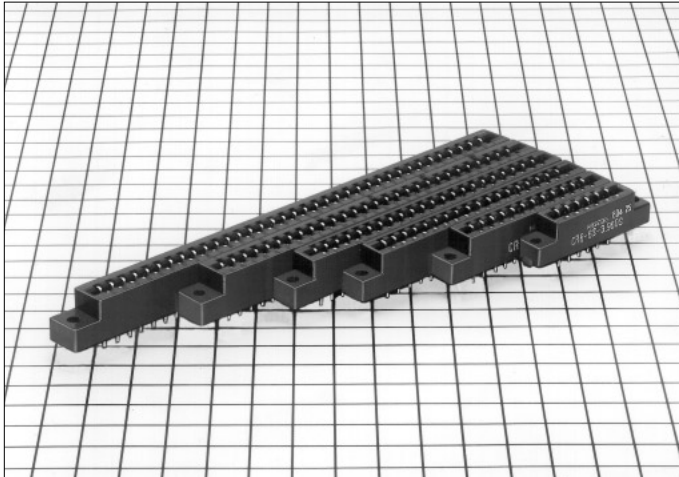
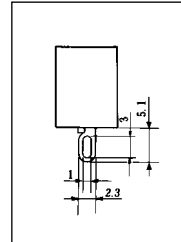


# 3.96mm Pitch Card Edge Connector

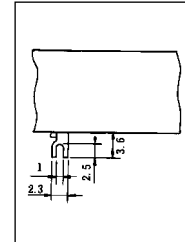
CR6 Series



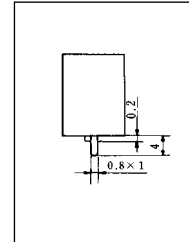
## Connection Method



Eyelet



Open End

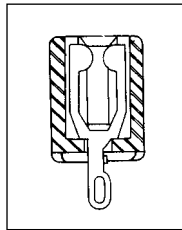


Through hole

## ■ 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 Voltage rating: 600V AC	Operating Temperature Range: -30 to +85°C (Note 1) Operating Humidity Range: 40 to 80%	Storage Temperature Range: -10 to +60°C (Note 2) Storage Humidity Range: 40 to 70 (Note 2)
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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°C and humidity of 90% to 95%
6. Temperature Cycle	No damage, cracks, or parts looseness.	(-65°C : 30 minutes → 15 to 35°C : 5 minutes max. → 125°C : 30 minutes → 15 to 35°C : 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°C 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

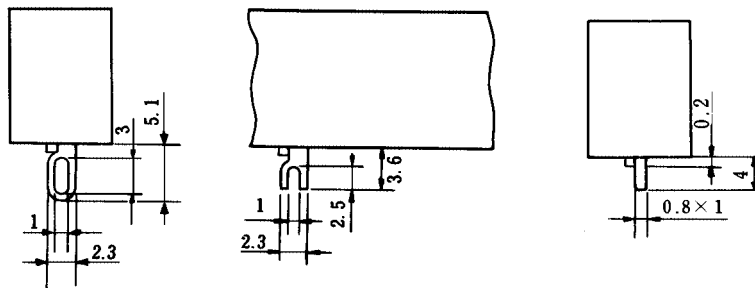
Parts	Material	Finish	Remarks
Insulator	Dieallyphtalate	Blue	UL94V-0
Contact	Copper alloy	Gold plated	_____

## Ordering Information

$\frac{\text{CR6}}{\text{①}} - \frac{\text{22S}}{\text{②}} - \frac{\text{3.96}}{\text{③}} \frac{\text{E}}{\text{④}}$

① Series Name : CR6	④ Contact type E : Eyelet type OE : Open end type DS : Through hole type
② Number of contacts : 6, 10, 12, 15, 18, 22, 28, 36	
③ Contact pitch : 3.96mm	

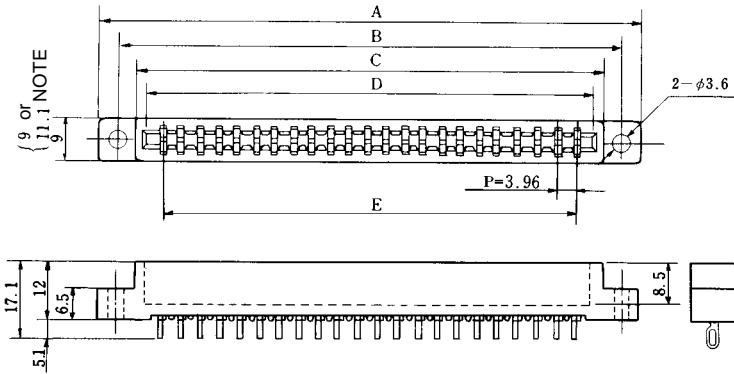
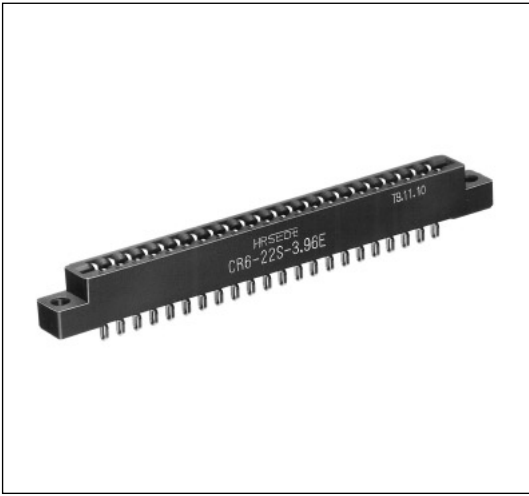
## Contact Type



(1) Eyelet

(2) Open End

(3) Through hole

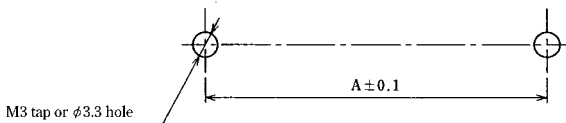


Unit: mm

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

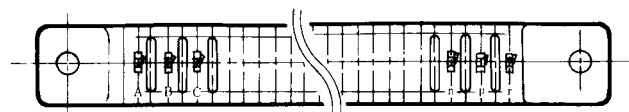
### ◆PCB Cutouts



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

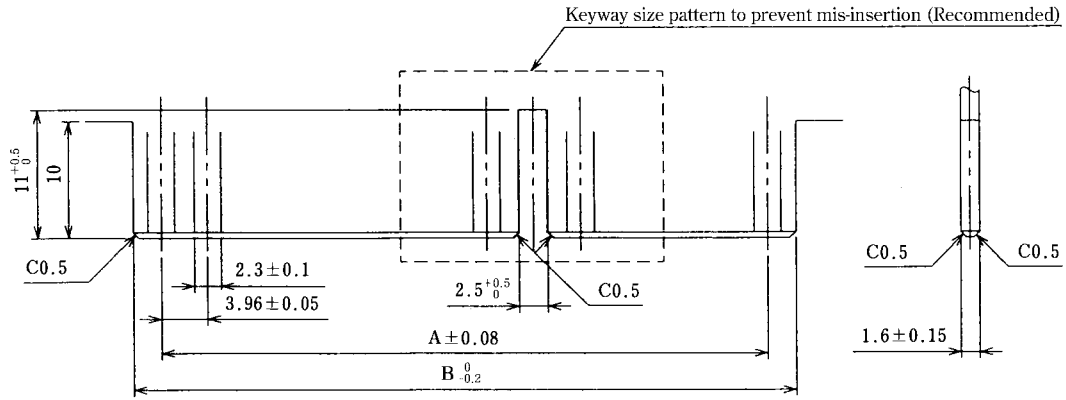


NOTE 1 : To utilize alphabetic symbols, following 8 alphabetic characters are not used.

G, I, O, Q, g, i, o, q

NOTE 2 : The above pattern is viewed from the contact (connection) side.

## ◆PCB Dimensions



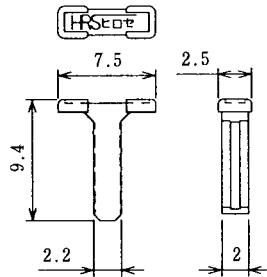
Unit: mm

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)



Part Number	CL No.	Material	Color
CR6-GPIN (A)	506-0018-5	ABS	Gray