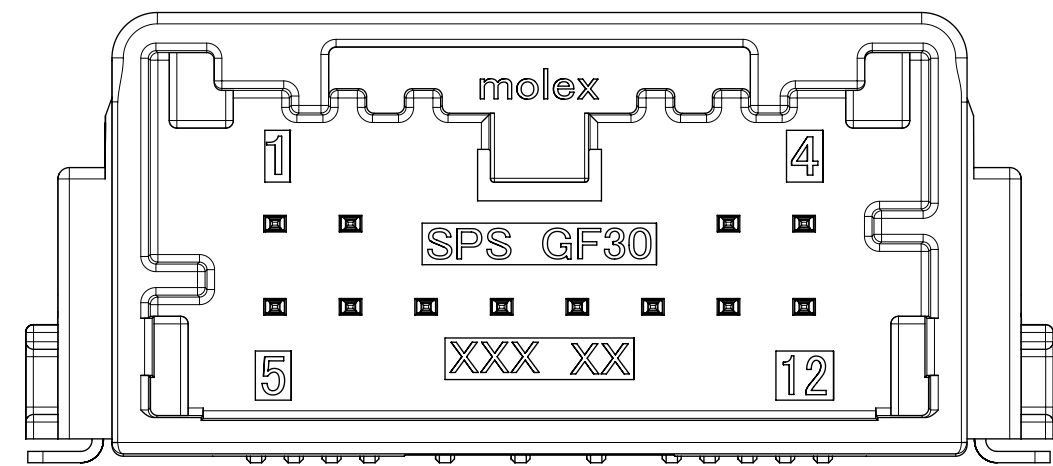
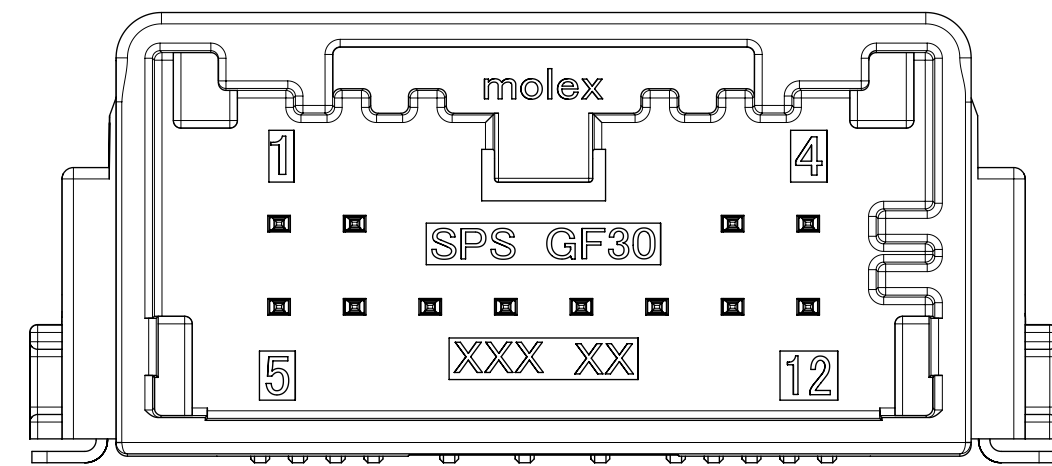


12 CIRCUIT SMT USCAR HEADER
POLARIZATION OPTION A

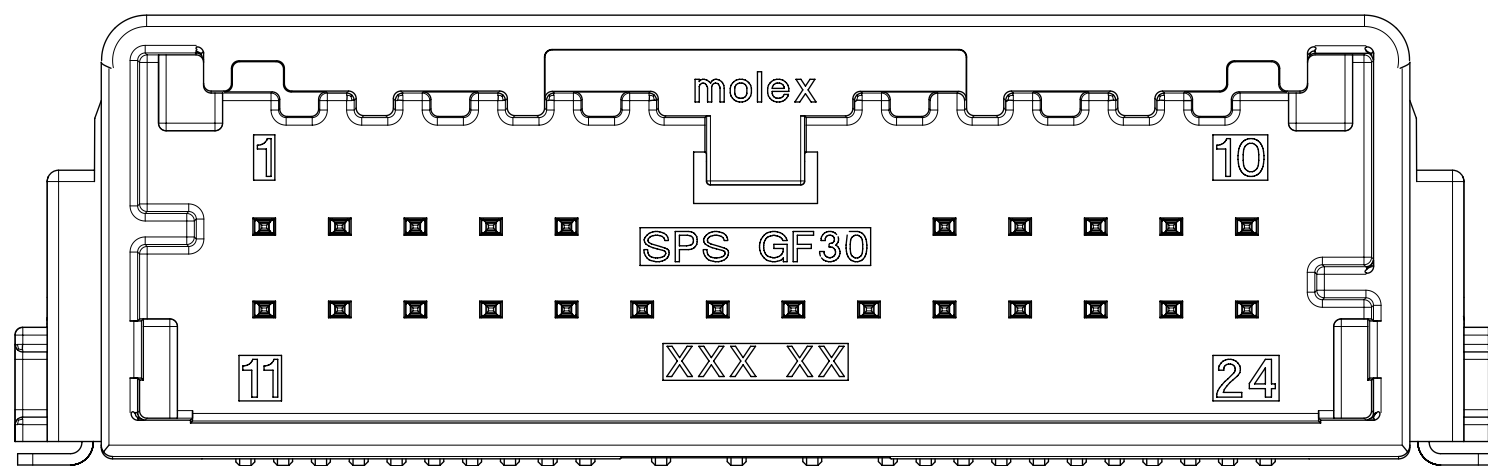


12 CIRCUIT SMT USCAR HEADER
POLARIZATION OPTION B

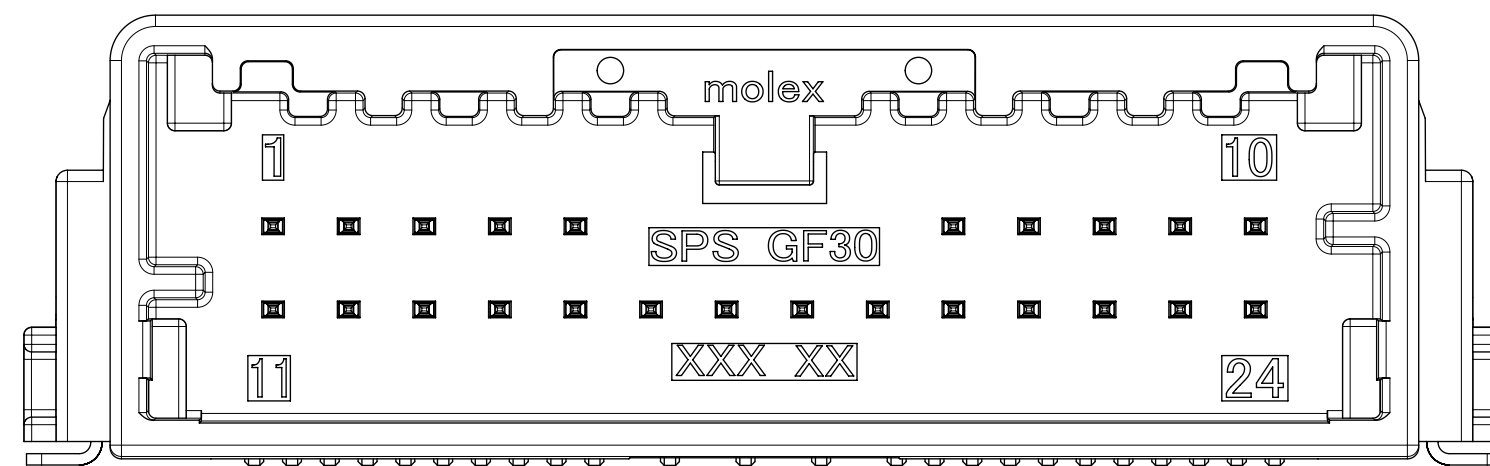


12 CIRCUIT SMT USCAR HEADER
POLARIZATION OPTION C

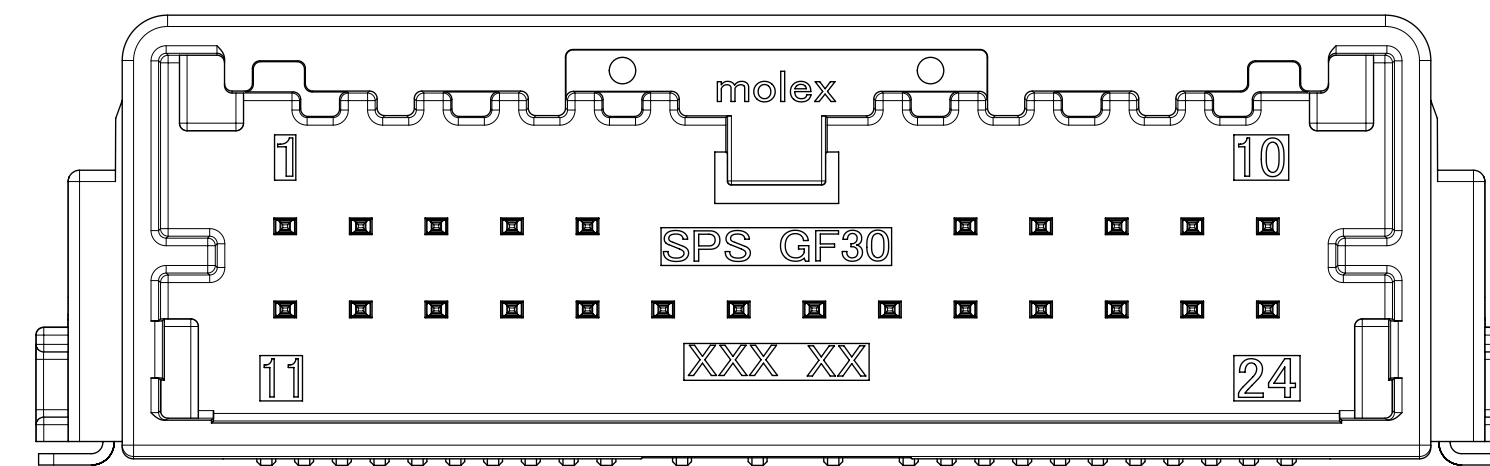
24CKT POLARIZATION OPTIONS SHOWN BELOW
ARE REPRESENTATIVE FOR 16 AND 20CKT



24 CIRCUIT SMT HEADER
POLARIZATION OPTION A



24 CIRCUIT SMT HEADER
POLARIZATION OPTION B



24 CIRCUIT SMT HEADER
POLARIZATION OPTION C

NOTES: VALID UNLESS OTHERWISE SPECIFIED

1. GENERAL:
 - a. APPLICATION SPECIFICATION SEE: AS-34791-020
 - b. PRODUCT SPECIFICATION SEE: PS-34791-020
 - c. PACKAGING SPECIFICATION PER MOLEX DRAWING: SEE CHART
 - d. SOLDERABILITY PER SMES-152
 - e. PARTS MUST BE IN COMPLIANCE TO MOLEX CHEMICAL SUBSTANCES FOR PRODUCTS AND PACKAGING SPECIFICATION: QEHS-699000-300
 - f. DATA MUST BE SUBMITTED UNDER THE MOLEX PART NUMBER TO IMDS (COMPANY ID#13255)
 - g. FLAMMABILITY REQUIREMENT: PER ISO3795 OR GM3191
 - h. VISUAL DEFECTS SHALL MEET COSMETIC STANDARD PS-45499-002 (Class B)

2. DESIGN - MATERIALS:
 - a. SHROUD (PLASTIC HOUSING): SPS 30% GF, 25% REGRIND MAX PER WEIGHT
 - b. BLADES:
 - BASE METAL: C260 BRASS
 - PLATING REQUIREMENTS:
 - TIN:
 - UNDERPLATING:
 - OVERALL NICKEL: 1.25 - 2.25 MICROMETERS
 - OVERPLATING:
 - OVERALL TIN: 2.5 - 4.0 MICROMETERS
 - GOLD:
 - UNDERPLATING:
 - OVERALL NICKEL: 1.25 - 2.25 MICROMETERS
 - OVERPLATING:
 - CONTACT AREA: ELECTRODEPOSITED GOLD
 - MINIMUM 0.76 MICROMETERS HARD GOLD
 - PCB CONTACT AREA: ELECTRODEPOSITED TIN MATTE FINISH
 - MINIMUM 2.5 - 4.0 MICROMETERS

3. DESIGN - GEOMETRY:
 - a. THIS IS A 100% CAD GENERATED PART. THE CAD MATHEMATICAL DATA IS THE MASTER FOR THIS PART. FOR DIMENSIONAL OR ANY INFORMATION NOT SHOWN ON THIS DRAWING, ANALYZE THE CAD MODEL.
 - b. GEOMETRIC DIMENSIONS AND TOLERANCES PER ASME Y14.5M - 2009
 - c. GENERAL TOLERANCES: SEE TITLE BLOCK
 - d. EDGES AND UNDIMENSIONED DETAILS PER ISO13715
 - e. CORNERS SHOWN AS SHARP TO BE R 0.1 MAX
 - f. LETTERING SHALL BE BELOW SURROUNDING SURFACE OF PART. THIS INCLUDES RECYCLING CODE, PLANT AND CAVITY ID, VENDOR ID, AND CIRCUIT ID.

| | |
|------------------------------|--|
| INSPECTION BALLON NUMBER LOG | |
| PER DRAWING REVISION: W5 | |
| LAST BALLOON USED: 16 | |
| ADDED BALLOON NUMBERS: | |
| REMOVED BALLOON NUMBERS: | |

| | |
|-----|--|
| W5 | ADDED DIM BALLOON 15 & 16 |
| W4 | ADDED 16CKT GOLD DEPOPULATED POL A P/N |
| W3 | NX REMASTERING |
| REV | DESCRIPTION |

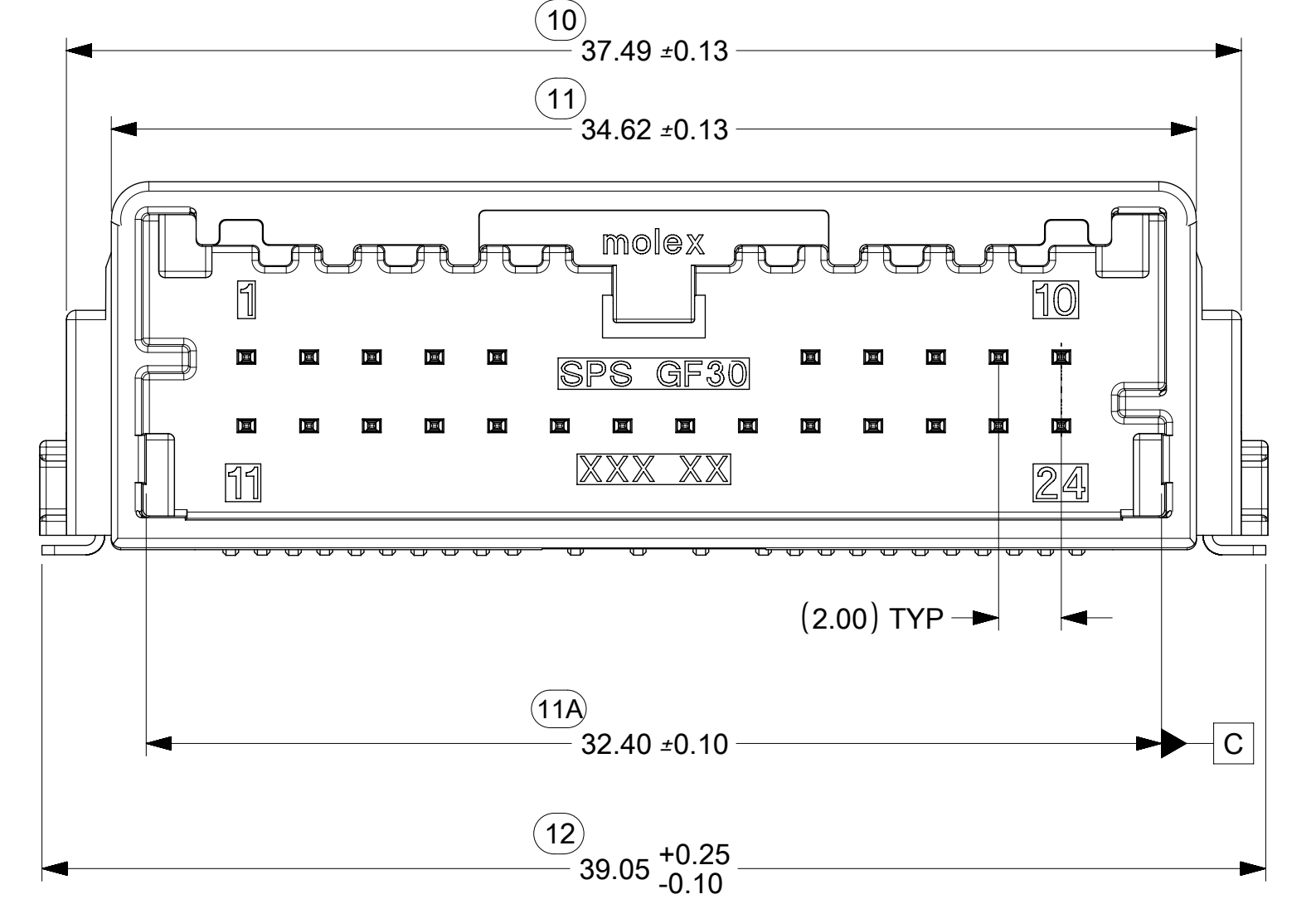
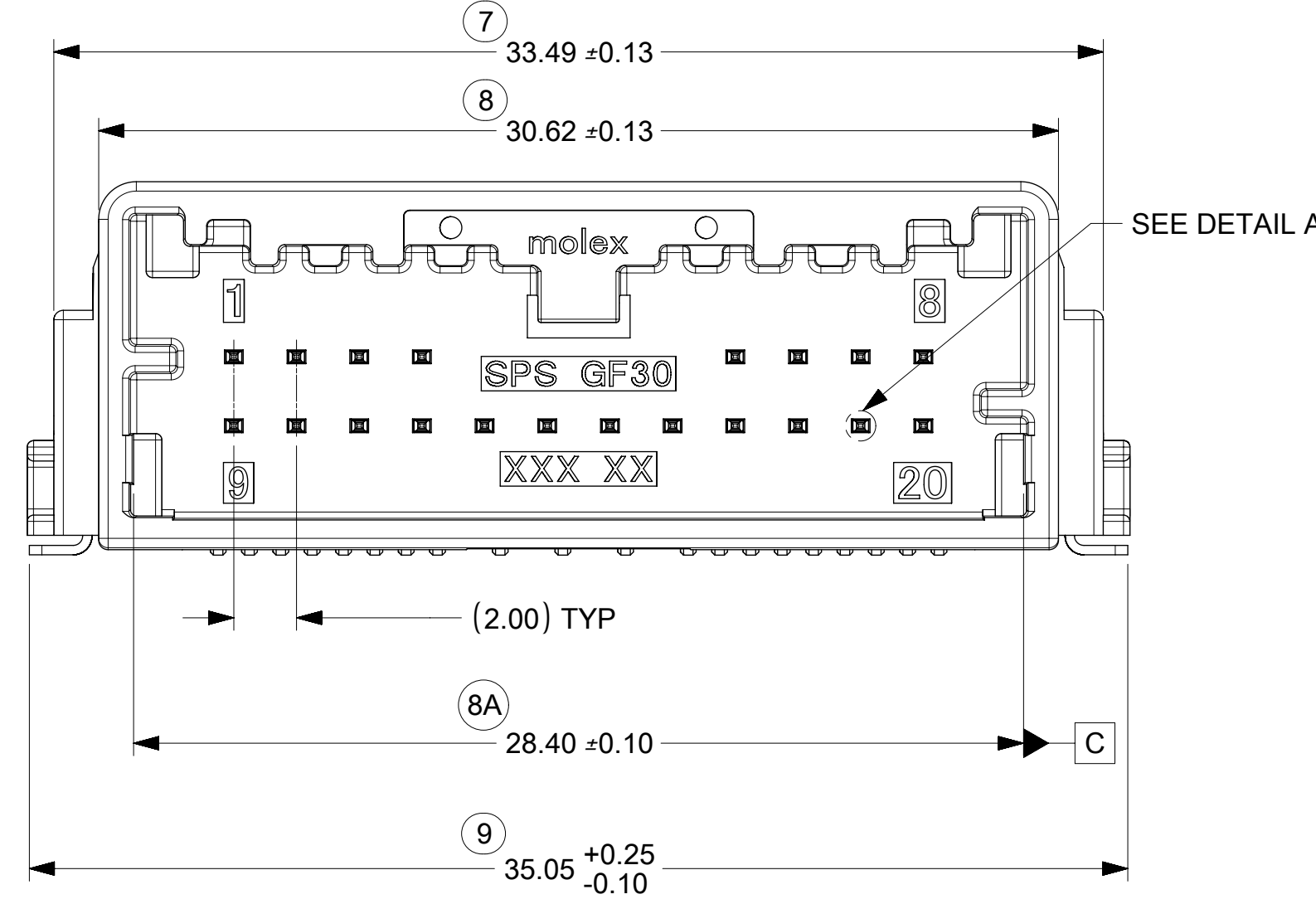
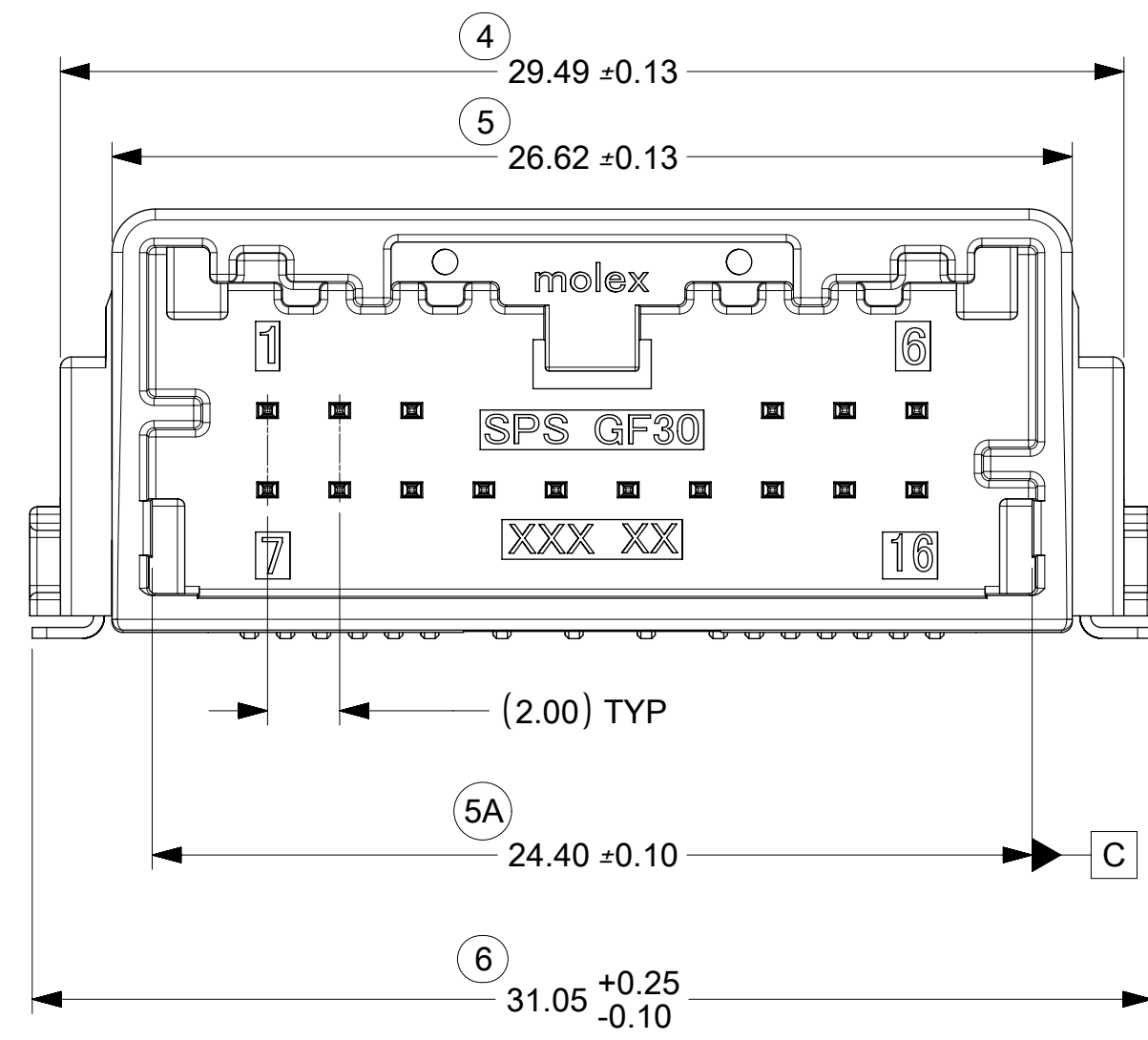
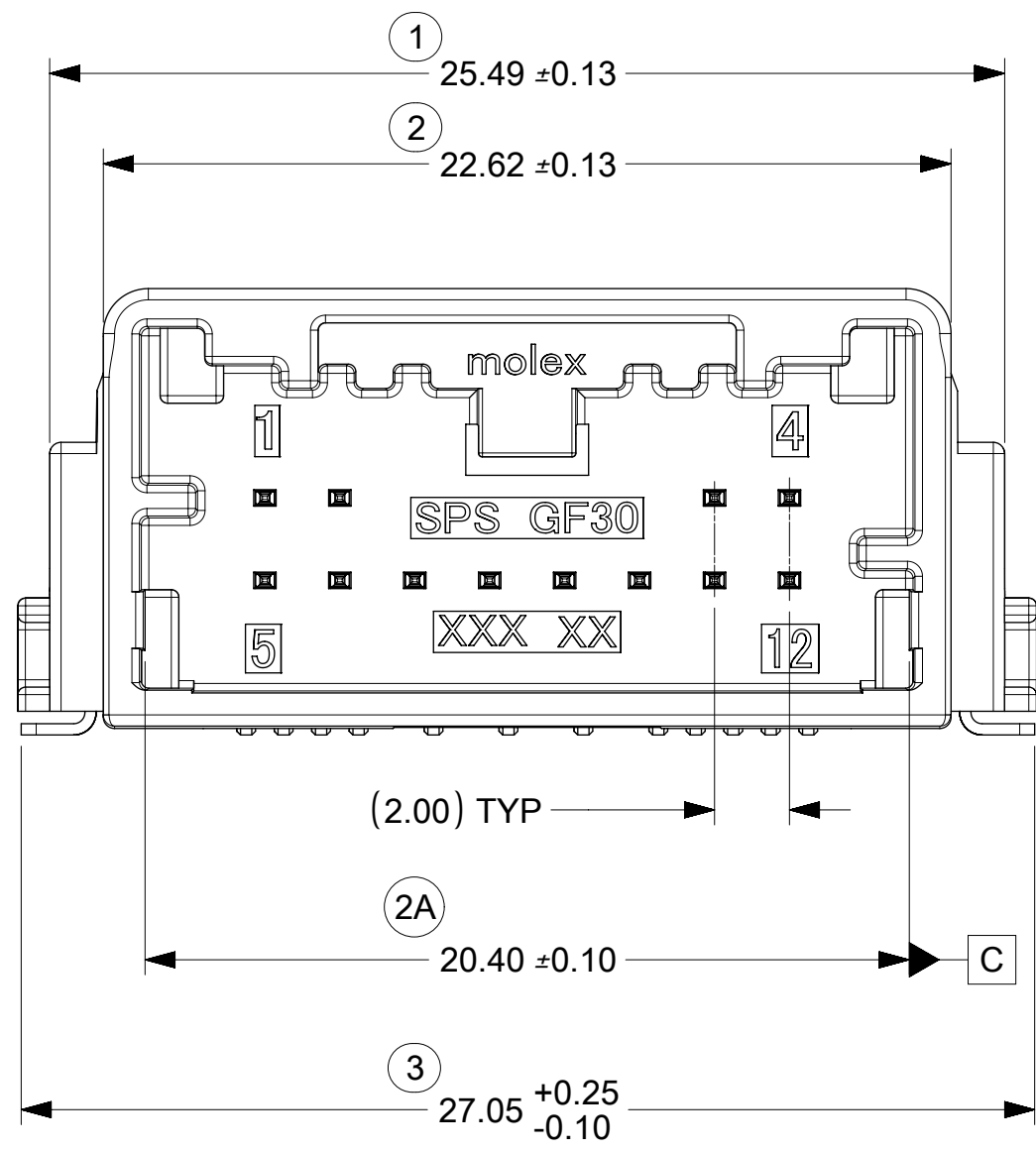
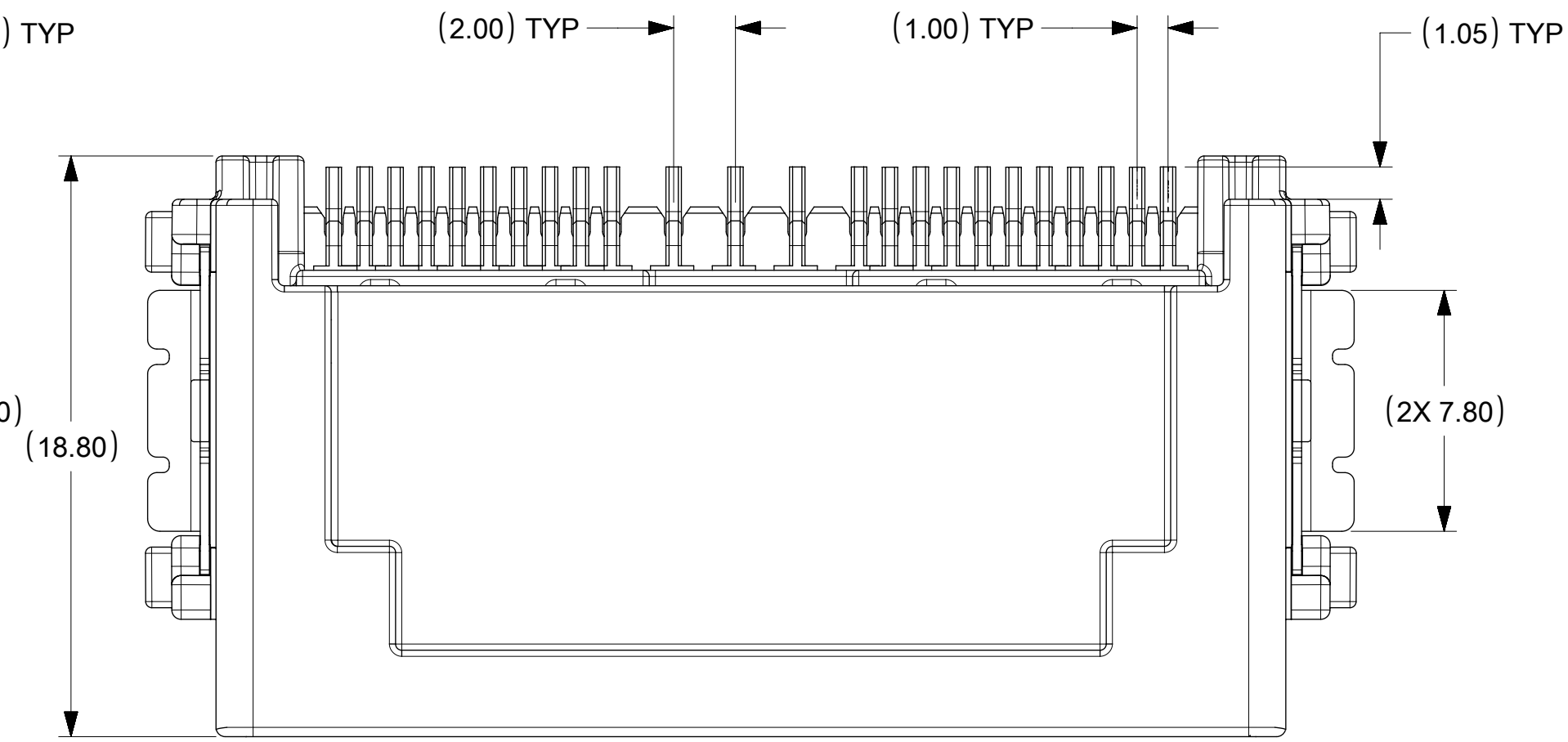
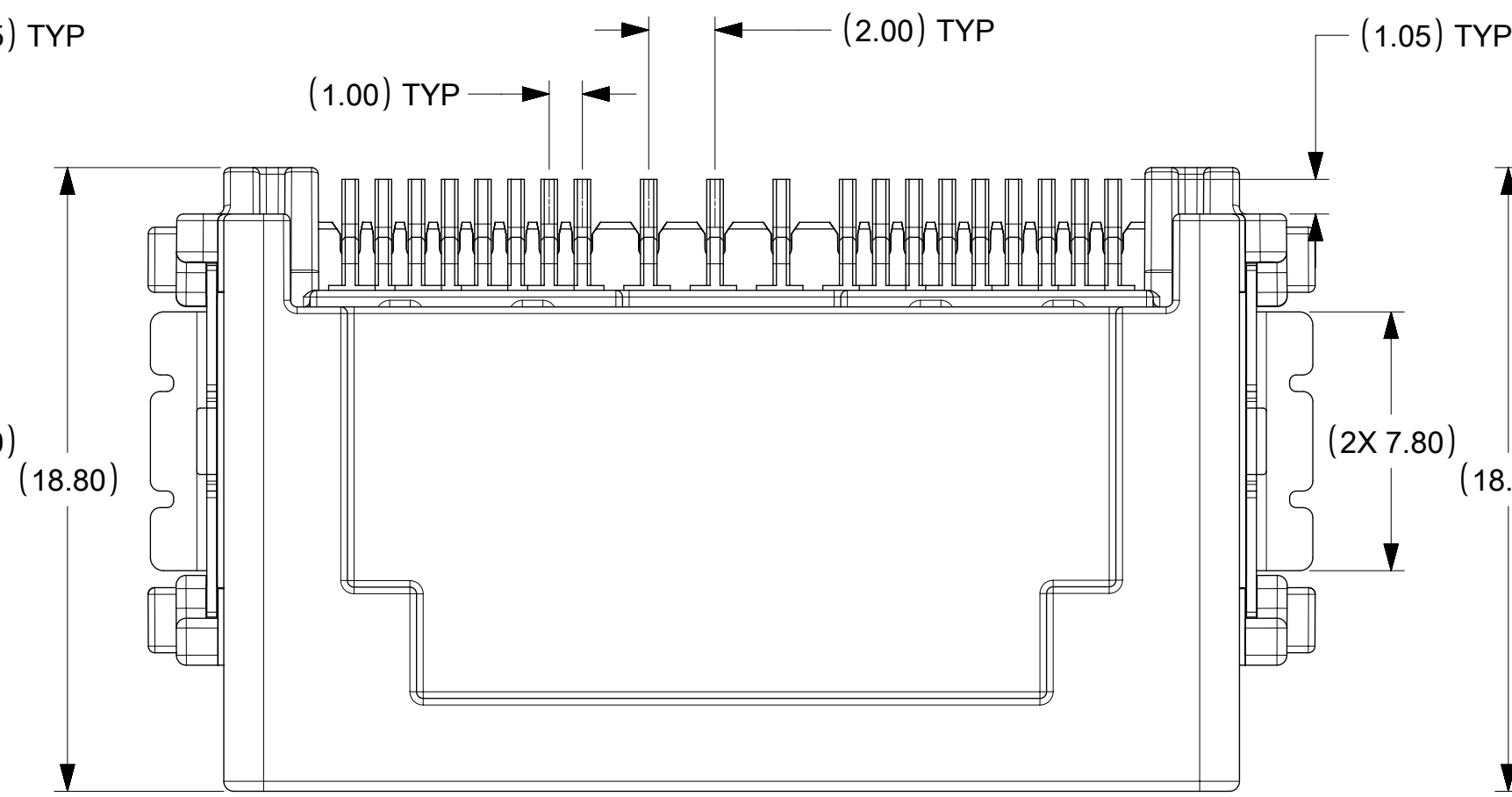
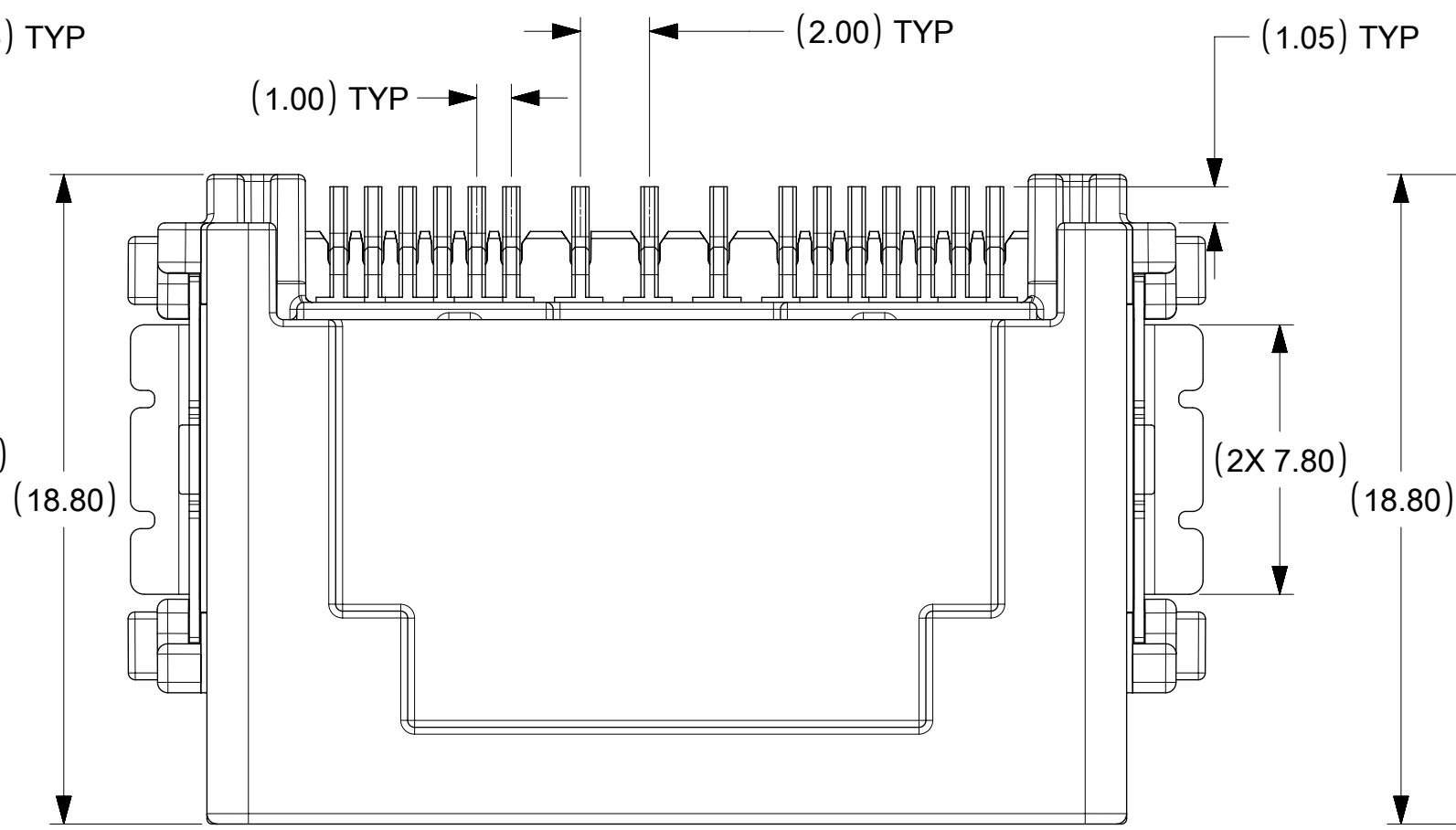
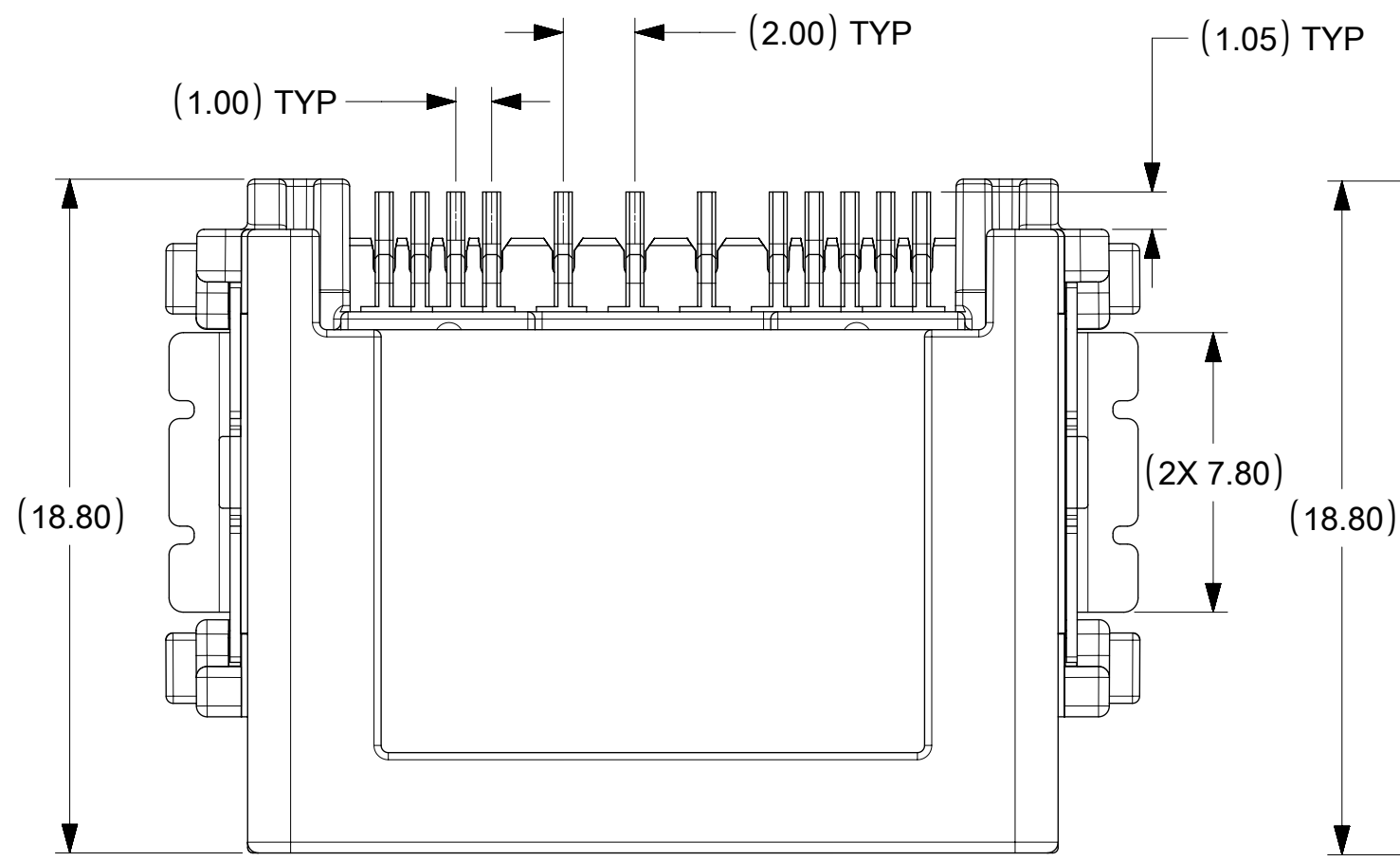
| | | | | | |
|--|---|--|---|--|---|
| QUALITY SYMBOLS ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | GENERAL TOLERANCES (UNLESS SPECIFIED) DIMENSION UNITS: MM ONLY SCALE: 5:1 DRWN BY: TMACHUGA DATE: 2011/11/23 CHKD BY: SMARCEAU DATE: 2011/12/19 APPR BY: SMARCEAU DATE: 2011/12/19 DRAWING SIZE: D THIRD ANGLE PROJECTION | | MINI 50 DUAL ROW SMT HEADER ASSEMBLY SALES DRAWING PRODUCT CUSTOMER DRAWING SERIES: 34897 MATERIAL NUMBER: SEE CHART CUSTOMER: GENERAL MARKET DOCUMENT NUMBER: SD-34897-001 DOC TYPE: PSD DOC PART: 000 SHEET NUMBER: 1 OF 5 |
| | EC NO: 174425 DRWN: KHEWITT CHKD: ECOLARUSSO REV APPR: JDUNAJ | 2018/02/26 2018/03/30 2018/04/02 | 4 PLACES ± 3 PLACES ± 2 PLACES ± 0.10 1 PLACE ± 0.2 0 PLACES ± | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | |
| | W5 | | | | |
| | | | | | |

12 CKT SMT USCAR HEADER

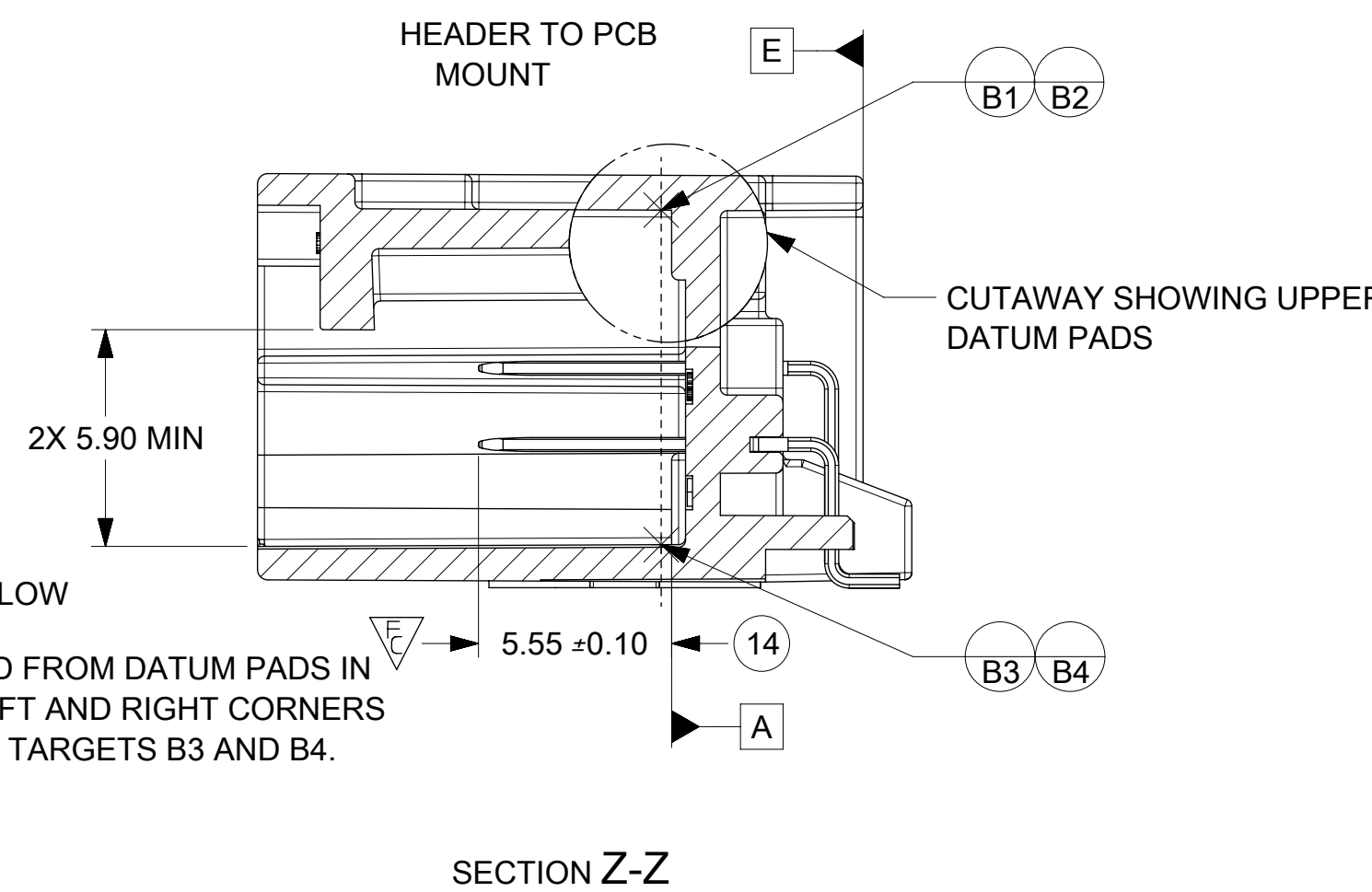
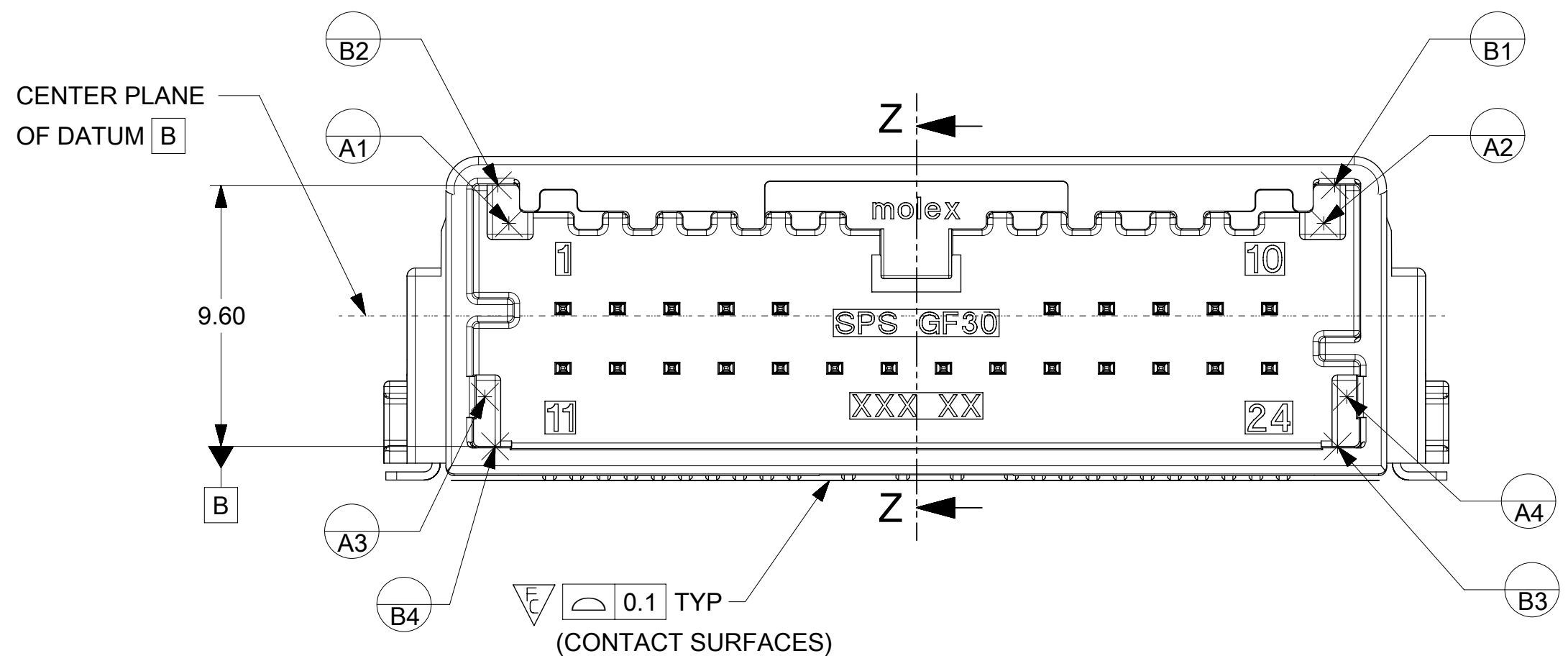
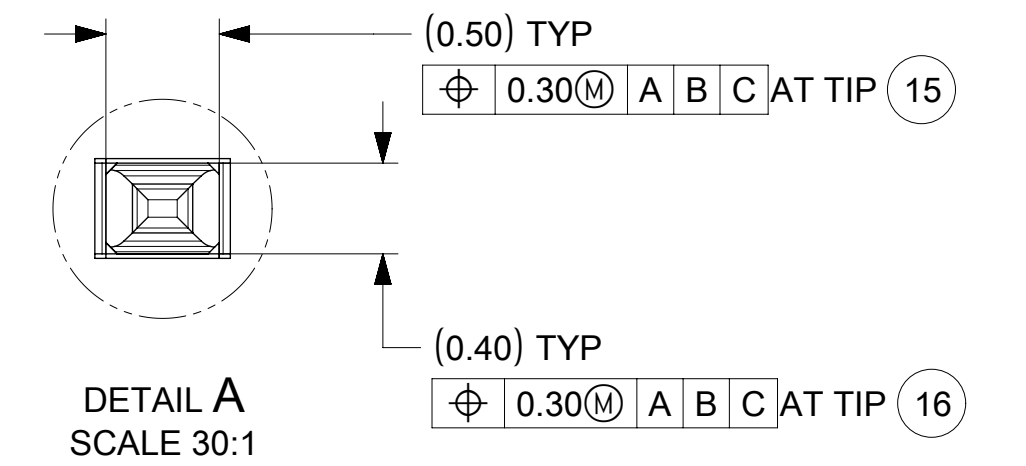
16 CKT SMT HEADER

20 CKT SMT HEADER

24 CKT SMT HEADER



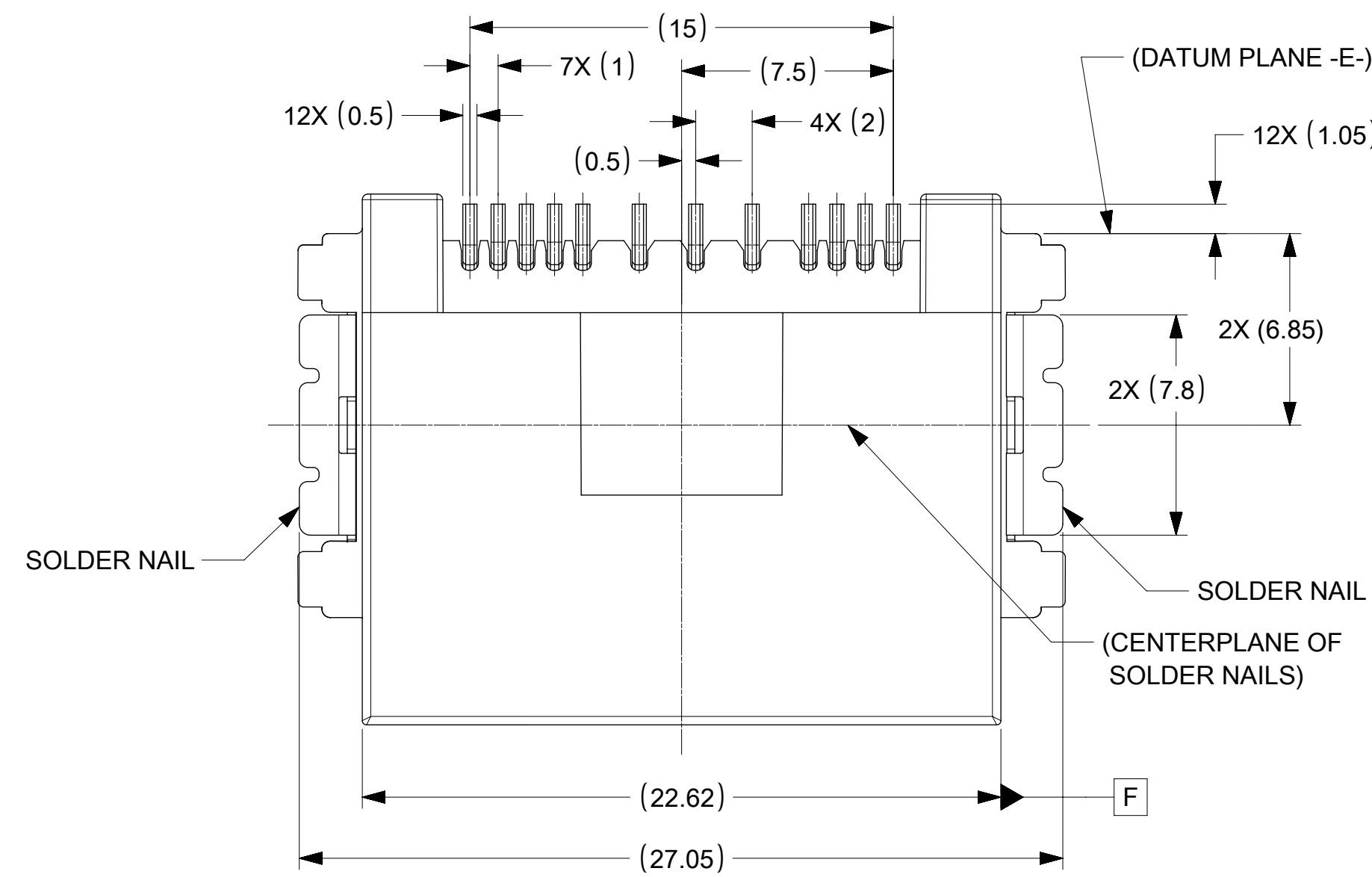
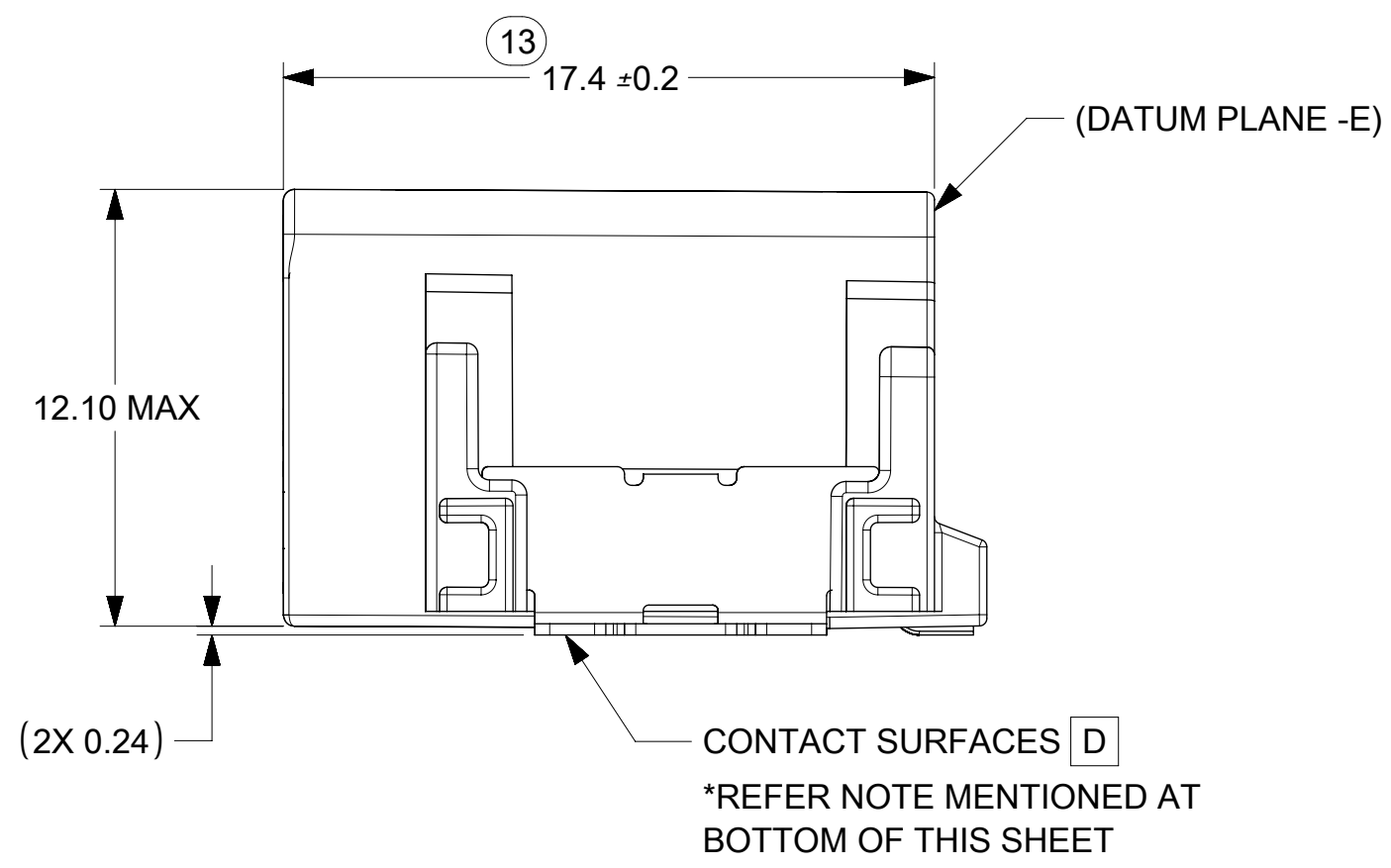
POST-REFLOW MINIMUM LATCH HEIGHT
24 CKT HEADER ASSEMBLY SHOWN AS EXAMPLE



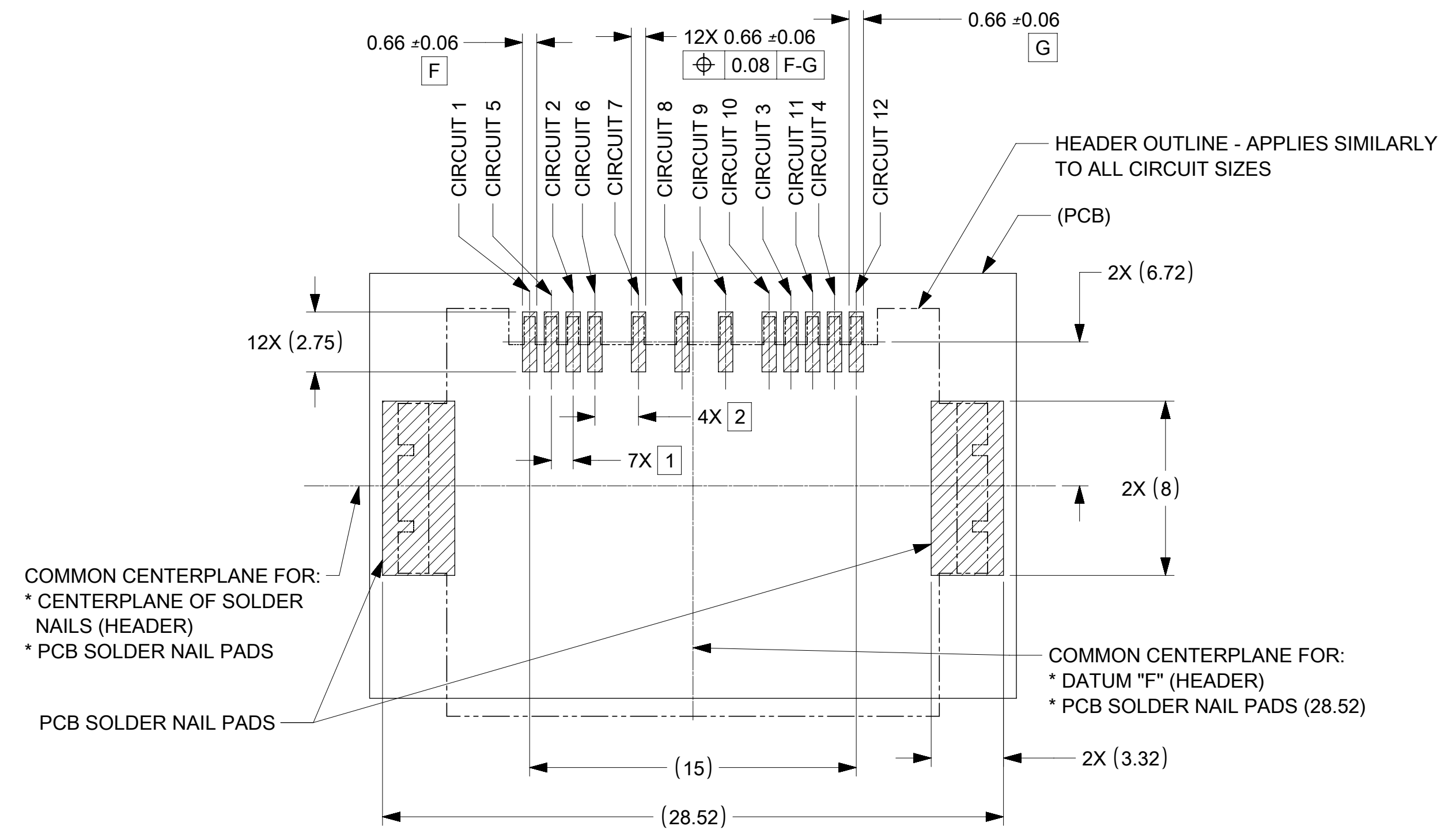
*POST REFLOW
MINIMUM
MEASURED FROM DATUM PADS IN
LOWER LEFT AND RIGHT CORNERS
TO DATUM TARGETS B3 AND B4.

| | | | | | | | | | | | |
|---|--|------------|------------|-----------------|------------------|------------------------|--|-----------------|------|------|------|
| THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | | | | | | | | | |
| QUALITY SYMBOLS | GENERAL TOLERANCES (UNLESS SPECIFIED) | | | | DIMENSION UNITS | SCALE | | | | | |
| F = 0 F = 0 F = 0 ▽ = 0 C = 0 ⊠ = 0 ■ = 0 ▽ = 0 | ANGULAR TOL ± 1.0 ° 4 PLACES ± 3 PLACES ± 2 PLACES ± 0.1 1 PLACE ± 0.2 0 PLACES ± DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | | | MM ONLY | 5:1 | | | | | |
| EC NO: 174425 | 2018/02/26 | 2018/03/30 | 2018/04/02 | DRWN: KHEWITT | CHKD: ECOLARUSSO | REV: APPR: JDUNAJ | DATE | DATE | DATE | DATE | DATE |
| W5 | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | | | DRAWING SIZE | THIRD ANGLE PROJECTION | PRODUCT CUSTOMER DRAWING MINI 50 DUAL ROW SMT HEADER ASSEMBLY SALES DRAWING | | | | |
| RELEASE STATUS | RELEASE DATE | SERIES | | MATERIAL NUMBER | | CUSTOMER | | DOCUMENT NUMBER | | | |
| | | 34897 | | SEE CHART | | GENERAL MARKET | | SD-34897-001 | | | |
| | | PSD | | 000 | | 2 OF 5 | | | | | |

BEFORE REFLOW SOLDERING
TEMPERATURE EXPOSURE

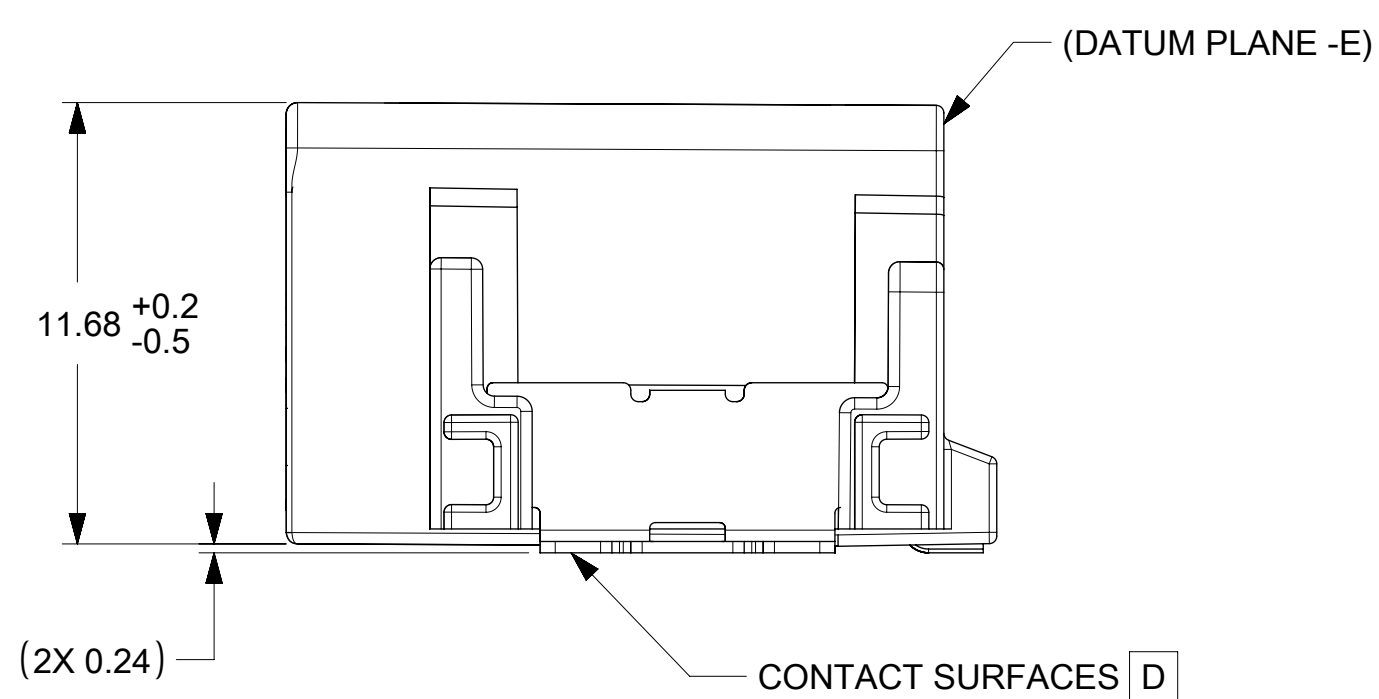


12 CKT SMT USCAR HEADER (BOTTOM VIEW)
(OTHER CIRCUIT SIZES ARE SIMILAR)



12 CKT PCB LAYOUT

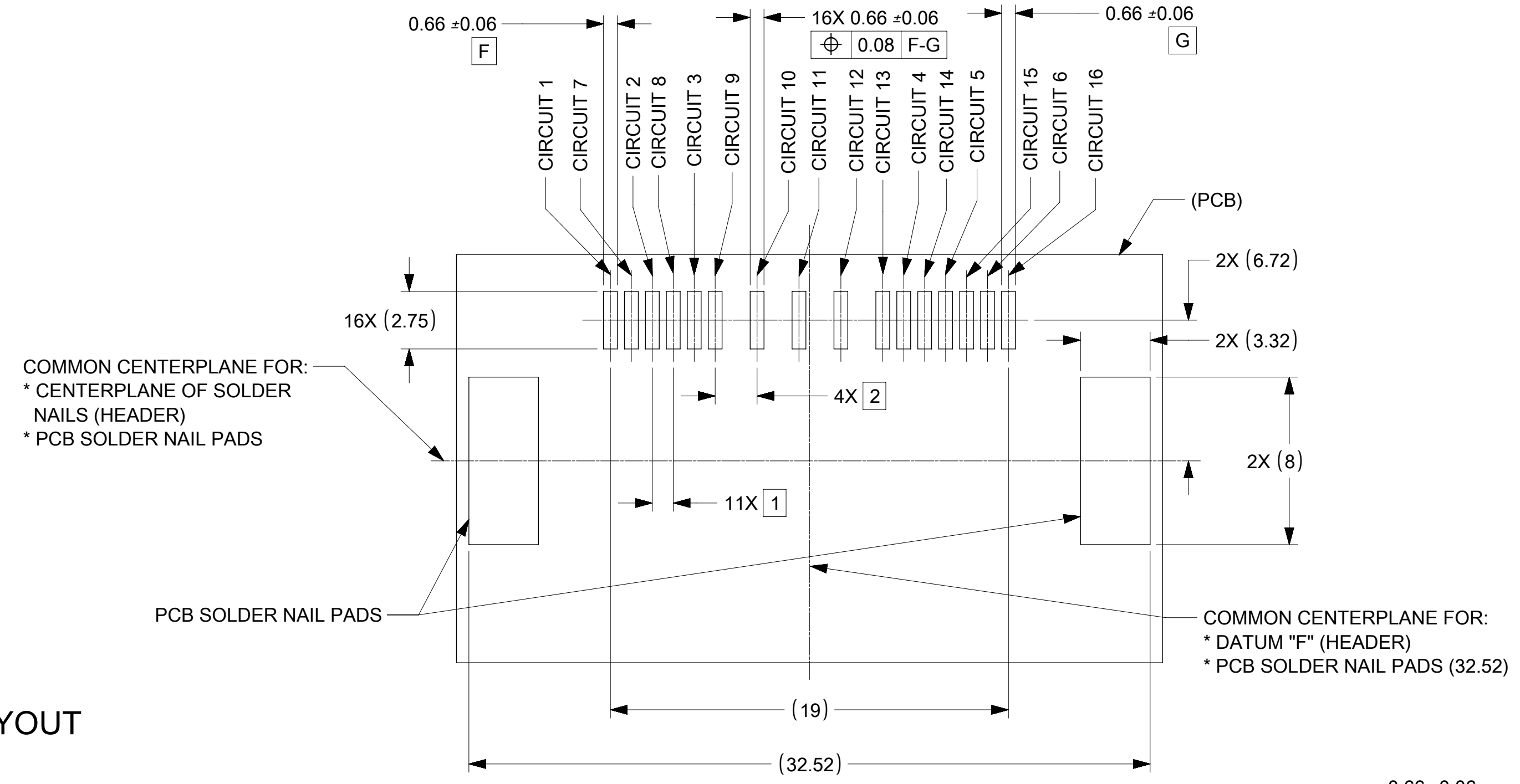
AFTER REFLOW SOLDERING
TEMPERATURE EXPOSURE



NOTE:
CONTACTS PER CKT:
12 CKT - 14 CONTACTS
16 CKT - 18 CONTACTS
20 CKT - 22 CONTACTS
24 CKT - 26 CONTACTS

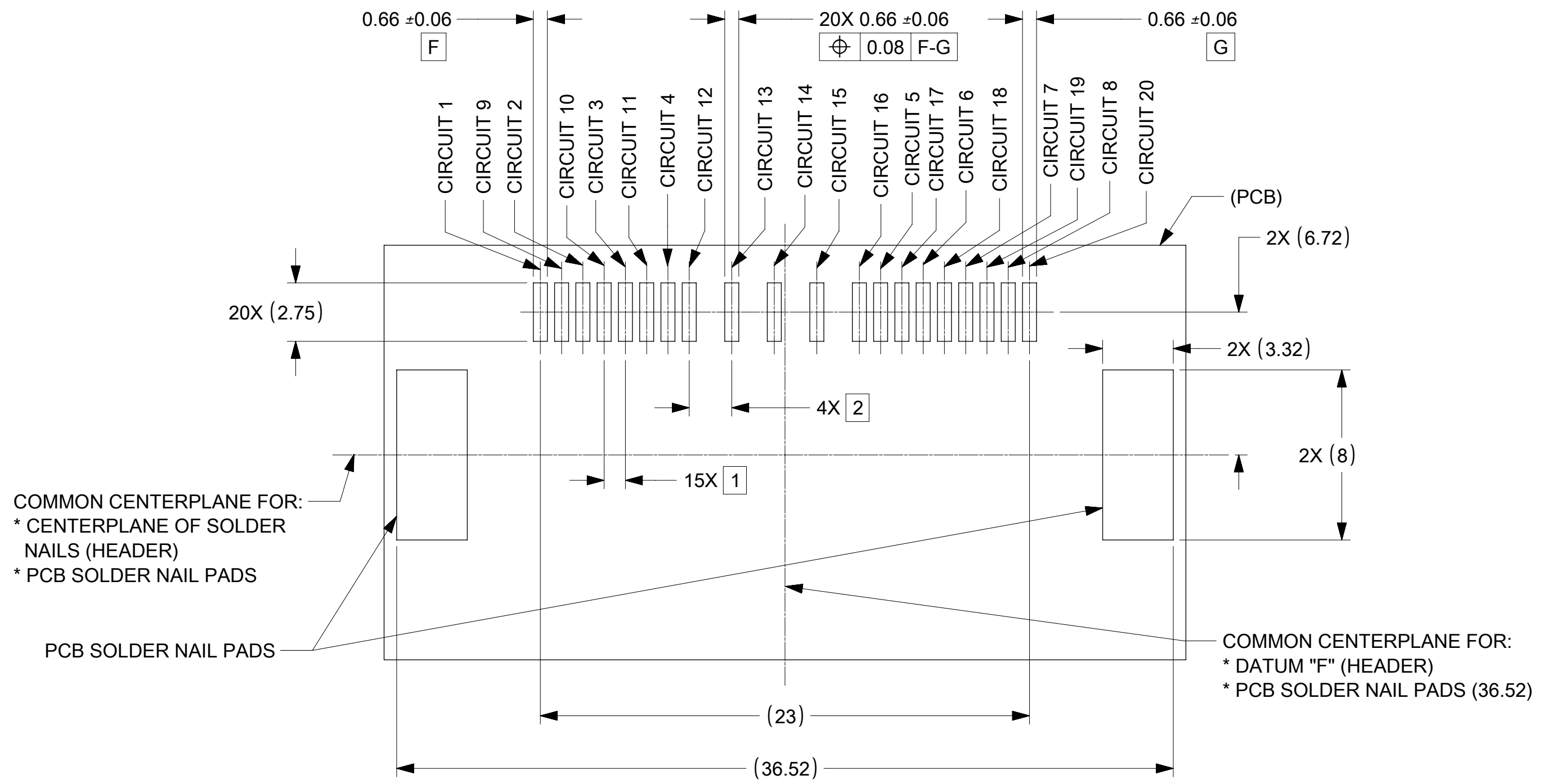
| | | | | | | | | | | | |
|--|---|--|--------------|-----------------|---|--------------|--------------------------|-----------------|----------------|--------------|--|
| QUALITY SYMBOLS □ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | | | | | | | | |
| | 2018/02/26 | GENERAL TOLERANCES (UNLESS SPECIFIED) | | DIMENSION UNITS | SCALE | | | | | | |
| | 2018/03/30 | ANGULAR TOL ± 1.0 ° | | MM ONLY | 5:1 | | | | | | |
| | 2018/04/02 | 4 PLACES ± | TMACHUGA | 2011/11/23 | MINI 50 DUAL ROW SMT HEADER ASSEMBLY SALES DRAWING | | | | | | |
| | EC NO: 174425 | 3 PLACES ± | CHKD BY | DATE | | | | | | | |
| | DRWN: KHEWITT | 2 PLACES ± 0.1 | APPR BY | | DATE | | PRODUCT CUSTOMER DRAWING | | | | |
| | CHKD: ECOLARUSSO | 1 PLACE ± 0.2 | SMARCEAU | | 2011/12/19 | | | | | | |
| | REV APPR: JDUNAJ | 0 PLACES ± | DRAWING SIZE | | THIRD ANGLE PROJECTION | | SERIES | MATERIAL NUMBER | CUSTOMER | | |
| | W5 | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | D | | | 34897 | SEE CHART | GENERAL MARKET | | |
| | | | | | | | DOCUMENT NUMBER | DOC TYPE | DOC PART | SHEET NUMBER | |
| | | | | | | SD-34897-001 | PSD | 000 | 3 OF 5 | | |

16 CKT PCB LAYOUT

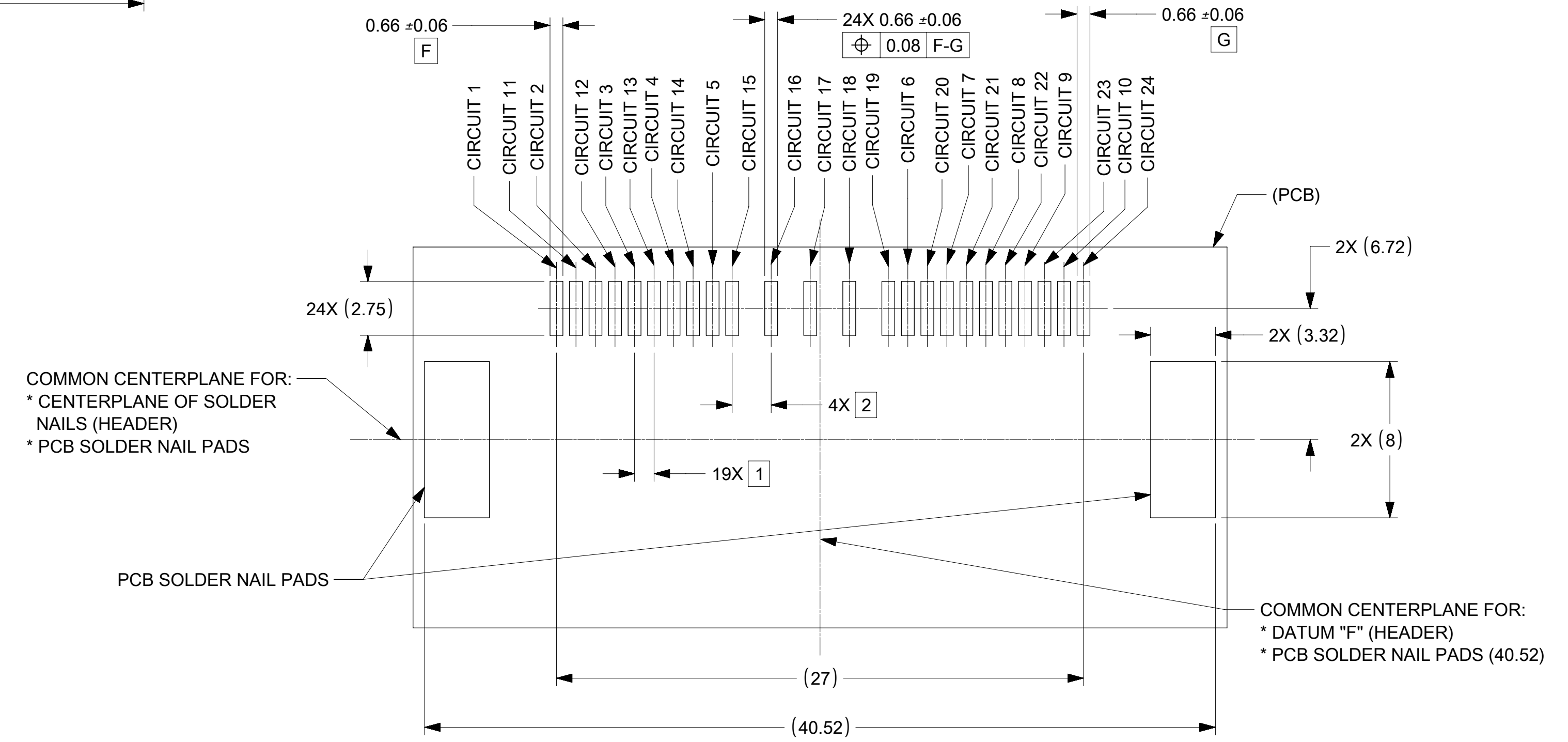


RECOMMENDED PCB LAYOUT:

20 CKT PCB LAYOUT



24 CKT PCB LAYOUT



| | | | | | | | | | | | |
|---|---|--|--------------|-----------------|------------------------|-----------------|--------------------------|----------|-----------|-----------------------|----------------|
| QUALITY SYMBOLS F = 0 F = 0 F = 0 ▽ = 0 C = 0 ⊠ = 0 ■ = 0 ▽ = 0 | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | | | | | | | | |
| | 2018/02/26 | GENERAL TOLERANCES (UNLESS SPECIFIED) | | DIMENSION UNITS | SCALE | | | | | | |
| | 2018/03/30 | ANGULAR TOL ± 1.0 ° | | MM ONLY | 5:1 | | | | | | |
| | 2018/04/02 | 4 PLACES ± | TMACHUGA | | DATE | | 2011/11/23 | | | | |
| | EC NO: 174425 DRWN: KHEWITT CHKD: ECOLARUSSO REV APPR: JDUNAJ | 3 PLACES ± | CHKD BY | | DATE | | PRODUCT CUSTOMER DRAWING | | | | |
| | | 2 PLACES ± 0.1 | APPR BY | | DATE | | SERIES | | | | |
| | | 1 PLACE ± 0.2 | SMARCEAU | | 2011/12/19 | | MATERIAL NUMBER | | CUSTOMER | | |
| | | 0 PLACES ± | DRAWING SIZE | | THIRD ANGLE PROJECTION | | 34897 | | SEE CHART | | GENERAL MARKET |
| | W5 | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | D | | DOCUMENT NUMBER | | DOC TYPE | | DOC PART SHEET NUMBER | |
| | | | | | | SD-34897-001 | | PSD | | 000 4 OF 5 | |

MINI50 SMT DUAL ROW HEADER ASSEMBLIES

GOLD:

| MATERIAL NUMBER | | CONFIGURATION | CIRCUIT | POL | DEPOPULATED | VOIDED CKTS | COLOR | BLADE PLATING | MATING COMPONENT | |
|--------------------------------|---|---------------|---------|-----|-------------|--------------------------|-----------|---------------|------------------|------------|
| TUBE PACKAGING PK-31301-688 | TAPE AND REEL PACKAGING PK-31301-786 | | | | | | | | UN-BRIDGED | BRIDGED |
| 34897-5120 | 34897-6120 | USCAR | 12 | A | NO | N/A | BLACK | GOLD | 34824-0124 | 34824-1124 |
| 34897-5121 | 34897-6121 | USCAR | 12 | B | NO | N/A | GRAY | GOLD | 34824-0125 | 34824-1125 |
| 34897-5122 | 34897-6122 | USCAR | 12 | C | NO | N/A | DARK GRAY | GOLD | 34824-0126 | 34824-1126 |
| 34897-5160 | 34897-6160 | USCAR | 16 | A | NO | N/A | BLACK | GOLD | 34824-0164 | 34824-1164 |
| 34897-5161 | 34897-6161 | USCAR | 16 | B | NO | N/A | GRAY | GOLD | 34824-0165 | 34824-1165 |
| 34897-5162 | 34897-6162 | USCAR | 16 | C | NO | N/A | DARK GRAY | GOLD | 34824-0166 | 34824-1166 |
| 34897-5200 | 34897-6200 | USCAR | 20 | A | NO | N/A | BLACK | GOLD | 34824-0204 | 34824-1204 |
| 34897-5201 | 34897-6201 | USCAR | 20 | B | NO | N/A | GRAY | GOLD | 34824-0205 | 34824-1205 |
| 34897-5202 | 34897-6202 | USCAR | 20 | C | NO | N/A | DARK GRAY | GOLD | 34824-0206 | 34824-1206 |
| 34897-5240 | 34897-6240 | USCAR | 24 | A | NO | N/A | BLACK | GOLD | 34824-0244 | 34824-1244 |
| 34897-5241 | 34897-6241 | USCAR | 24 | B | NO | N/A | GRAY | GOLD | 34824-0245 | 34824-1245 |
| 34897-5242 | 34897-6242 | USCAR | 24 | C | NO | N/A | DARK GRAY | GOLD | 34824-0246 | 34824-1246 |
| N/A | 34897-6164 | USCAR | 16 | A | YES | 1, 2, 3, 4, 5, 6, 10, 13 | BLACK | GOLD | 34824-0160 | 34824-1160 |

TIN:

| MATERIAL NUMBER | | CONFIGURATION | CIRCUIT | POL | COLOR | BLADE PLATING | MATING COMPONENT | |
|--------------------------------|---|---------------|---------|-----|-----------|---------------|------------------|------------|
| TUBE PACKAGING PK-31301-688 | TAPE AND REEL PACKAGING PK-31301-786 | | | | | | UN-BRIDGED | BRIDGED |
| 34897-9120 | 34897-8120 | USCAR | 12 | A | BLACK | TIN | 34824-0124 | 34824-1124 |
| 34897-9121 | 34897-8121 | USCAR | 12 | B | GRAY | TIN | 34824-0125 | 34824-1125 |
| 34897-9122 | 34897-8122 | USCAR | 12 | C | DARK GRAY | TIN | 34824-0126 | 34824-1126 |
| 34897-9160 | 34897-8160 | USCAR | 16 | A | BLACK | TIN | 34824-0164 | 34824-1164 |
| 34897-9161 | 34897-8161 | USCAR | 16 | B | GRAY | TIN | 34824-0165 | 34824-1165 |
| 34897-9162 | 34897-8162 | USCAR | 16 | C | DARK GRAY | TIN | 34824-0166 | 34824-1166 |
| 34897-9200 | 34897-8200 | USCAR | 20 | A | BLACK | TIN | 34824-0204 | 34824-1204 |
| 34897-9201 | 34897-8201 | USCAR | 20 | B | GRAY | TIN | 34824-0205 | 34824-1205 |
| 34897-9202 | 34897-8202 | USCAR | 20 | C | DARK GRAY | TIN | 34824-0206 | 34824-1206 |
| 34897-9240 | 34897-8240 | USCAR | 24 | A | BLACK | TIN | 34824-0244 | 34824-1244 |
| 34897-9241 | 34897-8241 | USCAR | 24 | B | GRAY | TIN | 34824-0245 | 34824-1245 |
| 34897-9242 | 34897-8242 | USCAR | 24 | C | DARK GRAY | TIN | 34824-0246 | 34824-1246 |

| | | | | | | | | | | | | | | | | |
|----------------------------|---|---------------------------------------|--|-----------------|------------|---|--------------|--|------------------------|--|-----------------|--|-----------|--|-----------------------|--|
| QUALITY SYMBOLS | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | | | | | | | | | | | | | |
| | 2018/02/26 2018/03/30 2018/04/02 EC NO: 174425 DRWN: KHEWITT CHKD: ECOLARUSSO REV APPR: JDUNAJ | GENERAL TOLERANCES (UNLESS SPECIFIED) | | DIMENSION UNITS | SCALE | MINI 50 DUAL ROW SMT HEADER ASSEMBLY SALES DRAWING PRODUCT CUSTOMER DRAWING | | | | | | | | | | |
| | | ANGULAR TOL ± 1.0 ° | | MM ONLY | 1:1 | | | | | | | | | | | |
| | | 4 PLACES ± | | DRWN BY | DATE | | | | | | | | | | | |
| | 3 PLACES ± | | TMACHUGA | 2011/11/23 | CHKD BY | | DATE | | SERIES | | MATERIAL NUMBER | | CUSTOMER | | | |
| | 2 PLACES ± 0.1 | | APPR BY | | DATE | | DRAWING SIZE | | THIRD ANGLE PROJECTION | | DOCUMENT NUMBER | | DOC TYPE | | DOC PART SHEET NUMBER | |
| | 1 PLACE ± 0.2 | | SMARCEAU | | 2011/12/19 | | D | | ⊕ | | 34897 | | SEE CHART | | GENERAL MARKET | |
| | 0 PLACES ± | | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | | | | | | | | | | | | |
| | W5 | | SD-34897-001 | | PSD | | 000 | | 5 OF 5 | | | | | | | |