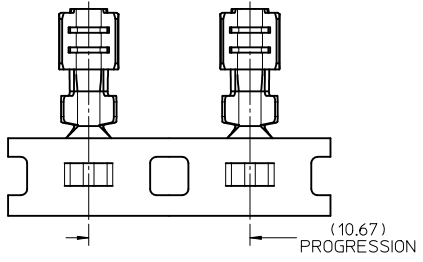
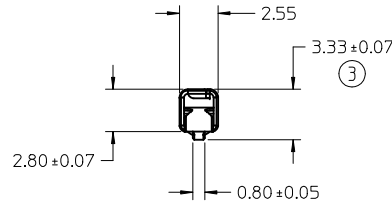


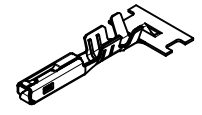
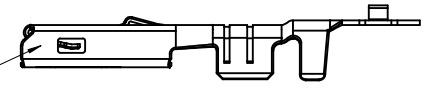
DIMENSIONS FOR LARGE POLARIZATION RIB TERMINAL ONLY

NOTES: (UNLESS OTHERWISE SPECIFIED)

1. MATING TERMINAL SHOWN ON SD-33000-001
2. MATERIAL: ASTM B422, UNS C19025, HR04
THICKNESS: 0.30 mm ± 0.01
TEMPER: FULL HARD (REF)
TENSILE: 496 MIN 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 PERFORMANCE SPECIFICATION FOR CABLE TO TERMINAL ELECTRICAL CRIMPS PER SAE/USCAR-21 (8/2001)
7. MEETS PERFORMANCE STANDARD FOR AUTOMOTIVE ELECTRICAL CONNECTOR SYSTEMS FOR SAE/USCAR-2, REV. 4 (TEMP CLASS 3) (4/2001)
8. MEETS ELECTRICAL CONNECTION SYSTEM DESIGN SPECIFICATION (SDS) REV:11 (5/2002)
9. MEETS FIELD CORRELATED LIFE TEST (FCLT) PER SAE/USCAR-20 (11/2001)
10. MEETS WIRING COMPONENT DESIGN GUIDELINES SAE/USCAR-12 REV 2 (12/2001)
11. TSC ON A DIMENSION TO BE INTERPRETED AS DISTANCE TO A THEORETICAL SHARP CORNER AS IF THE RADIUS WERE NOT PRESENT
12. REFERENCE 97BG-14474-AAB FOR LARGE POLARIZATION RIB CAVITY SPECIFICATION
13. INSERTION FORCE (TIN) AVG. FROM PV TESTING =
3.8N LARGE POLARIZATION RIB
3.5N SMALL POLARIZATION RIB (REFERENCE)
14. ALL DIMENSIONS EXCEPT ①, ②, ③ & ④ ARE COMMON TO BOTH SMALL AND LARGE POLARIZATION RIB TERMINALS
15. REFERENCE PK-31300-516 FOR REEL DIRECTION
16. REFERENCE AS-33012-002 FOR CRIMP INFORMATION

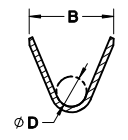
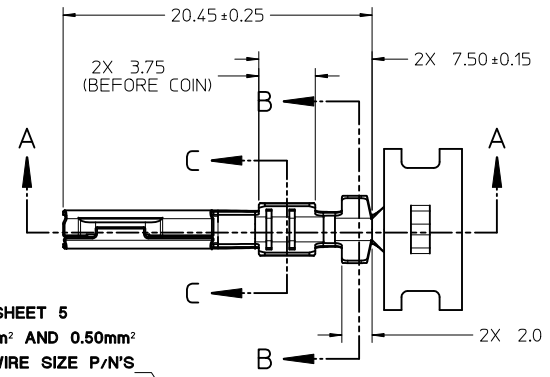


STAMP PLATING TYPE
Sn-TIN, Au-GOLD OR
Ag-SILVER IN THIS
AREA

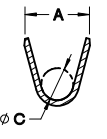
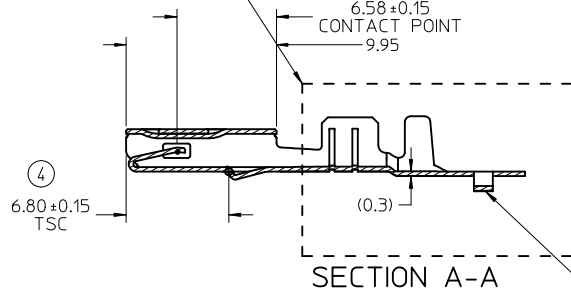


SCALE 2:1

SEE SHEET 5
0.35mm² AND 0.50mm²
ISO WIRE SIZE P/N'S
33012-2004/3004
33001-4005/5005



SECTION B-B
SCALE 5:1



SECTION C-C
SCALE 5:1

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

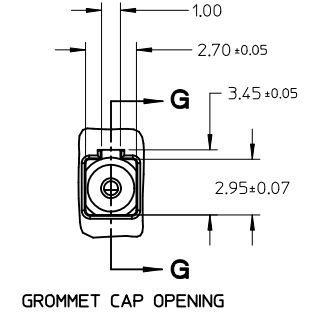
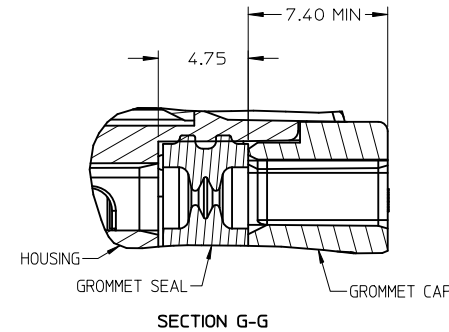
ENTER DESCRIPTION EC NO: UAU2011-1208 DRWN:ADHIR 2011/06/28 CHKD: APPR:BMOSER 2011/07/06	DESCRIPTION	QUALITY SYMBOLS
	REV	

GENERAL TOLERANCES (UNLESS SPECIFIED)	
mm	INCH
4 PLACES ± 0.10	± 0.004
3 PLACES ± 0.005	± 0.0002
2 PLACES ± 0.10	± 0.004
1 PLACE ± 0.3	± 0.012
ANGULAR ± 3 °	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	

DIMENSION STYLE MM ONLY	
DRAWN BY	DATE
L. PULLIAM	2005/06/21
CHECKED BY	DATE
A. DHIR	2005/06/21
APPROVED BY	DATE
B. MOSER	2005/06/22
MATERIAL NO.	
SEE TABLE	
SIZE	
C	

SCALE 4:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
MX150 RECEPTACLE TERMINAL		
MOLEX INCORPORATED		
DOCUMENT NO. SD-33012-002	SHEET NO. 1 OF 5	
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		

TABLE										
SUPPLIER PART NUMBER		PLATING	GRIP CODE	WIRE APPLICATION		A +0.30	B +0.30	C +0.30	D +0.30	COMMENTS
SMALL POLARIZATION RIB	RIGHT PAYOFF DIRECTION B			SAE (AWG)	METRIC (mm ²)					
33012-2001	33012-3001	TIN	14	14/16	2.0-15	3.9	4.4	1.7	1.6	
33012-2002	33012-3002	TIN	18	18/20	1.0-0.75	3.3	3.1	1.3	1.4	
33012-2003	33012-3003	TIN	22	22	0.35-0.50	2.5	2.6	0.9	1.0	
33012-2004	33012-3004	TIN	M3	N/A	0.35-0.50	2.5	2.7	0.9	1.54±0.1	PREFERRED TERMINAL FOR USE IN SEALED APPLICATION WITH 0.35& 0.50 WIRES (OD 1.2-1.7mm)
33001-2003	33001-3003	GOLD	14	14/16	2.0-15	3.9	4.4	1.7	1.6	
33001-2004	33001-3004	GOLD	18	18/20	1.0-0.75	3.3	3.1	1.3	1.4	
33001-2005	33001-3005	GOLD	22	22	0.35-0.50	2.5	2.6	0.9	1.0	
33001-4001	33001-5001	SILVER	14	14/16	2.0-15	3.9	4.4	1.7	1.6	
33001-4002	33001-5002	SILVER	18	18/20	1.0-0.75	3.3	3.1	1.3	1.4	
33001-4003	33001-5003	SILVER	22	22	0.35-0.50	2.5	2.6	0.9	1.0	
33001-4005	33001-5005	SILVER	M3	N/A	0.35-0.50	2.5	2.7	0.9	1.54±0.1	PREFERRED TERMINAL FOR USE IN SEALED APPLICATION WITH 0.35& 0.50 WIRES (OD 1.2-1.7mm) USE IN CLASS 3 (125° C) APPLICATIONS ONLY
LARGE POLARIZATION RIB - NOT TO BE USED IN MX150 SEALED CONNECTORS										
33012-2021	33012-3021	TIN	14	14/16	2.0-15	3.9	4.4	1.7	1.6	
33012-2022	33012-3022	TIN	18	18/20	1.0-0.75	3.3	3.1	1.3	1.4	
33012-2023	33012-3023	TIN	22	22	0.35-0.50	2.5	2.6	0.9	1.0	
33001-2021	33001-3021	GOLD	14	14/16	2.0-15	3.9	4.4	1.7	1.6	
33001-2022	33001-3022	GOLD	18	18/20	1.0-0.75	3.3	3.1	1.3	1.4	
33001-2023	33001-3023	GOLD	22	22	0.35-0.50	2.5	2.6	0.9	1.0	
33001-4021	33001-5021	SILVER	14	14/16	2.0-15	3.9	4.4	1.7	1.6	
33001-4022	33001-5022	SILVER	18	18/20	1.0-0.75	3.3	3.1	1.3	1.4	
33001-4023	33001-5023	SILVER	22	22	0.35-0.50	2.5	2.6	0.9	1.0	



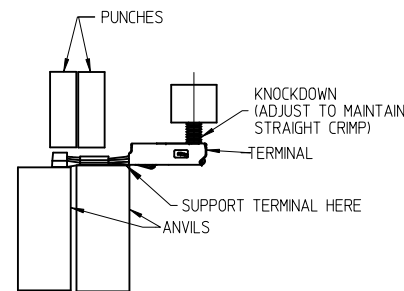
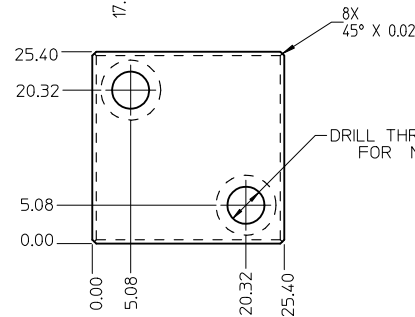
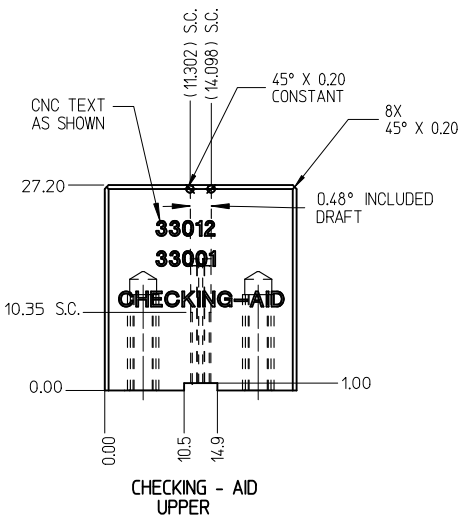
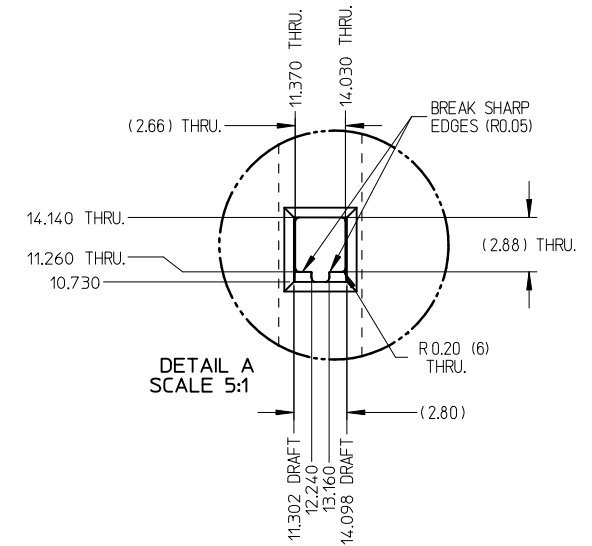
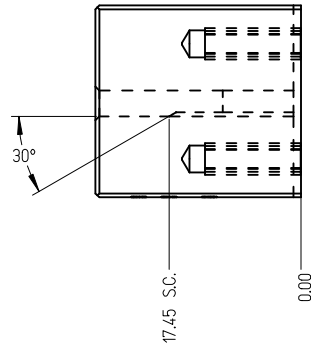
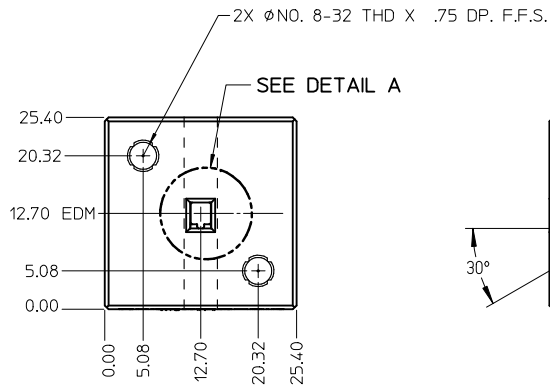
**GROMMET SEAL / CAP CONFIGURATION TO MODIFY
LARGE POLARIZATION RIB CAVITY TO ACCEPT
SMALL POLARIZATION RIB APPLICATIONS**

ENTER DESCRIPTION EC NO: UAU2011-1208 DRWN:ADHIR 2011/06/28 CHKD: APPR:BMOSER 2011/07/06 B3	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	▽=0	mm INCH	MM ONLY	METRIC		
	▽=0	4 PLACES ± --- ± ---	DRAWN BY DATE	TITLE		
	▽=0	3 PLACES ± 0.005 ± ---	L. PULLIAM 2005/06/21	MX150 RECEPTACLE TERMINAL		
		2 PLACES ± 0.10 ± ---	CHECKED BY DATE			
		1 PLACE ± 0.3 ± ---	A. DHIR 2005/06/21			
		ANGULAR ± 3°	APPROVED BY DATE			
			B. MOSER 2005/06/22			
			MATERIAL NO.	DOCUMENT NO.		
			SEE TABLE	SD-33012-002		
			SIZE C			
			THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

THIS CHECKING - AID IS FOR SMALL POLARIZATION RIB TERMINALS ONLY



CHECKING - AID ASSEMBLY
SCALE 1:1

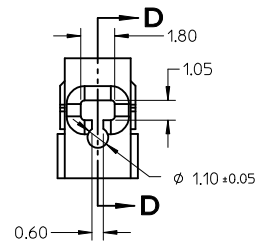
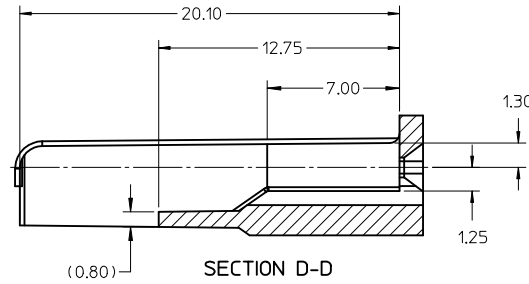
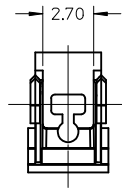


CRIMP REQUIREMENTS:

1. CRIMP STRAIGHTNESS MUST BE MAINTAINED USE A KNOCKDOWN TOOL LOCATED AS SHOWN TERMINAL BOX MUST NOT BE DEFORMED
2. AFTER CRIMPING, THE CRIMPED TERMINAL (AND UP TO 5 mm OF WIRE PAST THE INSULATOR CUTOFF TAB) MUST FIT FREELY INTO THE CHECKING-AID SHOWN ON THIS PAGE
3. FOR OTHER MECHANICAL REQUIREMENTS ON CRIMPED TERMINALS, REFER TO SAE/USCAR-21 (5-13-02) SECTIONS 4.2 (VISUAL INSPECTION), 4.2 (CROSS SECTION ANALYSIS) AND 4.4 (CONDUCTOR CRIMP PULLOUT FORCE)

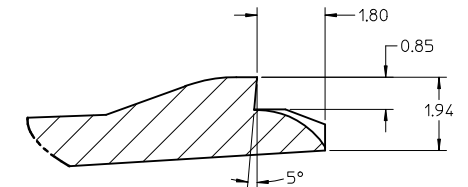
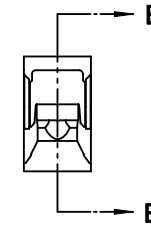
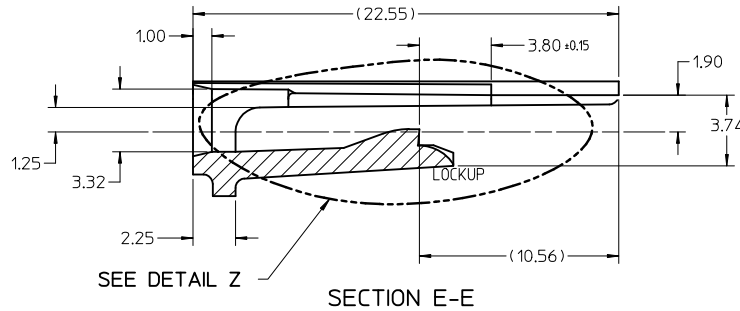
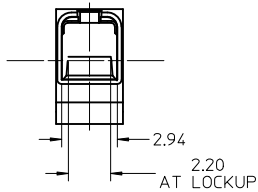
UPPER & LOWER
CHECKING-AID
A2 TOOL STEEL
HARDEN & GRIND
ROCKWELL "C" 56-58

ENTER DESCRIPTION EC NO: UAU2011-1208 DRWN:ADHIR 2011/06/28 CHKD: APPR:BMOSER 2011/07/06 REV:	QUALITY SYMBOLS 	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>± .005</td> <td>± .0005</td> </tr> <tr> <td>3 PLACES</td> <td>± 0.005</td> <td>± .0005</td> </tr> <tr> <td>2 PLACES</td> <td>± 0.10</td> <td>± .005</td> </tr> <tr> <td>1 PLACE</td> <td>± 0.3</td> <td>± .010</td> </tr> </tbody> </table> ANGULAR ± 3°		mm	INCH	4 PLACES	± .005	± .0005	3 PLACES	± 0.005	± .0005	2 PLACES	± 0.10	± .005	1 PLACE	± 0.3	± .010	DIMENSION STYLE MM ONLY DRAWN BY DATE L. PULLIAM 2005/06/21 CHECKED BY DATE A. DHIR 2005/06/21 APPROVED BY DATE B. MOSER 2005/06/22 MATERIAL NO. SEE TABLE	SCALE 2:1 DESIGN UNITS METRIC THIRD ANGLE PROJECTION	TITLE MX150 RECEPTACLE TERMINAL	MOLEX INCORPORATED DOCUMENT NO. SD-33012-002	SHEET NO. 3 OF 5
		mm	INCH																			
	4 PLACES	± .005	± .0005																			
	3 PLACES	± 0.005	± .0005																			
2 PLACES	± 0.10	± .005																				
1 PLACE	± 0.3	± .010																				
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																				

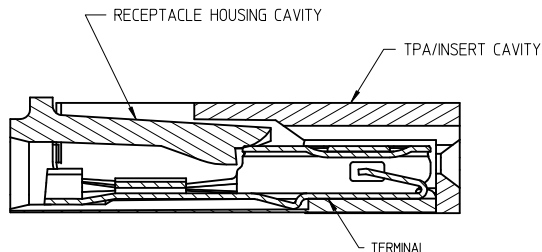


NOTES: UNLESS OTHERWISE SPECIFIED

1. TOLERANCES: LINEAR ± 0.10
ANGULAR $\pm 3^\circ$
2. ALL DRAFT WITHIN TOLERANCE.
3. MAX RADII 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 RECEPTACLE
TERMINAL PART NUMBERS SPECIFIED ELSEWHERE ON THIS
DRAWING

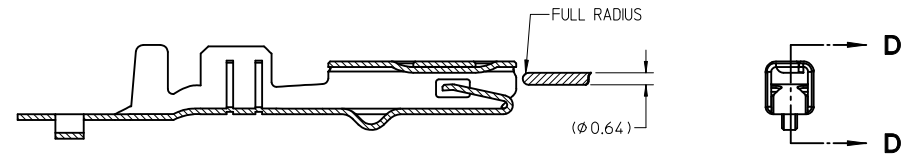
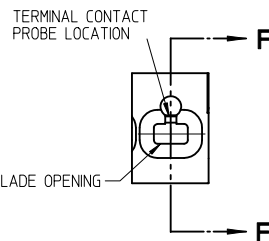


DETAIL Z
SCALE 20:1



SECTION F-F

RECEPTACLE CAVITY ASSEMBLED VIEWS
FOR SMALL POLARIZATION RIB APPLICATIONS
FIG. 1



SECTION D-D
FOR LARGE POLARIZATION RIB APPLICATIONS
FIG. 2

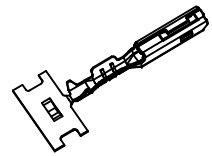
PROBING DOWN THE
THROAT MUST USE
THIS TERMINAL PROBE

PROBE PIN DETAILS:
MANUFACTURER: LONE STAR INDUSTRIAL
PART NUMBER: LS054R-403-N-4.6
PIN DIAMETER: 0.025 IN (0.64mm)
TIP SHAPE: SPHERICAL
TEL: 915-779-7255

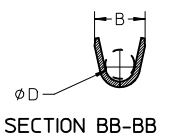
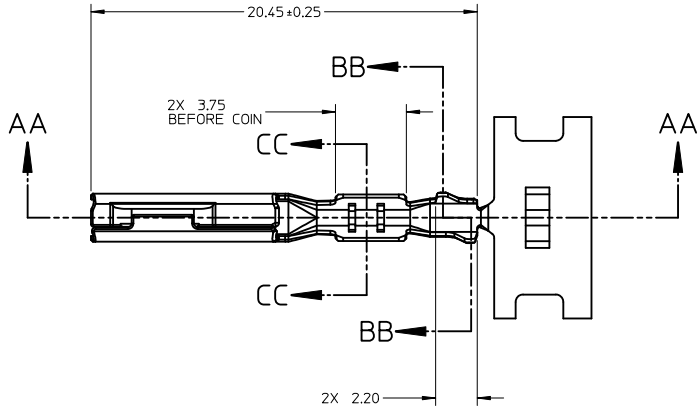
PREFERRED PROBING LOCATION
IS NOT ON SPRING MEMBER

IF ELECTRICAL CONTINUITY PROBE
TOUCHES SPRING MEMBER USE
PROBING AS SHOWN IN FIG. 2

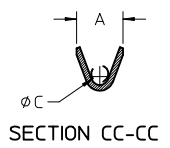
ENTER DESCRIPTION EC NO: UAU2011-1208 DRAWN:ADHIR CHKD: APPR:BMOSER	2011/06/28 2011/07/06	QUALITY SYMBOLS ▽=0 ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY	SCALE 5:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
			4 PLACES ± --- ± ---	3 PLACES ± 0.005 ± ---	DRAWN BY L. PULLIAM	DATE 2005/06/21	TITLE MX150 RECEPTACLE TERMINAL	
B3	DESCRIPTION	REV	2 PLACES ± 0.10 ± ---	1 PLACE ± 0.3 ± ---	CHECKED BY A. DHIR	DATE 2005/06/21	MATERIAL NO. SD-33012-002	
			ANGULAR ± 3°		APPROVED BY B. MOSER	DATE 2005/06/22		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			SEE TABLE		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			



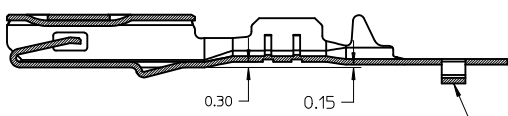
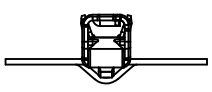
ISO VIEW
SCALE 2:1



SECTION BB-BB



SECTION CC-CC



SECTION AA-AA

P/N'S 33012-2004/3004
33001-4005/6005

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

ENTER DESCRIPTION EC NO: UAU2011-1208 DRWN:ADHIR CHKD: APPR:BMOSER 2011/06/28 2011/07/06	QUALITY SYMBOLS ▽=0 ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY	SCALE 5:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
		4 PLACES ± --- ± --- 3 PLACES ± 0.005 ± --- 2 PLACES ± 0.10 ± --- 1 PLACE ± 0.3 ± ---	mm INCH	DRAWN BY L. PULLIAM	DATE 2005/06/21	TITLE MX150 RECEPTACLE TERMINAL			
		ANGULAR ± 3 °		CHECKED BY A. DHIR	DATE 2005/06/21	MOLEX INCORPORATED			
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		APPROVED BY B. MOSER	DATE 2005/06/22	MATERIAL NO. SEE TABLE	DOCUMENT NO. SD-33012-002	SHEET NO. 5 OF 5	