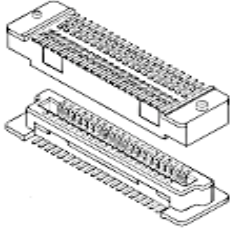


**61082-121402LF - Bergstak®  
: 120 Positions, Dual Row,  
BTB Vertical Receptacle**



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### Mating Half

- ▶ 61083-121400LF
- ▶ 61083-121402LF
- ▶ 61083-122400LF
- ▶ 61083-122402LF
- ▶ 61083-123400LF

### Specifications

<b>General</b>	
<b>Gender</b>	Receptacle
<b>Number of contacts (Total)</b>	120
<b>Mating half</b>	Mates with all 120 Positions Bergstak® Plugs Base P/N 61083
<b>Dimensional</b>	
<b>Height (Mated)</b>	8 mm(0.315 in.) 6 mm(0.236 in.) 7 mm(0.276 in.) 5 mm(0.197 in.)
<b>Dim A (in)</b>	1.858 in.
<b>Dim A (mm)</b>	47.2 mm
<b>Dim B (in)</b>	2.118 in.
<b>Dim B (mm)</b>	53.8 mm
<b>Dim C (in)</b>	2.055 in.
<b>Dim C (mm)</b>	52.2 mm
<b>Electrical</b>	
<b>Current rating</b>	0.8 amps max
<b>Resistance (Contact)</b>	30 M-ohms max. (Initial), 50 M-ohms max. (After Test)
<b>Resistance (Insulation)</b>	1000 M-ohms min. (Initial), 100 M-ohms min. (After Test)
<b>Voltage rating</b>	100 volts AC
<b>Mechanical</b>	
<b>Durability (Mating cycles)</b>	100
<b>Insertion force</b>	90 grams per Contact max.
<b>Withdrawal Force</b>	10 grams per Contact min.

**Mounting**

<b>Polarization pegs (Board)</b>	Yes
<b>Retention feature (Board)</b>	No
<b>Solder process</b>	IR and Vapor-Phase Reflow

**Physical**

<b>Material (Contact)</b>	Copper Alloy
<b>Material (Housing)</b>	LCP
<b>Plating (Contact area)</b>	0.2 µm (8 µin.) Gold
<b>Plating (Tail)</b>	Matte-Tin
<b>Underplating (Contact)</b>	1.27 µm (50 µin.) Nickel
<b>Resistance to Solder Heat</b>	240°C for 30 sec
<b>Temperature (Range)</b>	-40°C to +125°C

**Approvals / Certifications**

<b>UL File Number</b>	E66906
<b>CSA File Number</b>	LR46923
<b>Approvals / Certifications</b>	UL and CSA Approved

**Other Features**

<b>Popular Configuration (Customer Production)</b>	Yes
<b>Most Popular Configuration</b>	Yes
<b>Packaging (Type)</b>	Tape and Reel, with vacuum pickup caps
<b>Vacuum Pick-up Cap</b>	Yes
<b>Literature</b>	950547-001

61082-AA B C D E FF

AA	POSITION
04	2X20
06	2X30
08	2X40
10	2X50
12	2X60
14	2X70
16	2X80
18	2X90
20	2X100

B	FOR PLUG, SEE DWG. NO. 61083			
COMBINATION OF MATED HEIGHT	Plug 1	Plug 2	Plug 3	Plug 4
Recep 1				
Recep 2				
Recep 3				

E	PACKAGING
0	TUBE WITHOUT METAL CAP
2	T&R WITH METAL CAP
9	TUBE WITH METAL CAP
6	T&R WITHOUT METAL CAP (WITH KAPTON TAPE)



D	POLARIZATION PEG	HOLD DOWN
0	YES	NO
2	NO	NO

C	PLATING ON CONTACT AREA	FF
0	GOLD 0.2um MIN / TIN LEAD NICKEL UNDERPLATE OVERALL 1.27um MIN	NONE
1	GOLD FLASH (0.1um MIN) OVER PALLADIUM-NICKEL 0.76um MIN / TIN LEAD NICKEL UNDERPLATE OVERALL 1.27um MIN	NONE
4	GOLD 0.2um MIN / PURE TIN 2um MIN (LEAD FREE) NICKEL UNDERPLATE OVERALL 1.27um MIN	LF
5	GOLD 0.38um MIN / PURE TIN 2um MIN (LEAD FREE) NICKEL UNDERPLATE OVERALL 1.27um MIN	LF
6	GOLD FLASH (0.1um MIN) OVER PALLADIUM-NICKEL 0.76um MIN / PURE TIN 2um MIN (LEAD FREE) NICKEL UNDERPLATE OVERALL 1.27um MIN	LF

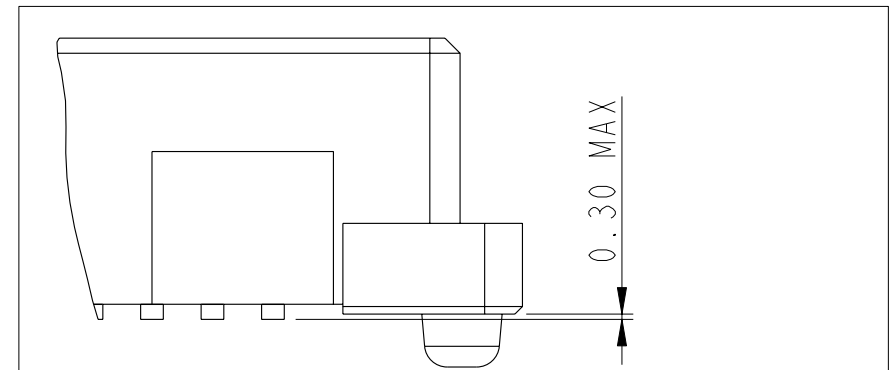
- NOTES:
- MATERIAL  
HOUSING: LCP UL 94V-0  
TERMINAL: BERYLLIUM COPPER
  - PLATING  
AS SHOWN IN TABLE.
  - SEE GS-12-547 FOR PRODUCT SPEC.
  - SEE GS-15-551 AND GS-14-816 FOR THE DETAILS OF PACKAGING.  
PRODUCT WILL BE PACKED IN ACCORDANCE TO GLOBAL PROCEDURE GS-14-920.
  - PACKAGING OPTION 2: "NOT ALL SIZES AVAILABLE; CHECK WITH FACTORY".
  - THIS PRODUCT MEETS THE EUROPEAN UNION DIRECTIVES AND OTHER COUNTRY REGULATIONS AS DESCRIBED IN GS-22-008.
  - THE HOUSING WITH WITHSTAND EXPOSURE UP TO 260° PEAK TEMPERATURE FOR 30 SECONDS IN A CONVECTION, INFRA-RED OR VAPOR REFLOW OVEN.
  - PLATING OPTION "4" IS LEADFREE ALTERNATIVE FOR OPTION "0", AND OPTION "6" IS LEADFREE ALTERNATIVE FOR OPTION "1".
  - HIGH PRECISION COPLANARITY IS AVAILABLE FOR 2X80 TO 2X100 POS, ALL HEIGHTS. PLS REFER TO PRINT 10069524.
  - A SYMBOL WILL BE NEXT TO ANY DIMENSION, VIEW OR NOTE WHICH HAS BEEN MODIFIED WITH THE CURRENT DRAWING REVISION.



rev	ecn no	dr	date
W	S07-0166	MCH	2007-05-16
X	S07-0416	MCH	2007-11-22
Y	S08-0330	MCH	2008-10-08
AA	S09-0311	MCH	2009-10-06
T	S04-0133	MW	2004-06-23
U	S04-0167	CH	2004-07-30
V	S04-0098	CH	2005-03-31

www.fciconnect.com		surface - <input checked="" type="checkbox"/> ISO 1302	tolerance std ISO 406 ISO 1101	projection	MM
		TOLERANCES UNLESS OTHERWISE SPECIFIED			Scale 17:1
Dr	M. Cheong	2009-06-01	ANGULAR	0.X ±0.20	size A3
Eng	M. Cheong	2009-06-01	LINEAR	0.XX ±0.15	
Chr	M. Cheong	2009-06-01	0° ±2°	0.XXX ±0.10	ECN S09-0311
Appr	Joey Ng	2009-10-06	Product family	BERGSTAK	Spec ref
FCI		title BERGSTAK 0.8MM		dwg no 61082	Rev. AA
		catalog no		CUSTOMER	sheet 1 of 6

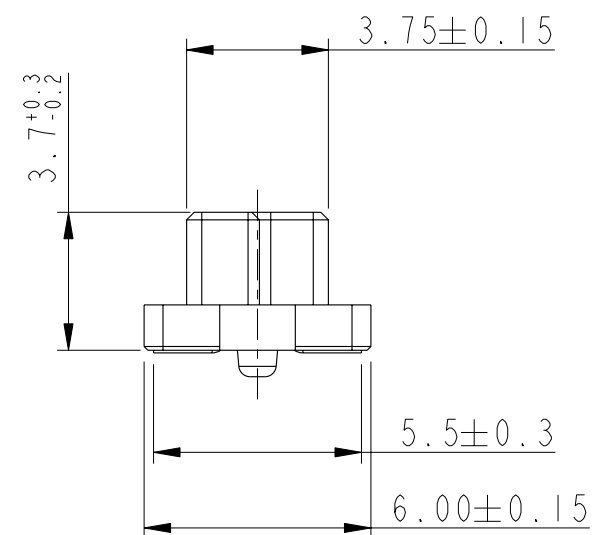
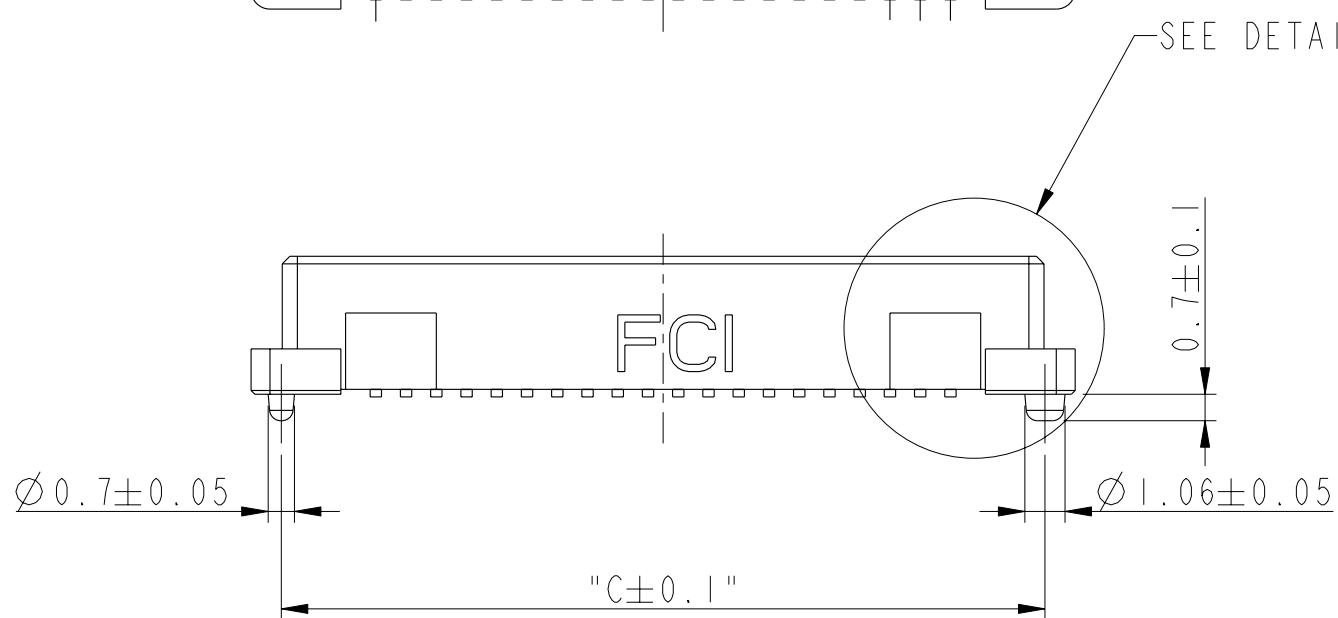
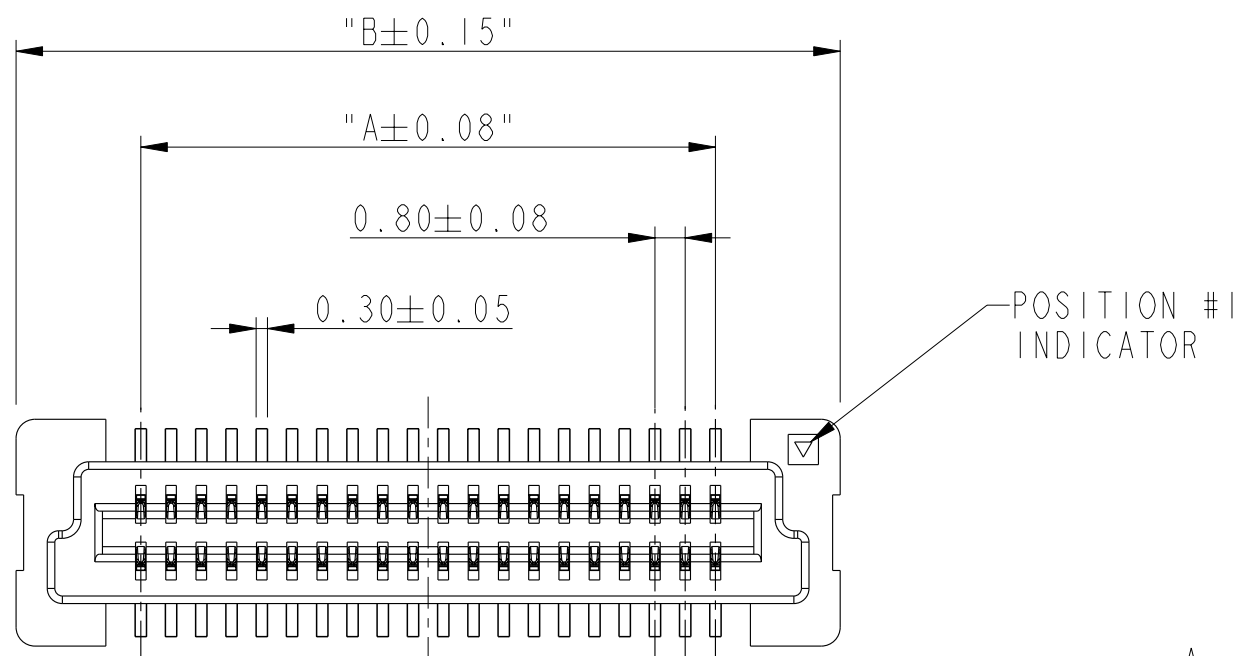
PRODUCT NO.	NUMBER OF POSITIONS	DIMENSION		
		A	B	C
61082-041***	2X20	15.2	21.8	20.2
61082-061***	2X30	23.2	29.8	28.2
61082-081***	2X40	31.2	37.8	36.2
61082-101***	2X50	39.2	45.8	44.2
61082-121***	2X60	47.2	53.8	52.2
61082-141***	2X70	55.2	61.8	60.2
61082-161***	2X80	63.2	69.8	68.2
61082-181***	2X90	71.2	77.8	76.2
61082-201***	2X100	79.2	85.8	84.2



COPLANARITY OF TAIL:  
 0.1 MAX. APPLIED TO 2X20 TO 2X70 POS.  
 0.13 MAX APPLIED TO 2X80 TO 2X100 POS.

HIGH PRECISION COPLANARITY IS AVAILABLE FOR 2X80 TO 2X100 POS.  
 PLS REFER TO PRINT 10069524.

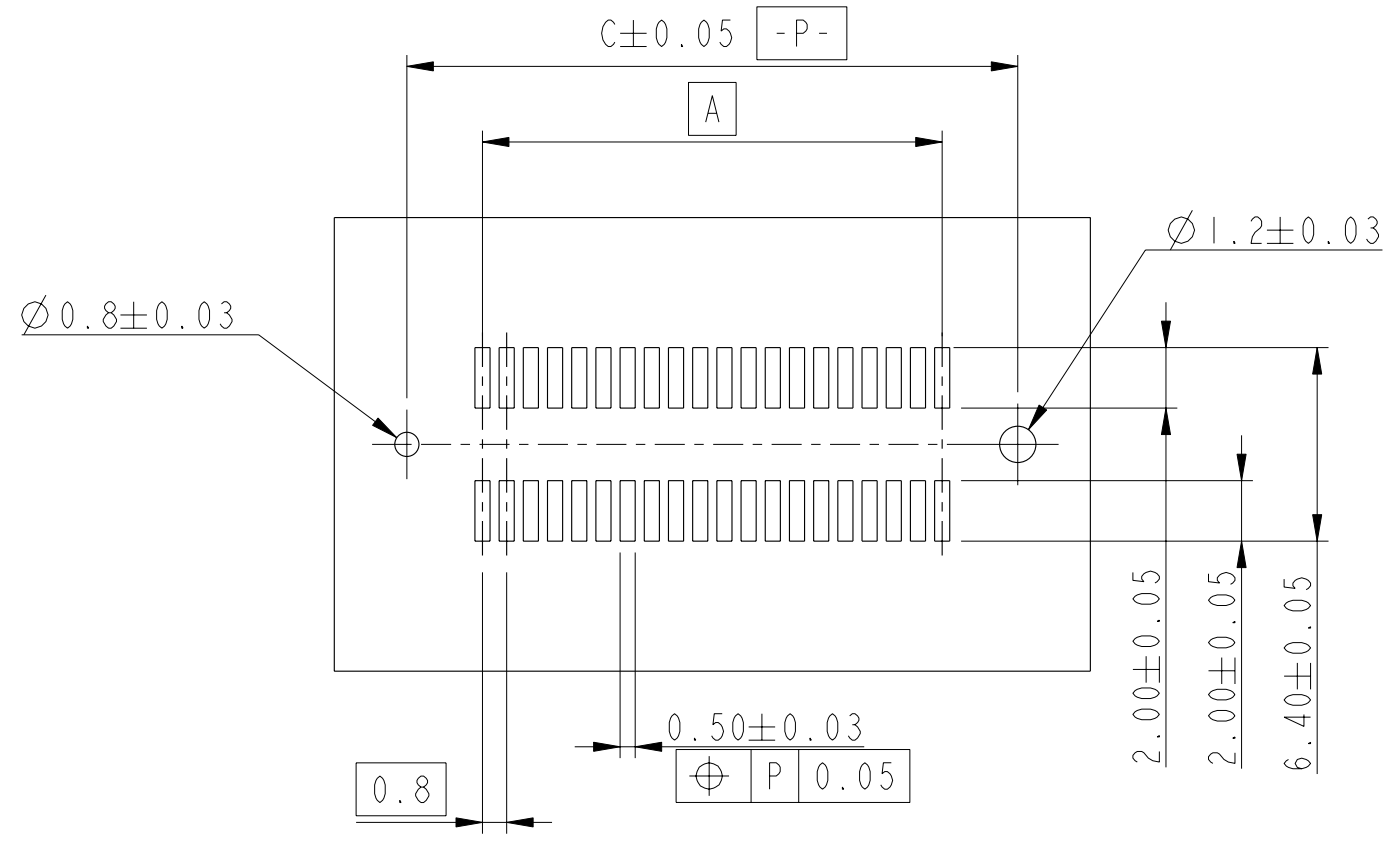
DETAIL A  
 SCALE 10:1



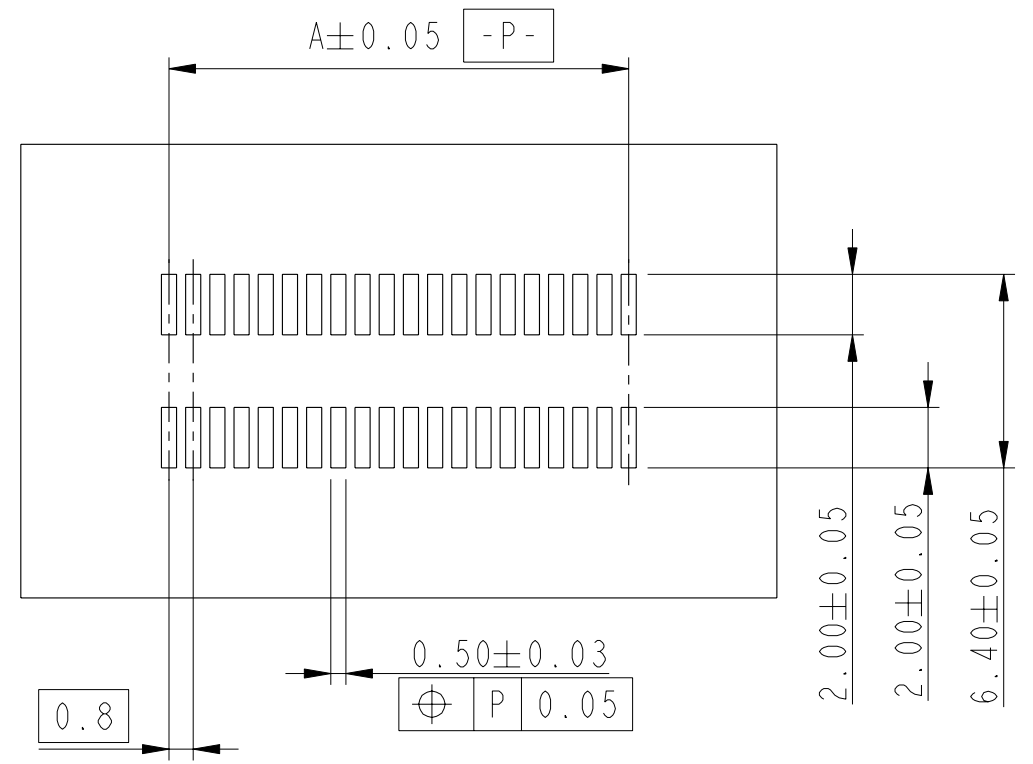
RECEPTACLE I

	Title BERGSTAK 0.8MM RECEPTACLE ASSY	dwg no 61082	Rev. AA
	catalog no -	CUSTOMER	sheet 2 of 6

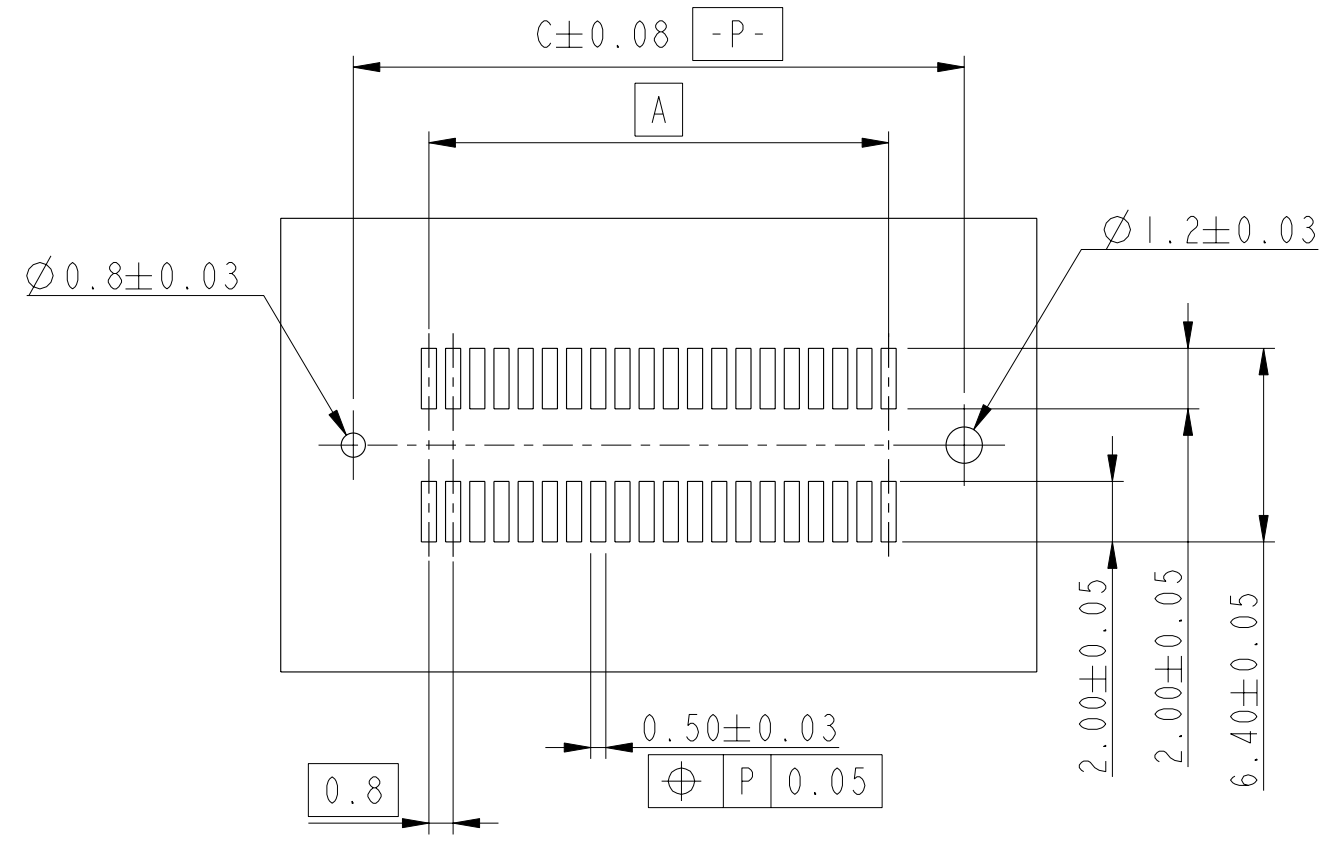
RECEPTACLE 1



RECOMMENDED PCB LAYOUT WITH PEGS  
FOR NO. OF POSITION 2X20, 2X30, 2X40, 2X50, 2X60



RECOMMENDED PCB LAYOUT WITHOUT PEGS AND HOLDDOWN



RECOMMENDED PCB LAYOUT WITH PEGS  
FOR NO. OF POSITION 2X70, 2X80, 2X90, 2X100



Copyright FCI.

	title BERGSTAK 0.8MM RECEPTACLE ASSY	dwg no 61082	Rev. AA
	catalog no -	CUSTOMER	sheet 3 of 6

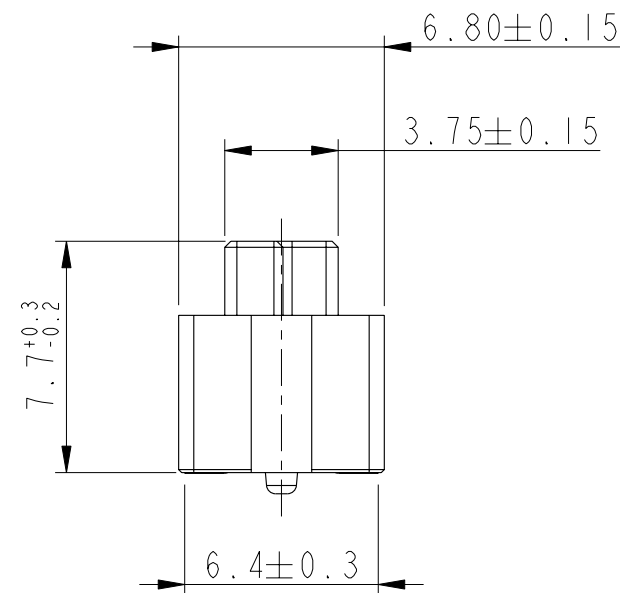
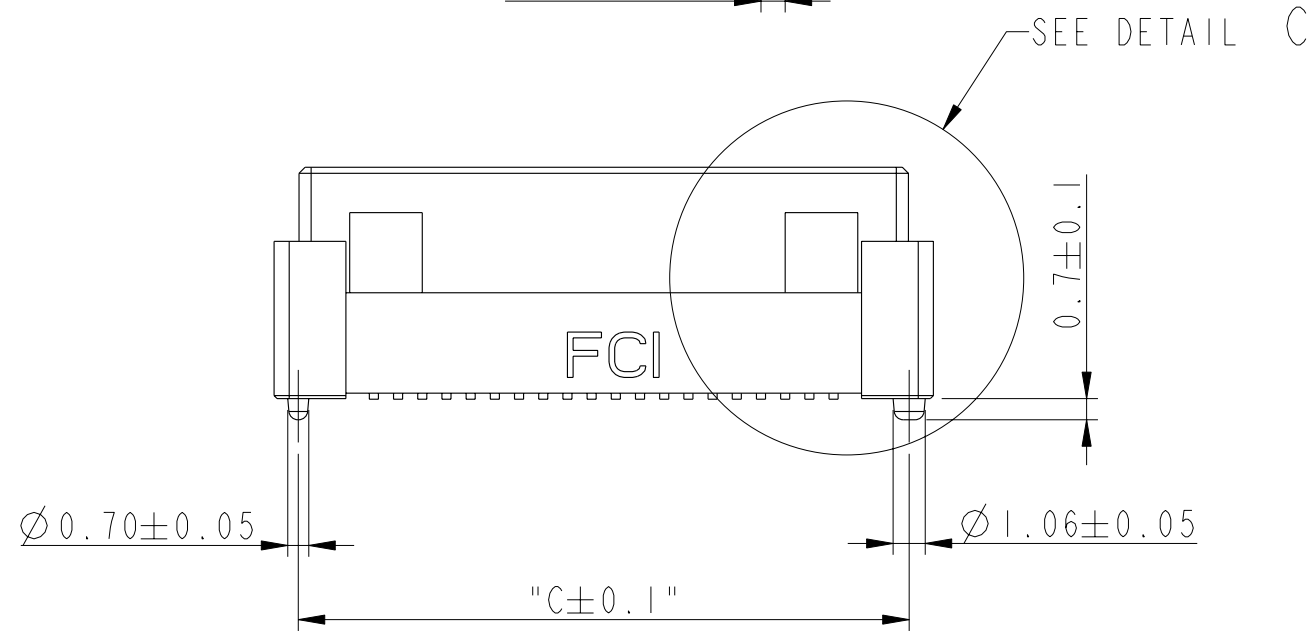
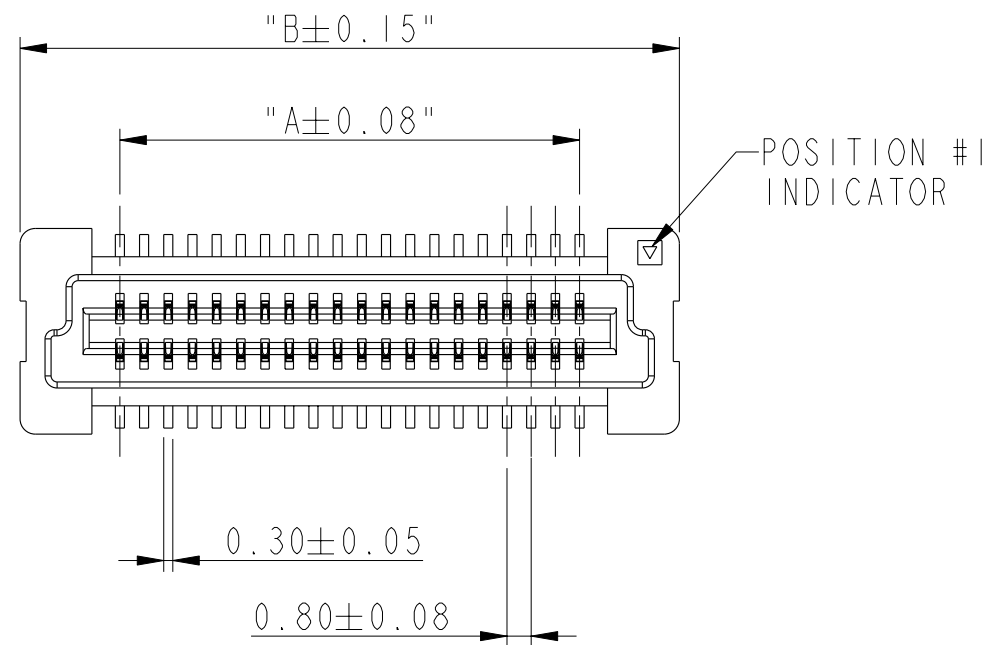
PRODUCT NO.	NUMBER OF POSITIONS	DIMENSION		
		A	B	C
61082-042***	2X20	15.2	21.8	20.2
61082-062***	2X30	23.2	29.8	28.2
61082-082***	2X40	31.2	37.8	36.2
61082-102***	2X50	39.2	45.8	44.2
61082-122***	2X60	47.2	53.8	52.2
61082-142***	2X70	55.2	61.8	60.2
61082-162***	2X80	63.2	69.8	68.2
61082-182***	2X90	71.2	77.8	76.2
61082-202***	2X100	79.2	85.8	84.2

AA

COPLANARITY OF TAIL  
 0.1 MAX APPLIED TO 2X20 TO 2X70 POS.  
 0.13 MAX APPLIED TO 2X80 TO 2X100 POS.

HIGH PRECISION COPLANARITY IS AVAILABLE FOR 2X80 TO 2X100 POS.  
 PLS REFER TO PRINT 10069524.

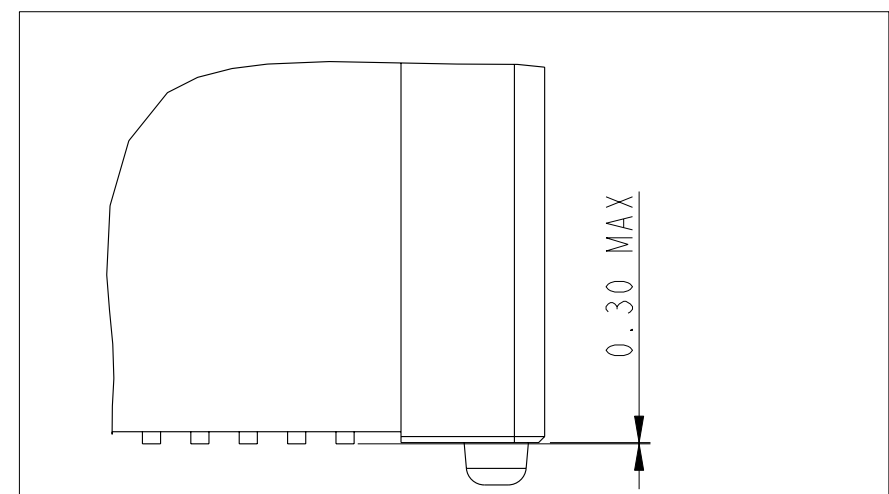
DETAIL C  
 SCALE 8:1



RECEPTACLE 2

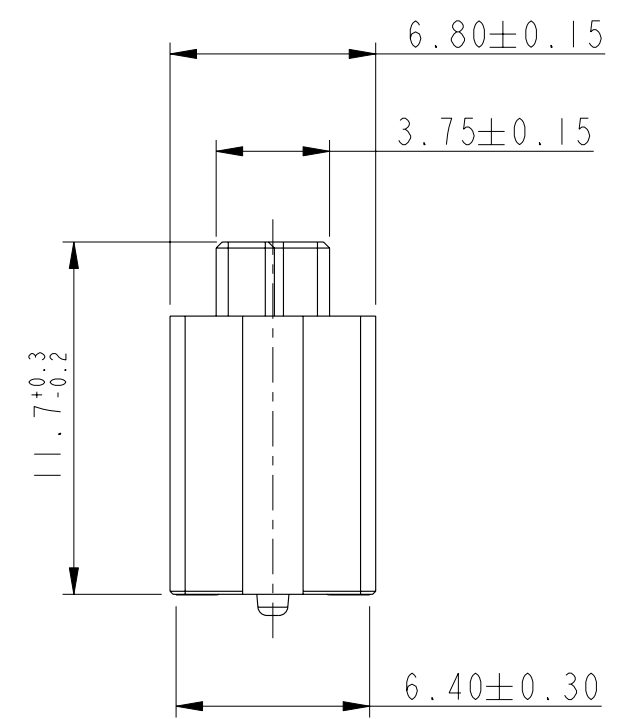
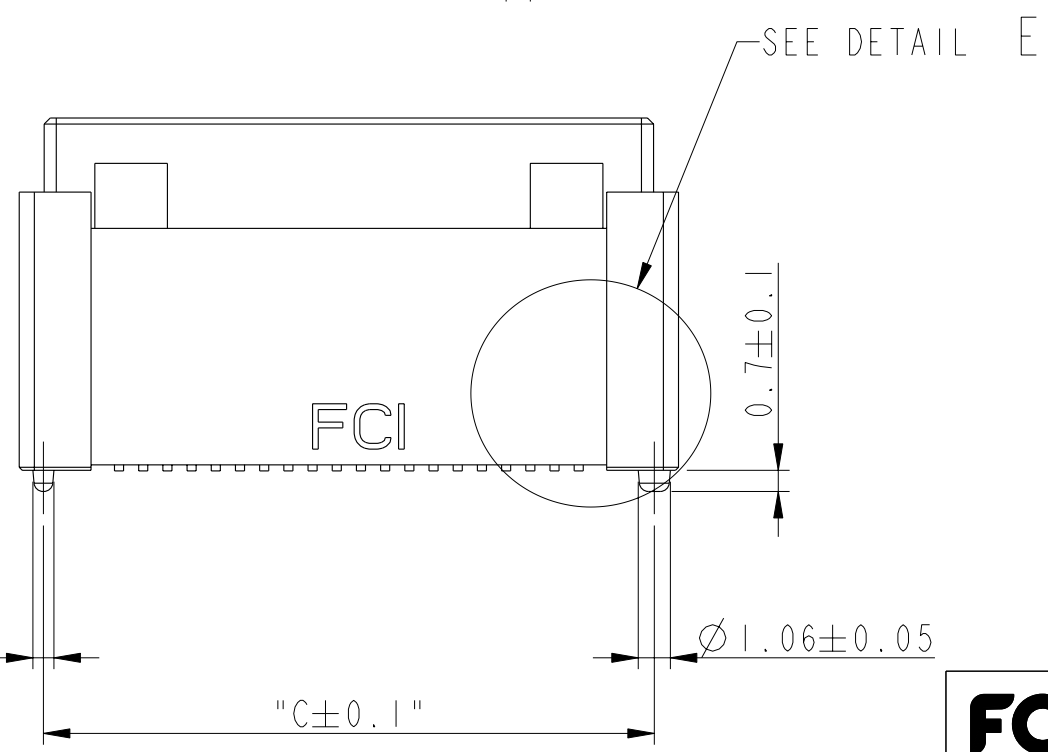
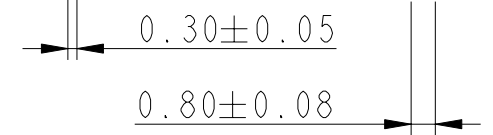
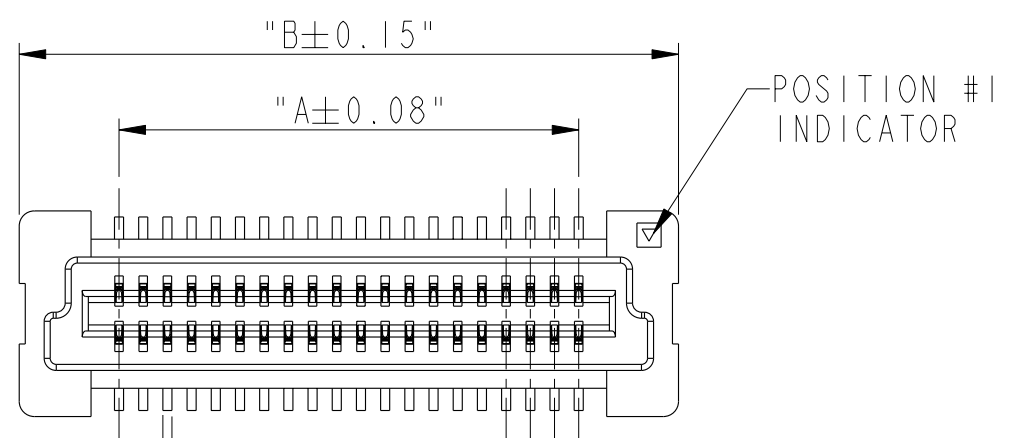
FCI	title	BERGSTAK 0.8MM	dwg no	61082	Rev.	AA
	catalog no	-	CUSTOMER	sheet 4 of 6		

PRODUCT NO.	NUMBER OF POSITIONS	DIMENSION		
		A	B	C
61082-043***	2X20	15.2	21.8	20.2
61082-063***	2X30	23.2	29.8	28.2
61082-083***	2X40	31.2	37.8	36.2
61082-103***	2X50	39.2	45.8	44.2
61082-123***	2X60	47.2	53.8	52.2
61082-143***	2X70	55.2	61.8	60.2
61082-163***	2X80	63.2	69.8	68.2
61082-183***	2X90	71.2	77.8	76.2
61082-203***	2X100	79.2	85.8	84.2



COPLANARITY OF TAIL  
 0.1 MAX APPLIED TO 2X20 TO 2X70 POS  
 0.13 MAX APPLIED TO 2X80 TO 2X100 POS.  
 HIGH PRECISION COPLANARITY IS AVAILABLE  
 FOR 2X80 TO 2X100 POS.  
 PLS REFER TO PRINT 10069524.

DETAIL E  
 SCALE 8:1

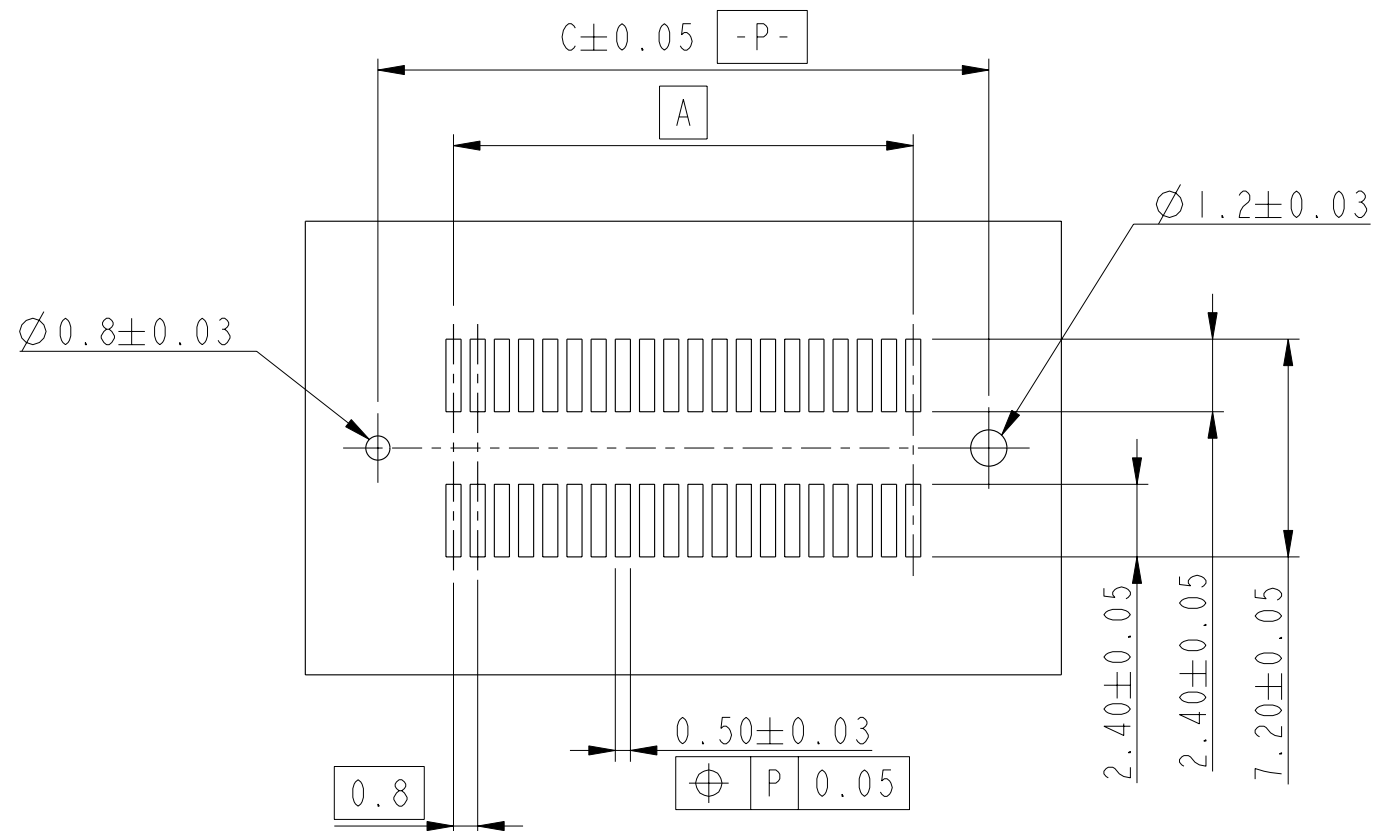


RECEPTACLE 3

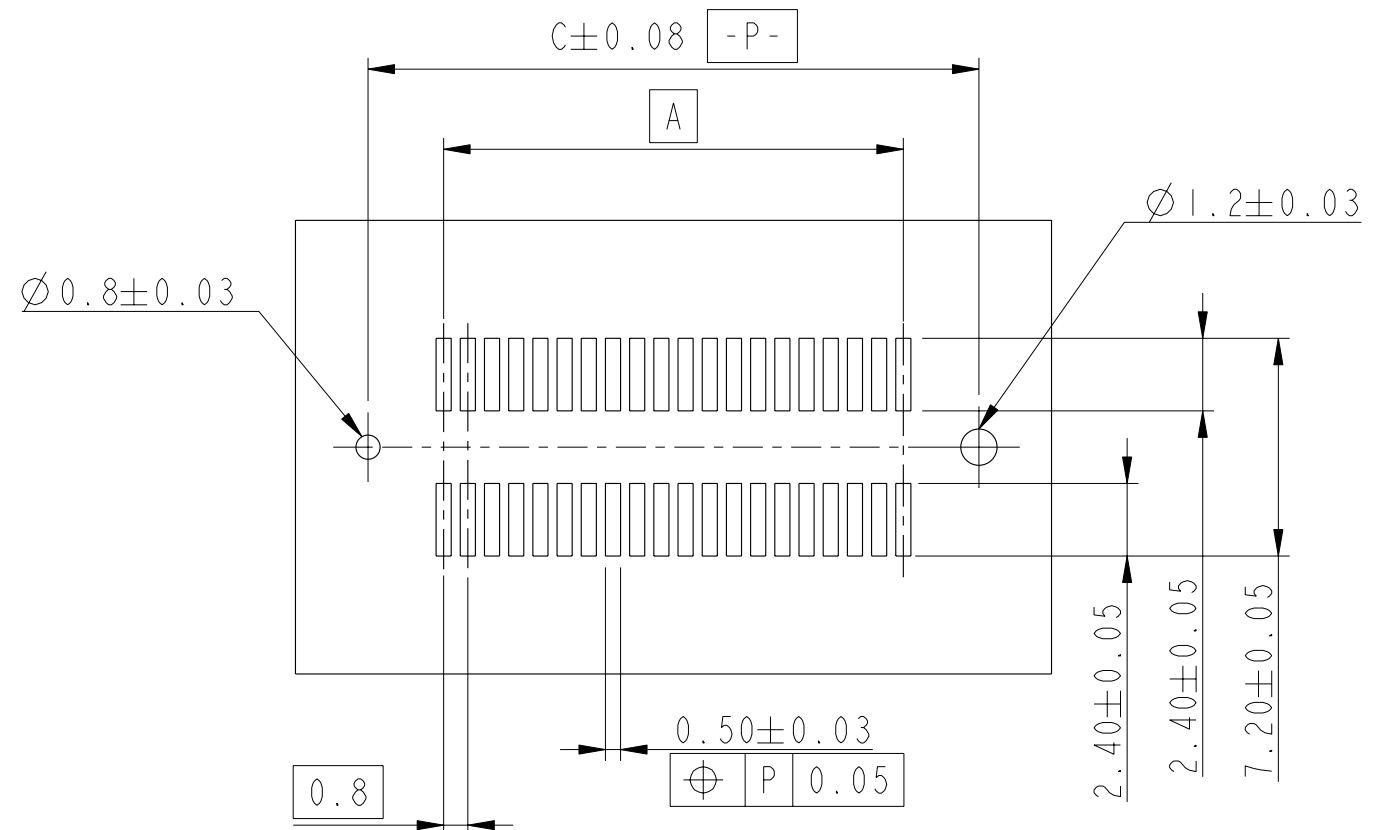
FCj	title	BERGSTAK 0.8MM	dwg no	61082	Rev.	AA
		RECEPTACLE ASSY				
	catalog no	-	CUSTOMER	sheet 5 of 6		

Copyright FCI.  
**FCj**

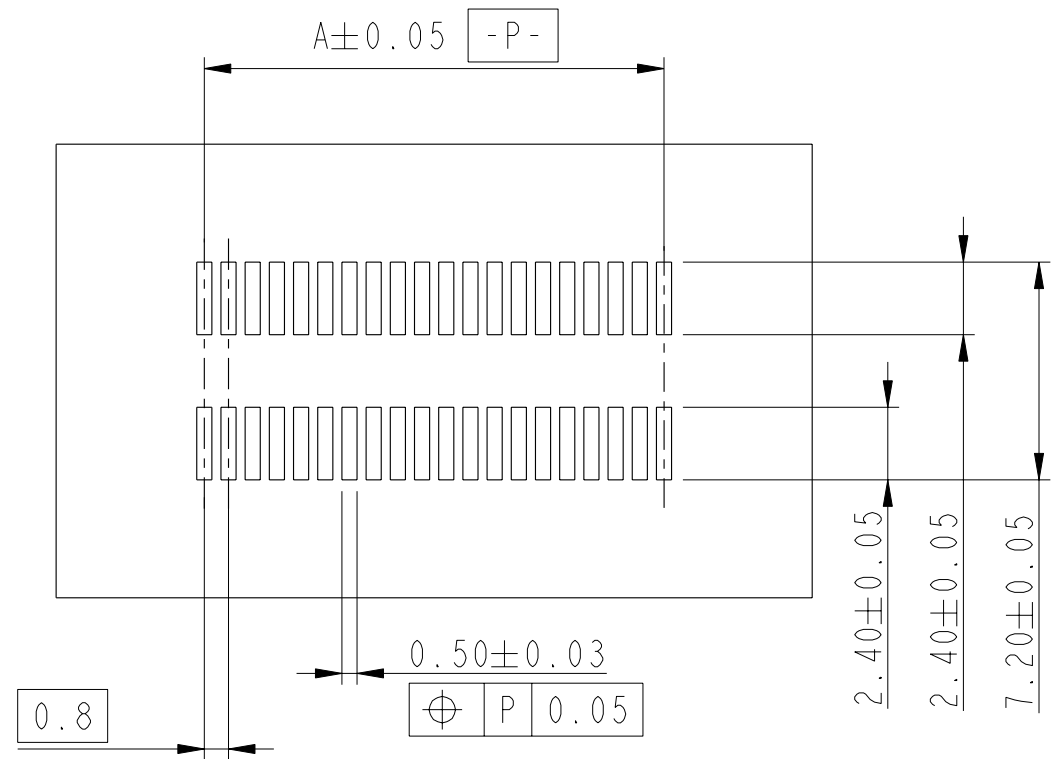
RECEPTACLE 2 & 3



RECOMMENDED PCB LAYOUT WITH PEGS  
FOR NO. OF POSITION 2X20, 2X30, 2X40, 2X50, 2X60



RECOMMENDED PCB LAYOUT WITH PEGS  
FOR NO. OF POSITION 2X70, 2X80, 2X90, 2X100



RECOMMENDED PCB LAYOUT WITHOUT PEGS AND HOLDDOWN



Copyright FCI.



title BERGSTAK 0.8MM  
RECEPTACLE ASSY  
catalog no

dwg no 61082

Rev. AA

CUSTOMER sheet 6 of 6