

# 3.96 or 4.00 × 4.4mm GRID PATTERN CR7 SERIES DUAL LINE CONNECTORS

## General

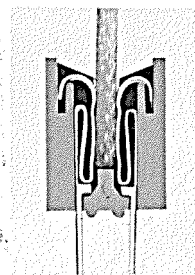
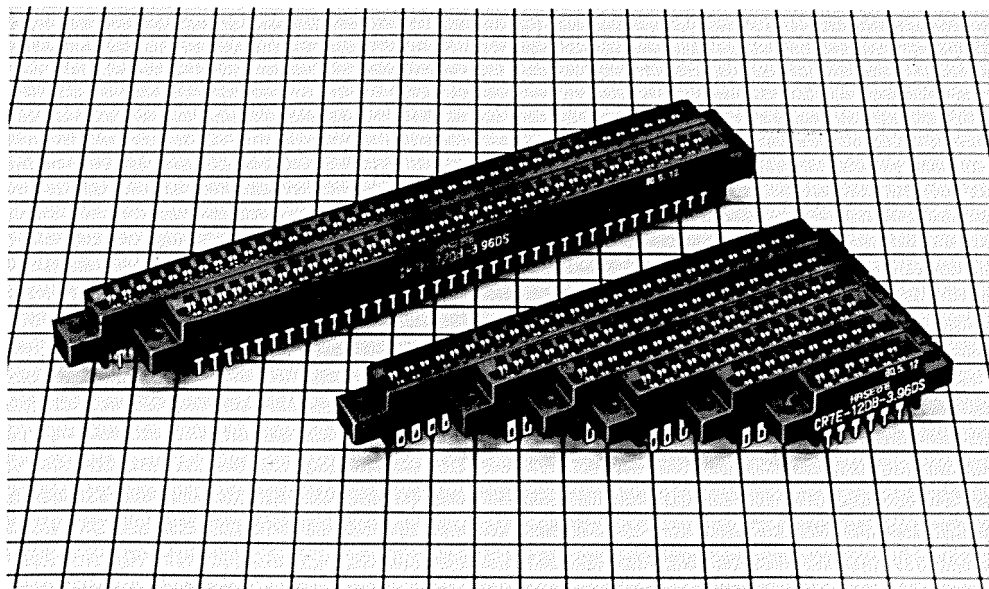
CR7 series are 3.96 or 4.00mm centers dual line connectors featuring bellows contacts of 8 contact points in 2 steps which offer excellent electrical and mechanical characteristics. 12, 20, 30, 36, 44, 56, 72, and 80 pin in 3.96mm

centers and 20, 28, 36, 44, and 56 pin in 4.00mm centers are line-uped with Solder Eyelet or Dip Solder terminals. A polarizing key is available for protection of coupling errors.

## Material and Finish

Molding : UL94V-0 Glass-reinforced Polycarbonate, Blue

Contact : Phosphor Bronze, (1) Whole gold plating over nickel or (2) Selective gold plating and solder over nickel

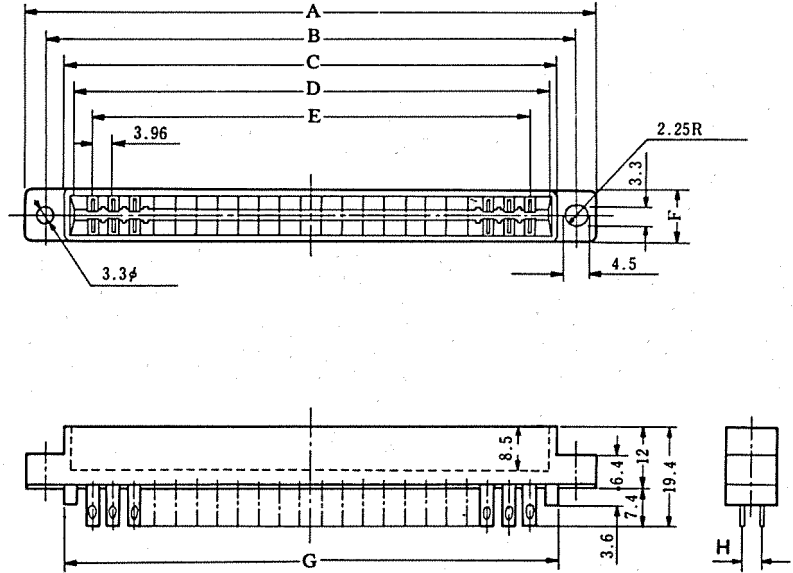
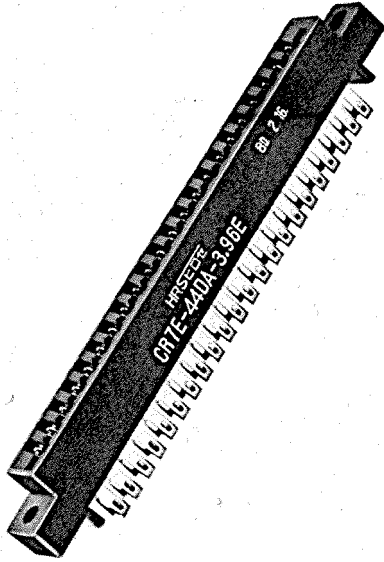


## Electrical and Environmental Performance

Current Rating	: 3A
Voltage Rating	: AC600V, DC850V
Insulation Resistance	: 5000MΩ MIN at DC500V
Contact Resistance	: 15mΩ MAX at DC1A
Voltage Withstanding	: AC1800V for a minute
Insertion and	
Extraction Force	: 57–450grs/contact at 1.575 <sup>±0.002</sup> mm steel gauge
Humidity	: MIL-STD-202, Insulation Resistance 1000MΩ MIN at 40 <sup>±2</sup> °C, 90–95%, and 96 hours
Vibration	: MIL-STD-202, No visual damage nor looseness of parts at 10–55Hz with 1.5mm amplitude
Shock	: MIL-STD-202, No visual damage nor looseness of parts at 50G in 3 directions
Temperature Cycling	: MIL-STD-202, No visual damage at –55 to +85°C
Durability	: Contact Resistance 15mΩ MAX after 500 times consecutive coupling operation
Salt Spray	: MIL-STD-202, No heavy corrosion at 5%, 35°C Salt Water spray for 48 hours
Low Level Circuit	: MIL-C-21097, Contact Resistance 15mΩ MAX at DC1mA

# 1. 3.96mm Centers Type

mm



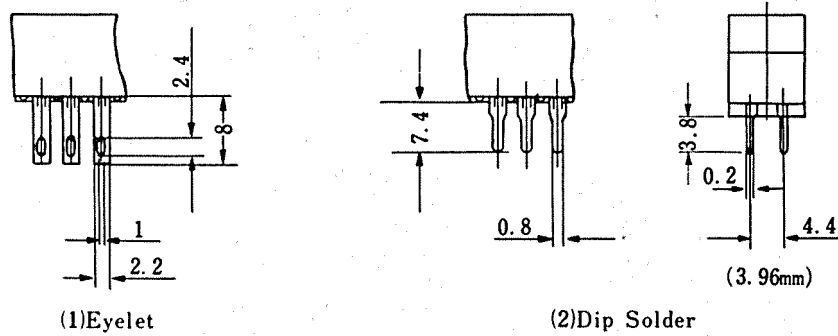
CR7E - 44DA - 3.96E

mm

No. of pin	Part No.		Terminals	A	B	C	D	E	F	G	H
	Wholly Gold Plated	Selectively Gold Plated									
12	CR7E-12DA-3.96E	CR7E-12DB-3.96E	Eyelet	47	38.9	30.7	28	19.8	9	29.7	4.0
	CR7E-12DA-3.96DS	CR7E-12DB-3.96DS	Dip Solder								4.4
20	CR7E-20DA-3.96E	CR7E-20DB-3.96E	Eyelet	63	54.8	47.3	43.8	35.64	9	46.3	4.0
	CR7E-20DA-3.96DS	CR7E-20DB-3.96DS	Dip Solder								4.4
30	CR7E-30DA-3.96E	CR7E-30DB-3.96E	Eyelet	82.5	74.6	67.2	63.6	55.44	9	66.2	4.0
	CR7E-30DA-3.96DS	CR7E-30DB-3.96DS	Dip Solder								4.4
36	CR7E-36DA-3.96E	CR7E-36DB-3.96E	Eyelet	94.4	86.5	79	75.5	67.32	9	78	4.0
	CR7E-36DA-3.96DS	CR7E-36DB-3.96DS	Dip Solder								4.4
44	CR7E-44DA-3.96E	CR7E-44DB-3.96E	Eyelet	110.2	102.4	95	91.4	83.16	9	94	4.0
	CR7E-44DA-3.96DS	CR7E-44DB-3.96DS	Dip Solder								4.4
56	CR7E-56DA-3.96E	CR7E-56DB-3.96E	Eyelet	133.7	126	118.1	115	106.98	11.1	117.1	4.0
	CR7E-56DA-3.96DS	CR7E-56DB-3.96DS	Dip Solder								4.4
72	CR7E-72DA-3.96E	CR7E-72DB-3.96E	Eyelet	166	158	150	146.8	138.68	11.1	149	4.0
	CR7E-72DA-3.96DS	CR7E-72DB-3.96DS	Dip Solder								4.4
80	CR7E-80DA-3.96E	CR7E-80DB-3.96E	Eyelet	182	174	166	162.7	154.53	11.1	165	4.0
	CR7E-80DA-3.96DS	CR7E-80DB-3.96DS	Dip Solder								4.4

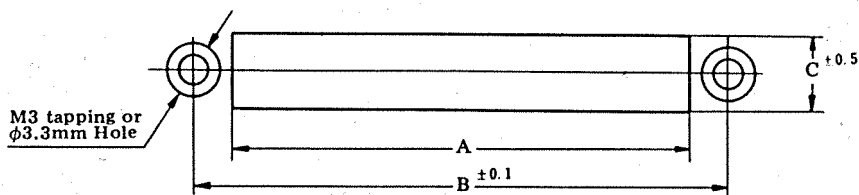
## Terminals

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## Mounting Cutout

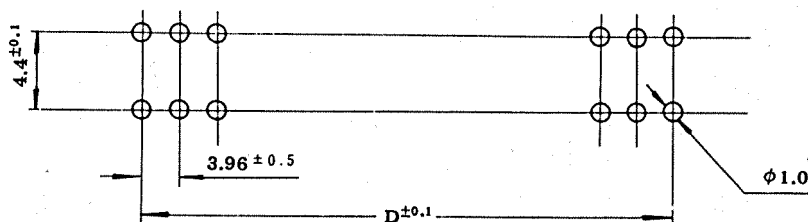
mm



	mm							
No. of pin	12	20	30	36	44	56	72	80
A	32.5	48.3	68.2	80.0	96.0	119.1	151.0	167.0
B	38.9	54.8	74.6	86.5	102.4	126.0	158.0	174.0
C			10				12	

## Dip Soldering Pattern

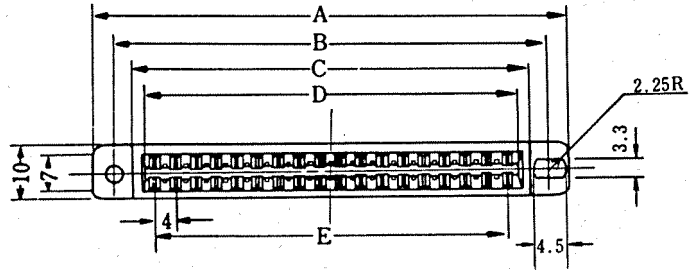
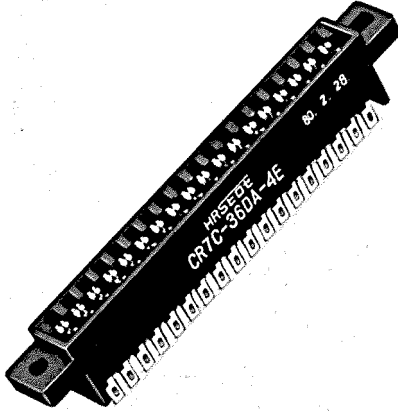
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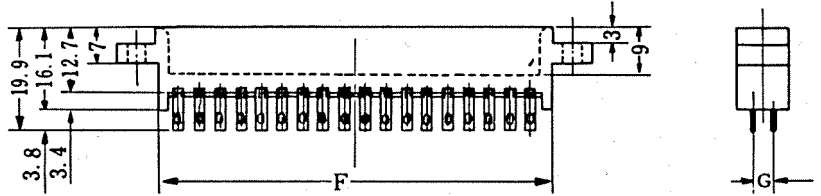
	mm							
No. of pin	12	20	30	36	44	56	72	80
D	19.8	35.64	55.44	67.32	83.16	106.98	138.68	154.53

## 2. 4.00mm Centers Type

mm



CR7C-36DA-4E



mm

No. of pin	Part No.		Terminals	A	B	C	D	E	F	G
	Wholly Gold Plated	Selectively Gold Plated								
20	CR7C-20DA-4E	CR7C-20DB-4E	Eyelet	58	50	43	41	36	43	4.0
	CR7C-20DA-4DS	CR7C-20DB-4DS	Dip Solder							4.4
28	CR7C-28DA-4E	CR7C-28DB-4E	Eyelet	75	67	60	57	52	59	4.0
	CR7C-28DA-4DS	CR7C-28DB-4DS	Dip Solder							4.4
36	CR7C-36DA-4E	CR7C-36DB-4E	Eyelet	92	84	77	73	68	76	4.0
	CR7C-36DA-4DS	CR7C-36DB-4DS	Dip Solder							4.4
44	CR7C-44DA-4E	CR7C-44DB-4E	Eyelet	109	101	93	89	84	93	4.0
	CR7C-44DA-4DS	CR7C-44DB-4DS	Dip Solder							4.4
56	CR7C-56DA-4E	CR7C-56DB-4E	Eyelet	133	125	117	113.5	108	117	4.0
	CR7C-56DA-4DS	CR7C-56DB-4DS	Dip Solder							4.4

70E

### Polarizing Key

mm

Part No.	Material
CR7C-GPIN	Polyacetal, White

### Terminals

mm

(1)Eyelet

(2)Dip Solder

### Mounting Cutout

mm

No. of pin	20	28	36	44	56
A	44	61	78	94	118
B	50	67	84	101	125
C	11.5				11.0

### Dip Soldering Pattern

mm

No. of pin	20	28	36	44	56
D	36	52	68	84	108