

Introduction

The system CB includes 1.27mm (.050"), 2.00mm (.098") and standard 2.54mm (.100") center spacing Board to Board connectors. They are available for pin through holes or surface mount version in many of body height to meet customers application board to board requirements.

A number of design features have been included in CB system, the connector stand-off prevents flux wicking problem during soldering process, conventional glass filled polyesters, which are suitable wave soldered connectors. Typically, surface mount connectors should be able to withstand 230°C for 30 seconds, and in extreme cases 260°C for 10 seconds.

Additionally, many of CviLux Board to Board connectors are available with optional alignment pins or locking clips to help the lead properly position on the pad and assures the highest quality fillet. They can mate CviLux CH system offers complete design flexibility for board-to-board connections.

This system is popular used in Computers, Peripherals, Test Equipment, Medical, Instrumentation and any other commercial applications that need ultra high density interconnects.



System CB - Technical Specifications

MILITARY STANDARD - MIL - STD - 1344 (TEST METHODS FOR ELECTRONIC CONNECTOR)

Dielectric Withstanding: Per MIL-STD-1344A method 3001.1
 Contact Resistance: Per MIL-STD-1344A method 3002.1
 Insulation Resistance: Per MIL-STD-1344A method 3003.1
 Solderability: Per MIL-STD-202F method 208D

1.27mm (.050") Center spacing Board to Board Connectors

<p>Electrical Data-</p> <p>Current rating: 1 Amp</p> <p>Dielectric Withstanding: 600 VAC for one minute</p> <p>Contact Resistance: < 20 mΩ</p> <p>Insulation Resistance: > 1000 MΩ</p> <p>Operating Temperature: -40°C - +105°C</p>	<p>Construction-</p> <p>Hole through type Insulator: Black, Glass Filled Polyester</p> <p>Surface mount type Insulator: High temperature plastic</p> <p>Flammability Rating: UL 94V-0</p> <p>Contacts: Phosphor Bronze or Brass</p> <p>Contact plating: Tin-Lead or Gold plated over Nickel</p> <p>Please see plating code for other options</p>
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2.00mm (.079") Center spacing Board to Board Connectors

<p>Electrical Data-</p> <p>Current rating: 1 Amp</p> <p>Dielectric Withstanding: 1000 VAC for one minute</p> <p>Contact Resistance: < 20 mΩ</p> <p>Insulation Resistance: > 1000 MΩ</p> <p>Operating Temperature: -40°C - +105°C</p>	<p>Construction-</p> <p>Hole through type Insulator: Black, Glass Filled Polyester</p> <p>Surface mount type Insulator: High temperature plastic</p> <p>Flammability Rating: UL 94V-0</p> <p>Contacts: Phosphor Bronze or Brass</p> <p>Contact plating: Tin-Lead or Gold plated over Nickel</p> <p>Please see plating code for other options</p>
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2.54mm (.100") Center spacing Board to Board Connectors

<p>Electrical Data-</p> <p>Current rating: 3 Amps</p> <p>Dielectric Withstanding: 1000 VAC for one minute</p> <p>Contact Resistance: < 20 mΩ</p> <p>Insulation Resistance: > 1000 MΩ</p> <p>Operating Temperature: -40°C - +105°C</p>	<p>Construction-</p> <p>Hole through type Insulator: Black, Glass Filled Polyester</p> <p>Surface mount type Insulator: High temperature plastic</p> <p>Flammability Rating: UL 94V-0</p> <p>Contacts: Phosphor Bronze or Brass</p> <p>Contact plating: Tin-Lead or Gold plated over Nickel</p> <p>Please see plating code for other options</p>
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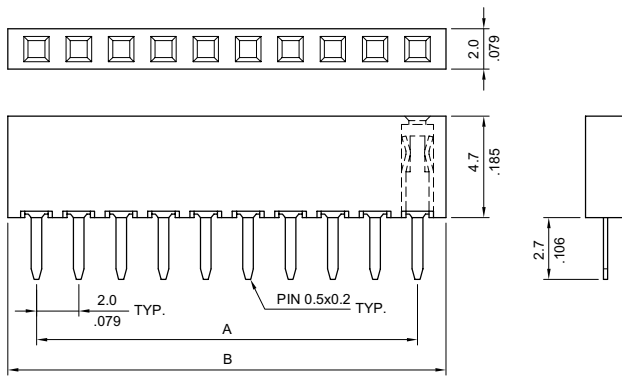
CB22 Series Single Row Straight Board Mount Connector

2.00mm(.079") Center spacing

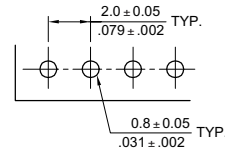
☉ Mates CH11 and CH21 headers



Ordering code		1	2	3	4	5	6
		CB22	40	2	V	1	00
1 Series No.	3 Plating code:			6 Other options:			
2 Circuits: 02 to 40	2= Gold flash plated over Nickel			00= Standard		*Special option Consult manufacturer	
	4 Tail Style: V= Straight						
	5 Color: 1= Black						



A = 2.00 x No. of Spaces
 B = A + 2.60
 * Available in 2 through 40 circuits



Recommended P.C. Board Layout

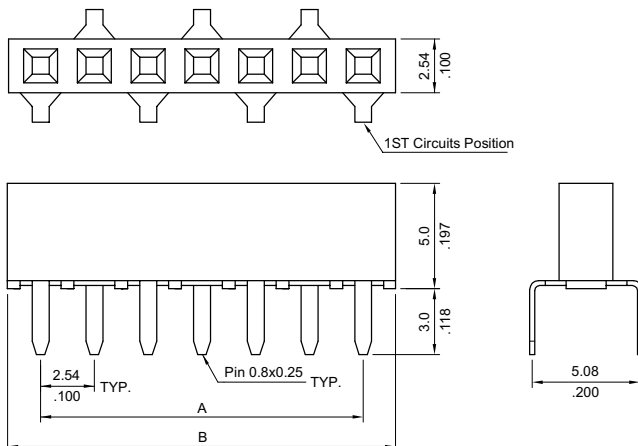
CB33 Series Single Row Straight Bottom Entry Connector

2.54mm(.100") Center spacing

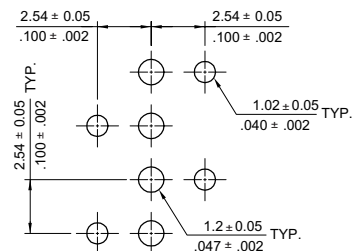
☉ Mates CH31, CH34 and CH35 headers



Ordering code		1	2	3	4	5	6
		CB33	40	2	R	1	00
1 Series No.	3 Plating code:			6 Other options:			
2 Circuits: 02 to 40	2= Gold flash plated over Nickel			00= Standard		*Special option Consult manufacturer	
	4 Tail Style: R= Bottom entry						
	5 Color: 1= Black						



A = 2.54 x No. of Spaces
 B = A + 3.04
 * Available in 2 through 40 circuits



Recommended P.C. Board Layout

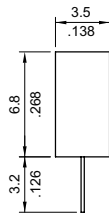
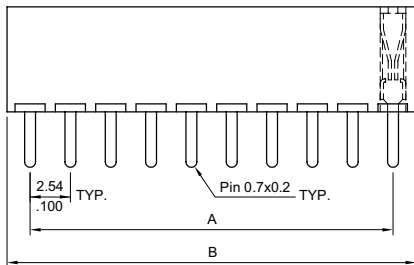
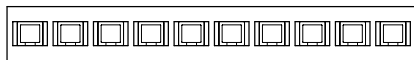
CB37 Series Single Row Straight Board Mount Connector

2.54mm(.100") Center spacing

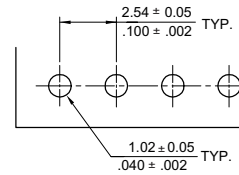
⊙ Mates CH31 and CH34 headers



Ordering code		①	②	③	④	⑤	⑥
		C B 3 7	4 5	A	V	1	0 0
① Series No.	③ Plating code:			⑥ Other options:			
② Circuits: 02 to 45	A= Selective Gold flash plated over Nickel			00= Standard			
	④ Tail Style: V= Straight			*Special option Consult manufacturer			
	⑤ Color: 1= Black						



A = 2.54 x No. of Spaces
 B = A + 3.0
 * Available in 2 through 45 circuits



Recommended P.C. Board Layout

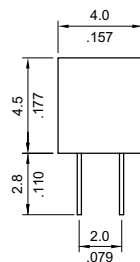
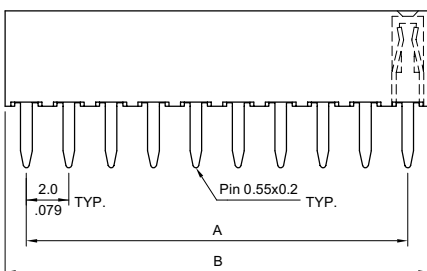
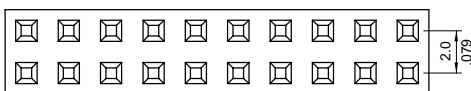
CB74 Series Dual Row Straight Board Mount Connector

2.00mm(.079") Center spacing

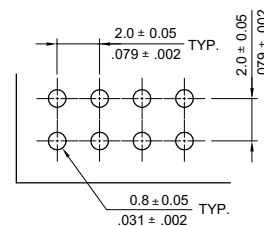
⊙ Mates CH71, CH72 and CH75 headers



Ordering code		①	②	③	④	⑤	⑥
		C B 7 4	8 0	2	V	1	0 0
① Series No.	③ Plating code:			⑥ Other options:			
② Circuits: 04 to 80	2= Gold flash plated over Nickel			00= Standard			
	④ Tail Style: V= Straight			*Special option Consult manufacturer			
	⑤ Color: 1= Black						



A = 2.0 x No. of Spaces
 B = A + 2.5
 * Available in 4 through 80 circuits



Recommended P.C. Board Layout

CB39 Series Single Row Board Mount Connector

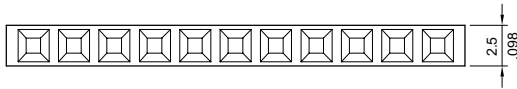
CB

2.54mm(.100") Center spacing

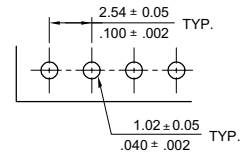
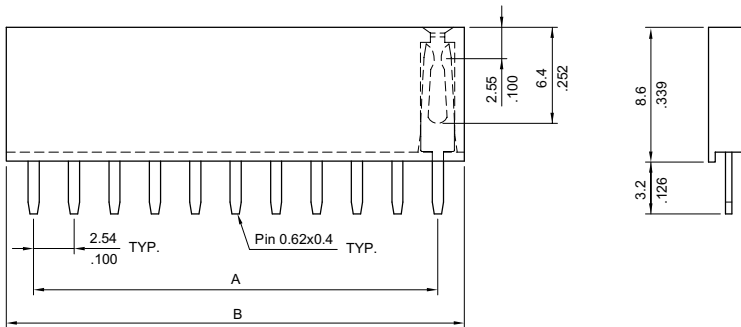
⊙ Mates CH31, CH34 and CH35 headers



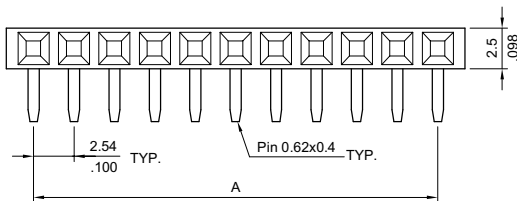
Ordering code		①	②	③	④	⑤	⑥
		C B 3 9	4 0	2	V	1	0 0
① Series No.	③ Plating code:			⑥ Other options:			
② Circuits: 02 to 40	2= Gold flash plated over Nickel			00= Standard			
	④ Tail Style: V= Straight H= Right Angle			*Special option Consult manufacturer			
	⑤ Color: 1= Black						



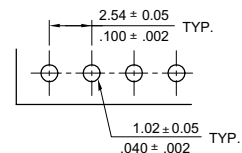
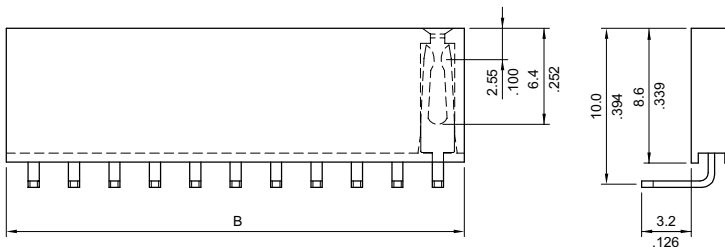
A = 2.54 x No. of Spaces
 B = A + 3.0
 * Available in 2 through 40 circuits



Recommended P.C. Board Layout



A = 2.54 x No. of Spaces
 B = A + 3.0
 * Available in 2 through 40 circuits

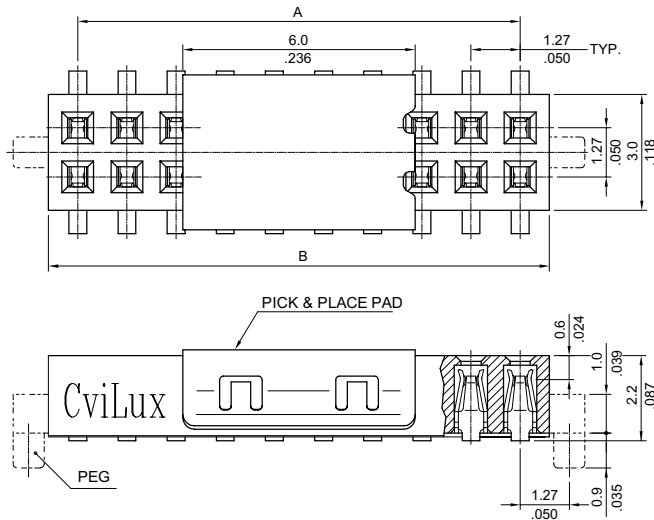
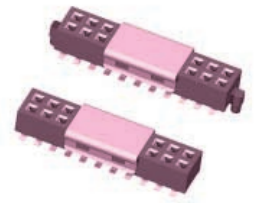


Recommended P.C. Board Layout

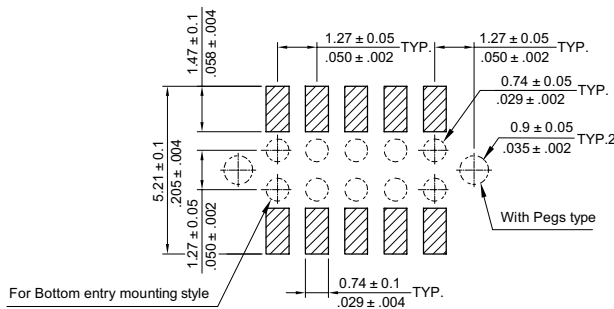
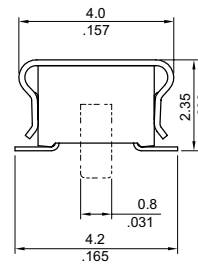
CB50 Series Dual Row Straight Surface Mount Connector

1.27mm(.050") Center spacing

- Ultra Low profile
- Top & Bottom entry
- High performance contact design
- Mates CH50, CH51, CH55 and CH58 Connectors



DIM. A = 1.27 X NO. OF SPACES
 DIM. B = DIM. A + 1.67
 * AVAILABLE IN 6 THROUGH 80
 CIRCUITS



Recommended P.C. Board Layout

Without Peg ; Without Pick & Place Pad	
With Pegs ; Without Pick & Place Pad	
Without Peg ; With Pick & Place Pad	
With Pegs ; With Pick & Place Pad	

Ordering Code

1 **2** **3** **4** **5** **6** **7**
CB5040200T0

1 Series No.
2 Circuits:
 06 to 80

3 Plating code:
 1= Tin-lead over Nickel
 2= Gold flash plated over Nickel
 3= 15µin Gold plated over Nickel
 4= 30µin Gold plated over Nickel

4 0= Without Peg , P= With Pegs
5 0= Without Pick & Place Pad
 P= With Pick & Place Pad
6 Packing:
 T= Tube Packing , R= Tape & Reel
7 Other Option: 0= Standard
 *Special option Consult manufacturer

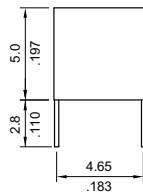
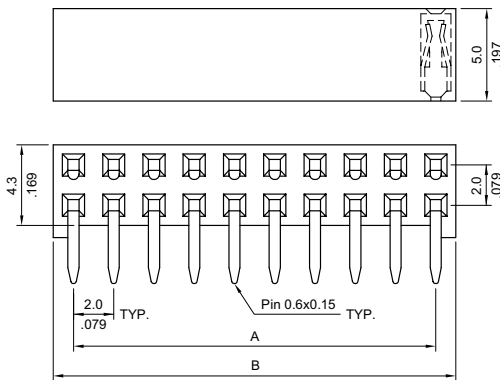
CB78 Series Dual Row Right Angle Board Mount Connector

2.00mm(.079") Center spacing

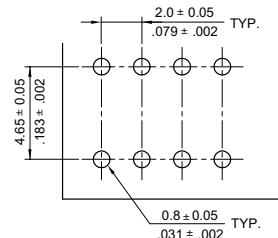
☉ Mates CH71 and CH72 headers



Ordering code		1	2	3	4	5	6
		C B 7 8	5 0	2	H	1	0 0
1 Series No.	3 Plating code:			6 Other options:			
2 Circuits:	2= Gold flash plated over Nickel			00= Standard			
04 to 50	4 Tail Style: H= Right angle			*Special option Consult manufacturer			
	5 Color: 1= Black						



A = 2.0 x No. of Spaces
 B = A + 2.5
 * Available in 4 through 50 circuits



Recommended P.C. Board Layout

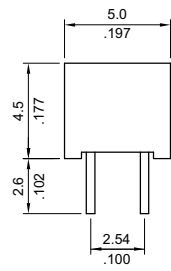
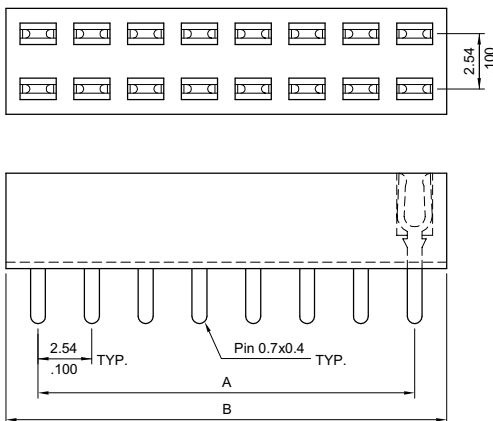
CB82 Series Dual Row Straight Board Mount Connector

2.54mm(.100") Center spacing

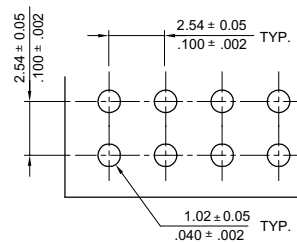
☉ Mates CH81, CH82, CH84 and CH85 headers



Ordering code		1	2	3	4	5	6
		C B 8 2	X 2	2	V	1	0 0
1 Series No.	3 Plating code:			6 Other options:			
2 Circuits:	2= Gold flash plated over Nickel			00= Standard			
04 to 104	4 Tail Style: V= Straight			*Special option Consult manufacturer			
X2= 104	5 Color: 1= Black						



A = 2.54 x No. of Spaces
 B = A + 3.2
 * Available in 4 through 104 circuits



Recommended P.C. Board Layout

CB83 Series Dual Row Straight Bottom Entry Connector

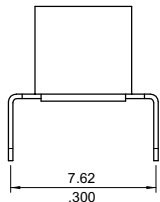
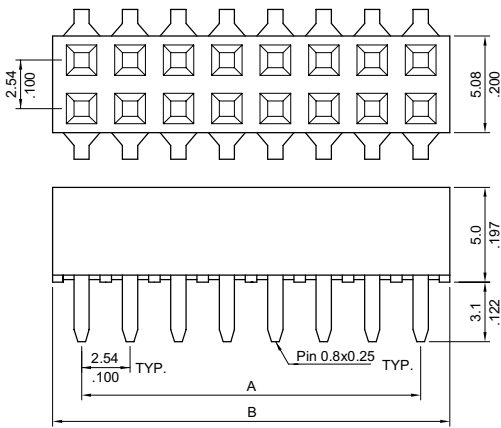
2.54mm(.100") Center spacing

© Mates CH81, CH82, CH83, CH84 and CH85 headers

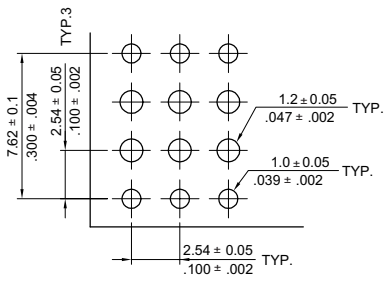
CB



Ordering code		①	②	③	④	⑤	⑥
		C B 8 3	8 0	2	R	1	0 0
① Series No.	③ Plating code:			⑥ Other options:			
② Circuits: 04 to 80	2= gold flash plated over Nickel			00= Standard			
	④ Tail Style: R= Bottom Entry			*Special option Consult manufacturer			
	⑤ Color: 1= Black						



A = 2.54 x No. of Spaces
 B = A + 3.10
 * Available in 4 through 80 circuits



Recommended P.C. Board Layout

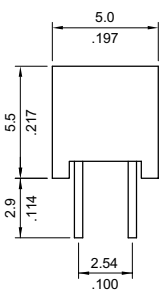
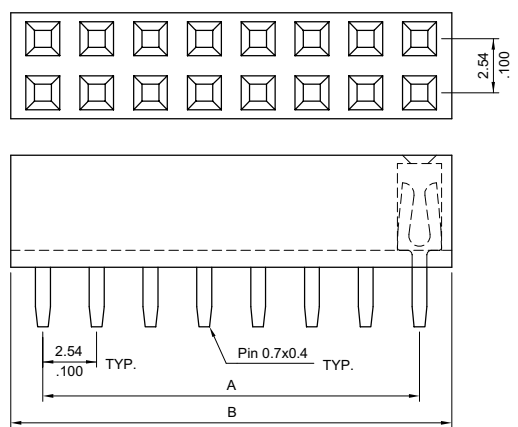
CB85 Series Dual Row Straight Board Mount Connector

2.54mm(.100") Center spacing

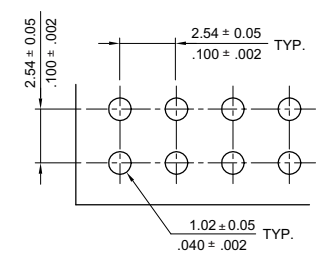
© Mates CH81, CH82, CH83, CH84 and CH85 headers



Ordering code		①	②	③	④	⑤	⑥
		C B 8 5	8 6	2	V	1	0 0
① Series No.	③ Plating code:			⑥ Other options:			
② Circuits: 04 to 86	2= Gold flash plated over Nickel			00= Standard			
	④ Tail Style: V= Straight			*Special option Consult manufacturer			
	⑤ Color: 1= Black						



A = 2.54 x No. of Spaces
 B = A + 3.0
 * Available in 4 through 86 circuits



Recommended P.C. Board Layout

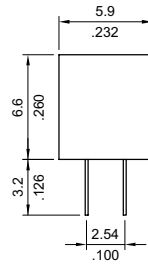
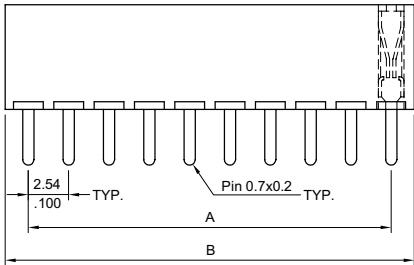
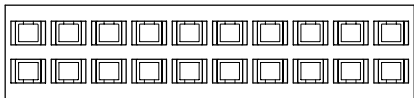
CB87 Series Dual Row Straight Board Mount Connector

2.54mm(.100") Center spacing

⊙ Mates CH81, CH82, CH83, CH84 and CH85 headers



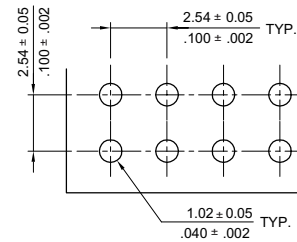
Ordering code		①	②	③	④	⑤	⑥
		C B 8 7	9 0	A	V	1	0 0
① Series No.	③ Plating code:			⑥ Other options:			
② Circuits: 04 to 90	A= Selective Gold flash over Nickel			00= Standard			
	④ Tail Style: V= Straight			*Special option Consult manufacturer			
	⑤ Color: 1= Black						



A = 2.54 x No. of Spaces

B = A + 3.0

* Available in 4 through 90 circuits



Recommended P.C. Board Layout

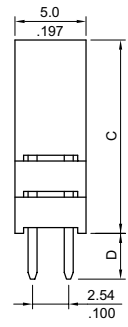
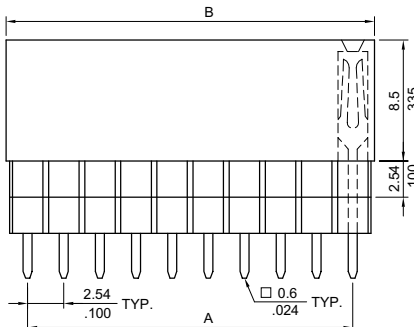
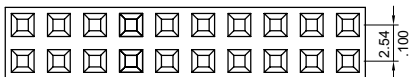
CB96 Series Dual Row Elevated Board Mount Connector

2.54mm(.100") Center spacing

⊙ Mates CH81, CH82, CH83, CH84 and CH85 headers



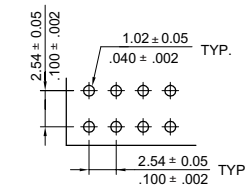
Ordering code		①	②	③	④	⑤	⑥
		C B 9 6	8 0	2	V	1	0 0
① Series No.	③ Plating code:			⑥ Other options:			
② Circuits: 06 to 80	2= Gold flash plated over Nickel			00= Standard			
	④ Tail Style: V= Straight			*Special option Consult manufacturer			
	⑤ Color: 1= Black						



A = 2.54 x No. of Spaces

B = A + 3.04

* Available in 6 through 80 circuits



Recommended P.C. Board Layout

Option Code	Dimension	
	C	D
00	11.05(.435)	2.3(.091)
1Y	11.05(.435)	7.3(.287)
2Y	13.59(.535)	4.8(.189)
3Y	16.13(.635)	2.3(.091)
1Z	11.05(.435)	12.2(.480)
2Z	13.59(.535)	9.6(.378)
3Z	16.13(.635)	7.1(.280)
4Z	18.67(.735)	4.6(.181)

CB91 Series Dual Row Board Mount Connector

2.54mm(.100") Center spacing

© Mates CH81, CH82, CH84 and CH85 headers

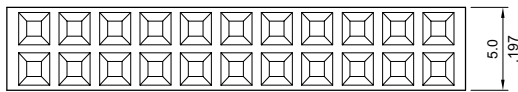
CB



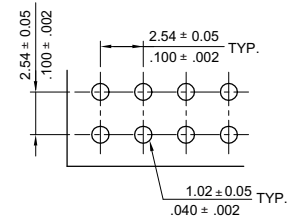
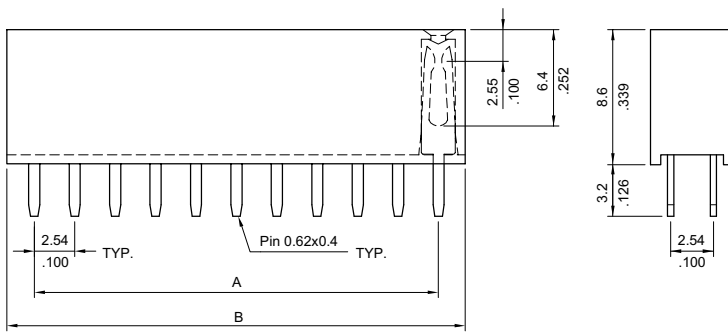
Ordering code

① ② ③ ④ ⑤ ⑥
CB91 80 2 V 1 00

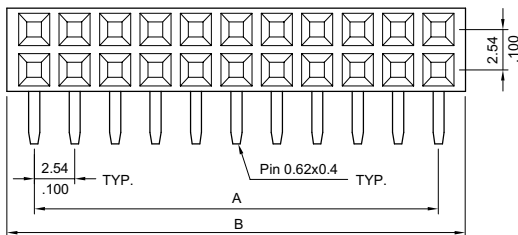
- | | | |
|---|---|--|
| ① Series No.
② Circuits:
04 to 80 | ③ Plating code:
2= Gold flash plated over Nickel
④ Tail Style: V= Straight
H= Right Angle
⑤ Color: 1= Black | ⑥ Other options:
00= Standard
*Special option Consult manufacturer |
|---|---|--|



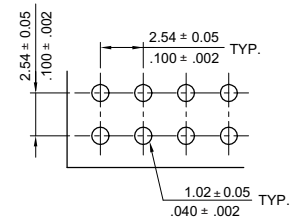
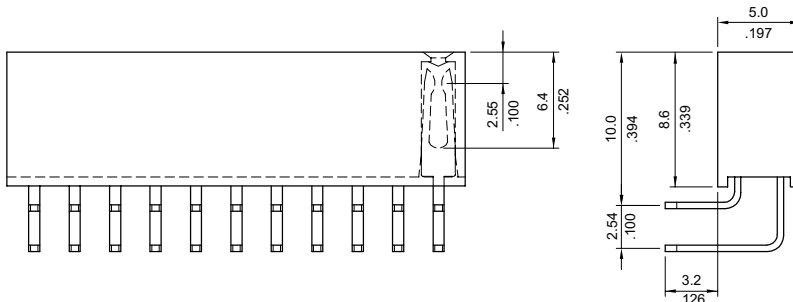
A = 2.54 x No. of Spaces
 B = A + 3.0
 * Available in 4 through 80 circuits



Recommended P.C. Board Layout



A = 2.54 x No. of Spaces
 B = A + 3.0
 * Available in 4 through 80 circuits



Recommended P.C. Board Layout

CB94 Series Dual Row Board Mount Connector

CB

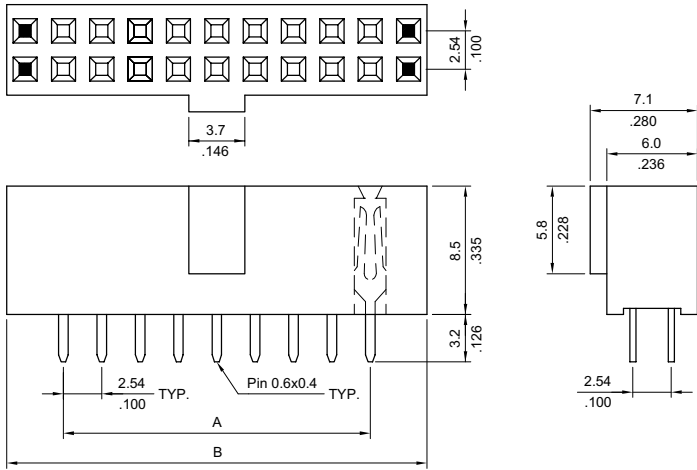
2.54mm(.100") Center spacing

⊙ Mates CH87 headers With polarizing rib

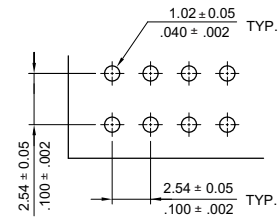


Ordering code		①	②	③	④	⑤	⑥
		C	B	9	4	6	4
		2	V	1	0	0	0

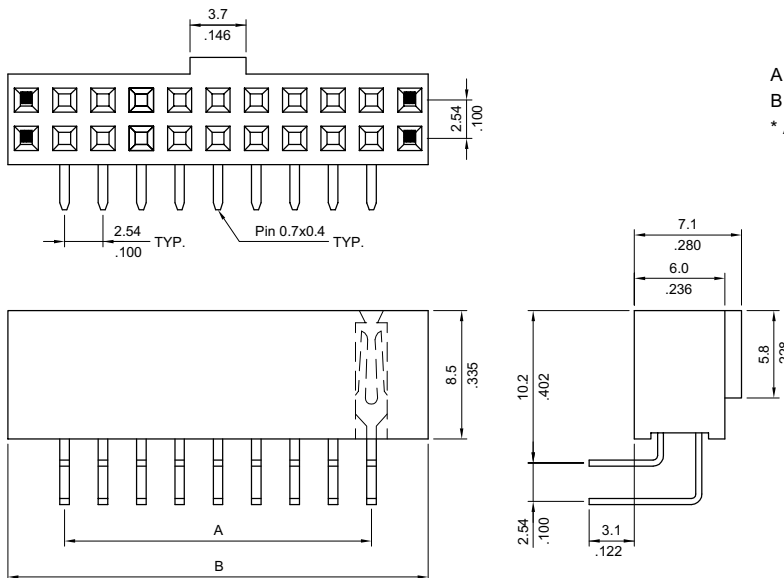
① Series No.	③ Plating code: 2= Gold flash plated over Nickel	⑥ Other options: 00= Standard *Special option Consult manufacturer
② Circuits: See below drawing	④ Tail Style: V= Straight H= Right Angle	
	⑤ Color: 1=Black	



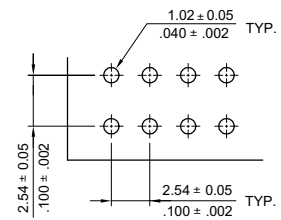
A = 2.54 x No. of Spaces
 B = A + 7.62
 * Available circuits: 6,8,10,14,16,20,24,26,30
 34,40,44,48,50,60 and 64



Recommended P.C. Board Layout



A = 2.54 x No. of Spaces
 B = A + 7.62
 * Available circuits: 6,8,10,14,16,20,24,26,30
 34,40,44,48,50,60 and 64



Recommended P.C. Board Layout

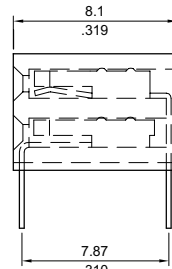
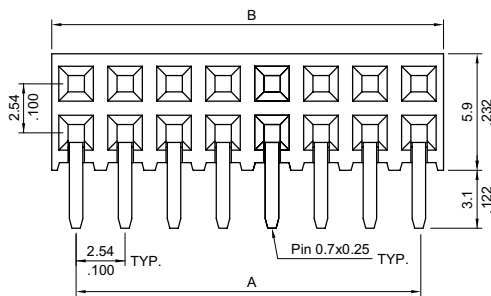
CB97 Series Dual Row Right Angle Board Mount Connector

2.54mm(.100") Center spacing

⊙ Mates CH81, CH82, CH83 and CH84 headers



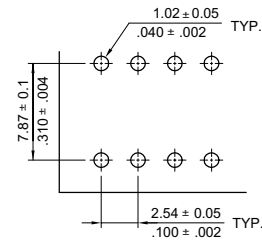
Ordering code		①	②	③	④	⑤	⑥
		C B 9 7	8 0	2	H	1	0 0
① Series No.	③ Plating code:			⑥ Other options:			
② Circuits: 04 to 80	2= Gold flash plated over Nickel			00= Standard			
	④ Tail Style: H= Right angle			*Special option Consult manufacturer			
	⑤ Color: 1= Black						



A = 2.54 x No. of Spaces

B = A + 2.54

* Available in 4 through 80 circuits



Recommended P.C. Board Layout

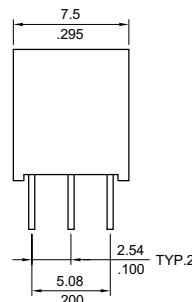
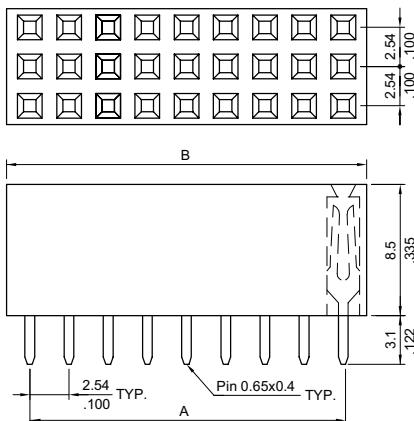
CB98 Series Triple Row Straight Board Mount Connector

2.54mm(.100") Center spacing

⊙ Mates CH96 headers



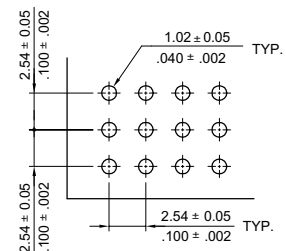
Ordering code		①	②	③	④	⑤	⑥
		C B 9 8	X 2	2	V	1	0 0
① Series No.	③ Plating code:			⑥ Other options:			
② Circuits: 09 to 120 X2= 120	2= Gold flash plated over Nickel			00= Standard			
	④ Tail Style: V= Straight			*Special option Consult manufacturer			
	⑤ Color: 1= Black						



A = 2.54 x No. of Spaces

B = A + 3.04

* Available in 9 through 120 circuits



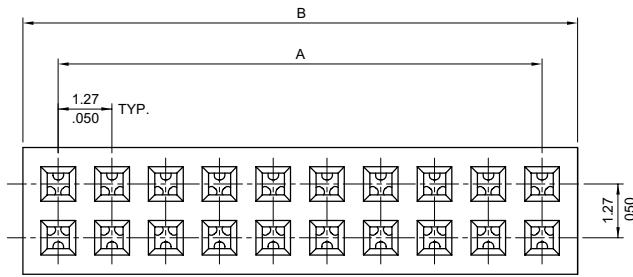
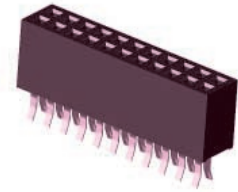
Recommended P.C. Board Layout

CBC1 Series Dual Row PCB Clip Type Socket Connector

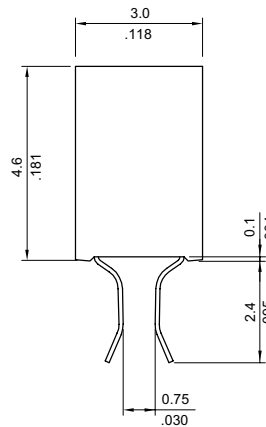
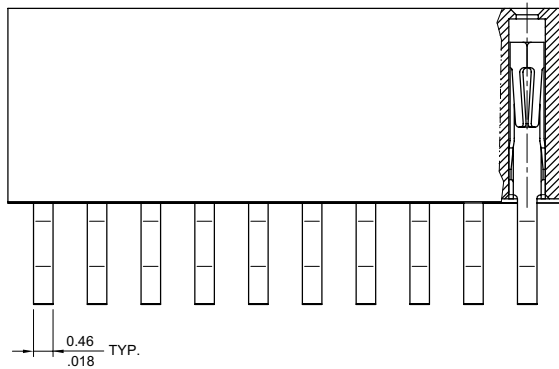
CB

1.27mm(.050") Center spacing

- ⊙ Mates 1.27mm Pitch ϕ 0.46mm Round Pin headers
- ⊙ Designed with Beam Contact
- ⊙ For 0.8mm Thickness P.C Board Clip
- ⊙ Low insertion Force Anti-flux



A = 1.27 x No. of Spaces
 B = A + 1.67
 * Available in 6 through 80 circuits



Ordering Code

1 **2** **3** **4** **5** **6**
CBC1 20 C C 1 00

1 Series No.
2 Circuits:
 06 to 80

3 Plating code:
 A= Selective Gold flash over Nickel
 B= Selective 15 μ in Gold flash over Nickel
 C= Selective 30 μ in Gold flash over Nickel

4 Tail Style: C= PCB Clip
5 Color:
 1= Black
6 Other Option: 00= Standard
 *Special option Consult manufacturer