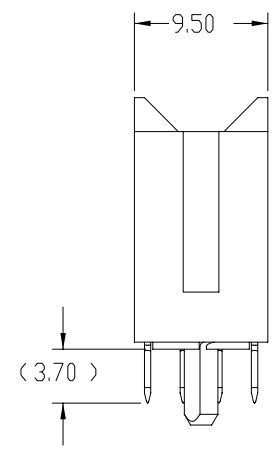
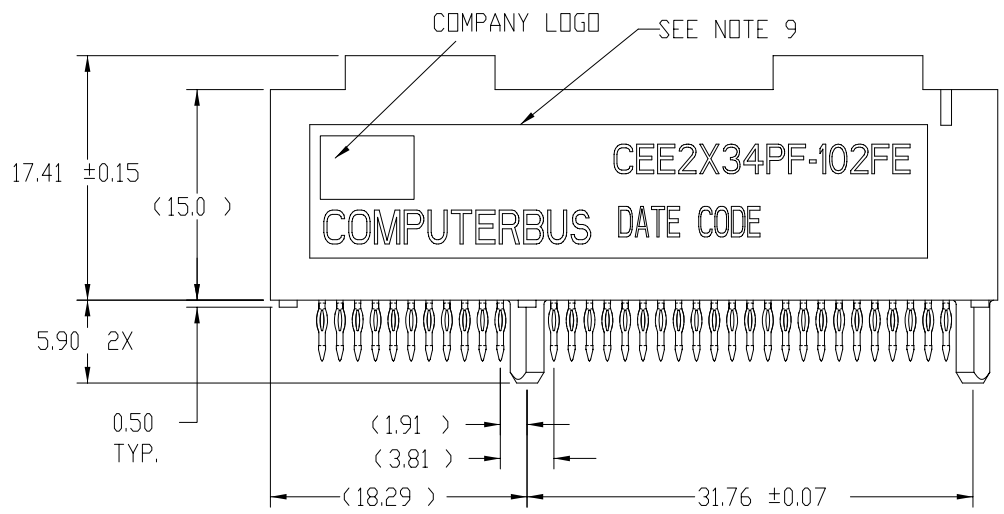
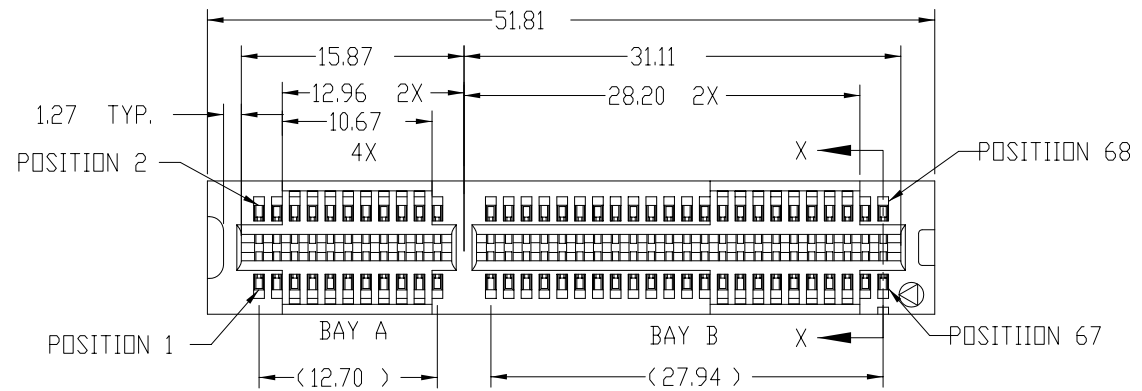




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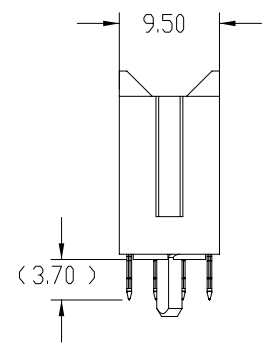
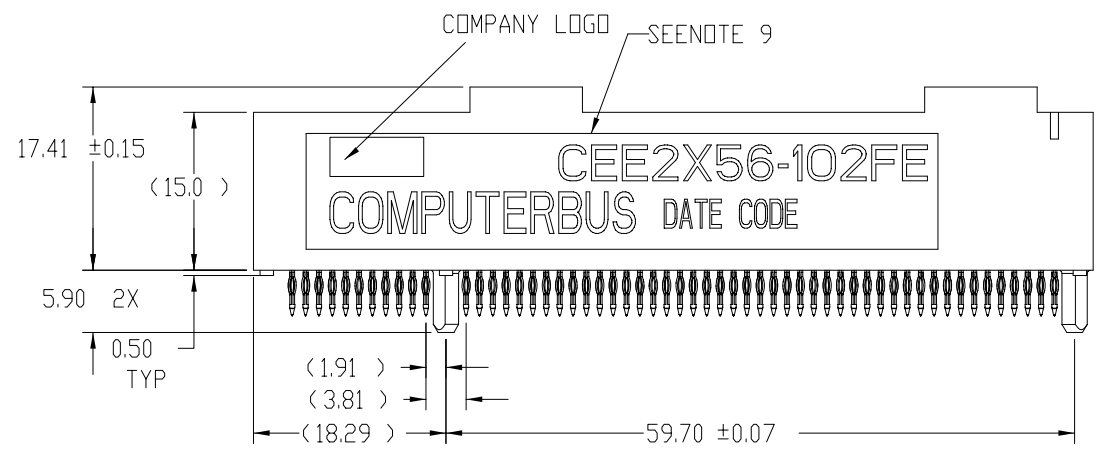
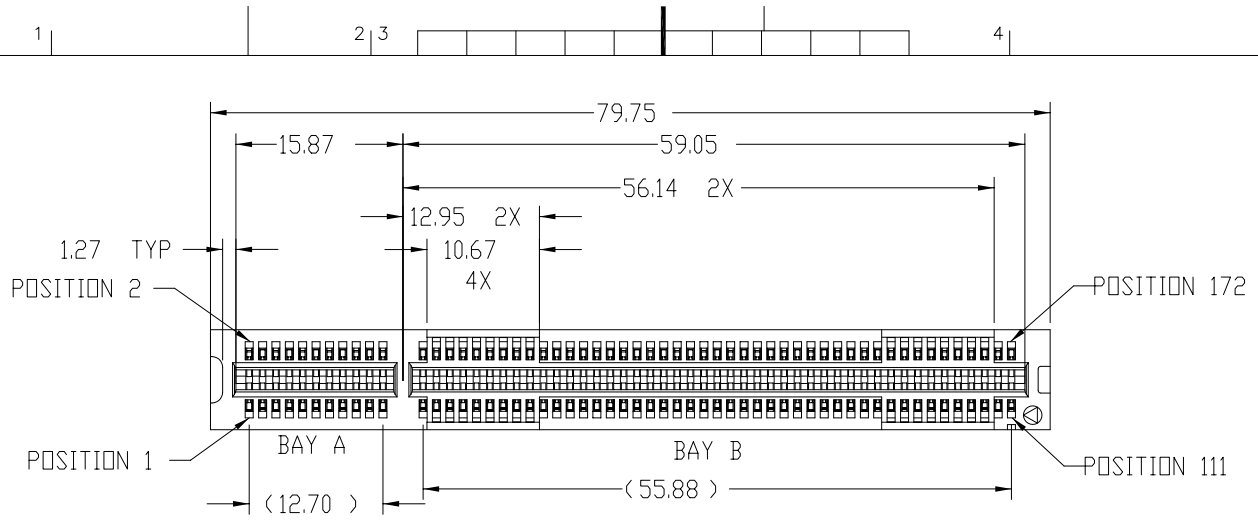
PRODUCT NUMBER  
SEE TABLE



|                                       |          |     |          |                       |           |         |   |                                  |   |   |    |                  |   |   |   |   |   |
|---------------------------------------|----------|-----|----------|-----------------------|-----------|---------|---|----------------------------------|---|---|----|------------------|---|---|---|---|---|
| mat'l. code                           |          |     |          | surface<br>ISO 1302 ✓ |           |         |   | tolerance<br>ISO 406<br>ISO 1101 |   |   |    | projection<br>MM |   | product family<br>CARDEDGE                |   |   |   |
| tolerances unless otherwise specified |          |     |          | angles                |           |         |   | linear                           |   |   |    | scale 2:1        |   | title<br>CEE 2X__PF<br>CONNECTOR ASSEMBLY |   |   |   |
| Itr                                   | ecn no   | dr  | date     |                       |           |         |   |                                  |   |   |    |                  |   | sheet 1 of 10 size                        |   |   |   |
| E                                     | V00805   | CW  | 3/28/00  |                       |           |         |   |                                  |   |   |    |                  |   | A3  |   |   |   |
| F                                     | V11759   | MEP | 7/3/01   |                       |           |         |   |                                  |   |   |    |                  |   | SE94583                                   |   |   |   |
| G                                     | V12247   | GIP | 9/13/01  | 0°±1'                 |           |         |   |                                  |   |   |    |                  |   | type Product Customer Drawing             |   |   |   |
| H                                     | V04-1156 | TAB | 12/13/04 | dr                    | G. PETERS | 9/13/01 |   |                                  |   |   |    |                  |   |   |   |   |   |
| J                                     | M05-0075 | ERE | 04/05/05 | enr                   | D. CASEY  | 9/14/01 |   |                                  |   |   |    |                  |   |   |   |   |   |
| K                                     | M06-0037 | MHT | 3/30/06  | chr                   | G. PETERS | 9/13/01 |   |                                  |   |   |    |                  |   |   |   |   |   |
| L                                     | M06-0234 | AGS | 06/16/06 | appd                  | D. CASEY  | 9/13/01 |   |                                  |   |   |    |                  |   |   |   |   |   |
| sheet                                 | revision | L   | L        | L                     | L         | L       | L | L                                | L | L | L  | L                | L | L   | L | L | L |
| index                                 | sheet    | 1   | 2        | 3                     | 4         | 5       | 6 | 7                                | 8 | 9 | 10 |                  |   |   |   |   |   |

form: A3

PRODUCT NUMBER  
SEE TABLE

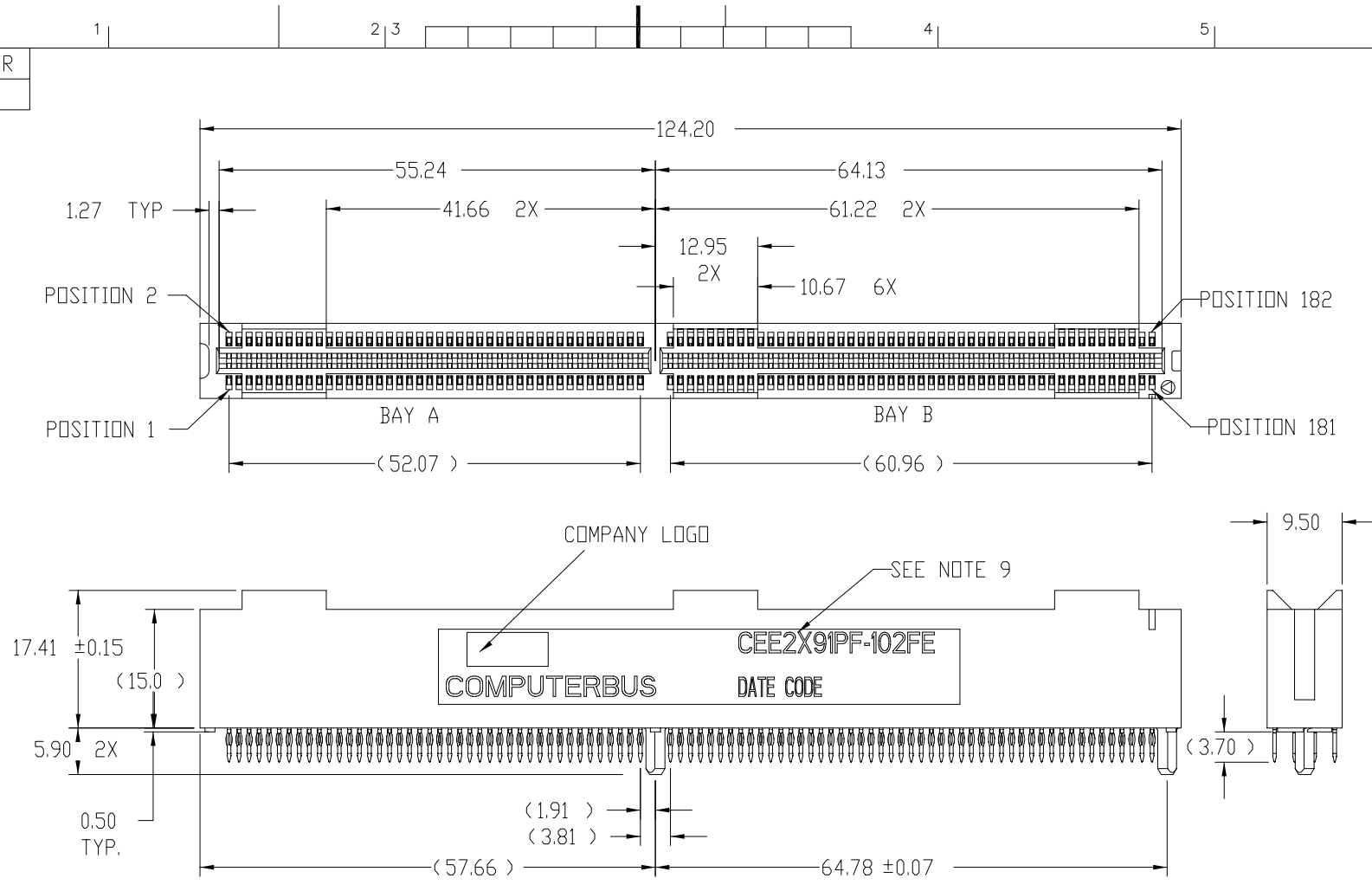


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|             |  |                       |  |                                  |  |                                       |  |                                  |  |
|-------------|--|-----------------------|--|----------------------------------|--|---------------------------------------|--|----------------------------------|--|
| mat'l. code |  | surface<br>ISO 1302 ✓ |  | tolerance<br>ISO 406<br>ISO 1101 |  | projection<br>MM                      |  | product family<br>CARDEDGE       |  |
| ltr         |  | ecn no dr             |  | date                             |  | tolerances unless otherwise specified |  | title                            |  |
| L           |  |                       |  |                                  |  | .X±.2<br>.XX±.10<br>.XXX±.050         |  | CEE 2X__PF<br>CONNECTOR ASSEMBLY |  |
|             |  |                       |  |                                  |  | 0°±1'                                 |  | scale 3:2                        |  |
|             |  |                       |  | dr G. PETERS 9/13/01             |  |                                       |  | dwg no sheet 2 of 10 size        |  |
|             |  |                       |  | enr D. CASEY 9/14/01             |  |                                       |  | SE94583 A3                       |  |
|             |  |                       |  | chr G. PETERS 9/13/01            |  |                                       |  | type Product Customer Drawing    |  |
|             |  |                       |  | appd D. CASEY 9/13/01            |  |                                       |  |                                  |  |
| sheet index |  | revision sheet        |  |                                  |  |                                       |  |                                  |  |

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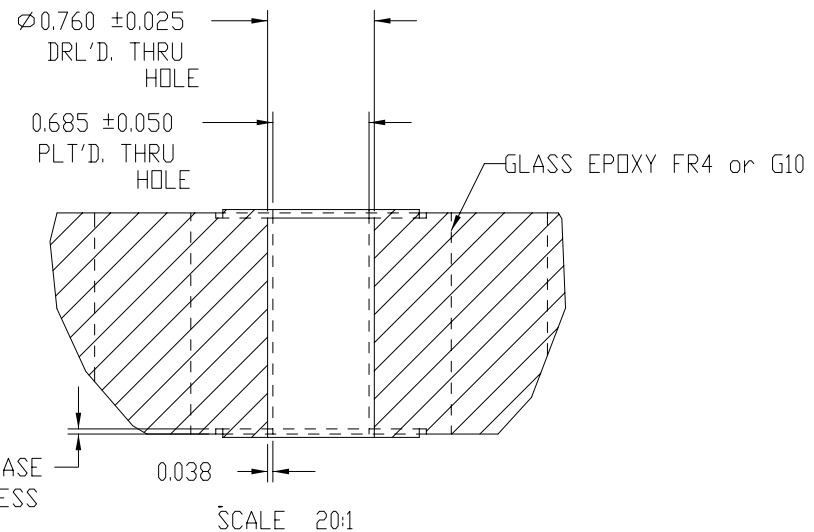
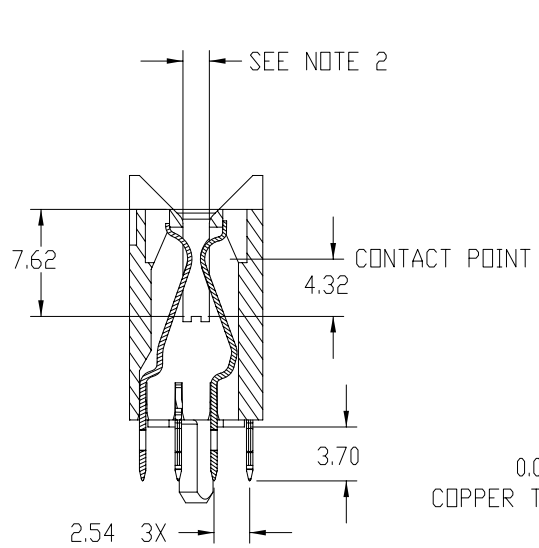
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|             |  |                       |  |                                  |  |                                       |  |                                  |  |
|-------------|--|-----------------------|--|----------------------------------|--|---------------------------------------|--|----------------------------------|--|
| mat'l. code |  | surface<br>ISO 1302 ✓ |  | tolerance<br>ISO 406<br>ISO 1101 |  | projection<br>MM                      |  | product family<br>CARDEDGE       |  |
| ltr         |  | ecn no dr             |  | date                             |  | tolerances unless otherwise specified |  | title                            |  |
| L           |  |                       |  |                                  |  | .X±.2<br>.XX±.10<br>.XXX±.050         |  | CEE 2X__PF<br>CONNECTOR ASSEMBLY |  |
|             |  |                       |  |                                  |  | 0°±1'                                 |  | scale 2:1                        |  |
|             |  |                       |  | dr G. PETERS 9/13/01             |  |                                       |  | dwg no sheet 3 of 10 size        |  |
|             |  |                       |  | enr D. CASEY 9/14/01             |  |                                       |  | SE94583 A3                       |  |
|             |  |                       |  | chr G. PETERS 9/13/01            |  |                                       |  | type Product Customer Drawing    |  |
|             |  |                       |  | appd D. CASEY 9/13/01            |  |                                       |  |                                  |  |
| sheet index |  | revision sheet        |  |                                  |  |                                       |  |                                  |  |



form: A3

| FCI CATALOG NO.<br>F/CONNECTORS<br>w/CARD COLLECTORS | CONNECTOR<br>SIZE | NO. CONTACTS<br>LOADED | TERM. | LOAD PATTERN | CONTACT<br>PAIRS<br>BAY A | CONTACT<br>PAIRS<br>BAY B | CONTACT<br>PAIRS<br>BAY C |
|--|-------------------|------------------------|-------|--------------|---------------------------|---------------------------|---------------------------|
| CEE2X34PF-102FE                                      | 2x34              | 68                     | P.F.  | FULLY LOADED | 11                        | 23                        | n/a                       |
| CEE2X56PF-102FE                                      | 2x56              | 112                    | P.F.  | FULLY LOADED | 11                        | 45                        | n/a                       |
| CEE2X91PF-102FE                                      | 2x91              | 182                    | P.F.  | FULLY LOADED | 42                        | 49                        | n/a                       |
| CEE2X34PF-102FELF                                    | 2x34              | 68                     | P.F.  | FULLY LOADED | 11                        | 23                        | n/a                       |
| CEE2X56PF-102FELF                                    | 2x56              | 112                    | P.F.  | FULLY LOADED | 11                        | 45                        | n/a                       |
| CEE2X91PF-102FELF                                    | 2x91              | 182                    | P.F.  | FULLY LOADED | 42                        | 49                        | n/a                       |

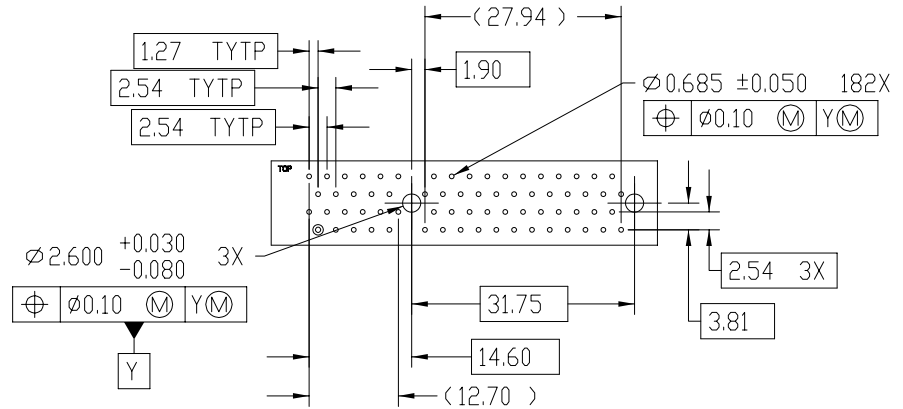


RECOMMENDED PLATED THRU HOLE DIMENSIONS  
FOR COMPLIANT PRESS PINS

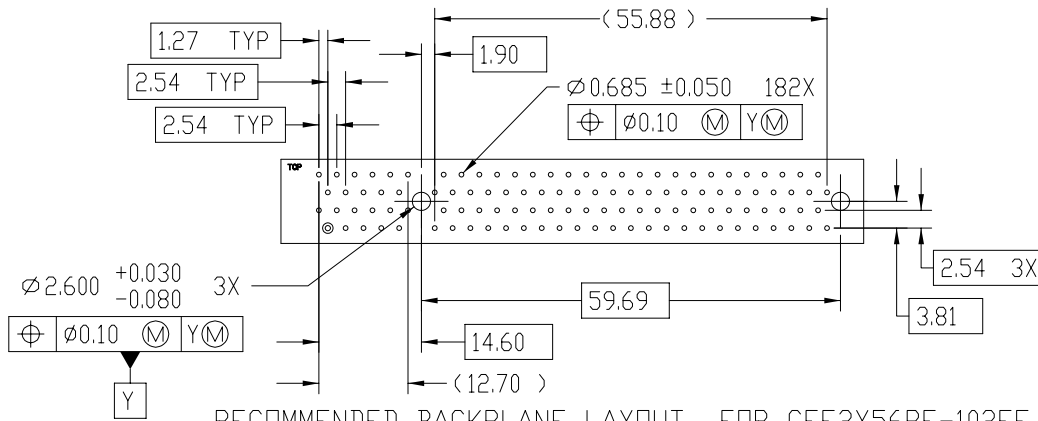
|             |  |   |  |                                  |  |                                       |  |                                  |  |
|-------------|--|---|--|----------------------------------|--|---------------------------------------|--|----------------------------------|--|
| mat'l. code |  | surface<br>ISO 1302 <input checked="" type="checkbox"/> |  | tolerance<br>ISO 406<br>ISO 1101 |  | projection<br>                        |  | product family<br>CARDEDGE       |  |
| ltr         |  | ecn no  |  | date                             |  | tolerances unless otherwise specified |  | title                            |  |
| L           |  |   |  |                                  |  | .X±.2<br>.XX±.10<br>.XXX±.050         |  | CEE 2X__PF<br>CONNECTOR ASSEMBLY |  |
|             |  |   |  |                                  |  | 0°±1'                                 |  | scale 2:1                        |  |
|             |  |   |  | dr G. PETERS 9/13/01             |  |                                       |  | dwg no sheet 4 of 10 size        |  |
|             |  |   |  | enr D. CASEY 9/14/01             |  |                                       |  | SE94583 A3                       |  |
|             |  |   |  | chr G. PETERS 9/13/01            |  |                                       |  | type Product Customer Drawing    |  |
|             |  |   |  | appd D. CASEY 9/13/01            |  |                                       |  |                                  |  |
| sheet index |  | revision sheet  |  |                                  |  |                                       |  |                                  |  |

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RECOMMENDED BACKPLANE LAYOUT  
FOR CEE2X34PF-102FE & CEE2X34PF-102FELF



RECOMMENDED BACKPLANE LAYOUT FOR CEE2X56PF-102FE & CEE2X56PF-102FELF



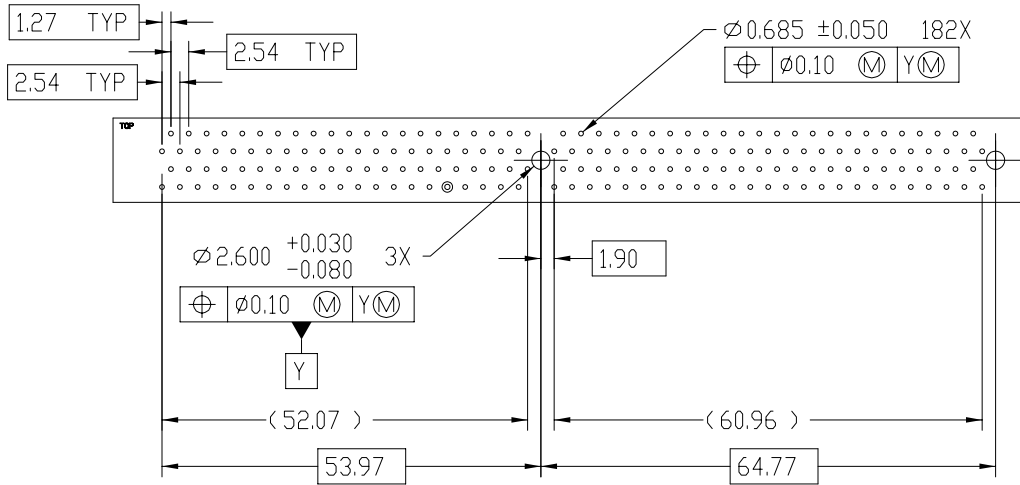
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|             |  |                       |  |                                  |  |                                       |  |                                  |  |
|-------------|--|-----------------------|--|----------------------------------|--|---------------------------------------|--|----------------------------------|--|
| mat'l. code |  | surface<br>ISO 1302 ✓ |  | tolerance<br>ISO 406<br>ISO 1101 |  | projection<br>MM                      |  | product family<br>CARDEDGE       |  |
| ltr         |  | ecn no dr             |  | date                             |  | tolerances unless otherwise specified |  | title                            |  |
| L           |  |                       |  |                                  |  | .X±.2<br>.XX±.10<br>.XXX±.050         |  | CEE 2X__PF<br>CONNECTOR ASSEMBLY |  |
|             |  |                       |  |                                  |  | scale 1:1                             |  | dwg no sheet 5 of 10 size        |  |
|             |  |                       |  | dr G. PETERS 9/13/01             |  |                                       |  | SE94583 A3                       |  |
|             |  |                       |  | enr D. CASEY 9/14/01             |  |                                       |  |                                  |  |
|             |  |                       |  | chr G. PETERS 9/13/01            |  |                                       |  |                                  |  |
|             |  |                       |  | appd D. CASEY 9/13/01            |  |                                       |  | type Product Customer Drawing    |  |
| sheet index |  | revision sheet        |  |                                  |  |                                       |  |                                  |  |

form: A3

PRODUCT NUMBER  
SEE TABLE



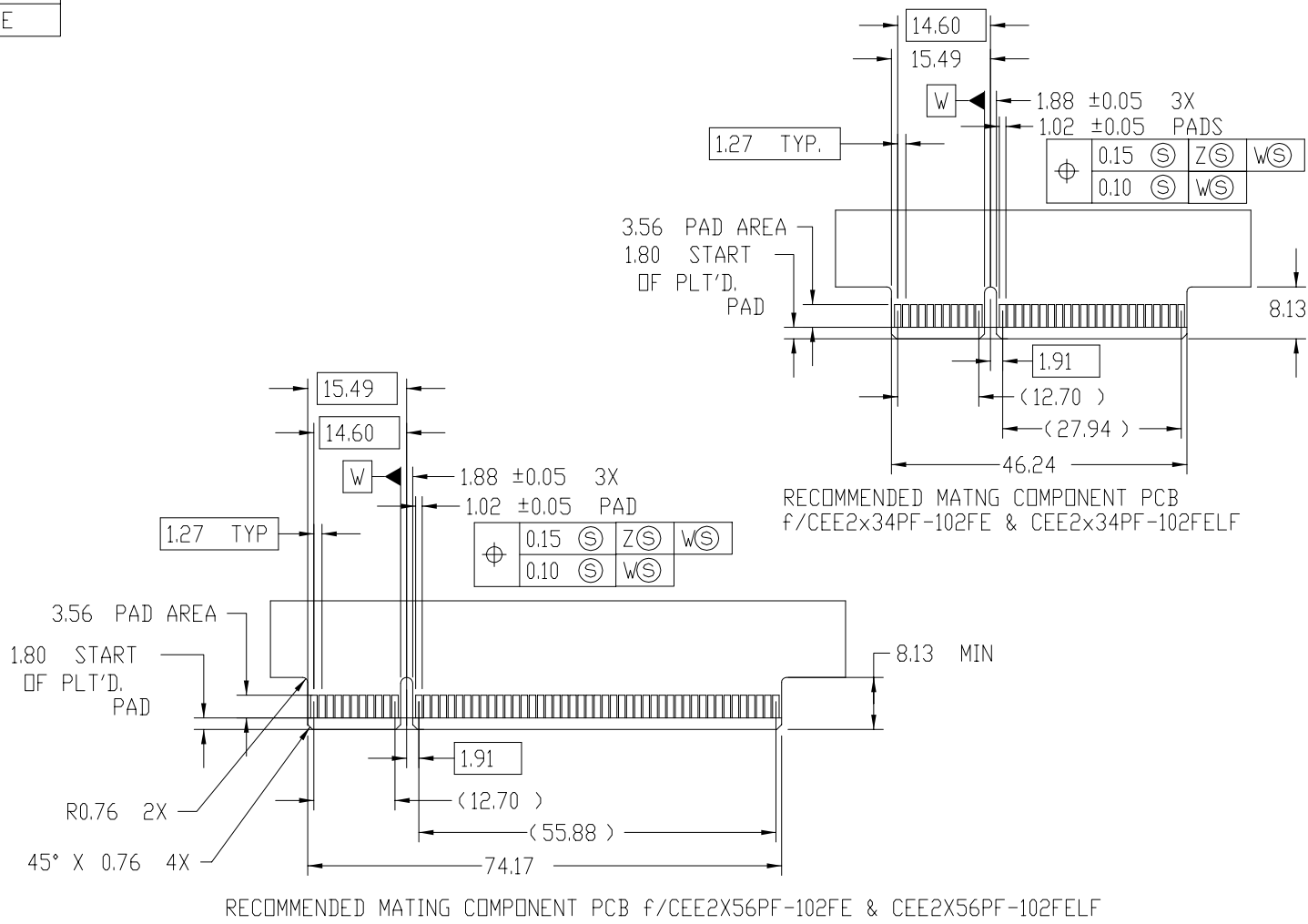
RECOMMENDED BACKPLANE LAYOUT f/CEE2X91PF-102FE & CEE2X91PF-102FELF



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|             |  |                       |  |                                  |  |                                       |  |                                  |  |
|-------------|--|-----------------------|--|----------------------------------|--|---------------------------------------|--|----------------------------------|--|
| mat'l. code |  | surface<br>ISO 1302 ✓ |  | tolerance<br>ISO 406<br>ISO 1101 |  | projection<br>MM                      |  | product family<br>CARDEDGE       |  |
| ltr         |  | ecn no                |  | date                             |  | tolerances unless otherwise specified |  | title                            |  |
| L           |  |                       |  |                                  |  | .X±.2<br>.XX±.10<br>.XXX±.050         |  | CEE 2X__PF<br>CONNECTOR ASSEMBLY |  |
|             |  |                       |  |                                  |  | scale 1:1                             |  | dwg no sheet 6 of 10 size        |  |
|             |  |                       |  | dr G. PETERS 9/13/01             |  | FCI                                   |  | SE94583 A3                       |  |
|             |  |                       |  | enr D. CASEY 9/14/01             |  |                                       |  | type Product Customer Drawing    |  |
|             |  |                       |  | chr G. PETERS 9/13/01            |  |                                       |  |                                  |  |
|             |  |                       |  | appd D. CASEY 9/13/01            |  |                                       |  |                                  |  |
| sheet index |  | revision sheet        |  |                                  |  |                                       |  |                                  |  |

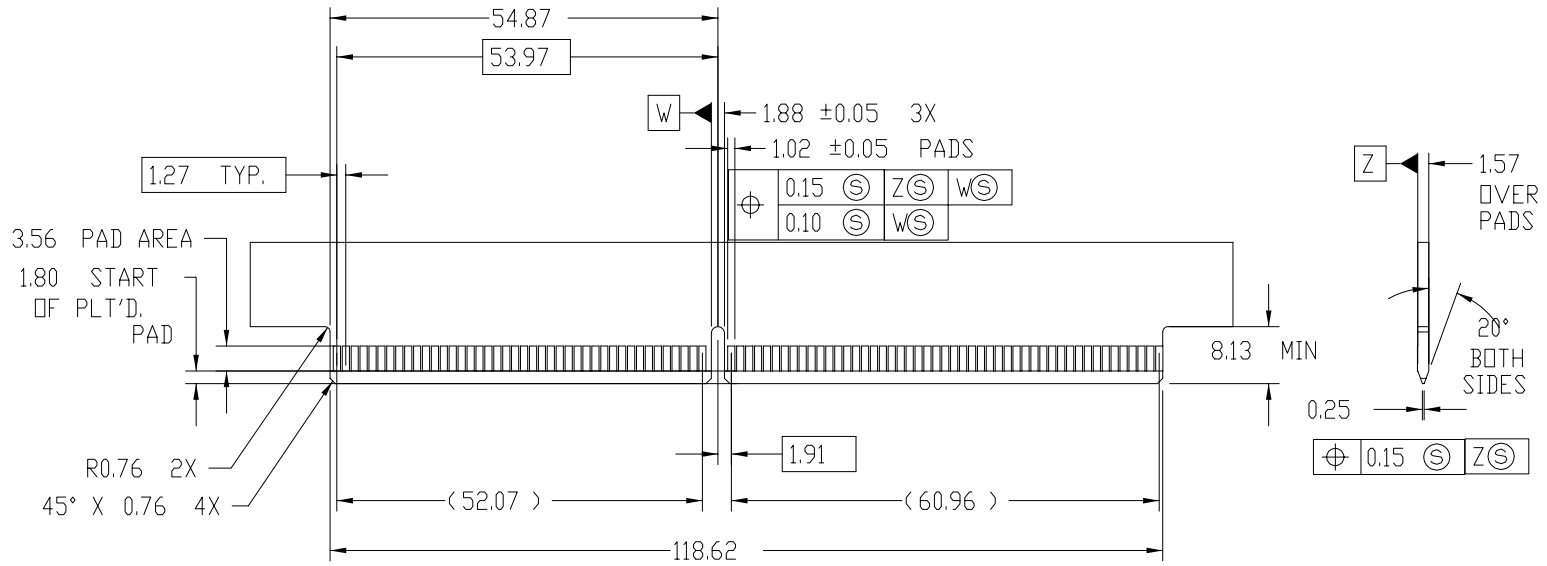
PRODUCT NUMBER  
SEE TABLE



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|             |  |                       |  |                                  |  |                                       |  |                                  |  |
|-------------|--|-----------------------|--|----------------------------------|--|---------------------------------------|--|----------------------------------|--|
| mat'l. code |  | surface<br>ISO 1302 ✓ |  | tolerance<br>ISO 406<br>ISO 1101 |  | projection<br>MM                      |  | product family<br>CARDEDGE       |  |
| ltr         |  | ecn no dr             |  | date                             |  | tolerances unless otherwise specified |  | title                            |  |
| L           |  |                       |  |                                  |  | .X±.2<br>.XX±.10<br>.XXX±.050         |  | CEE 2X__PF<br>CONNECTOR ASSEMBLY |  |
|             |  |                       |  |                                  |  | 0°±1'                                 |  | scale 2:1                        |  |
|             |  |                       |  | dr G. PETERS 9/13/01             |  |                                       |  | dwg no sheet 7 of 10 size        |  |
|             |  |                       |  | enr D. CASEY 9/14/01             |  |                                       |  | SE94583 A3                       |  |
|             |  |                       |  | chr G. PETERS 9/13/01            |  |                                       |  | type Product Customer Drawing    |  |
|             |  |                       |  | appd D. CASEY 9/13/01            |  |                                       |  |                                  |  |
| sheet index |  | revision sheet        |  |                                  |  |                                       |  |                                  |  |

PRODUCT NUMBER  
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RECOMMENDED MATING COMPONENT PCBF/CEE2X91PF-102FE & CEE2X91PF-102FELF



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|             |  |                       |  |                                  |  |                                       |  |                                  |  |
|-------------|--|-----------------------|--|----------------------------------|--|---------------------------------------|--|----------------------------------|--|
| mat'l. code |  | surface<br>ISO 1302 ✓ |  | tolerance<br>ISO 406<br>ISO 1101 |  | projection<br>MM                      |  | product family<br>CARDEDGE       |  |
| ltr         |  | ecn no                |  | date                             |  | tolerances unless otherwise specified |  | title                            |  |
| L           |  |                       |  |                                  |  | .X±.2<br>.XX±.10<br>.XXX±.050         |  | CEE 2X__PF<br>CONNECTOR ASSEMBLY |  |
|             |  |                       |  |                                  |  | 0°±1'                                 |  | scale 1:1                        |  |
|             |  |                       |  | dr G. PETERS 9/13/01             |  |                                       |  | dwg no sheet 8 of 10 size        |  |
|             |  |                       |  | enr D. CASEY 9/14/01             |  |                                       |  | SE94583 A3                       |  |
|             |  |                       |  | chr G. PETERS 9/13/01            |  |                                       |  | type Product Customer Drawing    |  |
|             |  |                       |  | appd D. CASEY 9/13/01            |  |                                       |  |                                  |  |
| sheet index |  | revision sheet        |  |                                  |  |                                       |  |                                  |  |

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NOTES:

1. INTERPRET THIS DRAWING IN ACCORDANCE WITH ANSI Y14.5M -1982.
2. CONNECTORS WITH CARD COLLECTING SCOOPS ARE DESIGNED TO ACCOMMODATE 1.57+/- .180 PC BOARDS WITH WARPAGE UP TO +/-2.03.
3. RECOMMENDED COMPONENT BOARD MATERIAL:  
P.C. BOARD:FR-4 WITH 28.35 GRAMS MIN. COPPER, PADS PLATED WITH .76 MICRONS MIN GOLD, PER MIL-G-45204, TYPE 1, CLASS 1, GRADE C OVER 2.54 MICRONS MIN NI. UNDERPLATE PER QQ-N-290.
4. RECOMMENDED BACK PLANE THICKNESS IS 2.39 FOR 3.71 COMPLIANT TAIL.
5. CONTACT MATING SURFACES ARE LUBRICATED WITH OS-138.
6. MATERIAL:

BODY: POLYPHTHALAMIDE (PPA) UL RATED 94V-0  
COLOR, BLACK

CONTACTS: PHOS BRONZE, PER FCI SPEC. M738

CONTACT FINISH: FE 0.75 MICRONS MIN GOLD IN CONTACT  
AREA 1-3 MICRONS MIN 60/40 TIN LEAD ON SOLDER TAILS  
2 MICRONS MIN NI UNDERPLATE ALL OVER.

LEAD FREE OPTION:

CONTACT FINISH: FE 0.75 MICRONS MIN GOLD IN CONTACT  
AREA 1-3 MICRONS MIN PURE TIN ON SOLDER TAILS  
2 MICRONS MIN NI UNDERPLATE ALL OVER.

7. PERFORMANCE CHARACTERISTICS: SEE SHEET 7.
8. APPLICATION SPECIFICATION PER BUS-09-026.
9. ITEM NAME, LOGO, PART NUMBER, DATE CODE, AND UL SYMBOLS TO APPEAR IN THIS AREA. }

10. LF SUFFIX AT THE END OF PART NUMBER IS LEAD FREE.

11. THIS PRODUCT MEETS EUROPEAN UNION DIRECTIVES AND OTHER COUNTRY REGULATION AS DESCRIBED IN GS-22-008.



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|             |                |   |      |                                       |           |                               |  |                                  |  |
|-------------|----------------|---|------|---------------------------------------|-----------|-------------------------------|--|----------------------------------|--|
| mat'l. code |                | surface<br>ISO 1302 <input checked="" type="checkbox"/> |      | tolerance<br>ISO 406<br>ISO 1101      |           | projection<br>                |  | product family<br>CARDEDGE       |  |
| ltr         | ecn no         | dr  | date | tolerances unless otherwise specified |           |                               |  | title                            |  |
| L           |                |   |      | angles                                | linear    | .X±.2<br>.XX±.10<br>.XXX±.050 |  | CEE 2X__PF<br>CONNECTOR ASSEMBLY |  |
|             |                |   |      | 0'±1"                                 |           | scale 1:1                     |  | dwg no sheet 9 of 10 size        |  |
|             |                |   |      | dr                                    | G. PETERS | 9/13/01                       |  | SE94583 A3                       |  |
|             |                |   |      | enr                                   | D. CASEY  | 9/14/01                       |  | FCI                              |  |
|             |                |   |      | chr                                   | G. PETERS | 9/13/01                       |  | type Product Customer Drawing    |  |
|             |                |   |      | appd                                  | D. CASEY  | 9/13/01                       |  |                                  |  |
| sheet index | revision sheet |   |      |                                       |           |                               |  |                                  |  |

PRODUCT NUMBER  
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PERFORMANCE CHARACTERISTICS:

ENVIRONMENTAL:

OPERATING TEMPERATURE: -40C TO 105C  
THERMAL SHOCK: MIL-STD-1344, METHOD 1003.1(-55C TO +85C, 5 CYCLES)

FLAMABILITY RATING: UL94V-0

MECHANICAL:

DURABILITY: 100 MATING CYCLES WITHOUT PHYSICAL DAMAGE, OR EXCEEDING LOW LEVEL CONTACT RESISTANCE REQUIREMENTS WHEN MATED WITH RECOMMENDED CARD.

CONTACT RETENTION: MIL-STD-1344, METHOD 2007.1, 4.4 N MIN.

MATING FORCE: MIL-STD-1344, METHOD 2013.1 2.0 N MAX. AVERAGE PER OPPOSING PAIR USING GAUGE PER MIL-STD-C-21097 WITH CARD PROFILE

CONTACT NORMAL FORCE: 0.72 N MINIMUM

PRESS FIT TERMINATION FORCES: INSERTION FORCE 70 N MAX. PER PIN  
RETENTION FORCE 9 N MIN. PER PIN

ELECTRICAL:

CONTACT RESISTANCE: MIL-STD-1344, METHOD 3002-1, WITH 10 MILLIOHM MAX. INITIAL, 20 (LOW SIGNAL LEVEL) MILLIOHM RISE. COMPONENT BOARD SIDE - 1 MILLIOHM MAX., CONNECTION PRESS FIT PIN WITH w/PLATED THROUGH HOLE.

INSULATION RESISTANCE: MIL-STD-202, METHOD 302, CONDITION B, 1000 MEGOHMS MIN.

DIELECTRIC WITHSTAND VOLTAGE: MIL-STD-1344, METHOD D3001.1 CONDITION 1, 500 VAC RM

CAPACITANCE: 2 PICO FARADS, MAX AT 1 MEGAHERTZ

CURRENT RATING: 1 AMP, 30C RISE ABOVE AMBIENT

VOLTAGE RATING: 150 VAC (RMS)



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|             |                |   |           |                                       |        |                               |                               |                                  |  |
|-------------|----------------|---|-----------|---------------------------------------|--------|-------------------------------|-------------------------------|----------------------------------|--|
| mat'l. code |                | surface<br>ISO 1302 <input checked="" type="checkbox"/> |           | tolerance<br>ISO 406<br>ISO 1101      |        | projection<br>                |                               | product family<br>CARDEDGE       |  |
| ltr         | ecn no         | dr  | date      | tolerances unless otherwise specified |        |                               |                               | title                            |  |
| L           |                |   |           | angles                                | linear | .X±.2<br>.XX±.10<br>.XXX±.050 |                               | CEE 2X__PF<br>CONNECTOR ASSEMBLY |  |
|             |                |   |           | 0'±1"                                 |        | scale 1:1                     |                               | dwg no sheet 10 of 10 size       |  |
|             |                | dr  | G. PETERS | 9/13/01                               |        |                               | SE94583 A3                    |                                  |  |
|             |                | enfr  | D. CASEY  | 9/14/01                               |        |                               |                               |                                  |  |
|             |                | chr   | G. PETERS | 9/13/01                               |        |                               |                               |                                  |  |
|             |                | appd  | D. CASEY  | 9/13/01                               |        |                               | type Product Customer Drawing |                                  |  |
| sheet index | revision sheet |   |           |                                       |        |                               |                               |                                  |  |