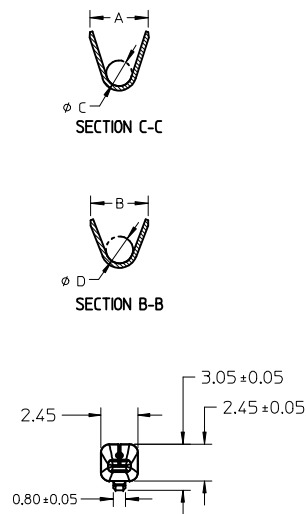
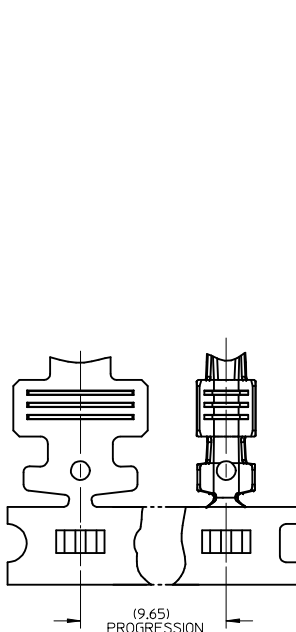
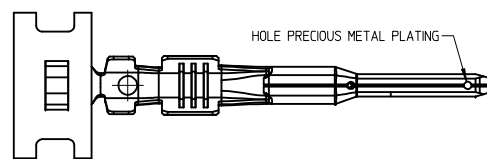
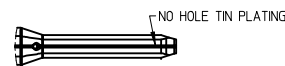


- GENERAL NOTES: (UNLESS OTHERWISE SPECIFIED)
1. MATING TERMINAL SHOWN ON SD-33012-002
  2. MATERIAL: ASTM B422, UNS C19025, HR04  
THICKNESS: 0.30 mm ± 0.01  
TEMPER: FULL HARD (REF)  
TENSILE: 496-572 MPA
  3. TIN PLATED TERMINAL FINISH:  
OVERALL UNDERPLATE ELECTRODEPOSITED NICKEL  
OVERALL ELECTRODEPOSITED REFLOW TIN
  4. GOLD PLATED TERMINAL FINISH:  
OVERALL UNDERPLATE ELECTRODEPOSITED DUCTILE SULFAMATE NICKEL  
CONTACT AREA - ELECTRODEPOSITED GOLD  
GRIP AREA - ELECTRODEPOSITED 100% TIN MATTE FINISH
  5. SILVER PLATED TERMINAL FINISH:  
OVERALL UNDERPLATE ELECTRODEPOSITED DUCTILE SULFAMATE NICKEL  
CONTACT AREA - ELECTRODEPOSITED PURE SILVER (0.5% MAX IMPURITIES) SEMI-BRIGHT FINISH  
- SILVER ANTI-TARNISH : EVABRITE  
GRIP AREA - ELECTRODEPOSITED 100% TIN MATTE FINISH
  6. MEETS CRIMP PERFORMANCE SPECIFICATION SAE/USCAR-21 (11/2001)
  7. MEETS PERFORMANCE STANDARD FOR AUTOMOTIVE ELECTRICAL CONNECTOR SYSTEMS  
SAE/USCAR-2 REV 3 (APRIL 2001)
  8. MEETS FIELD CORRELATED LIFE TEST SAE/USCAR-20 (11/2001)
  9. MEETS WIRING COMPONENT DESIGN GUIDELINES SAE/USCAR-12 REV 2 (12/2001)
  10. MEETS ELECTRICAL CONNECTION SYSTEM DESIGN SPECIFICATION (SDS) REV 11 (5/2002)
  11. REFERENCE PK-31300-516 FOR REEL DIRECTION
  12. REFERENCE AS-33000-001 FOR CRIMP INFORMATION



PRECIOUS METAL PLATED BLADE



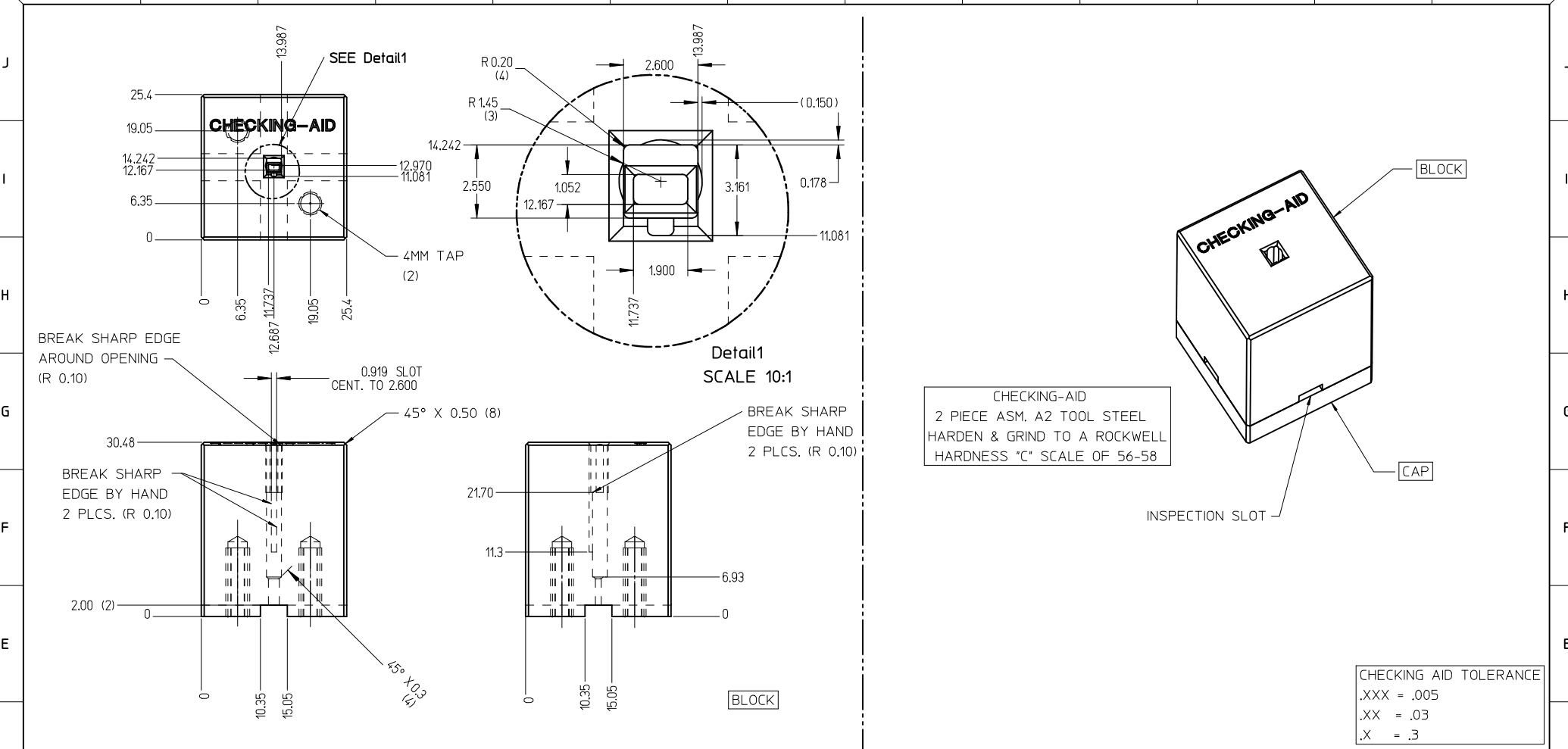
TIN PLATED BLADE

|                                                                                                            |             |                                                                 |                                                            |           |                                                                                                                                  |                            |                    |                                                                                                          |                              |                                                                                                                 |                     |  |  |  |
|------------------------------------------------------------------------------------------------------------|-------------|-----------------------------------------------------------------|------------------------------------------------------------|-----------|----------------------------------------------------------------------------------------------------------------------------------|----------------------------|--------------------|----------------------------------------------------------------------------------------------------------|------------------------------|-----------------------------------------------------------------------------------------------------------------|---------------------|--|--|--|
| ENTER DESCRIPTION<br>EC NO: JAU2014-0473<br>DRWN:BJENNINGS01 2013/10/07<br>CHKD:<br>APPR:BMOSER 2014/01/03 | DESCRIPTION | QUALITY SYMBOLS<br><div>▽=0</div> <div>▽=0</div> <div>▽=0</div> | GENERAL TOLERANCES (UNLESS SPECIFIED)                      |           |                                                                                                                                  | DIMENSION STYLE<br>MM ONLY |                    | SCALE<br>4:1                                                                                             | DESIGN UNITS<br>METRIC       |  THIRD ANGLE<br>PROJECTION |                     |  |  |  |
|                                                                                                            |             |                                                                 |                                                            | mm        | INCH                                                                                                                             | DRAWN BY<br>L.PULLIAM      | DATE<br>2006/01/31 | TITLE<br>MX150 15MM BLADE<br>TERMINAL                                                                    |                              |                                                                                                                 |                     |  |  |  |
|                                                                                                            |             |                                                                 | 4 PLACES                                                   | ± ---     | ± ---                                                                                                                            | CHECKED BY                 | DATE               |                                                                                                          |                              |                                                                                                                 |                     |  |  |  |
|                                                                                                            |             |                                                                 | 3 PLACES                                                   | ± ---     | ± ---                                                                                                                            | A.DHIR                     | 2006/02/01         |                                                                                                          |                              |                                                                                                                 |                     |  |  |  |
|                                                                                                            |             |                                                                 | 2 PLACES                                                   | ± 0.1     | ± ---                                                                                                                            | APPROVED BY                | DATE               |                                                                                                          |                              |                                                                                                                 |                     |  |  |  |
|                                                                                                            |             |                                                                 | 1 PLACE                                                    | ± 0.3     | ± ---                                                                                                                            | B.MOSER                    | 2006/02/02         |  MOLEX INCORPORATED | DOCUMENT NO.<br>SD-33000-001 |                                                                                                                 | SHEET NO.<br>1 OF 5 |  |  |  |
|                                                                                                            |             |                                                                 | ANGULAR ± 3 °                                              |           |                                                                                                                                  | MATERIAL NO.               |                    |                                                                                                          |                              |                                                                                                                 |                     |  |  |  |
|                                                                                                            |             |                                                                 | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS |           |                                                                                                                                  | SEE TABLE                  |                    |                                                                                                          |                              |                                                                                                                 |                     |  |  |  |
|                                                                                                            |             |                                                                 | REV                                                        | SIZE<br>C | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                            |                    |                                                                                                          |                              |                                                                                                                 |                     |  |  |  |
|                                                                                                            |             |                                                                 |                                                            |           |                                                                                                                                  |                            |                    |                                                                                                          |                              |                                                                                                                 |                     |  |  |  |

| FAMILY | GENDER | SEALING              | PLATING | PART NUMBER | PAYOFF<br>DIRECTION | GRIP<br>CODE | WIRE SIZES*  | A<br>±0.30 | B<br>±0.30 | C<br>±0.30 | D<br>±0.30   | SPECIAL CHARACTERISTICS |
|--------|--------|----------------------|---------|-------------|---------------------|--------------|--------------|------------|------------|------------|--------------|-------------------------|
| MX150  | BLADE  | MAT SEAL<br>UNSEALED | Sn      | 33000-0001  | RIGHT (B)           | 14           | 14AWG        | 3.9        | 3.8        | 1.7        | 1.6          | HIGH PERFORMANCE Sn     |
|        |        |                      |         | 33000-1001  | LEFT (D)            |              | 1.50-2.00mm² |            |            |            |              |                         |
|        |        |                      |         | 33000-0002  | RIGHT (B)           | 18           | 20/18/16AWG  | 3.3        | 3.1        | 1.3        | 1.4          |                         |
|        |        |                      |         | 33000-1002  | LEFT (D)            |              | 0.75-1.00mm² |            |            |            |              |                         |
|        |        |                      |         | 33000-0003  | RIGHT (B)           | 22           | 22AWG        | 2.5        | 2.6        | 0.9        | 1.0          |                         |
|        |        |                      |         | 33000-1003  | LEFT (D)            |              |              |            |            |            |              |                         |
|        |        |                      |         | 33000-0004  | RIGHT (B)           | M3           | 0.35-0.50mm² | 2.5        | 2.7        | 0.9        | 1.54<br>±0.1 |                         |
|        |        |                      |         | 33000-1004  | LEFT (D)            |              |              |            |            |            |              |                         |
|        |        |                      | Au      | 33011-1002  | RIGHT (B)           | 14           | 14AWG        | 3.9        | 3.8        | 1.7        | 1.6          | HIGH PERFORMANCE Au     |
|        |        |                      |         | 33011-0002  | LEFT (D)            |              | 1.50-2.00mm² |            |            |            |              |                         |
|        |        |                      |         | 33011-1004  | RIGHT (B)           | 18           | 20/18/16AWG  | 3.3        | 3.1        | 1.3        | 1.4          |                         |
|        |        |                      |         | 33011-0004  | LEFT (D)            |              | 0.75-1.00mm² |            |            |            |              |                         |
|        |        |                      |         | 33011-1006  | RIGHT (B)           | 22           | 22AWG        | 2.5        | 2.6        | 0.9        | 1.0          |                         |
|        |        |                      |         | 33011-0006  | LEFT (D)            |              |              |            |            |            |              |                         |
|        |        |                      |         | 33011-1008  | RIGHT (B)           | M3           | 0.35-0.50mm² | 2.5        | 2.7        | 0.9        | 1.54<br>±0.1 |                         |
|        |        |                      |         | 33011-0008  | LEFT (D)            |              |              |            |            |            |              |                         |
|        |        |                      | Ag      | 33011-2003  | RIGHT (B)           | 14           | 14AWG        | 3.9        | 3.8        | 1.7        | 1.6          | HIGH PERFORMANCE Ag     |
|        |        |                      |         | 33011-3003  | LEFT (D)            |              | 1.50-2.00mm² |            |            |            |              |                         |
|        |        |                      |         | 33011-2002  | RIGHT (B)           | 18           | 20/18/16AWG  | 3.3        | 3.1        | 1.3        | 1.4          |                         |
|        |        |                      |         | 33011-3002  | LEFT (D)            |              | 0.75-1.00mm² |            |            |            |              |                         |
|        |        |                      |         | 33011-2001  | RIGHT (B)           | 22           | 22AWG        | 2.5        | 2.6        | 0.9        | 1.0          |                         |
|        |        |                      |         | 33011-3001  | LEFT (D)            |              |              |            |            |            |              |                         |
|        |        |                      |         | 33011-2004  | RIGHT (B)           | M3           | 0.35-0.50mm² | 2.5        | 2.7        | 0.9        | 1.54<br>±0.1 |                         |
|        |        |                      |         | 33011-3004  | LEFT (D)            |              |              |            |            |            |              |                         |

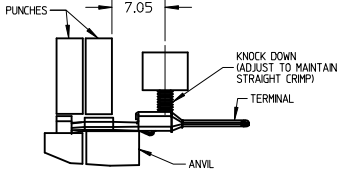
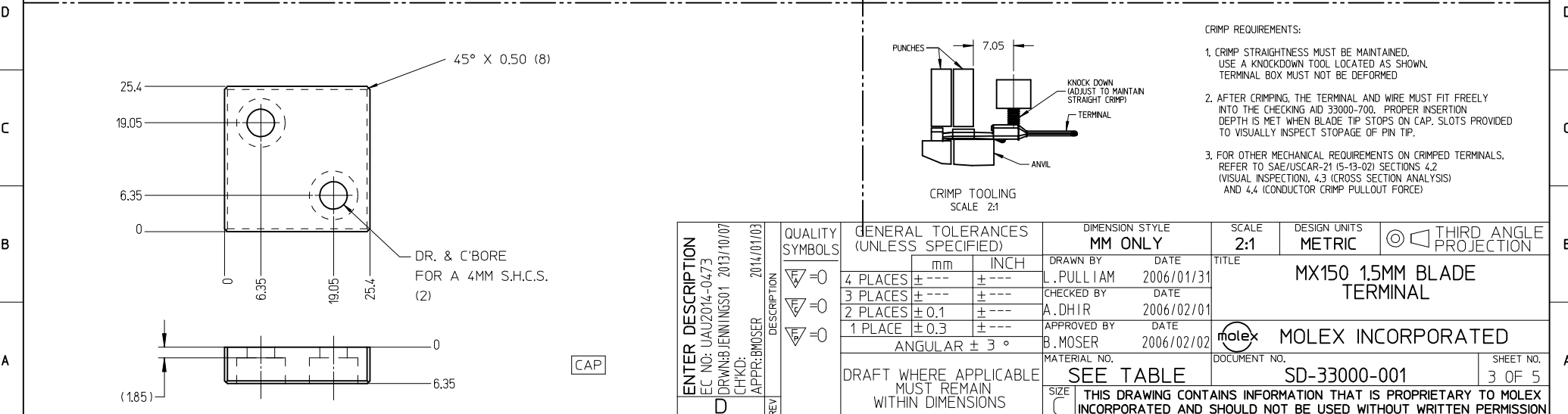
\* REFERENCE AS-33000-001 FOR SPECIFIC WIRE TYPES

|                                                                                                             |                                         |                                          |  |                                                                                                                                  |  |                  |                        |                              |  |
|-------------------------------------------------------------------------------------------------------------|-----------------------------------------|------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------|--|------------------|------------------------|------------------------------|--|
| ENTER DESCRIPTION<br>EC NO: UAU2014-0473<br>DRWN:B JENNINGS01 2013/10/07<br>CHKD:<br>APPR:BMOSER 2014/01/03 | QUALITY<br>SYMBOLS<br>▽=0<br>▽=0<br>▽=0 | GENERAL TOLERANCES<br>(UNLESS SPECIFIED) |  | DIMENSION STYLE<br>MM ONLY                                                                                                       |  | SCALE            | DESIGN UNITS<br>METRIC | THIRD ANGLE<br>PROJECTION    |  |
|                                                                                                             |                                         | mm                                       |  | INCH                                                                                                                             |  | DRAWN BY DATE    |                        | TITLE                        |  |
|                                                                                                             |                                         | 4 PLACES ± --- ± ---                     |  | L.PULLIAM 2006/01/31                                                                                                             |  | CHECKED BY DATE  |                        | MX150 15MM BLADE<br>TERMINAL |  |
|                                                                                                             |                                         | 3 PLACES ± --- ± ---                     |  | A.DHIR 2006/02/01                                                                                                                |  | APPROVED BY DATE |                        | MOLEX INCORPORATED           |  |
|                                                                                                             |                                         | 2 PLACES ± 0.1 ± ---                     |  | B.MOSER 2006/02/02                                                                                                               |  | MATERIAL NO.     |                        | DOCUMENT NO.                 |  |
| 1 PLACE ± 0.3 ± ---                                                                                         |                                         | ANGULAR ± 3 °                            |  | SEE TABLE                                                                                                                        |  | SD-33000-001     |                        | SHEET NO.<br>2 OF 5          |  |
| DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS                                                  |                                         | SIZE<br>C                                |  | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |  |                  |                        |                              |  |



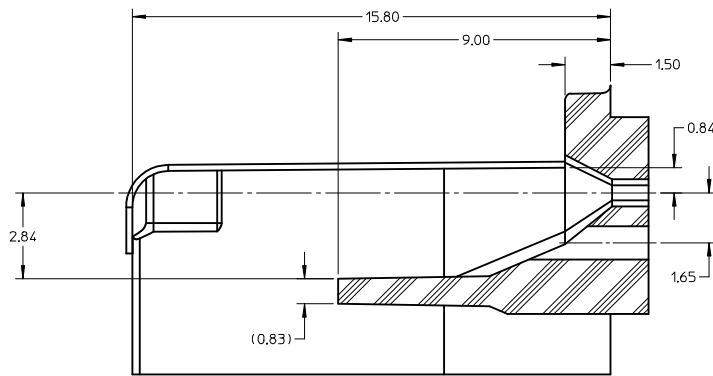
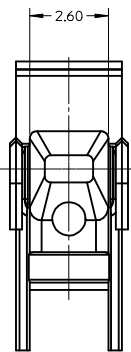
CHECKING-AID  
2 PIECE ASM. A2 TOOL STEEL  
HARDEN & GRIND TO A ROCKWELL  
HARDNESS "C" SCALE OF 56-58

CHECKING AID TOLERANCE  
.XXX = .005  
.XX = .03  
.X = .3



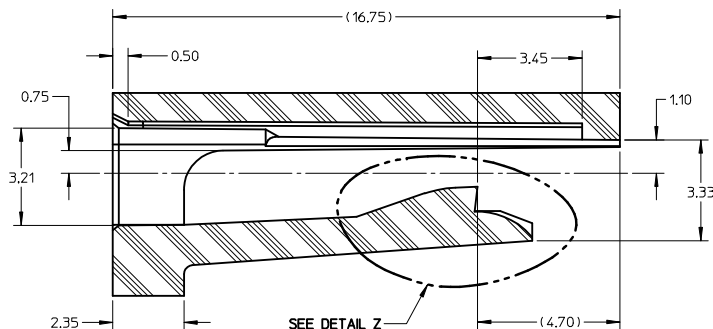
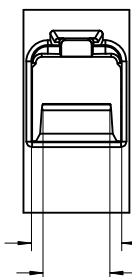
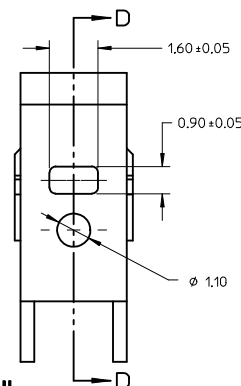
- CRIMP REQUIREMENTS:
1. CRIMP STRAIGHTNESS MUST BE MAINTAINED. USE A KNOCKDOWN TOOL LOCATED AS SHOWN. TERMINAL BOX MUST NOT BE DEFORMED
  2. AFTER CRIMPING, THE TERMINAL AND WIRE MUST FIT FREELY INTO THE CHECKING AID 33000-700. PROPER INSERTION DEPTH IS MET WHEN BLADE TIP STOPS ON CAP. SLOTS PROVIDED TO VISUALLY INSPECT STOPAGE OF PIN TIP.
  3. FOR OTHER MECHANICAL REQUIREMENTS ON CRIMPED TERMINALS, REFER TO SAE/USCAR-21 (5-13-02) SECTIONS 4.2 (VISUAL INSPECTION), 4.3 (CROSS SECTION ANALYSIS) AND 4.4 (CONDUCTOR CRIMP PULLOUT FORCE)

| GENERAL TOLERANCES<br>(UNLESS SPECIFIED)                   |                                                                                                                                  |          | DIMENSION STYLE<br>MM ONLY |              | SCALE<br>2:1                                                                          | DESIGN UNITS<br>METRIC |  THIRD ANGLE<br>PROJECTION |
|------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|----------|----------------------------|--------------|---------------------------------------------------------------------------------------|------------------------|-----------------------------------------------------------------------------------------------------------------|
|                                                            | mm                                                                                                                               | INCH     | DRAWN BY                   | DATE         | TITLE<br><br>MX150 1.5MM BLADE<br>TERMINAL                                            |                        |                                                                                                                 |
| 4 PLACES                                                   | ± .005                                                                                                                           | ± .005   | L. PULLIAM                 | 2006/01/31   |                                                                                       |                        |                                                                                                                 |
| 3 PLACES                                                   | ± .005                                                                                                                           | ± .005   | CHECKED BY                 | DATE         | MOLEX INCORPORATED                                                                    |                        |                                                                                                                 |
| 2 PLACES                                                   | ± 0.1                                                                                                                            | ± .005   | A. DHIR                    | 2006/02/01   |                                                                                       |                        |                                                                                                                 |
| 1 PLACE                                                    | ± 0.3                                                                                                                            | ± .005   | APPROVED BY                | DATE         |  | MOLEX INCORPORATED     |                                                                                                                 |
| ANGULAR ± 3 °                                              |                                                                                                                                  | B. MOSER | 2006/02/02                 |              |                                                                                       |                        |                                                                                                                 |
|                                                            |                                                                                                                                  |          | MATERIAL NO.               | DOCUMENT NO. | SHEET NO.                                                                             |                        |                                                                                                                 |
| DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS |                                                                                                                                  |          | SEE TABLE                  |              | SD-33000-001                                                                          |                        |                                                                                                                 |
|                                                            |                                                                                                                                  |          |                            |              | 3 OF 5                                                                                |                        |                                                                                                                 |
| SIZE                                                       | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |          |                            |              |                                                                                       |                        |                                                                                                                 |



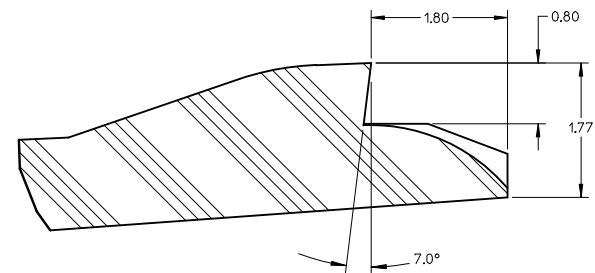
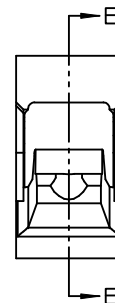
SECTION D-D

TPA/INSERT DETAIL



SECTION E-E

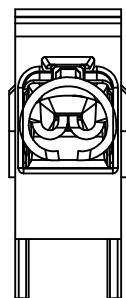
HOUSING DETAIL



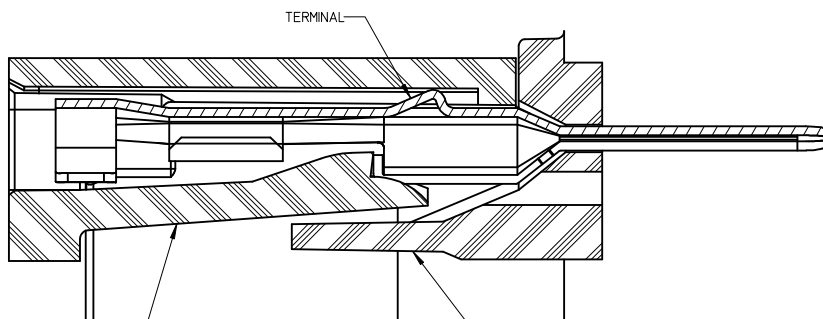
DETAIL Z  
SCALE 20:1

NOTES: (UNLESS OTHERWISE SPECIFIED)

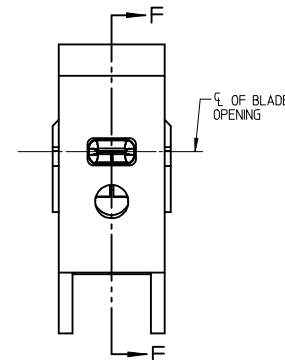
1. TOLERANCES: LINEAR  $\pm 0.10$   
ANGULAR  $3^\circ$
2. ALL DRAFT WITHIN TOLERANCE
3. MAX RADI ON ALL CORNERS SHOWN SHARP: 0.10
4. MAX FLASH PERMISSIBLE: 0.1
5. EJECTOR PIN MARKS PERMISSIBLE IF FLUSH TO 0.25 BELOW SURFACE
6. MATERIAL: HOUSING/FINGER SPECIFICATION ENGINEERED FOR MATERIAL WITH THE FOLLOWING PROPERTIES:  
A. FLEXURAL MODULUS = 4,500 TO 9,400 MPa  
PER ASTM TEST D790  
B. ELONGATION AT YIELD = 2.3% OR BETTER  
PER ASTM TEST D638 TYPE V
7. CAVITY SPEC FOR USE ONLY WITH MOLEX BLADE. TERMINAL PART NUMBERS (EXCEPT P/N'S FOR UNSEALED APPLICATIONS) SPECIFIED ELSEWHERE ON THIS DRAWING



BLADE TERMINAL HOUSING CAVITY



SECTION F-F



BLADE CAVITY ASSEMBLY VIEWS

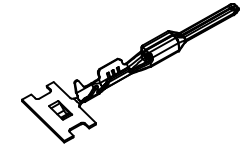
ENTER DESCRIPTION  
EC NO: UAU2014-0473  
DRAWN BY: JENNINGS01 2013/10/07  
CHKD: APPR: BMOSER 2014/01/03  
REV

QUALITY SYMBOLS  
▽ = 0  
▽ = 0  
▽ = 0

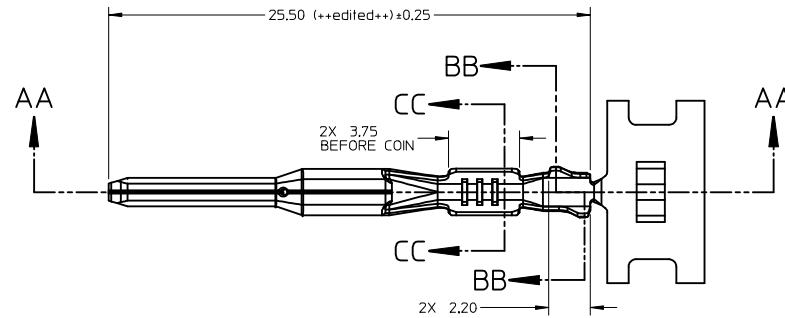
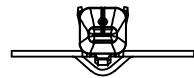
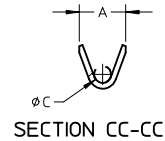
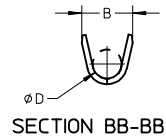
GENERAL TOLERANCES (UNLESS SPECIFIED)  
mm INCH  
4 PLACES  $\pm 0.1$   $\pm 0.004$   
3 PLACES  $\pm 0.15$   $\pm 0.006$   
2 PLACES  $\pm 0.2$   $\pm 0.008$   
1 PLACE  $\pm 0.3$   $\pm 0.012$   
ANGULAR  $\pm 3^\circ$   
DRAFT WHERE APPLICABLE  
MUST REMAIN  
WITHIN DIMENSIONS

DIMENSION STYLE  
MM ONLY  
DRAWN BY: L.PULLIAM DATE: 2006/01/31  
CHECKED BY: A.DHIR DATE: 2006/02/01  
APPROVED BY: B.MOSER DATE: 2006/02/02  
MATERIAL NO.  
SEE TABLE  
SIZE: C

SCALE  
DESIGN UNITS  
METRIC  
THIRD ANGLE PROJECTION  
TITLE  
MX150 15MM BLADE  
TERMINAL  
MOLEX INCORPORATED  
DOCUMENT NO.  
SD-33000-001  
SHEET NO.  
4 OF 5  
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION



ISO VIEW  
SCALE 2:1



SECTION AA-AA

P/N'S 33000-0004/1004  
33011-2004/3004

CARRIER BUMP DIRECTION  
POINTS DOWN FOR TIN PLATED TERMINALS  
POINTS UP FOR PRECIOUS METAL PLATED  
TERMINALS

|                                                                                                                   |  |             |                                                                 |                                       |       |                            |                                                                                                                               |                              |                                    |                        |  |
|-------------------------------------------------------------------------------------------------------------------|--|-------------|-----------------------------------------------------------------|---------------------------------------|-------|----------------------------|-------------------------------------------------------------------------------------------------------------------------------|------------------------------|------------------------------------|------------------------|--|
| ENTER DESCRIPTION<br>EC NO: UAU2014-0473<br>DRWN:BJENNINGS01 2013/10/07<br>CHKD:<br>APPR:BMOSER 2014/01/03<br>REV |  | DESCRIPTION | QUALITY SYMBOLS<br><div>▽=0</div> <div>▽=0</div> <div>▽=0</div> | GENERAL TOLERANCES (UNLESS SPECIFIED) |       | DIMENSION STYLE<br>MM ONLY |                                                                                                                               | SCALE<br>5:1                 | DESIGN UNITS<br>METRIC             | THIRD ANGLE PROJECTION |  |
|                                                                                                                   |  |             |                                                                 |                                       | mm    | INCH                       | DRAWN BY DATE                                                                                                                 |                              | TITLE<br>MX150 15MM BLADE TERMINAL |                        |  |
|                                                                                                                   |  |             |                                                                 | 4 PLACES                              | ± --- | ± ---                      | L.PULLIAM                                                                                                                     | 2006/01/31                   |                                    |                        |  |
|                                                                                                                   |  |             |                                                                 | 3 PLACES                              | ± --- | ± ---                      | CHECKED BY DATE                                                                                                               |                              |                                    |                        |  |
|                                                                                                                   |  |             |                                                                 | 2 PLACES                              | ± 0.1 | ± ---                      | A.DHIR                                                                                                                        | 2006/02/01                   |                                    |                        |  |
|                                                                                                                   |  |             | 1 PLACE                                                         | ± 0.3                                 | ± --- | APPROVED BY DATE           | molex MOLEX INCORPORATED                                                                                                      |                              |                                    |                        |  |
|                                                                                                                   |  |             | ANGULAR ± 3 °                                                   |                                       |       | B.MOSER                    |                                                                                                                               |                              | 2006/02/02                         |                        |  |
|                                                                                                                   |  |             | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS      |                                       |       | MATERIAL NO.<br>SEE TABLE  |                                                                                                                               | DOCUMENT NO.<br>SD-33000-001 |                                    | SHEET NO.<br>5 OF 5    |  |
|                                                                                                                   |  |             |                                                                 |                                       |       | SIZE<br>C                  | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                              |                                    |                        |  |