The product information in this catalog is for reference only. Please request the Engineering Drawing for the most current and accurate design information.
All non-RoHS products have been discontinued, or will be discontinued soon. Please check the products status on the Hirose website RoHS search at www.hirose-connectors.com, or contact your Hirose sales representative.

3.96mm Pitch Card Edge Connector

CR6 Series

**Connection Method**
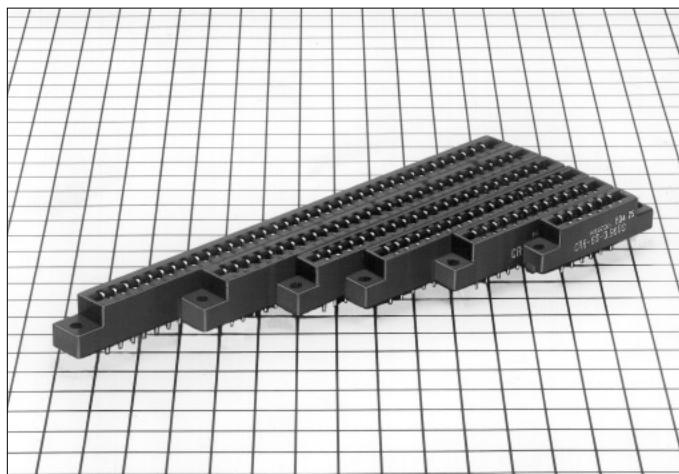
| Eyelet | Open End | Through hole |
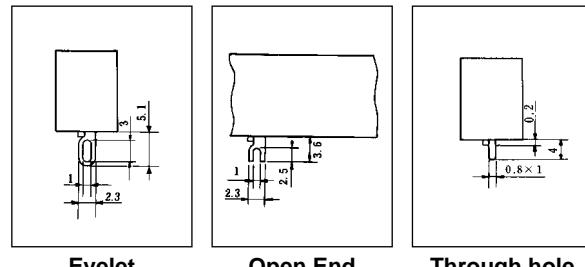
■Features

1. Contact Type

Uses the tuning fork contact, where the contact pitch is 3.96mm.
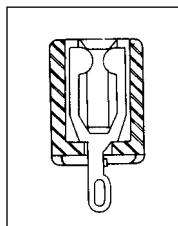
2. Variation in number of contacts

6, 10, 12, 15, 18, 22, 28, 36 contacts are available.

3. Connection Type

Eyelet, open end and through hole types are available.

4. Prevents mis-insertion in the board

Using the polarizing key prevents mis-insertion in the printed board.

■Product Specifications

Rating	Current rating: 5A	Operating Temperature Range: -30 to +85℃ (Note 1)	Storage Temperature Range: -10 to +60℃ (Note 2)
	Voltage rating: 600V AC	Operating Humidity Range: 40 to 80%	Storage Humidity Range: 40 to 70 (Note 2)

Item	Specification	Condition
1.Insulation Resistance	5000M ohms min.	500V DC
2.Withstanding Voltage	No flashover or insulation breakdown.	1800V AC/1 minute.
3.Contact Resistance	6m ohms max.	1A
4.Vibration	No electrical discontinuity of 10μs or more	Frequency: 10 to 55 Hz, single amplitude of 0.75 mm, 2 hours in each of the 3 directions.
5.Humidity(Steady state)	Insulation resistance: 1000M ohms min.	96 hours at temperature of 40℃ and humidity of 90% to 95%
6.Temperature Cycle	No damage, cracks, or parts looseness.	(-65℃ : 30 minutes→15 to 35℃: 5 minutes max.→ 125℃ : 30 minutes→15 to 35℃: 5 minutes max.) 5 cycles
7.Durability (Mating/un-mating)	Contact resistance: 6m ohms max.	500 cycles
8.Resistance to Soldering heat	No deformation of components affecting performance.	Manual soldering: 300℃ for 3 seconds

Note 1: Includes temperature rise caused by current flow.
Note 2: The term "storage" refers to products stored for long period of time prior to mounting and use. Operating Temperature Range and Humidity range covers non conducting condition of installed connectors in storage, shipment or during transportation.

■Material

Parts	Material	Finish	Remarks
Insulator	Dieallylphtalate	Blue	UL94V-0
Contact	Copper alloy	Gold plated	————

■Ordering Information

$$\underset{❶}{\underline{CR6}} - \underset{❷}{\underline{22S}} - \underset{❸}{\underline{3.96}}\underset{❹}{\underline{E}}$$

❶ Series Name : CR6	❹ Contact type	E : Eyelet type
❷ Number of contacts : 6, 10, 12, 15, 18, 22, 28, 36		OE : Open end type
❸ Contact pitch : 3.96mm		DS : Through hole type

◆Contact Type
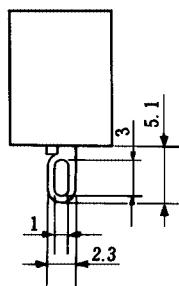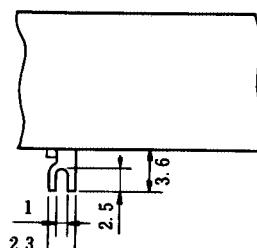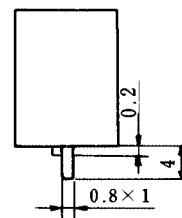
(1) Eyelet **(2) Open End** **(3) Through hole**
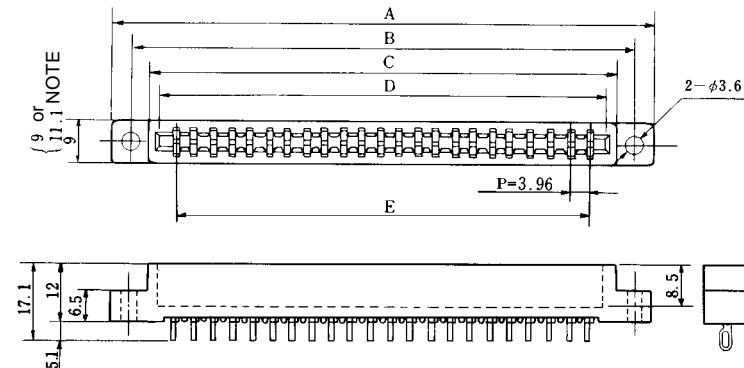
Unit: mm

Part Number	CL No.	Number of Contacts	A	B	C	D	E
CR6- 6S-3.96E	506-0019-8	6	45	38.9	31.47	28	19.8
CR6- 6S-3.96DS	506-0022-2						
CR6-10S-3.96E	506-0001-2	10	61	54.8	47.3	43.8	35.64
CR6-10S-3.96DS	506-0013-1						
CR6-12S-3.96E	506-0023-5	12	68.8	62.7	55.27	51.7	43.56
CR6-12S-3.96DS	506-0026-3						
CR6-15S-3.96E	506-0002-5	15	81	74.6	67.2	63.6	55.44
CR6-15S-3.96DS	506-0014-4						
CR6-18S-3.96E	506-0003-8	18	93	86.5	79	75.5	67.32
CR6-18S-3.96OE	506-0007-9						
CR6-18S-3.96DS	506-0015-7						
CR6-22S-3.96E	506-0004-0	22	109	102.4	95	91.3	83.16
CR6-22S-3.96OE	506-0008-1						
CR6-22S-3.96DS	506-0016-0						
CR6-28S-3.96E	506-0031-3	28	133.7	126.1	118.2	115.1	106.98
CR6-28S-3.96OE	506-0032-6						
CR6-28S-3.96DS	506-0034-1						
CR6-36S-3.96E	506-0027-6	36	166	158	150	146.8	138.66
CR6-36S-3.96DS	506-0030-0						

NOTE : 11.1mm for 28, 36 contacts

◆PCB Cutouts

Unit: mm
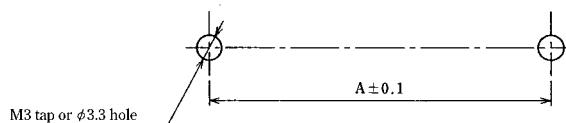
| Number of Contacts	6	10	12	15	18	22	28	36
A	38.9	54.8	62.7	74.6	86.5	102.4	126.1	158

◆Contact No. Alignment List
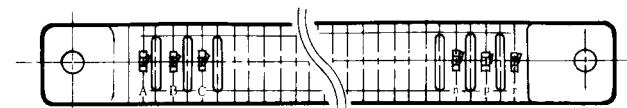
NOTE 1 : To utilize alphabetic symbols, following 8 alphabetic characters are not used.
G. I, O, Q, g, i, o, q
NOTE 2 : The above pattern is viewed from the contact (connection) side.

◆PCB Dimensions

Keyway size pattern to prevent mis-insertion (Recommended)

$11^{+0.5}_{0}$ 10 C0.5

2.3 ± 0.1
3.96 ± 0.05
$2.5^{+0.5}_{0}$ C0.5
$A\pm0.08$
$B^{0}_{-0.2}$

C0.5   C0.5
1.6 ± 0.15
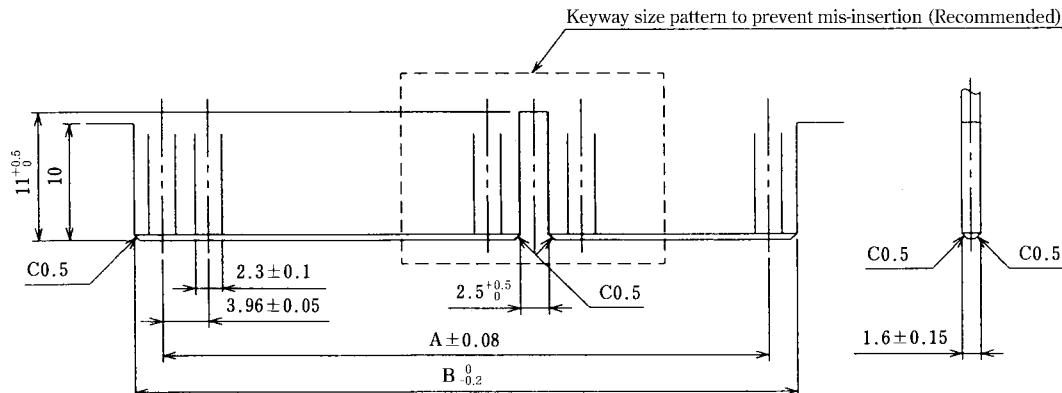
Unit: mm

Number of Contacts	6	10	12	15	18	22	28	36
A	19.8	35.64	43.56	55.44	67.32	83.16	106.98	138.68
B	27.8	43.6	51.5	63.4	75.3	91.1	114.9	146.6

NOTE : Using the polarizing key prevents mis-insertion in the printed board.
To use the polarizing key, insert the polarizing key so as to hit the mold bottom.

■Polarizing Key

CR6-GPIN(A)

7.5   2.5
9.4
2.2   2
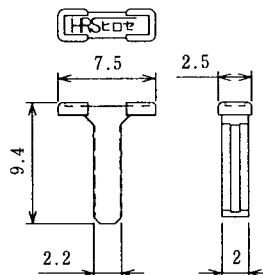
Part Number	CL No.	Material	Color
CR6-GPIN (A)	506-0018-5	ABS	Gray