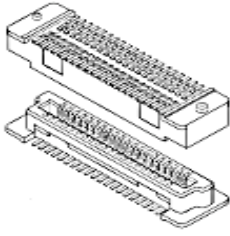


61083-064402LF - Bergstak®
: 60 Positions, Dual Row, BTB
Vertical Header



www.fci.com

Mating Half

- ▶ 61082-061400LF
- ▶ 61082-061402LF
- ▶ 61082-062400LF
- ▶ 61082-062402LF
- ▶ 61082-063400LF

Specifications

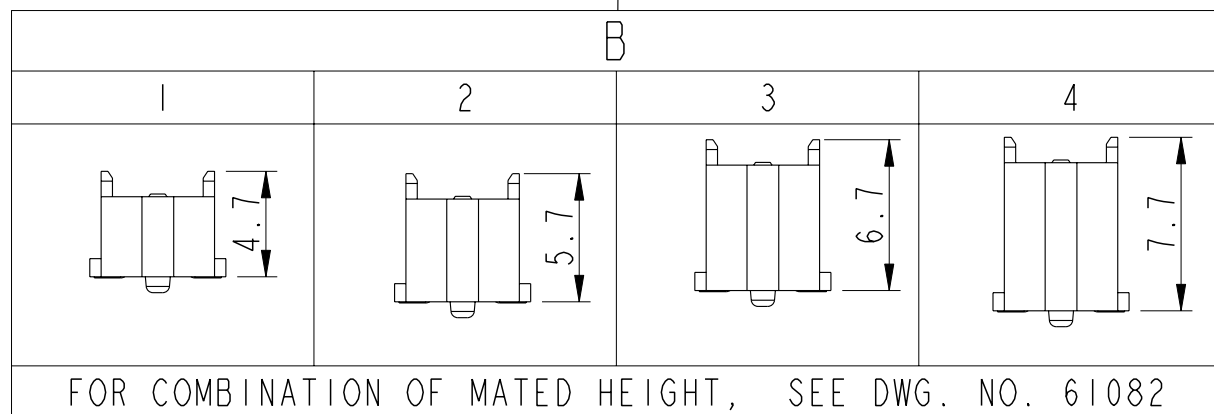
| General | |
|----------------------------|--|
| Gender | Plug |
| Number of contacts (Total) | 60 |
| Mating half | Mates with all 60 Positions Bergstak® Receptacles Base P/N 61082 |
| Dimensional | |
| Height (Mated) | 8 mm(0.315 in.) 12 mm(0.472 in.) 16 mm(0.63 in.) |
| Dim A (in) | 0.913 in. |
| Dim A (mm) | 23.2 mm |
| Dim B (in) | 1.173 in. |
| Dim B (mm) | 29.8 mm |
| Dim C (in) | 1.11 in. |
| Dim C (mm) | 28.2 mm |
| Electrical | |
| Current rating | 0.8 amps max |
| Resistance (Contact) | 30 M-ohms max. (Initial), 50 M-ohms max. (After Test) |
| Resistance (Insulation) | 1000 M-ohms min. (Initial), 100 M-ohms min. (After Test) |
| Voltage rating | 100 volts AC |
| Mechanical | |
| Durability (Mating cycles) | 100 |
| Insertion force | 90 grams per Contact max. |
| Withdrawal Force | 10 grams per Contact min. |
| Mounting | |
| Polarization pegs (Board) | Yes |
| Retention feature (Board) | No |
| Solder process | IR and Vapor-Phase Reflow |

| Physical | |
|--|--|
| Material (Contact) | Copper Alloy |
| Material (Housing) | LCP |
| Plating (Contact area) | 0.2 µm (8 µin.) Gold |
| Plating (Tail) | Matte-Tin |
| Underplating (Contact) | 1.27 µm (50 µin.) Nickel |
| Resistance to Solder Heat | 240°C for 30 sec |
| Temperature (Range) | -40°C to +125°C |
| Approvals / Certifications | |
| UL File Number | E66906 |
| CSA File Number | LR46923 |
| Approvals / Certifications | UL and CSA Approved |
| Other Features | |
| Popular Configuration (Customer Production) | Yes |
| Most Popular Configuration | Yes |
| Packaging (Type) | Tape and Reel, with vacuum pickup caps |
| Vacuum Pick-up Cap | Yes |
| Literature | 950547-001 |



61083- AA B C D E FF

| AA | NO. OF POSITIONS |
|----|------------------|
| 04 | 2X20 |
| 06 | 2X30 |
| 08 | 2X40 |
| 10 | 2X50 |
| 12 | 2X60 |
| 14 | 2X70 |
| 16 | 2X80 |
| 18 | 2X90 |
| 20 | 2X100 |



| 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) |
| 7 | T&R WITH PLASTIC PICK UP CAP. (SEE NOTE 11) |

| D | FEATURE | HOLD DOWN |
|---|---------|-----------|
| 0 | YES | NO |
| 2 | NO | NO |

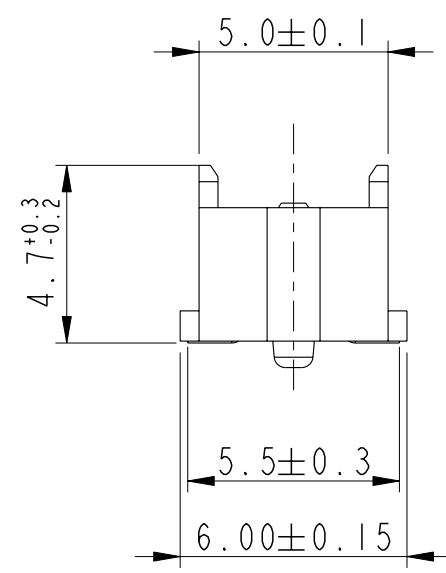
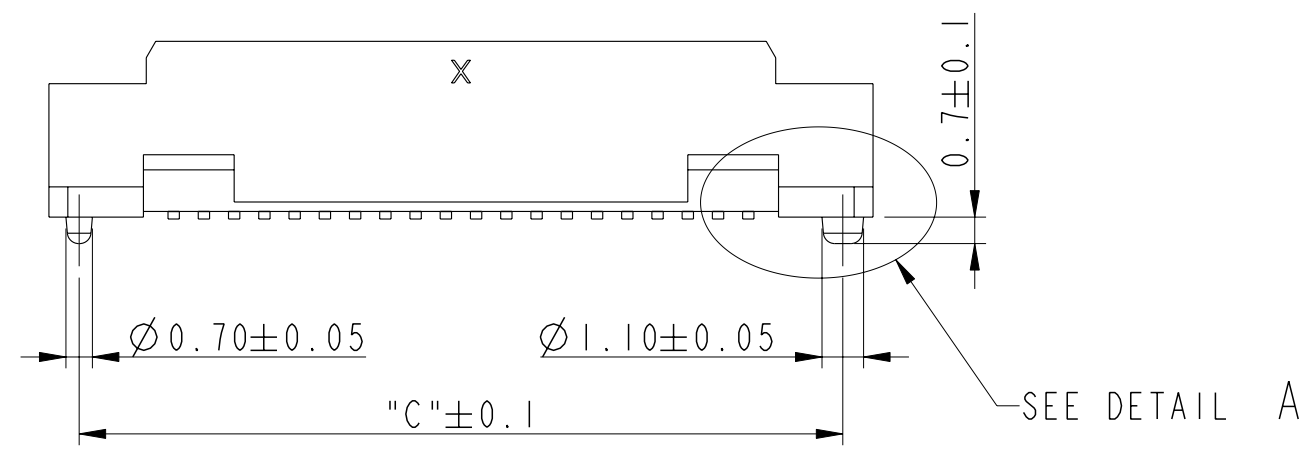
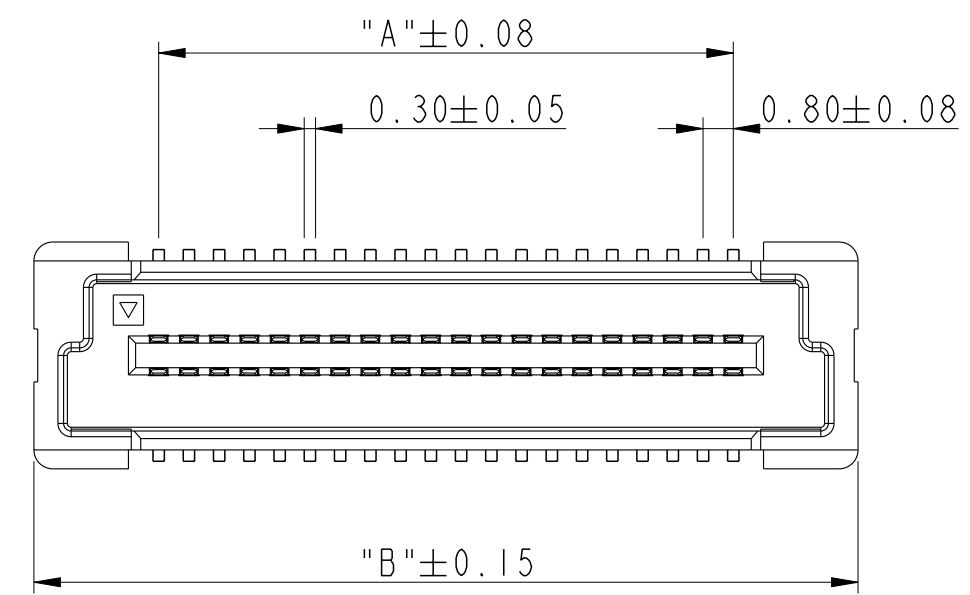
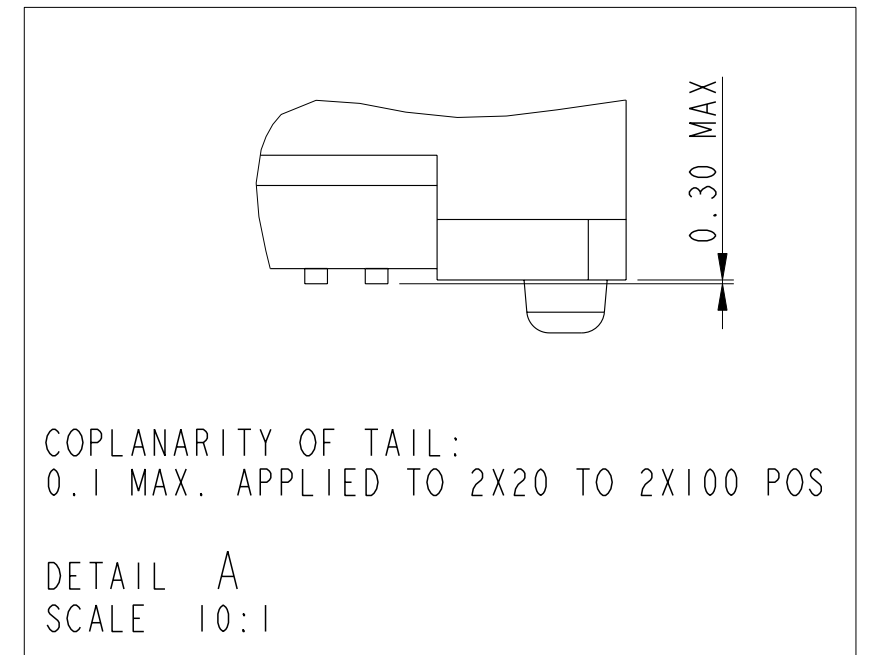
NOTE:

- MATERIAL:
HOUSING: G.F. LCP, UL94-V0
TERMINAL: BRASS
- PLATING:
AS SHOWN IN TABLE.
- SEE GS-12-547 FOR PRODUCT SPEC.
- SEE GS-14-551 AND GS-14-816 FOR PACKAGING SPEC.
- PACKAGING OPTION 2: NOT ALL SIZES ARE AVAILABLE. CHECK WITH FACTORY.
- THIS PRODUCT MEETS THE EUROPEAN UNION DIRECTIVES AND OTHER COUNTRY REGULATIONS AS DESCRIBED IN GS-22-008.
- THE HOUSING WILL WITHSTAND EXPOSURE UP TO 260° PEAK TEMPERATURE FOR 10 SECONDS IN A CONVECTION, INFRA-RED OR VAPOR PHASE 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 10069525.
- A SYMBOL WILL BE NEXT TO ANY DIMENSION, VIEW OR NOTE WHICH HAS BEEN MODIFIED WITH THE CURRENT DRAWING REVISION.
- PLASTIC PICK UP CAP OPTION IS ONLY AVAILABLE TO P/N: 61083-043607LF.

| C | PLATING | 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. | NONE |
| 4 | GOLD 0.2um MIN / PURE MATT TIN NICKEL UNDERPLATE OVERALL 1.27um. (LEADFREE PLATING) | LF (NOTE 6 & 8) |
| 5 | GOLD 0.38um MIN / MATT PURE TIN NICKEL UNDERPLATE OVERALL 1.27UM MIN (LEADFREE PLATING) | LF (NOTE 6 & 8) |
| 6 | GOLD FLASH (0.1um MIN) OVER PALLADIUM-NICKEL 0.76um MIN / PURE MATT TIN NICKEL UNDERPLATE OVERALL 1.27um. (LEADFREE PLATING) | LF (NOTE 6 & 8) |

| | | | | | | | | | |
|----------------|---------------------------------------|------------|------------|----------------|----------|--------------------|------------------------|--------------|---------|
| spec ref | dr | MAGGIE WU | 1999-03-24 | projection | mm | size | A3 | scale | 3:1 |
| tolerance std | TOLERANCES UNLESS OTHERWISE SPECIFIED | | | | ← → | ecn no | ELX-S-010487 | rel level | RELEASE |
| | eng | YU WEN CHU | 1999-03-24 | | | | | | |
| | chr | M CHEONG | 2012-03-06 | | | | | | |
| | appr | CH TAN | 2012-03-06 | | | | | | |
| product family | BERGSTAK | | - | product family | BERGSTAK | - | rel level | RELEASE | |
| surface | linear | 0.X | ±0.2 | | title | BERGSTAK 0.8mm BTB | dwg no | 61083 | rev |
| | | 0.XX | ±0.15 | | | | | | |
| | | 0.XXX | ±0.10 | | | | | | |
| | angular | 0° | ±2° | www.fci.com | cat. no. | - | Product - Customer Drw | sheet 1 of 6 | |

| PRODUCT NO. | NO. OF POSITION | DIMENSION | | |
|--------------|-----------------|-----------|------|------|
| | | A | B | C |
| 61083-041*** | 2X20 | 15.2 | 21.8 | 20.2 |
| 61083-061*** | 2X30 | 23.2 | 29.8 | 28.2 |
| 61083-081*** | 2X40 | 31.2 | 37.8 | 36.2 |
| 61083-101*** | 2X50 | 39.2 | 45.8 | 44.2 |
| 61083-121*** | 2X60 | 47.2 | 53.8 | 52.2 |
| 61083-141*** | 2X70 | 55.2 | 61.8 | 60.2 |
| 61083-161*** | 2X80 | 63.2 | 69.8 | 68.2 |
| 61083-181*** | 2X90 | 71.2 | 77.8 | 76.2 |
| 61083-201*** | 2X100 | 79.2 | 85.8 | 84.2 |

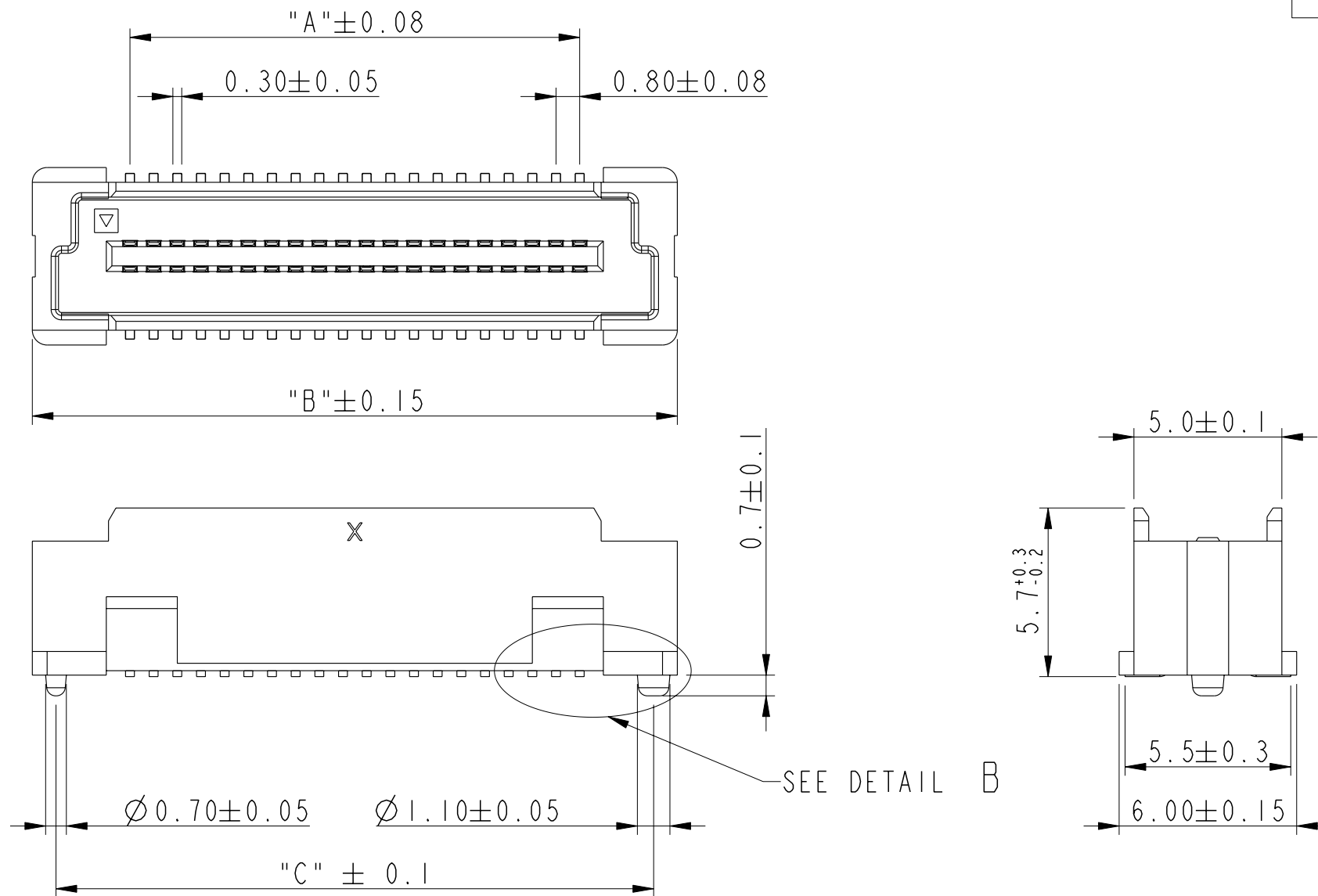
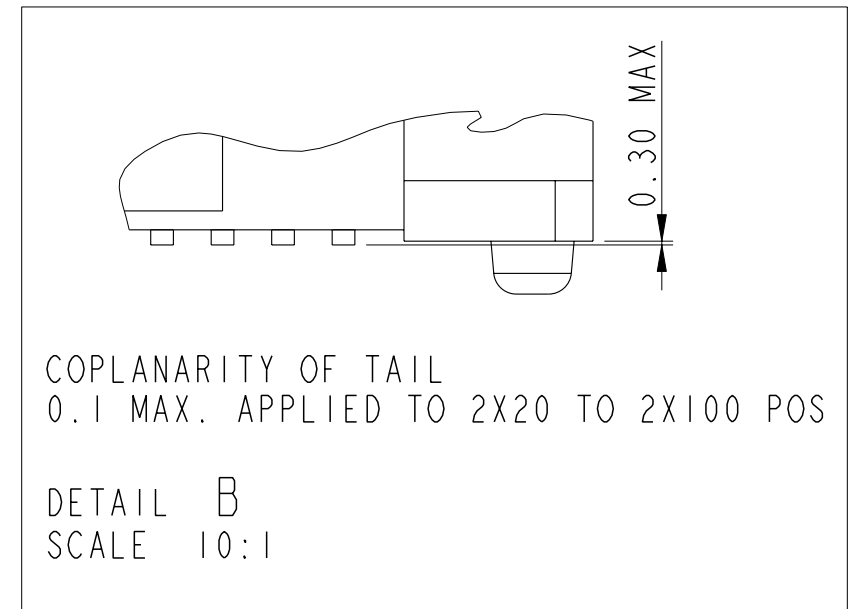


PLUG I

| | | | | | | | | | |
|---------------------------------------|---------|------------|------------|-------------|----------|--------------------|------------------------|--------------|---------|
| spec ref | dr | MAGGIE WU | 1999-03-24 | projection | mm | size | A3 | scale | 3:1 |
| tolerance std | eng | YU WEN CHU | 1999-03-24 | | | ecn no | ELX-S-010487 | rel level | RELEASE |
| TOLERANCES UNLESS OTHERWISE SPECIFIED | chr | M CHEONG | 2012-03-06 | | | | | | |
| | appr | CH TAN | 2012-03-06 | dwg no | 61083 | rev | AE | | |
| | surface | linear | 0.X | ±0.2 | cat. no. | - | Product - Customer Drw | sheet 2 of 6 | |
| | | 0.XX | ±0.15 | | | BERGSTAK 0.8mm BTB | | | |
| | | 0.XXX | ±0.10 | www.fci.com | | PLUG ASSY | | | |
| | angular | 0° | ±2° | | | | | | |

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| PRODUCT NO. | NO. OF POSITION | DIMENSION | | |
|--------------|-----------------|-----------|------|------|
| | | A | B | C |
| 61083-042*** | 2X20 | 15.2 | 21.8 | 20.2 |
| 61083-062*** | 2X30 | 23.2 | 29.8 | 28.2 |
| 61083-082*** | 2X40 | 31.2 | 37.8 | 36.2 |
| 61083-102*** | 2X50 | 39.2 | 45.8 | 44.2 |
| 61083-122*** | 2X60 | 47.2 | 53.8 | 52.2 |
| 61083-142*** | 2X70 | 55.2 | 61.8 | 60.2 |
| 61083-162*** | 2X80 | 63.2 | 69.8 | 68.2 |
| 61083-182*** | 2X90 | 71.2 | 77.8 | 76.2 |
| 61083-202*** | 2X100 | 79.2 | 85.8 | 84.2 |



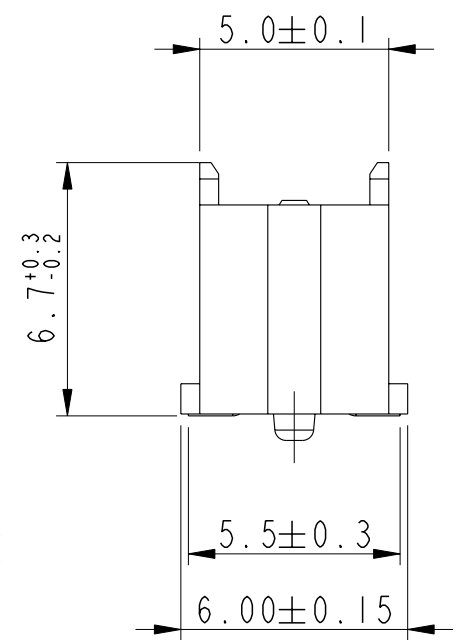
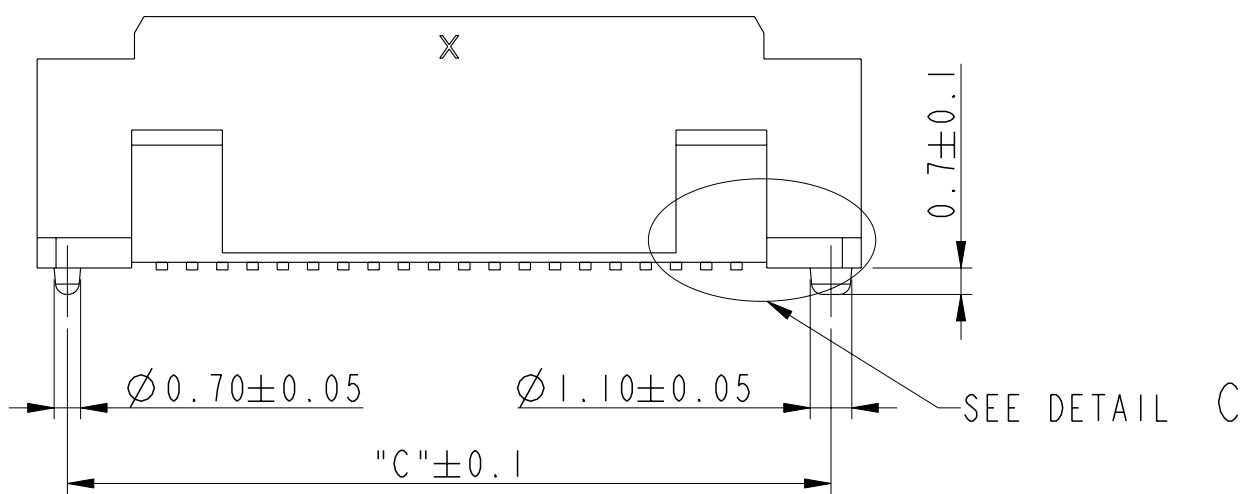
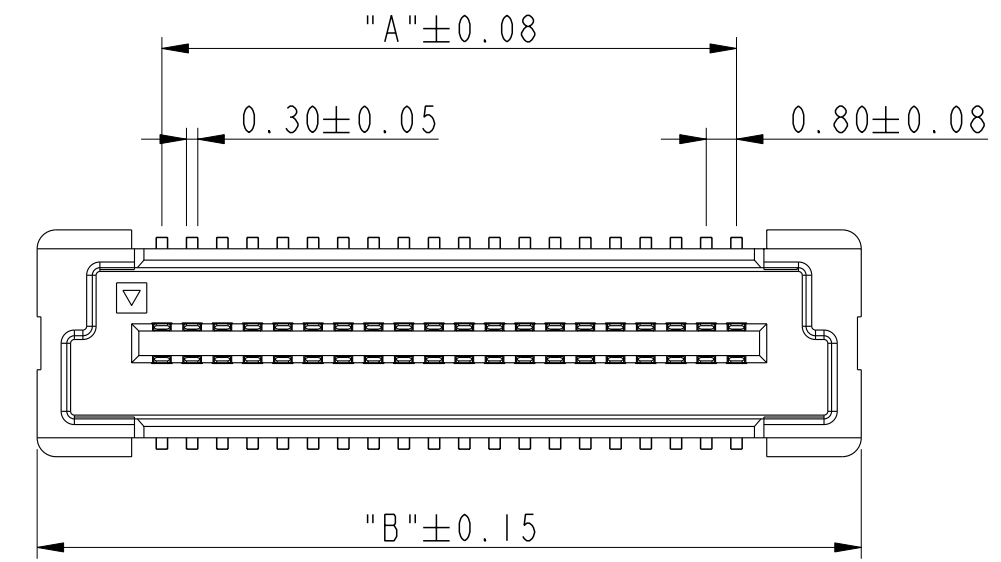
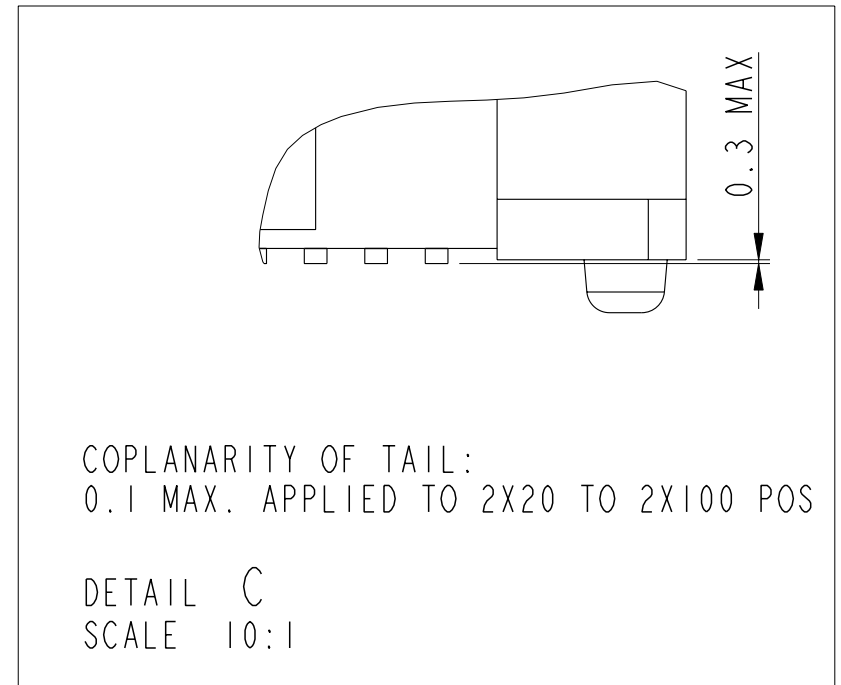
PLUG 2

| | | | | | | | | | |
|---------------------------------------|---------|------------|------------|----------------|----------|--------------------|------------------------|--------------|---------|
| spec ref | dr | MAGGIE WU | 1999-03-24 | projection | mm | size | A3 | scale | 3:1 |
| tolerance std | eng | YU WEN CHU | 1999-03-24 | | | ecn no | ELX-S-010487 | rel level | RELEASE |
| TOLERANCES UNLESS OTHERWISE SPECIFIED | chr | M CHEONG | 2012-03-06 | | | | | | |
| | appr | CH TAN | 2012-03-06 | product family | BERGSTAK | | | | |
| | surface | linear | 0.X | ±0.2 | title | BERGSTAK 0.8mm BTB | dwg no | 61083 | rev |
| | | 0.XX | ±0.15 | www.fci.com | cat. no. | - | Product - Customer Drw | sheet 3 of 6 | |
| | | 0.XXX | ±0.10 | | | | | | |
| | angular | 0° | ±2° | | | | | | |



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| PRODUCT NO. | NO. OF POSITION | DIMENSION | | |
|--------------|-----------------|-----------|------|------|
| | | A | B | C |
| 61083-043*** | 2X20 | 15.2 | 21.8 | 20.2 |
| 61083-063*** | 2X30 | 23.2 | 29.8 | 28.2 |
| 61083-083*** | 2X40 | 31.2 | 37.8 | 36.2 |
| 61083-103*** | 2X50 | 39.2 | 45.8 | 44.2 |
| 61083-123*** | 2X60 | 47.2 | 53.8 | 52.2 |
| 61083-143*** | 2X70 | 55.2 | 61.8 | 60.2 |
| 61083-163*** | 2X80 | 63.2 | 69.8 | 68.2 |
| 61083-183*** | 2X90 | 71.2 | 77.8 | 76.2 |
| 61083-203*** | 2X100 | 79.2 | 85.8 | 84.2 |

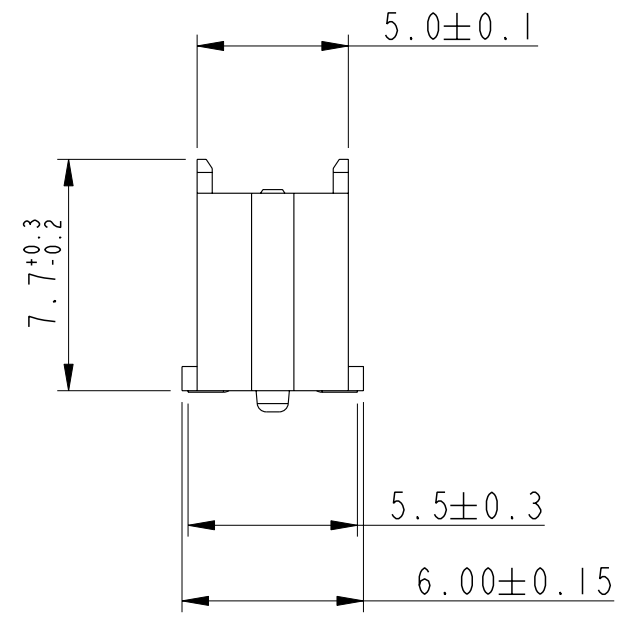
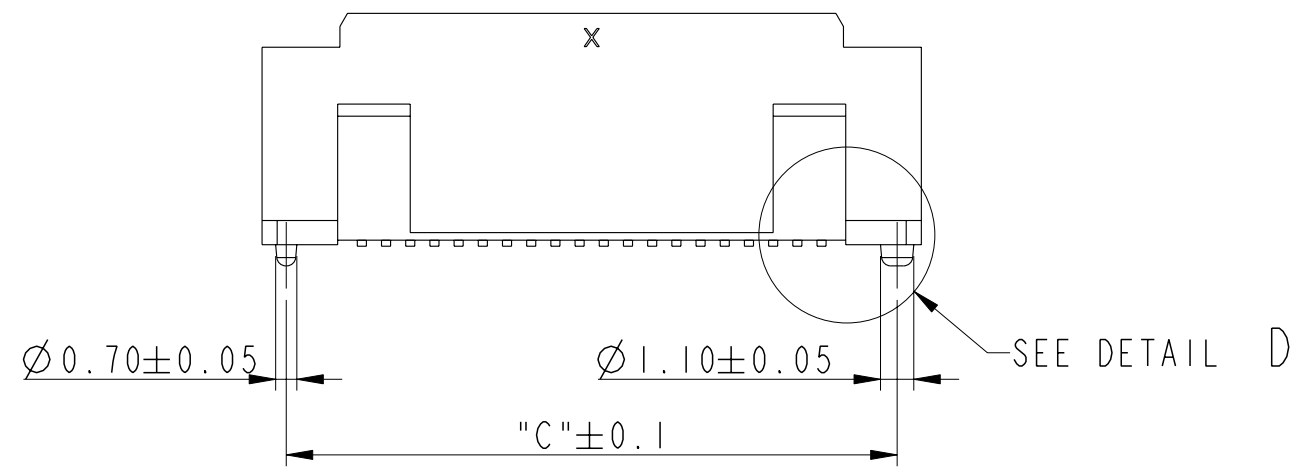
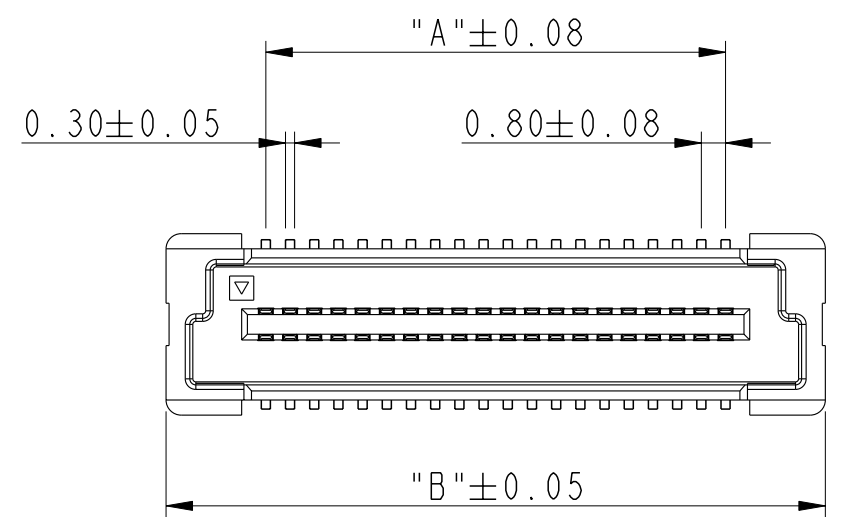
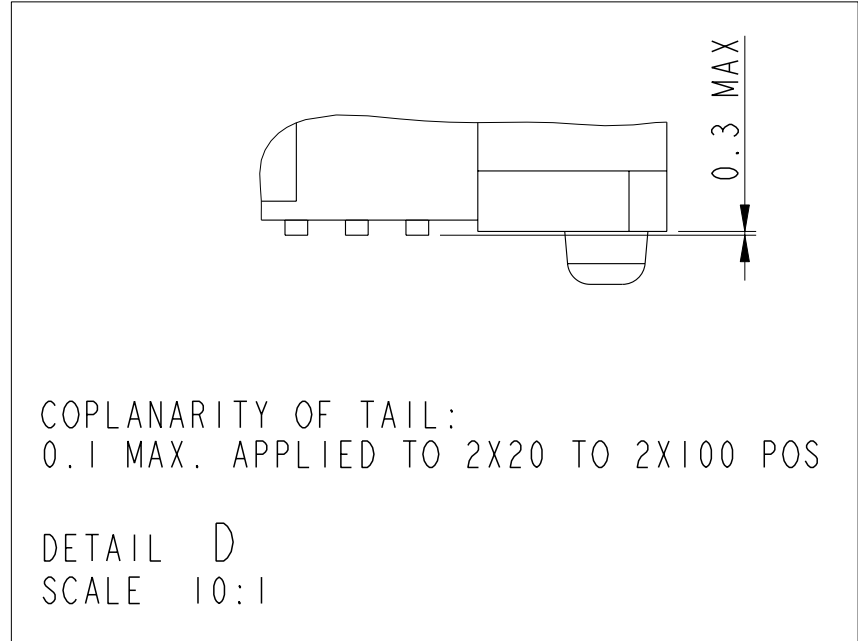


PLUG 3

| | | | | | | | | | |
|---------------------------------------|---------|------------|------------|------------|-------------|--------------------|--------------|------------------------|--------------|
| spec ref | dr | MAGGIE WU | 1999-03-24 | projection | mm | size | A3 | scale | 3:1 |
| tolerance std | eng | YU WEN CHU | 1999-03-24 | | | ecn no | ELX-S-010487 | rel level | RELEASE |
| TOLERANCES UNLESS OTHERWISE SPECIFIED | chr | M CHEONG | 2012-03-06 | | | | | | |
| | appr | CH TAN | 2012-03-06 | dwg no | 61083 | rev | AE | | |
| | surface | linear | 0.X | ±0.2 | www.fci.com | cat. no. | - | Product - Customer Drw | sheet 4 of 6 |
| | | 0.XX | ±0.15 | title | | BERGSTAK 0.8mm BTB | | | |
| | | 0.XXX | ±0.10 | title | | PLUG ASSY | | | |
| | angular | 0° | ±2° | title | | PLUG ASSY | | | |

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| PRODUCT NO. | NO. OF POSITION | DIMENSION | | |
|--------------|-----------------|-----------|------|------|
| | | A | B | C |
| 61083-044*** | 2X20 | 15.2 | 21.8 | 20.2 |
| 61083-064*** | 2X30 | 23.2 | 29.8 | 28.2 |
| 61083-084*** | 2X40 | 31.2 | 37.8 | 36.2 |
| 61083-104*** | 2X50 | 39.2 | 45.8 | 44.2 |
| 61083-124*** | 2X60 | 47.2 | 53.8 | 52.2 |
| 61083-144*** | 2X70 | 55.2 | 61.8 | 60.2 |
| 61083-164*** | 2X80 | 63.2 | 69.8 | 68.2 |
| 61083-184*** | 2X90 | 71.2 | 77.8 | 76.2 |
| 61083-204*** | 2X100 | 79.2 | 85.8 | 84.2 |



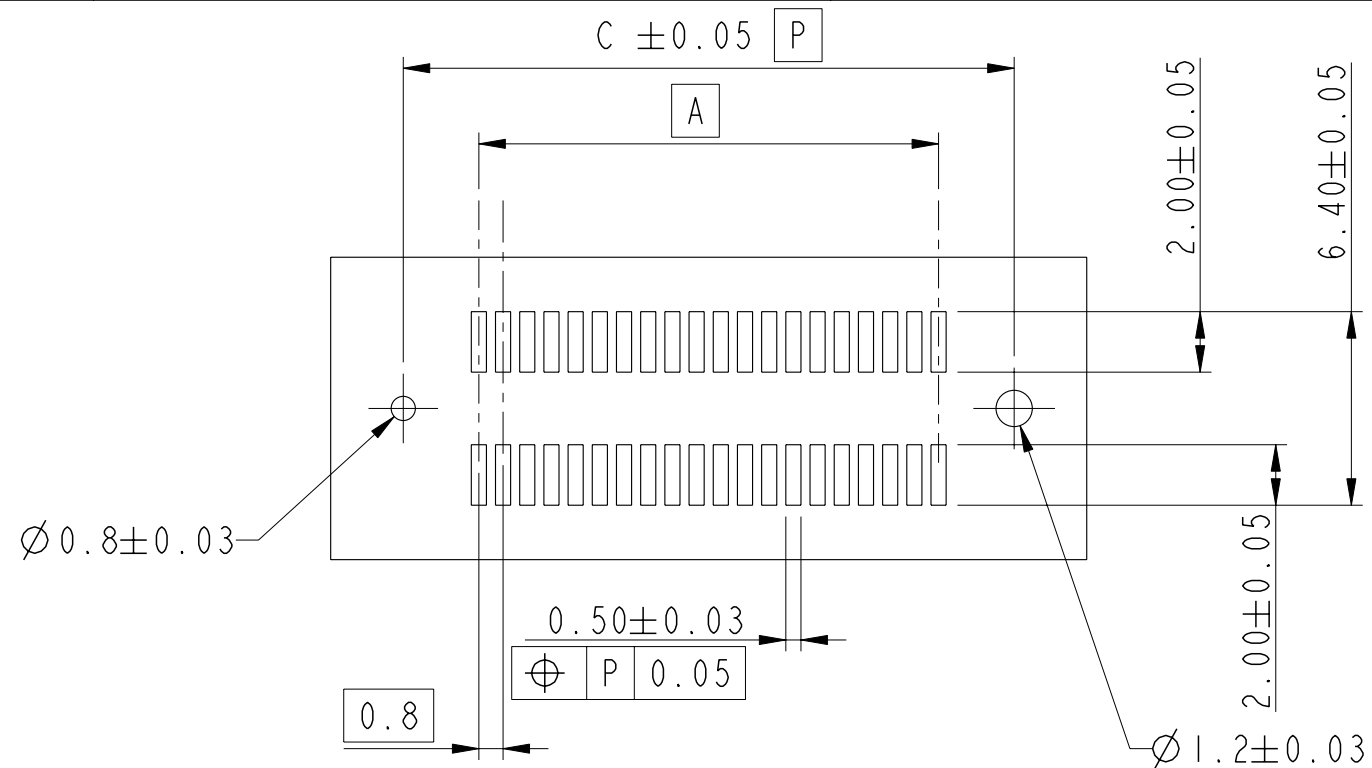
PLUG 4

| | | | | | | | | | |
|---------------------------------------|---------|------------|------------|----------------|----------|--|------------------------|--------------|---------|
| spec ref | dr | MAGGIE WU | 1999-03-24 | projection | mm | size | A3 | scale | 3:1 |
| tolerance std | eng | YU WEN CHU | 1999-03-24 | | | ecn no | ELX-S-010487 | rel level | RELEASE |
| TOLERANCES UNLESS OTHERWISE SPECIFIED | chr | M CHEONG | 2012-03-06 | | | | | | |
| | appr | CH TAN | 2012-03-06 | product family | BERGSTAK | rel level | RELEASE | | |
| | surface | linear | 0.X | ±0.2 | | title BERGSTAK 0.8mm BTB PLUG ASSY | dwg no 61083 | rev AE | |
| | | 0.XX | ±0.15 | | | | | | |
| | | 0.XXX | ±0.10 | | | | | | |
| | angular | 0° | ±2° | www.fci.com | cat. no. | - | Product - Customer Drw | sheet 5 of 6 | |

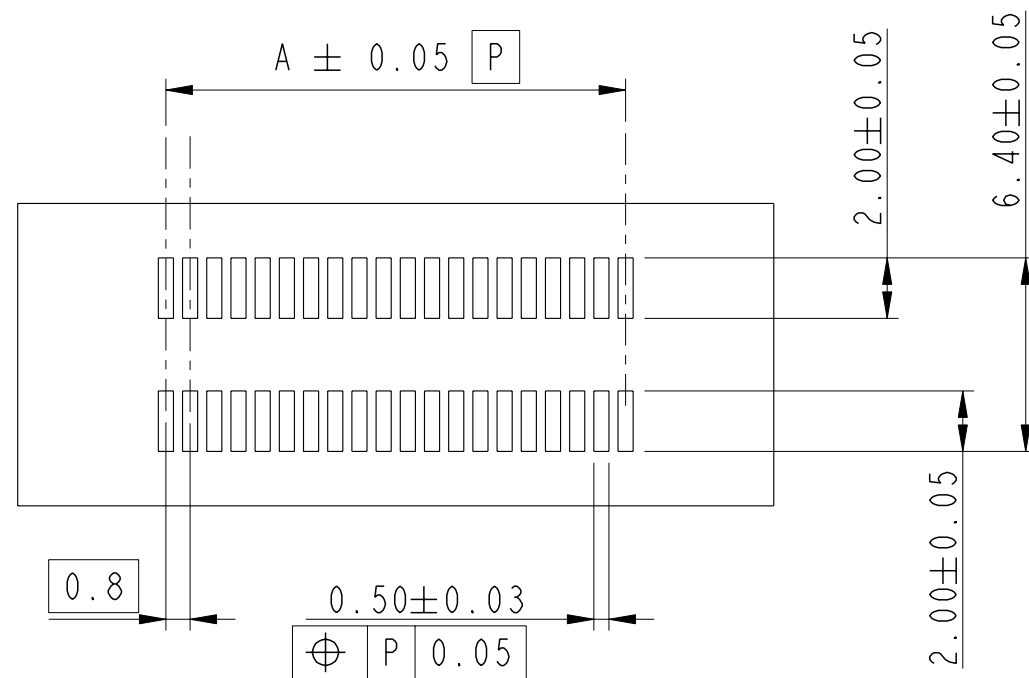


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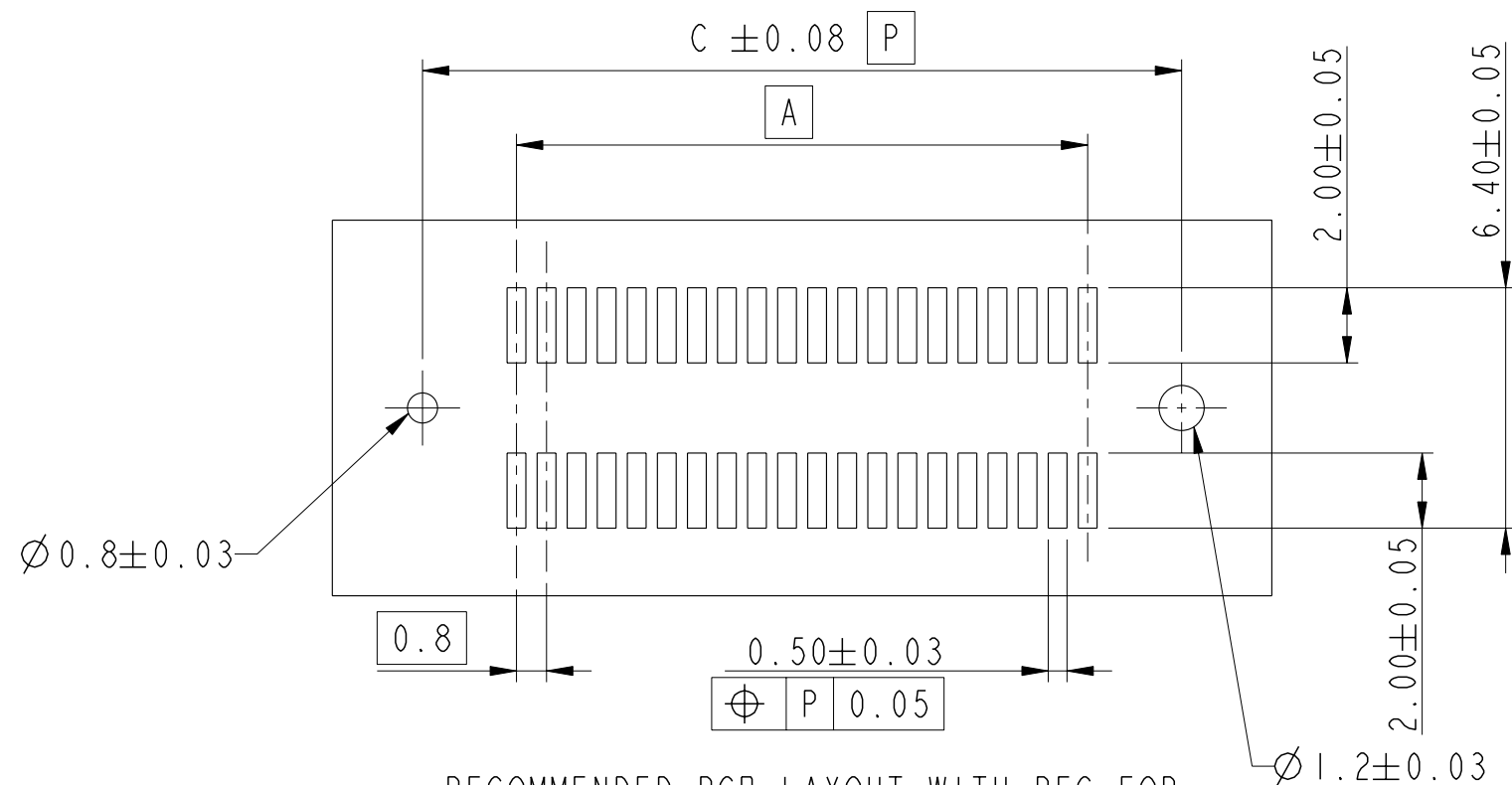
FOR PLUG 1/2/3/4



RECOMMENDED PCB LAYOUT WITH PEG FOR NO. OF POS 2X20, 2X30, 2X40, 2X50 2X60



RECOMMENDED PCB LAYOUT WITHOUT PEG AND HOLDDOWN FOR NO. OF POS 2X20, 2X30, 2X40, 2X50 2X60



RECOMMENDED PCB LAYOUT WITH PEG FOR NO. OF POS 2X70, 2X80, 2X90, 2X100

| | | | | | | | | | | | |
|---------------|---------------------------------------|-------------|-------------|------------|----|----------|---------------------------------------|----------|------------------------|---------|--|
| spec ref | dr | MAGGIE WU | 1999-03-24 | projection | mm | size | A3 | scale | 3:1 | | |
| tolerance std | TOLERANCES UNLESS OTHERWISE SPECIFIED | | | | | ecn no | ELX-S-010487 | | | | |
| | eng | YU WEN CHU | 1999-03-24 | | | | product family | BERGSTAK | rel level | RELEASE | |
| | chr | M CHEONG | 2012-03-06 | | | | | | | | |
| appr | CH TAN | 2012-03-06 | | | | dwg no | 61083 | | rev | | |
| surface | linear | 0.X ±0.2 | | | | | title BERGSTAK 0.8mm BTB PLUG ASSY | | | AE | |
| | | 0.XX ±0.15 | www.fci.com | | | cat. no. | - | | Product - Customer Drw | | |
| | | 0.XXX ±0.10 | | | | | | | sheet 6 of 6 | | |
| | angular | 0° ±2° | | | | | | | | | |



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