

NOTES: VALID UNLESS OTHERWISE SPECIFIED

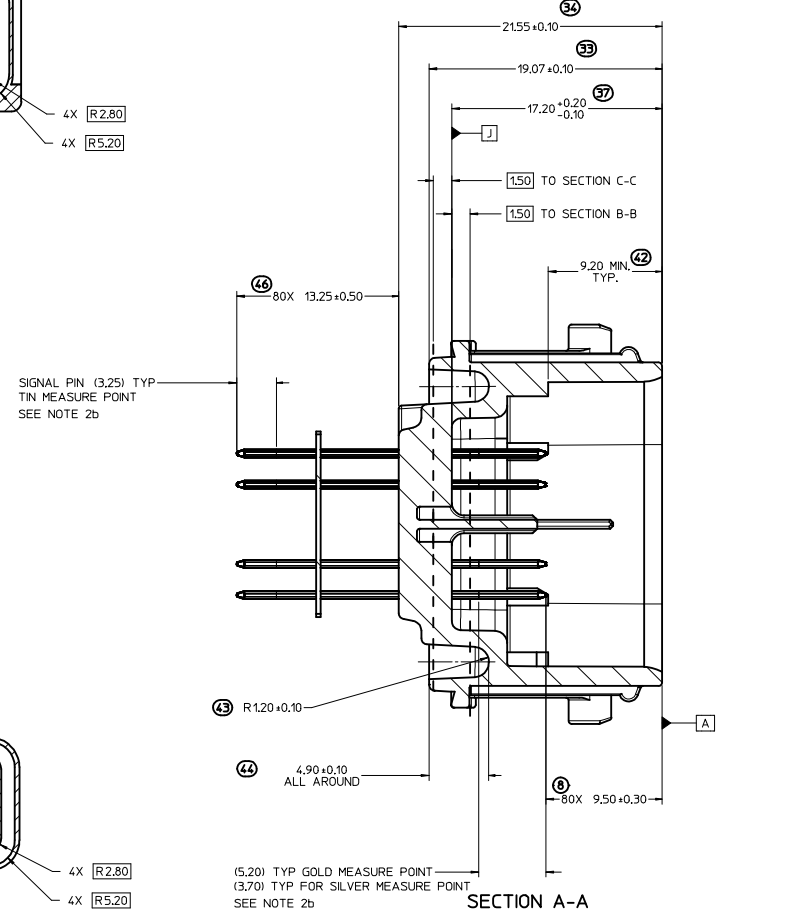
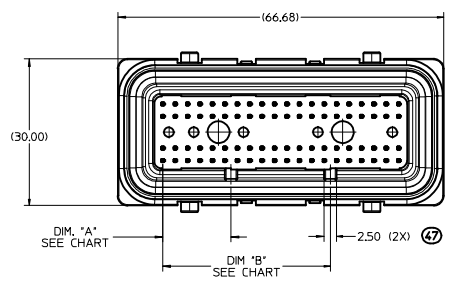
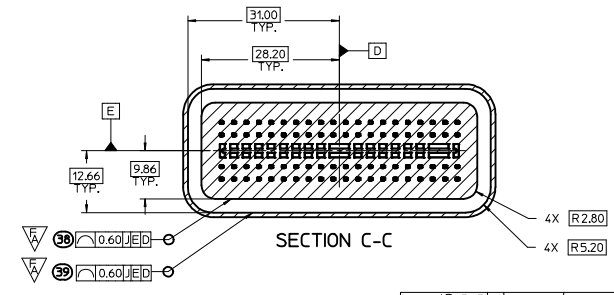
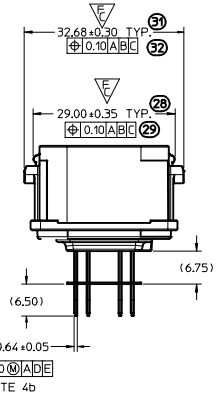
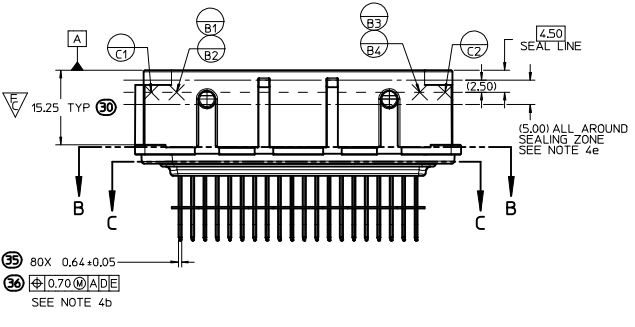
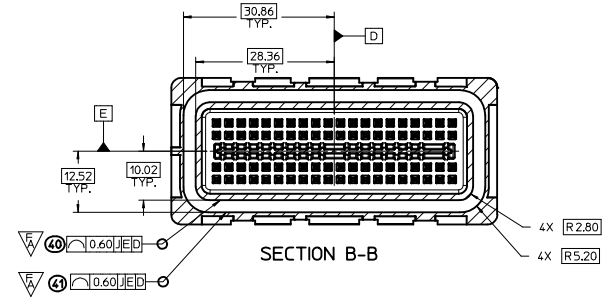
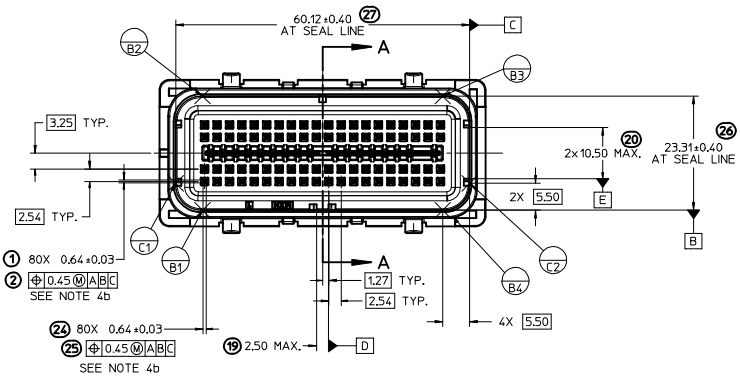
1. GENERAL:
 - a. APPLICATION SPECIFICATION: AS-31386-200
 - b. PRODUCT SPECIFICATION: PS-31387-200
 - c. PACKAGING SPECIFICATION: PK-31301-916
 - d. PARTS MUST BE IN COMPLIANCE TO MOLEX CHEMICAL SUBSTANCES FOR PRODUCTS AND PACKAGING SPECIFICATION: ES-40000-5016
 - e. DATA MUST BE SUBMITTED UNDER THE MOLEX PART NUMBER TO IMDS (COMPANY ID#13255)
 - f. DIMENSIONS AND TOLERANCES ARE VALID FOR AS SHIPPED SHROUD ASSEMBLY
 - g. REFERENCE GM INTERFACE CONTROL DRAWINGS (ICD)
 1. 12582682 (Au)
 2. 12642695 (Ag)
2. DESIGN - MATERIALS:
 - a. PLASTIC: PBT 30% GF - SEE CHART FOR COLOR
 - b. SIGNAL PIN PLATING:
 - UNDERPLATE: NICKEL 1.27-2.54 μ m
 - SELECT GOLD OPTION: 0.76 μ m MIN.
 - SELECT SILVER OPTION: 1.90-3.30 μ m MIN
 - SOLDER TAIL SELECT TIN: 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 MARKING
 1. INFORMATION TO BE PRINTED:
 - DDD - 4 DIGIT JULIAN DATE CODE
 - S_HH - SIXTHCER 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 POSITION TO BE VERIFIED ONLINE WITH A GO/NO-GO FUNCTIONAL GAGE.
 - c. ANTI-TARNISH FOR Ag PLATING ONLY: SYNTHETIC 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.

| | |
|----|---|
| B9 | CORRECTED KEY H 'DIM B' VALUE |
| B8 | CORRECTED KEY H 'DIM A' VALUE; CHANGE STATUS TO SALEABLE |
| B7 | UPDATED NOTE 1c SAP# 10595870 |
| B6 | ADDED NOTE 4d, e & SEALING ZONE ON PG 2 SAP# 10586362 |
| B5 | ADDED BALLOON NUMBERS 1.2,10,11,19,20, 24-44,46,47, DELETED BALLOON NUMBERS 3-7,9,12-15,17, 18, 21-23, 45 EDITED ALL NOTES, STATUS & MATING HARNESS PART NUMBER SAP# 10580347 |

| INSPECTION BALLOON NUMBER LOG | |
|------------------------------------|---|
| PER DRAWING REVISION: | B6 |
| LAST BALLOON NUMBER: | 47 |
| ADDED BALLOON NUMBER: | 1 2 8 10 11 19 20 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 46 47 |
| DELETED INSPECTION BALLOON NUMBER: | 3 4 5 6 7 9 12 13 14 15 16 17 18 21 22 23 45 |

| REV | DESCRIPTION | SCALE | DESIGN UNITS | THIRD ANGLE PROJECTION | |
|---|-------------|---|--------------|--|--|
| 2:1 | METRIC | | | | |
| QUALITY SYMBOLS ▽=0 ▽=0 ▽=0 | | GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.13 ± --- 1 PLACE ± 0.25 ± --- 0 PLACE ± --- ± --- | | DIMENSION STYLE MM ONLY | |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | DRAWN BY DATE FJAKLIC 04/30/08 CHECKED BY DATE FJAKLIC 04/30/08 APPROVED BY DATE GPRATT 05/05/08 | | TITLE 80 CKT SHROUD ASSEMBLY 0.64 SQ. PINS MX123 | |
| MATERIAL NO. SEE CHART | | DOCUMENT NO. SD-31387-080 | | SHEET NO. 1 OF 3 | |

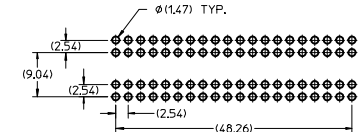
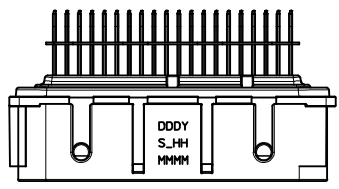
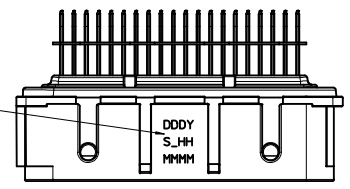
| |
|---------------------------|
| SEE REV COLUMN |
| LEC NO: UAU2014-0977 |
| DRWN:DDMM 2014/01/15 |
| CHKD:KRAMCZYK 2014/01/15 |
| APPR:DKRAMCZYK 2014/01/15 |
| B9 |



| SEE SHEET 1 EC NO: UAU2014-0977 DRAWING: 2014/01/15 CHK: OKRAMCZYK 2014/01/15 APPR: OKRAMCZYK 2014/01/15 REV: B9 | QUALITY SYMBOLS ∇=4 ∇=3 ∇=0 | GENERAL TOLERANCES (UNLESS SPECIFIED) <table border="1"> <thead> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> </thead> <tbody> <tr> <td>4 PLACES +</td> <td>---</td> <td>---</td> </tr> <tr> <td>3 PLACES +</td> <td>---</td> <td>---</td> </tr> <tr> <td>2 PLACES +</td> <td>±0.13</td> <td>---</td> </tr> <tr> <td>1 PLACE +</td> <td>±0.25</td> <td>---</td> </tr> <tr> <td>0 PLACE +</td> <td>---</td> <td>---</td> </tr> </tbody> </table> ANGULAR ± 3 ° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | mm | INCH | 4 PLACES + | --- | --- | 3 PLACES + | --- | --- | 2 PLACES + | ±0.13 | --- | 1 PLACE + | ±0.25 | --- | 0 PLACE + | --- | --- | DIMENSION STYLE MM ONLY DRAWN BY: FJAKLIC DATE: 04/30/08 CHECKED BY: FJAKLIC DATE: 04/30/08 APPROVED BY: GPRATT DATE: 05/05/08 MATERIAL NO.: SEE CHART | SCALE: 2:1 DESIGN UNITS: METRIC THIRD ANGLE PROJECTION | TITLE: 80 CKT SHROUD ASSEMBLY 0.64 SQ. PINS MX123 molex DOCUMENT NO.: SD-31387-080 SHEET NO.: 2 OF 3 |
|---|--------------------------------------|--|------|----|------|------------|-----|-----|------------|-----|-----|------------|-------|-----|-----------|-------|-----|-----------|-----|-----|--|--|---|
| | | mm | INCH | | | | | | | | | | | | | | | | | | | | |
| 4 PLACES + | --- | --- | | | | | | | | | | | | | | | | | | | | | |
| 3 PLACES + | --- | --- | | | | | | | | | | | | | | | | | | | | | |
| 2 PLACES + | ±0.13 | --- | | | | | | | | | | | | | | | | | | | | | |
| 1 PLACE + | ±0.25 | --- | | | | | | | | | | | | | | | | | | | | | |
| 0 PLACE + | --- | --- | | | | | | | | | | | | | | | | | | | | | |
| THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | | | | | | | | | | | | | | | | | | | | | |

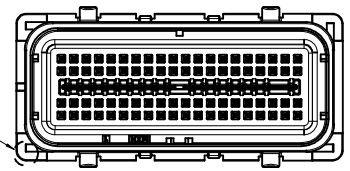
| SHROUD ASSEMBLY NUMBER | MATE SIDE PIN FINISH | COLOR | HARNESS SIDE KEY CODE | PCB SIDE KEY LOCATION | | MATING HARNESS PART NUMBER | STATUS |
|------------------------|----------------------|-------|-----------------------|-----------------------|----------------|----------------------------|----------|
| | | | | DIM. "A" +0.30 | DIM. "B" +0.30 | | |
| 31387-4001 | GOLD | BLUE | G | 13.97 | 34.29 | 345660703 345661903 | SALEABLE |
| 31387-4009 | GOLD | GRAY | H | 19.05 | 34.29 | 345660803 345662003 | SALEABLE |
| 31387-4017 | SILVER | BLUE | G | 13.97 | 34.29 | 345660703 345661903 | SALEABLE |
| 31387-4018 | SILVER | GRAY | H | 19.05 | 34.29 | 345660803 345662003 | SALEABLE |

SHROUD ASSEMBLY TRACEABILITY INFORMATION FOR MOLEX INTERNAL USE ONLY (SEE NOTE 4a)

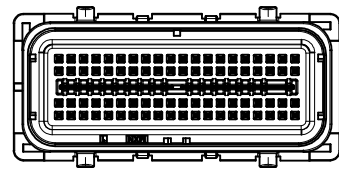


PCB LAYOUT FOR REFERENCE ONLY

MATE SIDE POLARIZATION KEY AT CORNERS

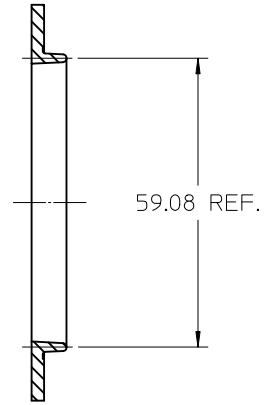
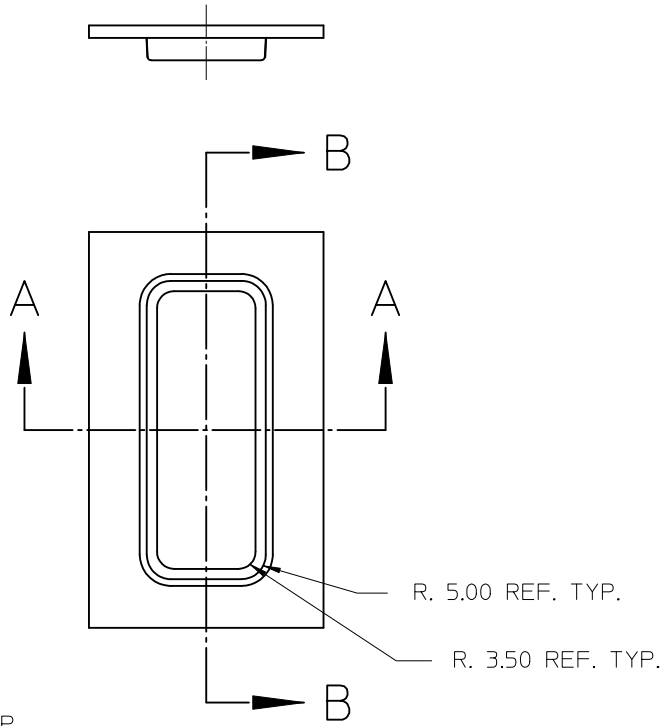
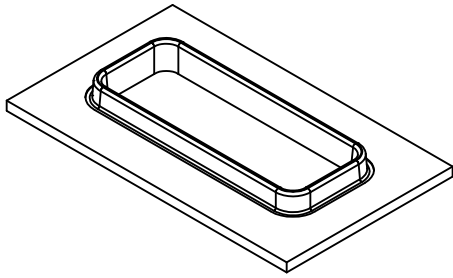


KEY OPTION "G"

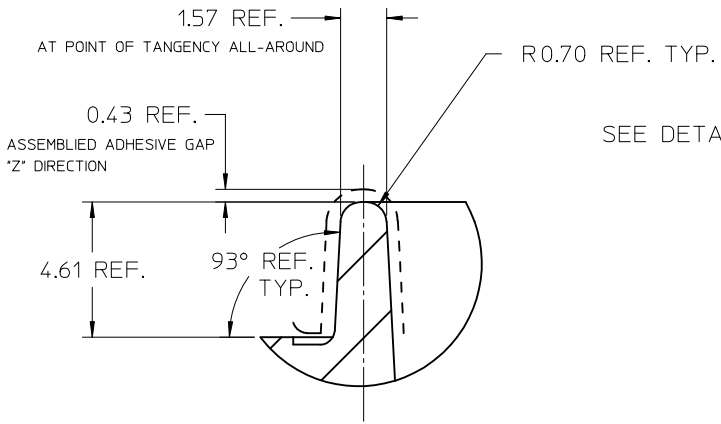


KEY OPTION "H"

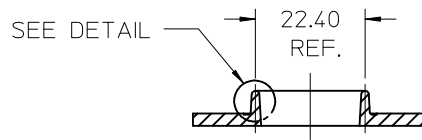
| SEE SHEET 1 EEC NO: UAU2014-0977 DRAWN BY: DRYNADUNN 2014/01/15 CHECKED BY: CHYKORAKWIZYK 2014/01/15 APPR: DKRAMCZYK 2014/01/15 REV: B9 | QUALITY SYMBOLS ▽=0 ▽=0 ▽=0 | GENERAL TOLERANCES (UNLESS SPECIFIED) <table border="1"> <thead> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> </thead> <tbody> <tr> <td>4 PLACES</td> <td>±0.13</td> <td>±---</td> </tr> <tr> <td>3 PLACES</td> <td>±0.25</td> <td>±---</td> </tr> <tr> <td>2 PLACES</td> <td>±0.50</td> <td>±---</td> </tr> <tr> <td>1 PLACE</td> <td>±1.00</td> <td>±---</td> </tr> <tr> <td>0 PLACE</td> <td>±---</td> <td>±---</td> </tr> </tbody> </table> | | mm | INCH | 4 PLACES | ±0.13 | ±--- | 3 PLACES | ±0.25 | ±--- | 2 PLACES | ±0.50 | ±--- | 1 PLACE | ±1.00 | ±--- | 0 PLACE | ±--- | ±--- | DIMENSION STYLE MM ONLY | SCALE 2:1 | DESIGN UNITS METRIC | THIRD ANGLE PROJECTION |
|---|--------------------------------------|--|------------------|-----------------------|------------------|--|-------|------|----------|-------|------|----------|-------|------|---------|-------|------|---------|------|------|-----------------------------------|---------------------|-------------------------------|------------------------|
| | | mm | INCH | | | | | | | | | | | | | | | | | | | | | |
| | 4 PLACES | ±0.13 | ±--- | | | | | | | | | | | | | | | | | | | | | |
| 3 PLACES | ±0.25 | ±--- | | | | | | | | | | | | | | | | | | | | | | |
| 2 PLACES | ±0.50 | ±--- | | | | | | | | | | | | | | | | | | | | | | |
| 1 PLACE | ±1.00 | ±--- | | | | | | | | | | | | | | | | | | | | | | |
| 0 PLACE | ±--- | ±--- | | | | | | | | | | | | | | | | | | | | | | |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | MATERIAL NO. SEE CHART | DRAWN BY FJAKLIC | DATE 04/30/08 | CHECKED BY FJAKLIC | DATE 04/30/08 | TITLE 80 CKT SHROUD ASSEMBLY 0.64 SQ. PINS MX123 | | | | | | | | | | | | | | | | | | |
| DOCUMENT NO. SD-31387-080 | SHEET NO. 3 OF 3 | molex | | | | | | | | | | | | | | | | | | | | | | |



SECTION B-B



DETAIL 6:1



SECTION A-A

| | | | | | | | | | | | |
|--|-------------------------------|--|--------------------|----------------------------|-------------------|--------------------------|------------------------|---|--|------------------------------|---------------------|
| ENTER DESCRIPTION EC NO: UAU2012-1624 DRAWN BY: DRW:DDUNN 2013/01/30 CHKD: JOUNAJ 2013/02/07 APPR: DKRAWCZYK 2013/02/19 B | QUALITY SYMBOLS ▽=0 ▽=0 | GENERAL TOLERANCES (UNLESS SPECIFIED) | | DIMENSION STYLE MM ONLY | | SCALE 1:1 | DESIGN UNITS METRIC | THIRD ANGLE PROJECTION | | | |
| | | 4 PLACES ±--- ±--- | 3 PLACES ±--- ±--- | 2 PLACES ±--- ±--- | 1 PLACE ±--- ±--- | DRAWN BY F JAKLIC | DATE 11/21/2008 | TITLE LARGE FOOTPRINT ADHESIVE TONGUE GEOMETRY | | | |
| | | ANGULAR ±---° | | | | CHECKED BY G PRATT | DATE 11/21/2008 | | | | |
| | | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | | | APPROVED BY DKRAWCZYK | DATE 2013/02/19 | Molex MOLEX INCORPORATED | | DOCUMENT NO. SD-31387-173 | SHEET NO. 1 OF 1 |