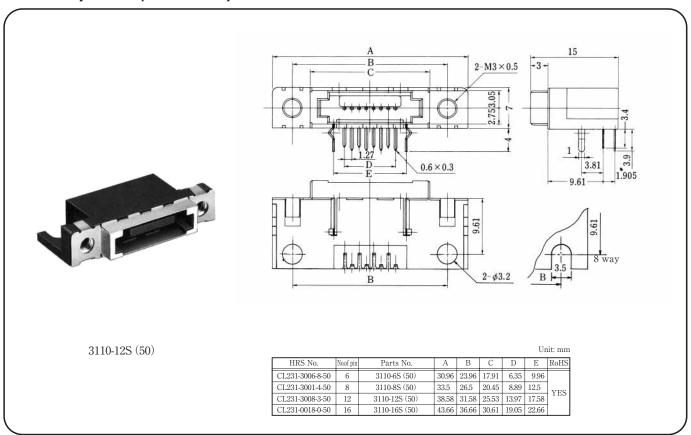
(7) Cover

C: Standard

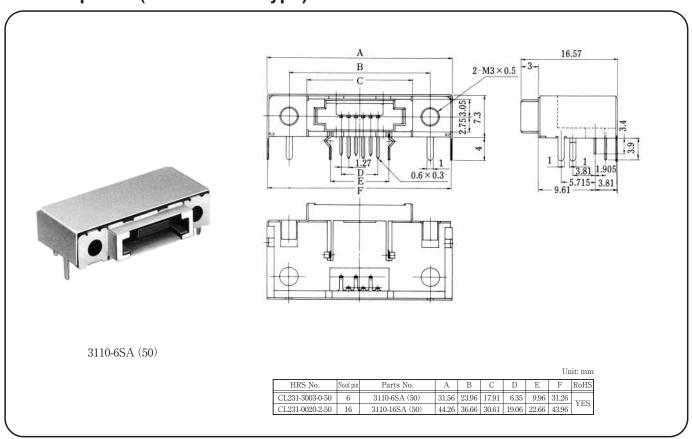
(8) Specification contents

(50): Specifications support RoHS

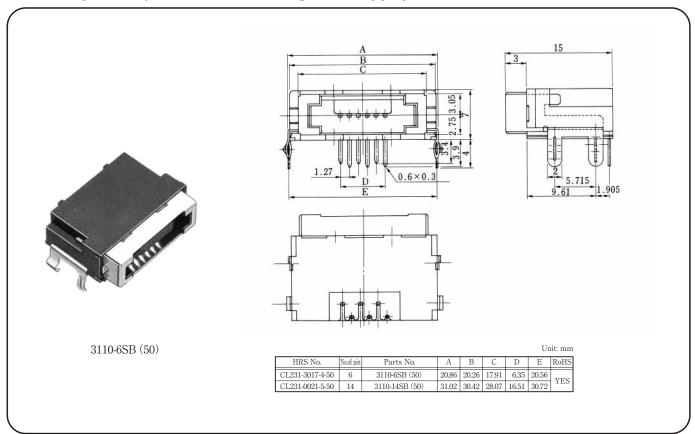
Receptacle (Standard)



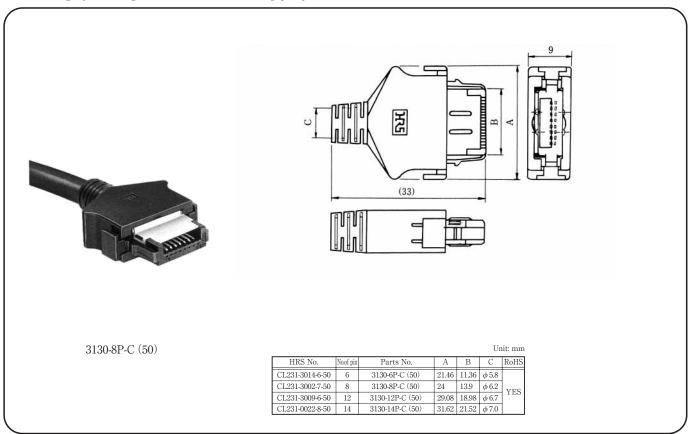
Receptacle (All Shielded Type)



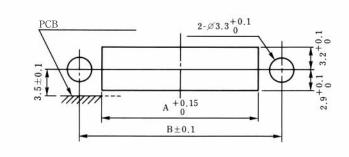
Receptacle (Without Mounting Hole Type)



Plug (Straight Cable Exit Type)

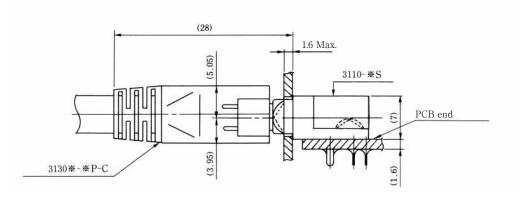


Panel Cutout (Thickness of Panel:Max.1.6mm)



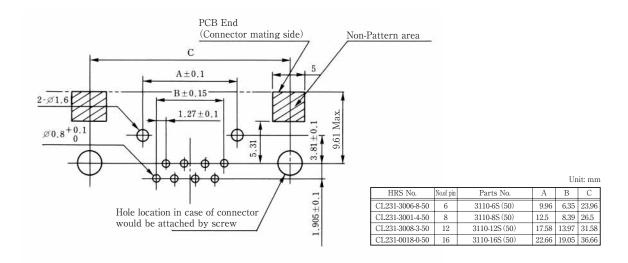
| | | | Un | it: mm |
|-----------------|-----------|----------------|-------|--------|
| HRS No. | No.of pin | Parts No. | А | В |
| CL231-3006-8-50 | 6 | 3110-6S (50) | 18.06 | 23.96 |
| CL231-3001-4-50 | 8 | 3110-8S (50) | 20.6 | 26.5 |
| CL231-3008-3-50 | 12 | 3110-12S (50) | 25.68 | 31.58 |
| CL231-0018-0-50 | 16 | 3110-16S (50) | 30.76 | 36.66 |
| CL231-0021-5-50 | 14 | 3110-14SB (50) | 28.22 | _ |

Coupling Status

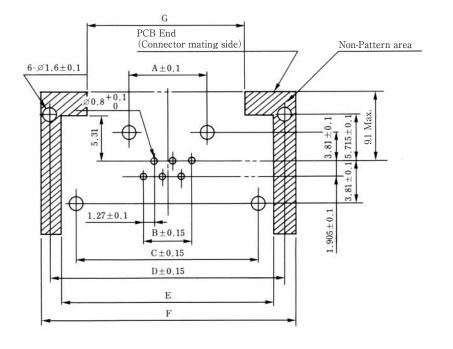


Note: Screw for Panel: M3×0.5 length 6mm.

Backboard Pattern (Standard)



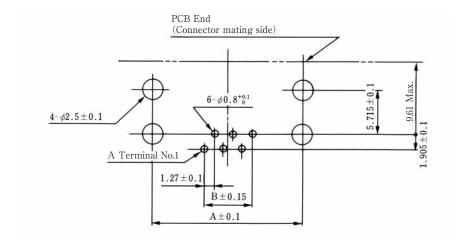
(All Shielded Type)



Unit: mm

| HRS No. | No.of pin | Parts No. | A | В | С | D | Е | F | G |
|-----------------|-----------|----------------|-------|-------|-------|-------|-------|-------|-------|
| CL231-3003-0-50 | 6 | 3110-6SA (50) | 9.96 | 6.35 | 23.96 | 31.26 | 27.56 | 31.96 | 18.96 |
| CL231-0020-2-50 | 16 | 3110-16SA (50) | 22.66 | 19.05 | 36.66 | 43.96 | 40.26 | 44.66 | 31.66 |

(Without Mounting Hole Type)



| Unit: mm | | | | | |
|----------|-----|--|--|--|--|
| А | В | | | | |
| 90 F.C | COF | | | | |

| ı | HRS No. | No.of pin | Parts No. | A | В |
|---|-----------------|-----------|----------------|-------|-------|
| 1 | CL231-3017-4-50 | 6 | 3110-6SB (50) | 20.56 | 6.35 |
| 1 | CL231-0021-5-50 | 14 | 3110-14SB (50) | 30.72 | 16.51 |

Connecting Method

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

Tooling

(Straight Cable Exit Type)

| Connector | Process | | Tool Name | |
|-----------------|--|------------------------------------|-----------|----------|
| 3130-6P-C (50) | Wire clamp Remaining part of cable cut | | | 3130-6CT |
| 3130-01 -C (30) | Crimping, Clamp | | 3130-6GP | |
| 3130-8P-C (50) | Wire clamp Remaining part of cable cut | | 3130-8CT | |
| 3130-8P-C(50) | Crimping, Clamp | Hi-Flex Connecting press | 3130-8GP | |
| 7(0) | Wire clamp Remaining part of cable cut | Connecting press (CL550-0082-2) | 3130-12CT | |
| 3130-12P-C (50) | Crimping, Clamp | | 3130-12GP | |
| 3130-14P-C (50) | Wire clamp Remaining part of cable cut | | 3130-14CT | |
| | Crimping, Clamp | | 3130-14GP | |