

NOTES: VALID UNLESS OTHERWISE SPECIFIED

1. GENERAL:

- a. APPLICATION SPECIFICATION SEE: AS-31386-200
- b. PRODUCT SPECIFICATION SEE: PS-31386-200
- c. PACKAGING SPECIFICATION: PK-31301-916
- d. PARTS MUST BE IN COMPLIANCE TO MOLEX CHEMICAL SUBSTANCES FOR PRODUCTS AND PACKAGING SPECIFICATION: ES-40000-5016
- e. DATA MUST BE SUBMITTED UNDER THE MOLEX PART NUMBER TO IMDS (COMPANY ID#13255)
- f. DIMENSIONS AND TOLERANCES ARE VALID FOR THE AS SHIPPED SHROUD ASSEMBLY
- g. REFERENCE GM INTERFACE CONTROL DRAWINGS (ICD):
 - 1. 12582683
 - 2. 12642694

2. DESIGN - MATERIALS:

- a. PLASTIC: 30% GF PBT, SEE CHART FOR COLOR
- b. SIGNAL PIN PLATING:
 - UNDERPLATING (OVERALL): NICKEL 1.27-2.54 μ m
 - GOLD (MATE SIDE): 0.76 μ m MIN
 - SILVER (MATE SIDE): 1.90-3.30 μ m
 - TIN (SOLDER TAIL): 5.08-10.16 μ m BRIGHT FINISH

3. DESIGN - GEOMETRY:

- a. THIS IS A 100% CAD GENERATED PART. THE CAD MATHEMATICAL DATA IS THE MASTER FOR ALL NON-DIMENSIONAL FEATURES. DRAWING DIMENSIONS SHALL BE MET WHEN DIFFERENCES EXIST BETWEEN THE DRAWING AND THE CAD MODEL. UNDERLINED DIMENSIONS OR DIMENSIONS INDICATED AS "EDITED" MAY BE DIFFERENT FROM THE 3D MODEL GEOMETRY. FOR DIMENSIONAL OR ANY INFORMATION NOT SHOWN ON THIS DRAWING, ANALYZE THE CAD MODEL.
- b. PRODUCT DESIGN MODEL NUMBER(S): SEE BOM TABLE
- c. GEOMETRIC DIMENSIONS AND TOLERANCES PER ASME Y14.5M-1994
- d. GENERAL TOLERANCES: - SEE TABLE

4. DESIGN - MANUFACTURING:

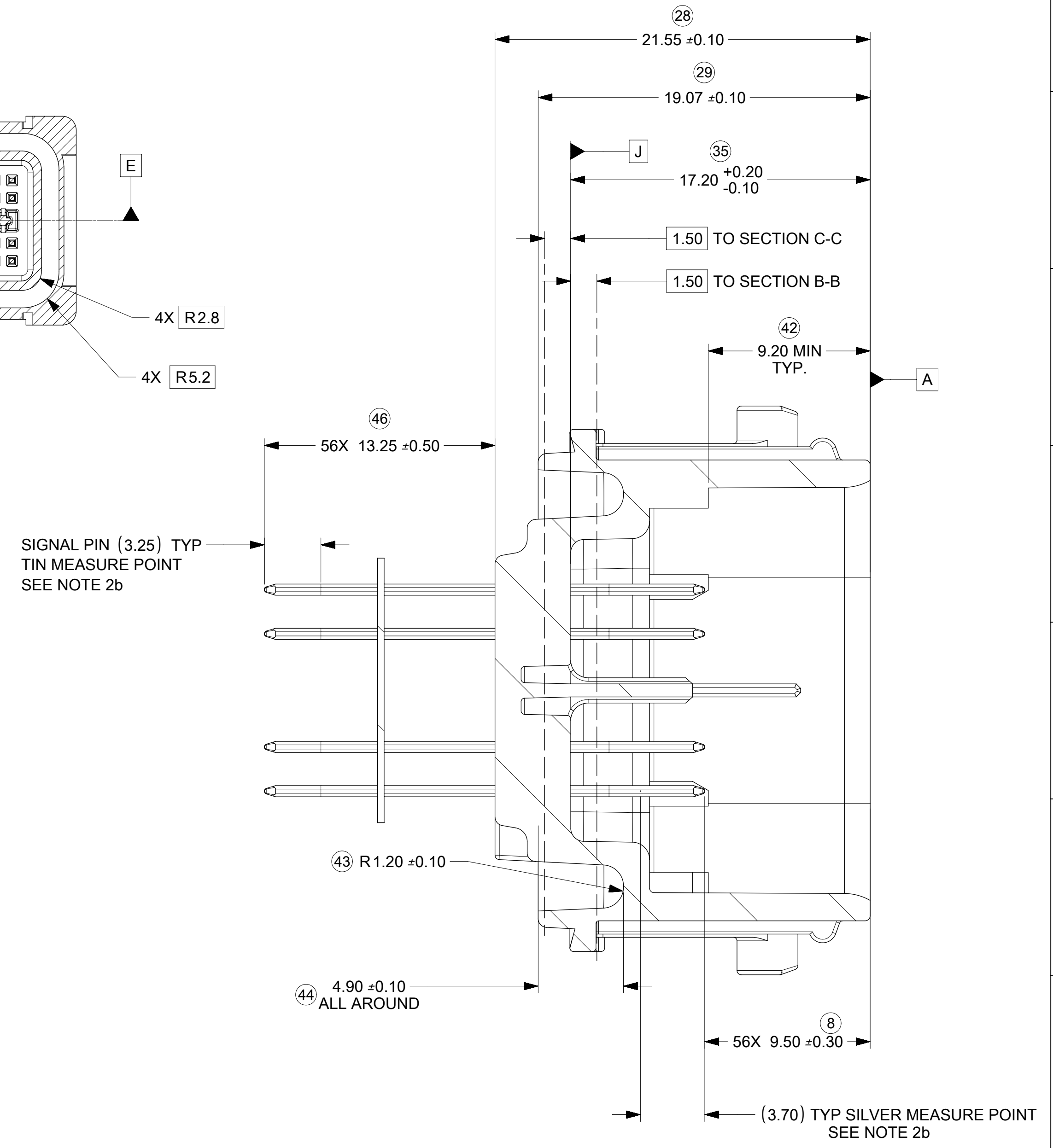
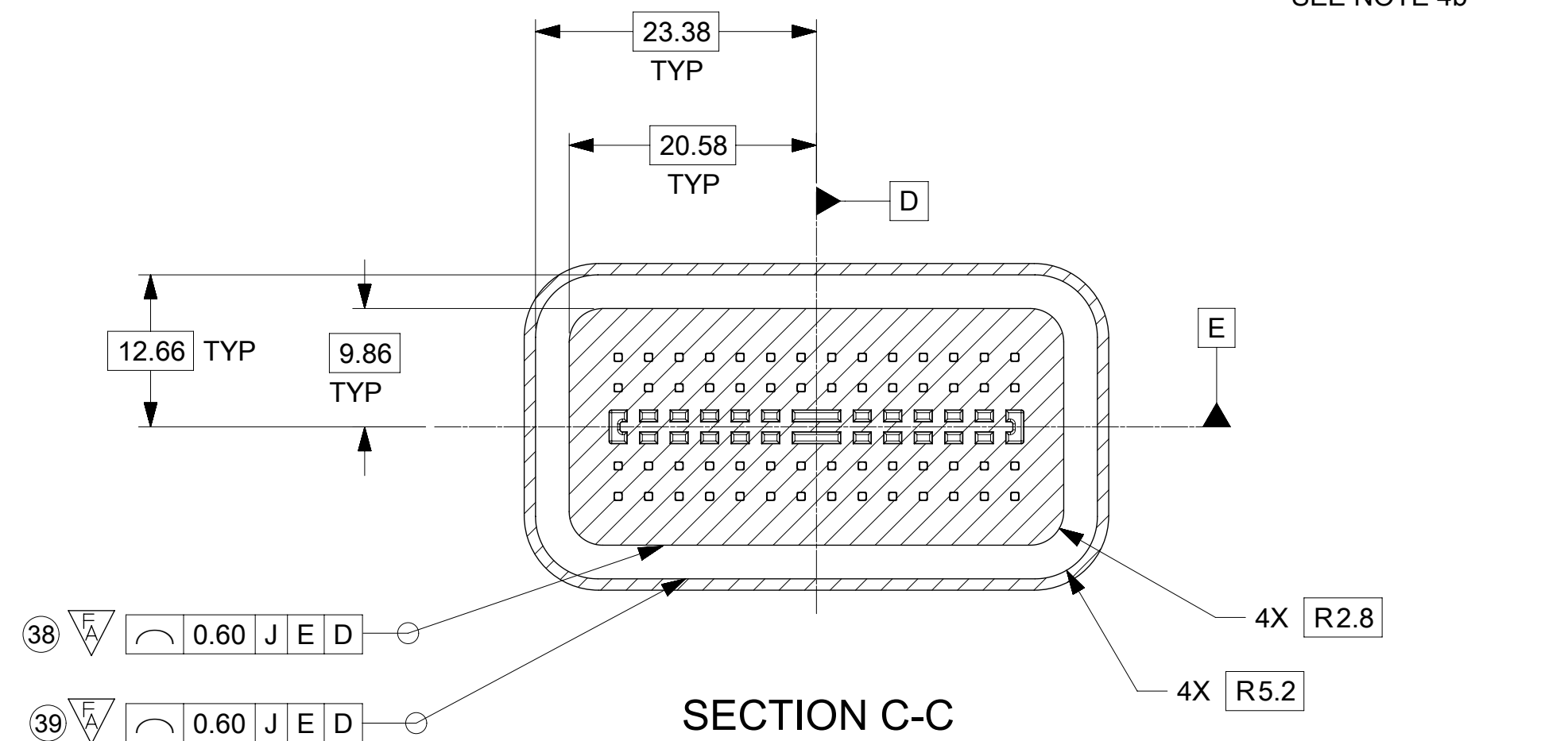
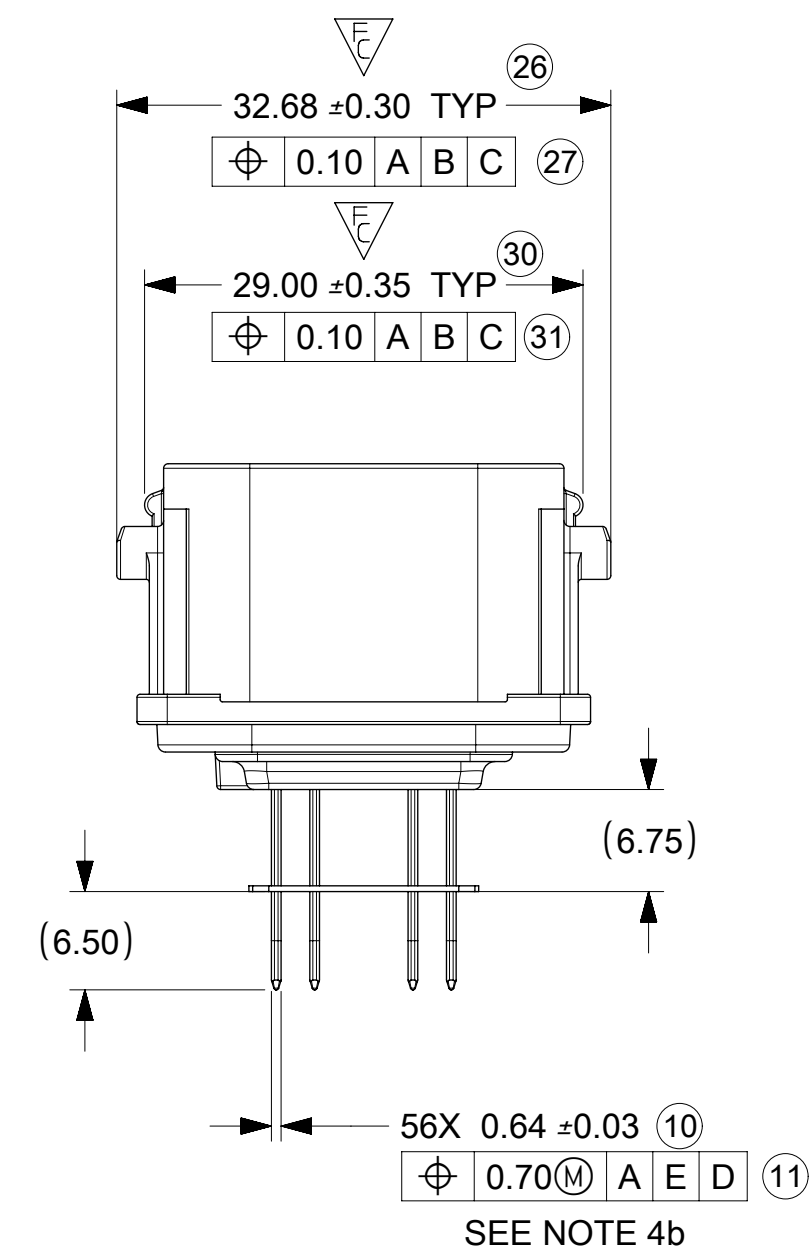
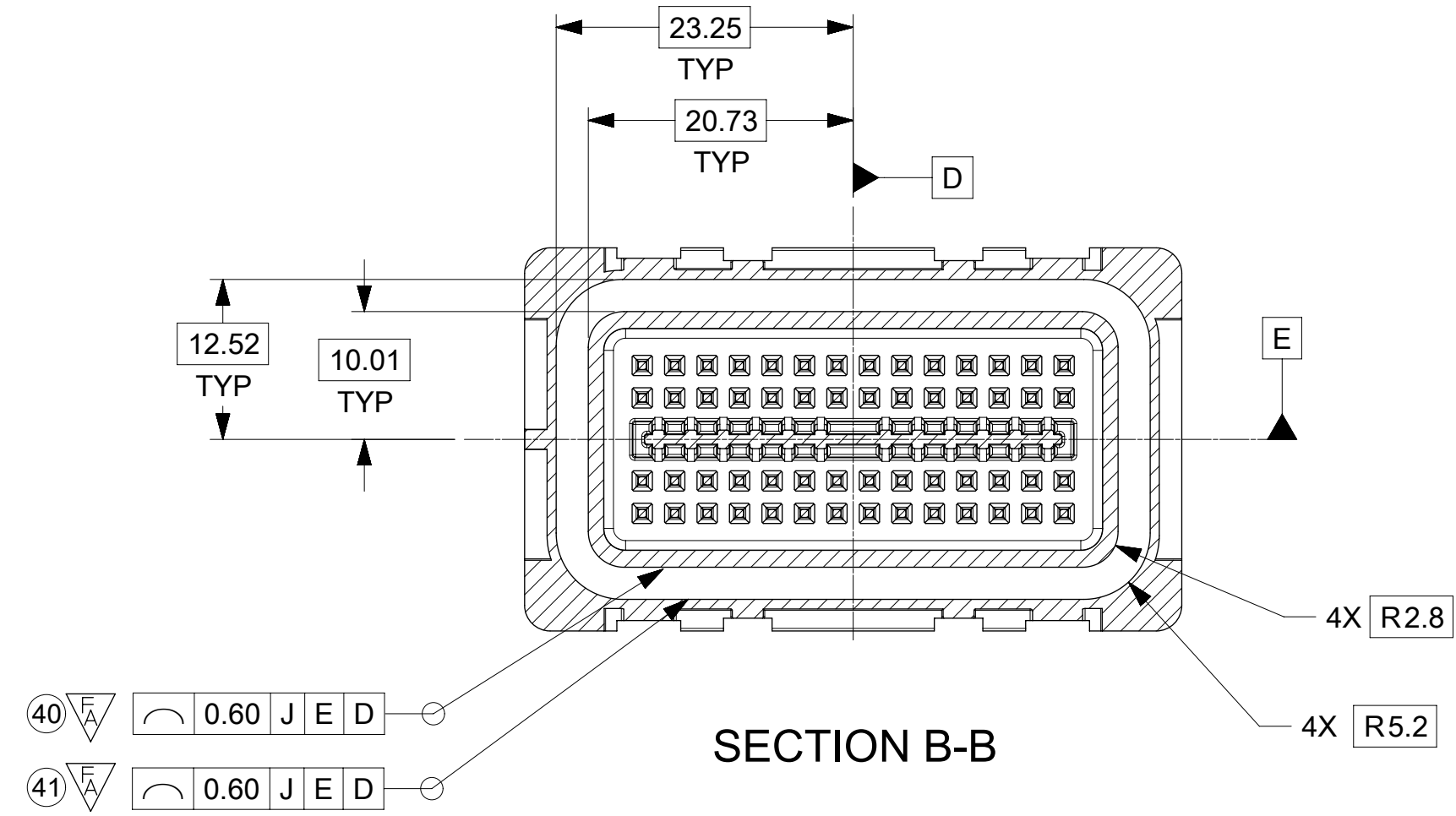
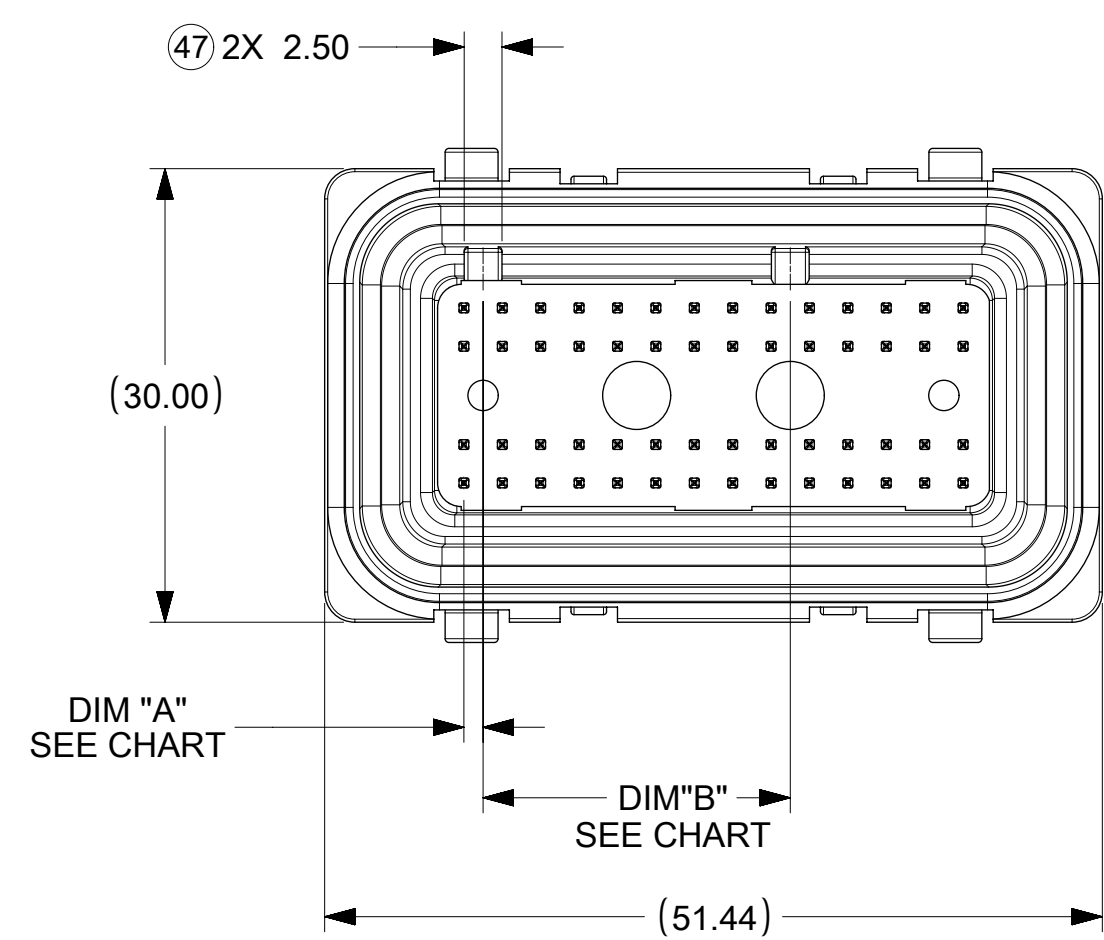
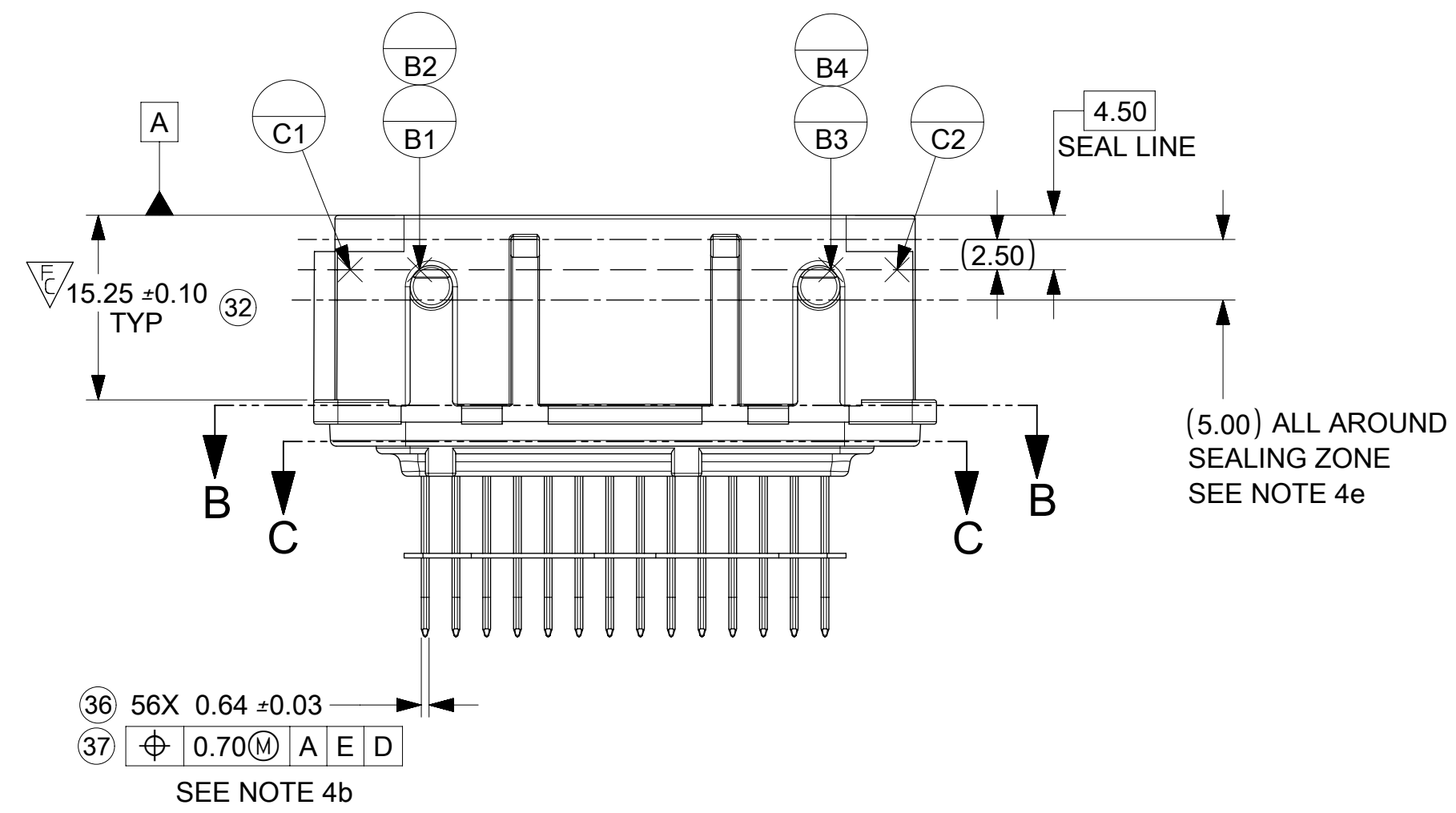
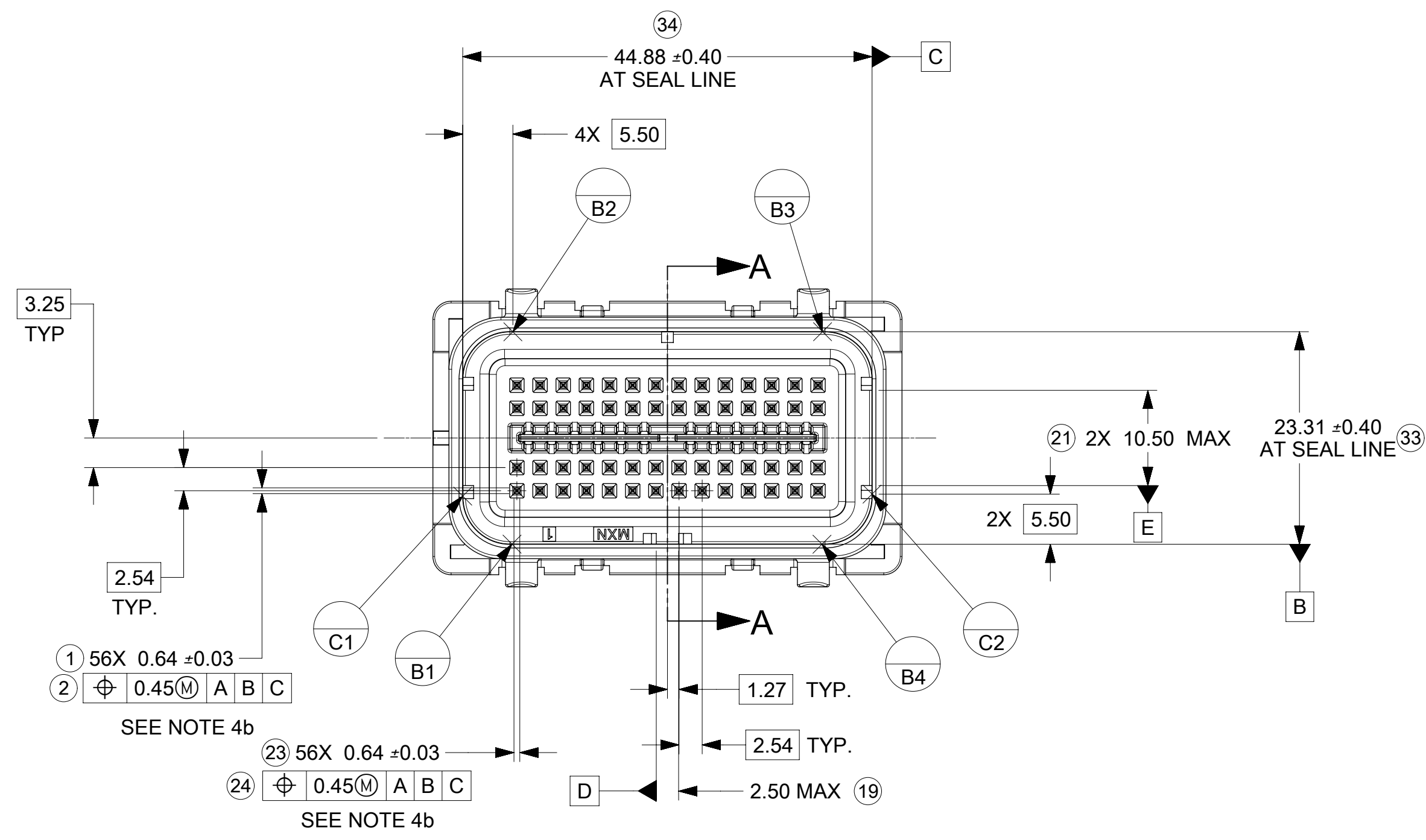
- a. HUMAN READABLE LASER MARKIING
 - 1. INFORMATION TO BE PRINTED:
 - DDDY - 4 DIGIT JULIAN DATE CODE
 - S_HH - STITCHER NUMBER_HOUR NUMBER (24 HOUR CLOCK)
 - MMMM - LAST FOUR DIGITS OF MOLEX MATERIAL NUMBER
 - 2. SIZE: HUMAN LEGIBLE
- b. PIN MATE SIDE AND PCB SIDE TRUE POSTION TO BE VERIFIED ONLINE WITH A GO/NO GO FUNCTIONAL GAGE.
- c. ANTI-TARNISH FOR Ag PLATING ONLY: SYTHETIC HYDROCARBON CONTACT SURFACE FINISH OR EQUIVALENT APPLIED WITHOUT VOID TO CONTACT AREA (MIN. 3.7mm FROM PIN TIP).
- d. VISUAL DEFECTS SHALL MEET COSMETIC STANDARD PS-45499-002 (CLASS B)
- e. THERE SHALL BE NO PERMISSIBLE DEFECTS THAT COULD POTENTIALLY PROHIBIT THE FUNCTIONALITY WITHIN THE SEALING SURFACE/ZONE SUCH AS PARTING LINES, MISMATCHES, SINK, TEXTURE VARIATIONS, SCRATCHES/GOUGES, SHORT FILL, PROTRUSIONS, PITS, DENTS/NICKS, BLISTERS OR EJECTOR MARKS.

| | |
|-----|--|
| B13 | UPDATED PCN 505530 FOR MINOR DRAFT AND RADII |
| B12 | NX REMASTERING |
| B11 | UPDATED NOTE 1c SAP# 10607192 |
| B9 | Ag PARTS TO SALEABLE SAP# 10594581 |
| B8 | ADDED NOTE 4d, e & SEALING ZONE ON PG 2 SAP# 10586362 |
| B7 | EDITED DIM & NOTES REMOVED NOTES 3e-3i & 4a-4l FROM PREVIOUS REV SAP# 10580347 |
| B6 | EDITED STATUS OF Ag PARTS SAP# 10579378 |
| B5 | EDITED DIMS, ADDED NOTES ON SHEET 1, DATUM D & E, UPDATED VIEWS AND FUNCTIONALS SAP# 10576862 |
| REV | DESCRIPTION |

INSPECTION BALLOON # LOG

PER DRAWING REVISION: B8
 LAST BALLOON NUMBER USED: 47
 ADDED BALLOON NUMBERS: 1, 2, 8, 17, 18, 19, 21, 23, 24, 26-44, 46, 47
 REMOVED BALLOON NUMBERS: 3-7, 9-16, 20, 22, 25

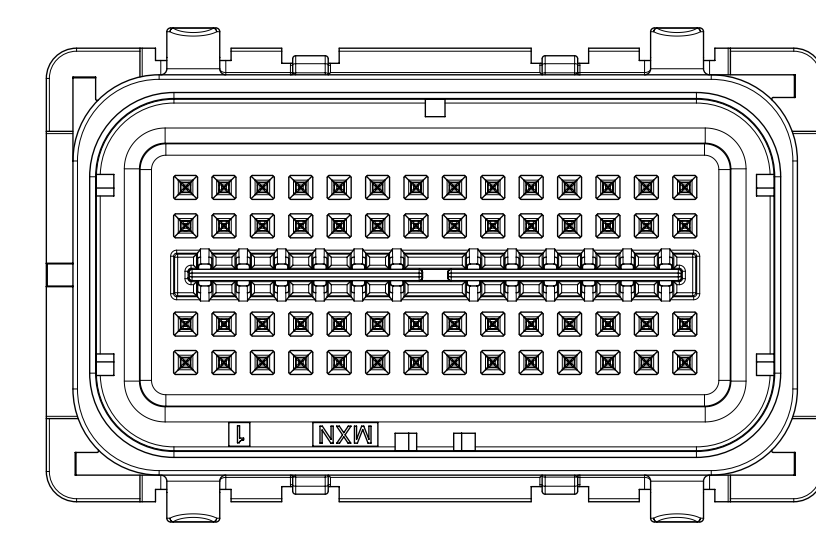
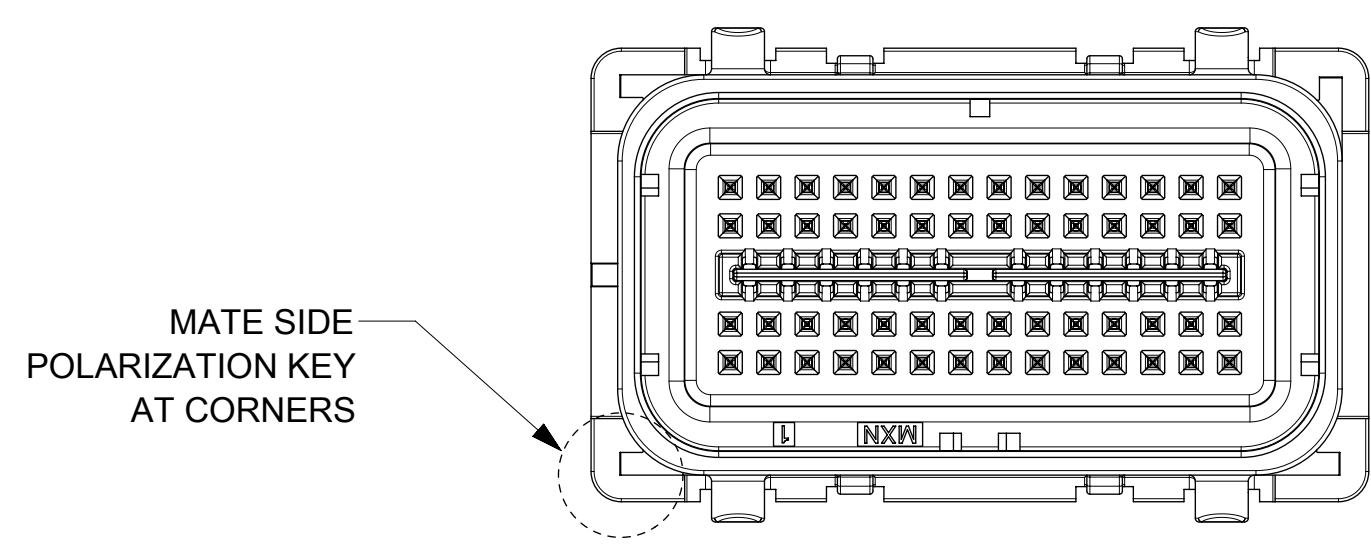
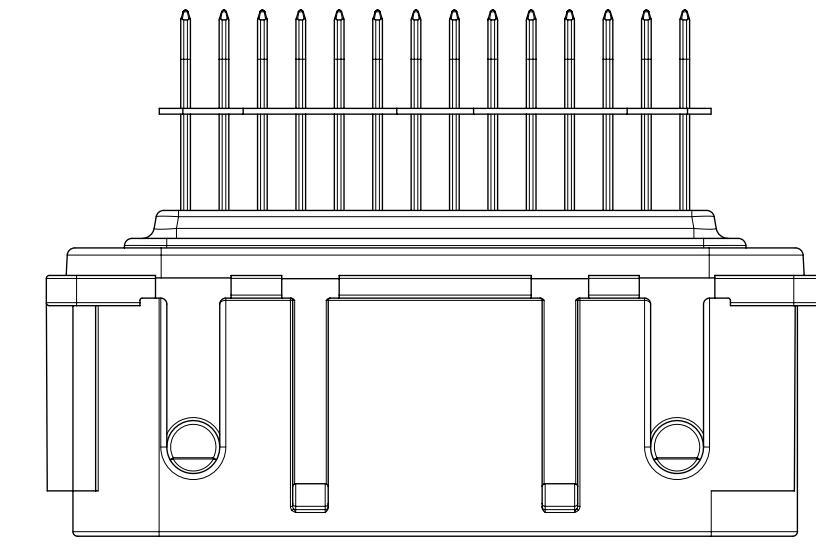
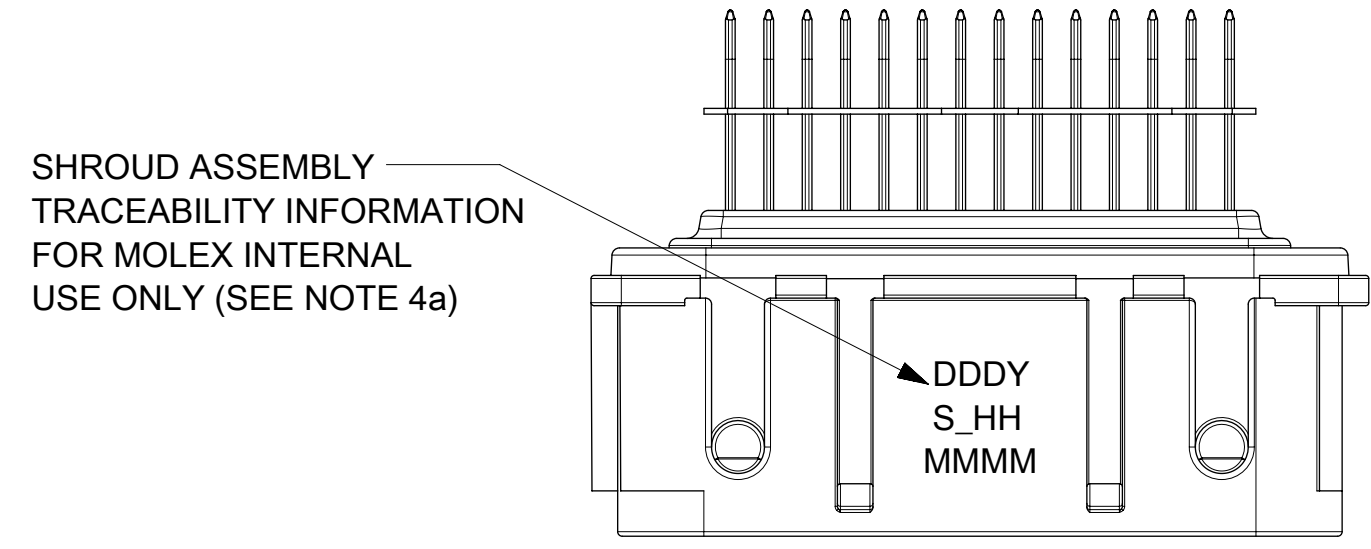
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|---|---|--|------------|-------------------------|---------------------------------------|-----------------|------------------------|----------------|---|--|--|----------|
| QUALITY SYMBOLS = 0 = 0 = 0 = 0 = 0 = 0 = 0 = 0 | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | | | | | | | | | |
| | EC NO: 606583 DRWN: BSKANTHARAJU CHKD: DKRAWCZYK REV APPR: DKRAWCZYK | 2018/10/12 | 2018/12/10 | 2018/12/10 | GENERAL TOLERANCES (UNLESS SPECIFIED) | | DIMENSION UNITS | SCALE | 56 CKT SHROUD ASSEMBLY 0.64 SQ. PINS MX123 PRODUCT CUSTOMER DRAWING | | | |
| | | 4 PLACES \pm | | ANGULAR TOL \pm 3.0 ° | | MM | 2:1 | | | | | |
| | | 3 PLACES \pm | | FJAKLIC | | DRWN BY | DATE | | | | | |
| | | 2 PLACES \pm 0.13 | | FJAKLIC | | CHKD BY | DATE | | | | | |
| | | 1 PLACE \pm 0.25 | | GPRATT | | APPR BY | DATE | | | | | |
| | | 0 PLACES \pm | | 05/05/08 | | DRAWING SIZE | THIRD ANGLE PROJECTION | | | | | |
| | | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | D | | SERIES | MATERIAL NUMBER | CUSTOMER | | | | |
| | | | | | | 31386 | SEE CHART | GENERAL MARKET | | | | |
| | | | | | | DOCUMENT NUMBER | | DOC TYPE | | | | DOC PART |
| | | | | SD-31386-056 | | PSD | 000 | 1 OF 3 | | | | |



SECTION A-A
SCALE 5:1

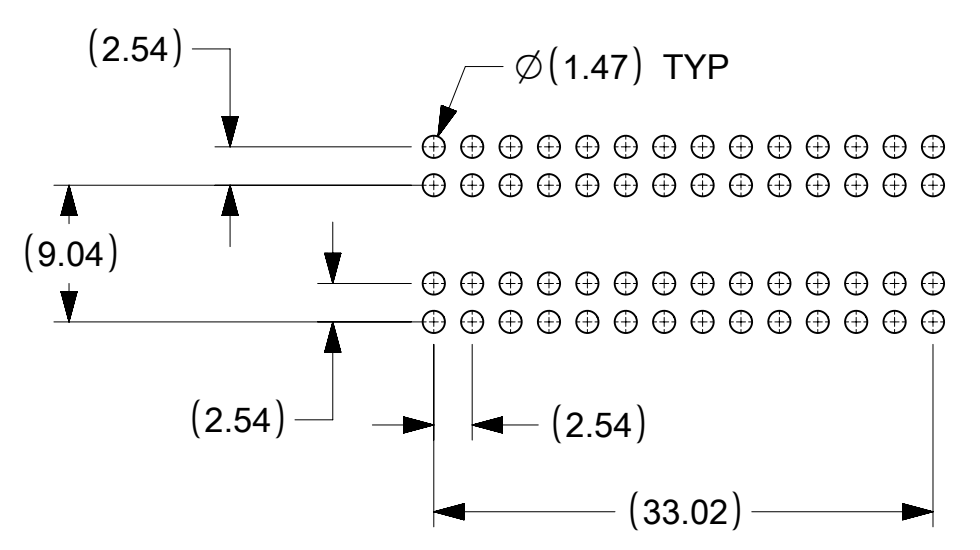
| THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | | | | | | | |
|---|---------------------------------------|-----------------|-----------------|--|-----------------|------------------------|---|-----------|----------------|
| QUALITY SYMBOLS | GENERAL TOLERANCES (UNLESS SPECIFIED) | | | | DIMENSION UNITS | SCALE | molex® | | |
| ▽ = 4 | 2018/10/12 | 2018/12/10 | 2018/12/10 | ANGULAR TOL ± 3.0 ° | MM | 2:1 | 56 CKT SHROUD ASSEMBLY 0.64 SQ. PINS MX123 | | |
| ▽ = 3 | DRWN: BSKANTHARAJU | CHKD: DKRAWCZYK | APPR: DKRAWCZYK | 4 PLACES ± | DRWN BY | DATE | | | |
| ▽ = 0 | 606583 | 2018/12/10 | 2018/12/10 | 3 PLACES ± | FJAKLIC | 04/30/08 | PRODUCT CUSTOMER DRAWING | | |
| ▽ = 0 | | | | 2 PLACES ± 0.13 | FJAKLIC | 04/30/08 | | | |
| ▽ = 0 | | | | 1 PLACE ± 0.25 | APPR BY | DATE | SERIES MATERIAL NUMBER CUSTOMER | | |
| ▽ = 0 | | | | 0 PLACES ± | GPRATT | 05/05/08 | | | |
| ▽ = 0 | | | | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | DRAWING SIZE | THIRD ANGLE PROJECTION | 31386 | SEE CHART | GENERAL MARKET |
| ▽ = 0 | B13 | D | ⊕ | DOCUMENT NUMBER | DOC TYPE | DOC PART | SHEET NUMBER | 2 OF 3 | |
| | | | | SD-31386-056 | PSD | 000 | | | |

| SHROUD ASSEMBLY NUMBER | MATE SIDE PIN FINISH | HOUSING COLOR | HARNESS SIDE KEY CODE | PCB SIDE KEY LOCATION | | MATING HARNESS PART NUMBER (OPT 0, OPT 9) | STATUS |
|------------------------|----------------------|---------------|-----------------------|-----------------------|----------------|---|----------|
| | | | | DIM. "A" ±0.30 | DIM. "B" ±0.30 | | |
| 31386-2001 | GOLD | BLUE | G | 6.35 | 26.67 | 345760703 345761903 | SALEABLE |
| 31386-2002 | GOLD | GRAY | H | 1.27 | 21.59 | 345760803 345762003 | SALEABLE |
| 31386-2020 | SILVER | BLUE | G | 6.35 | 26.67 | 345760703 345761903 | SALEABLE |
| 31386-2021 | SILVER | GRAY | H | 1.27 | 21.59 | 345760803 345762003 | SALEABLE |



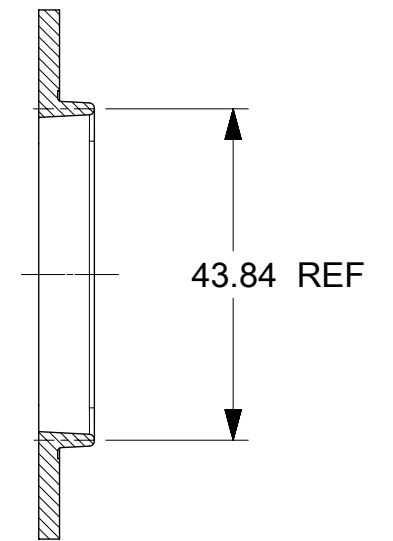
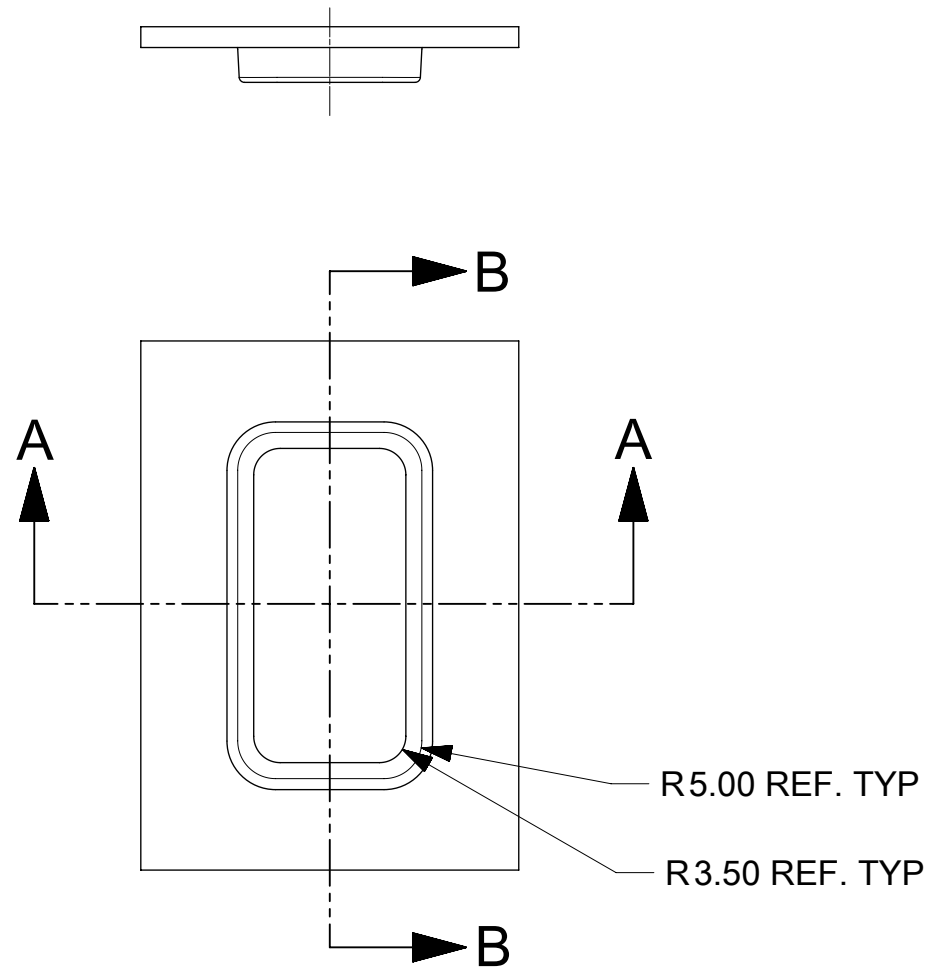
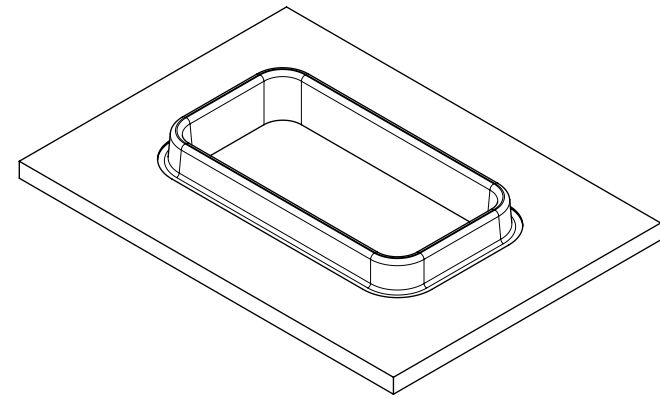
KEY OPTION "G"

KEY OPTION "H"

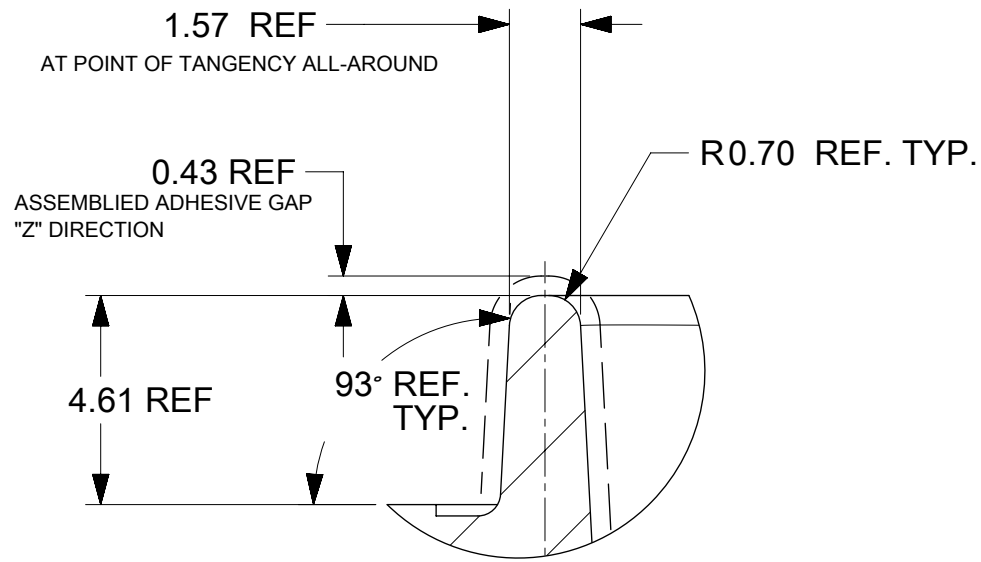


PCB LAYOUT FOR REFERENCE ONLY

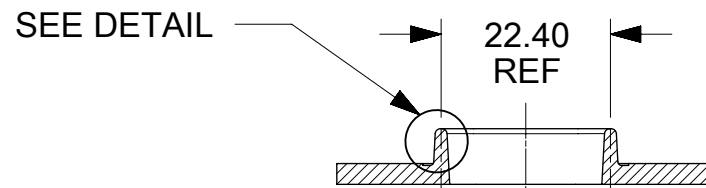
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|----------------------------|---|----------------------|---------------------------------------|--|-----------------|--------------|---|-----------------|-----------------|----------------|--------------|
| QUALITY SYMBOLS | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | | | | | | | | |
| | EC NO: 606583 | 2018/10/12 | GENERAL TOLERANCES (UNLESS SPECIFIED) | | DIMENSION UNITS | SCALE | | | | | |
| | DRWN: BSKANTHARAJU | 2018/12/10 | ANGULAR TOL ± 3.0 ° | | MM | 2:1 | | | | | |
| | CHKD: DKRAVCZYK | 2018/12/10 | 4 PLACES ± | FJAKLIC | DATE | 04/30/08 | 56 CKT SHROUD ASSEMBLY 0.64 SQ. PINS MX123 | | | | |
| | REVISIONS | REV: APPR: DKRAVCZYK | 3 PLACES ± | FJAKLIC | DATE | 04/30/08 | | | | | |
| | | | 2 PLACES ± 0.13 | GPRATT | DATE | 05/05/08 | PRODUCT CUSTOMER DRAWING | | | | |
| | | | 1 PLACE ± 0.25 | | | | | | | | |
| | | | 0 PLACES ± | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | DRAWING SIZE | THIRD ANGLE PROJECTION | SERIES | MATERIAL NUMBER | CUSTOMER | |
| | | | | | | D | | 31386 | SEE CHART | GENERAL MARKET | |
| | | | | | | | | DOCUMENT NUMBER | DOC TYPE | DOC PART | SHEET NUMBER |
| | | | | | | | SD-31386-056 | PSD | 000 | 3 OF 3 | |



SECTION B-B



SCALE 6:1



SECTION A-A

SEE DETAIL

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

| | | | | | | | | | |
|---|------------|---|------------------------|---|------------|--|--|--|--|
| EC NO: 121890 DRWN: BSKANTHARAJU CHKD: APPR: DKRAWCZYK | 2017/03/28 | GENERAL TOLERANCES (UNLESS SPECIFIED) ANGULAR TOL ± ° 4 PLACES ± 3 PLACES ± 2 PLACES ± 1 PLACE ± 0 PLACES ± DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | DIMENSION UNITS | SCALE | | | | | |
| | 2017/10/12 | | MM | 1:1 | | | | | |
| | | | | DRWN BY | DATE | SMALL FOOTPRINT ADHESIVE TONGUE GEOMETRY | | | |
| | | | | FJAKLIC | 11/21/2008 | | | | |
| | | | | CHK'D BY | DATE | PRODUCT CUSTOMER DRAWING | | | |
| | | GPRATT | 11/21/2008 | | | | | | |
| | | APPR BY | DATE | SERIES MATERIAL NUMBER CUSTOMER 31386 GENERAL MARKET | | | | | |
| | | DKRAWCZYK | 2013/02/19 | | | | | | |
| | | DRAWING SIZE | THIRD ANGLE PROJECTION | DOCUMENT NUMBER DOC TYPE DOC PART SHEET NUMBER SD-31386-156 PSD 000 1 OF 1 | | | | | |
| | | B | | | | | | | |

| | |
|----------------|--------------|
| RELEASE STATUS | RELEASE DATE |
|----------------|--------------|