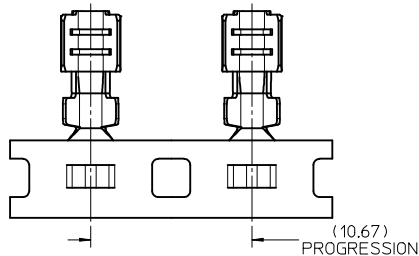
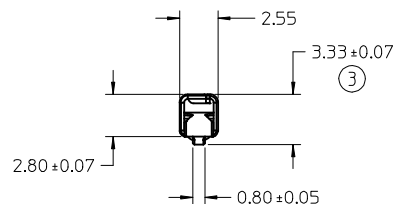


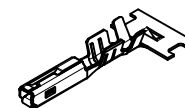
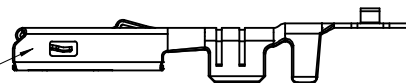
**DIMENSIONS FOR LARGE POLARIZATION RIB TERMINAL ONLY**

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 PURE SILVER (0.5% MAX IMPURITIES) SEMI-BRIGHT FINISH  
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) (5/2004)
8. MEETS ELECTRICAL CONNECTION SYSTEM DESIGN SPECIFICATION (SDS) REV:11 (5/2002)
9. MEETS FIELD CORRELATED LIFE TEST (FCLT) PER SAE/USCAR-20 (6/2004)
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

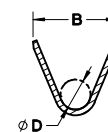
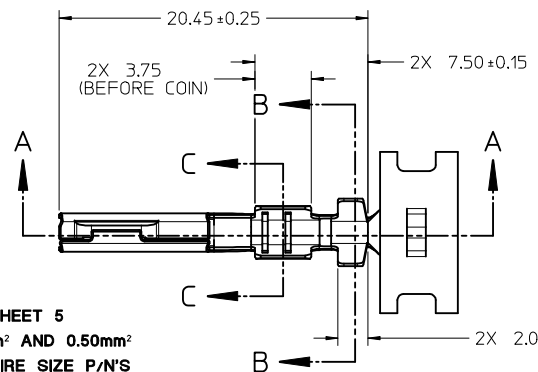


STAMP PLATING TYPE  
Sn-TIN, Au-GOLD OR  
Ag-SILVER IN THIS  
AREA

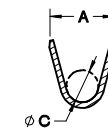
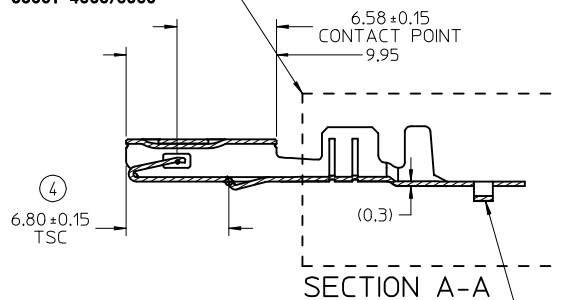


SCALE 2:1

SEE SHEET 5  
0.35mm<sup>2</sup> AND 0.50mm<sup>2</sup>  
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

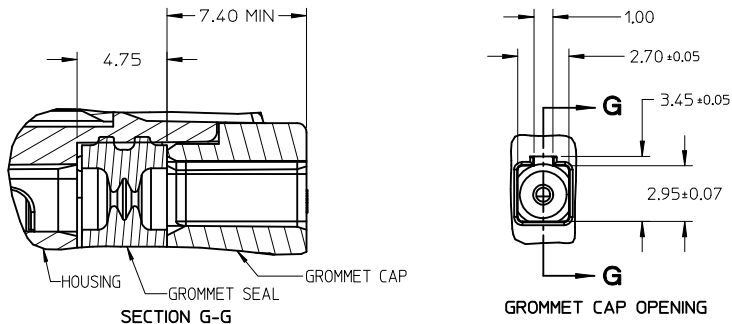
<b>ENTER DESCRIPTION</b> EC NO: UAU2014-0473 DRWINBJENNINGS01 2013/09/18 CHKD: APPR:BMOSER 2014/01/03	QUALITY SYMBOLS 	GENERAL TOLERANCES (UNLESS SPECIFIED) <table border="1"> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> <tr> <td>4 PLACES</td> <td>± 0.10</td> <td>± 0.004</td> </tr> <tr> <td>3 PLACES</td> <td>± 0.005</td> <td>± 0.0002</td> </tr> <tr> <td>2 PLACES</td> <td>± 0.10</td> <td>± 0.004</td> </tr> <tr> <td>1 PLACE</td> <td>± 0.3</td> <td>± 0.012</td> </tr> </table>		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	DIMENSION STYLE <b>MM ONLY</b> DRAWN BY DATE L. PULLIAM 2005/06/21 CHECKED BY DATE A. DHIR 2005/06/21 APPROVED BY DATE B. MOSER 2005/06/22	SCALE <b>4:1</b> DESIGN UNITS <b>METRIC</b>	THIRD ANGLE PROJECTION 
		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																		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE TABLE MATERIAL NO. DOCUMENT NO.	MOLEX INCORPORATED 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																				

FAMILY	GENDER	SEALING	PLATING	PART NUMBER	PAYOFF DIRECTION	GRIP CODE	WIRE SIZES*	A ±0.30	B ±0.30	C ±0.30	D ±0.30	SPECIAL CHARACTERISTICS
MX150	RECEPTACLE	MAT SEAL	Sn	33012-2001	RIGHT (B)	14	16/14AWG	3.9	4.4	1.7	1.6	HIGH PERFORMANCE Sn
				33012-3001	LEFT (D)	14	150-2.00mm <sup>2</sup>	3.9	4.4	1.7	1.6	
				33012-2002	RIGHT (B)	18	20/18AWG	3.3	3.1	1.3	1.4	
				33012-3002	LEFT (D)	18	0.75-1.00mm <sup>2</sup>	3.3	3.1	1.3	1.4	
				33012-2003	RIGHT (B)	22	22AWG	2.5	2.6	0.9	1.0	
				33012-3003	LEFT (D)	22	22AWG	2.5	2.6	0.9	1.0	
			Au	33012-2004	RIGHT (B)	M3	0.35-0.50mm <sup>2</sup>	2.5	2.7	0.9	1.54 ±0.1	
				33012-3004	LEFT (D)	M3	0.35-0.50mm <sup>2</sup>	2.5	2.7	0.9	1.54 ±0.1	
				33001-2003	RIGHT (B)	14	16/14AWG	3.9	4.4	1.7	1.6	
				33001-3003	LEFT (D)	14	150-2.00mm <sup>2</sup>	3.9	4.4	1.7	1.6	
				33001-2004	RIGHT (B)	18	20/18AWG	3.3	3.1	1.3	1.4	
				33001-3004	LEFT (D)	18	0.75-1.00mm <sup>2</sup>	3.3	3.1	1.3	1.4	
			Ag	33001-2005	RIGHT (B)	22	22AWG	2.5	2.6	0.9	1.0	
				33001-3005	LEFT (D)	22	22AWG	2.5	2.6	0.9	1.0	
				33001-2006	RIGHT (B)	M3	0.35-0.50mm <sup>2</sup>	2.5	2.7	0.9	1.54 ±0.1	
				33001-3006	LEFT (D)	M3	0.35-0.50mm <sup>2</sup>	2.5	2.7	0.9	1.54 ±0.1	
				33001-4001	RIGHT (B)	14	16/14AWG	3.9	4.4	1.7	1.6	
				33001-5001	LEFT (D)	14	150-2.00mm <sup>2</sup>	3.9	4.4	1.7	1.6	
Ag	33001-4002	RIGHT (B)	18	20/18AWG	3.3	3.1	1.3	1.4				
	33001-5002	LEFT (D)	18	0.75-1.00mm <sup>2</sup>	3.3	3.1	1.3	1.4				
	33001-4003	RIGHT (B)	22	22AWG	2.5	2.6	0.9	1.0				
	33001-5003	LEFT (D)	22	22AWG	2.5	2.6	0.9	1.0				
	33001-4005	RIGHT (B)	M3	0.35-0.50mm <sup>2</sup>	2.5	2.7	0.9	1.54 ±0.1				

LARGE POLARIZATION RIB - NOT TO BE USED IN MX150 SEALED CONNECTORS

FAMILY	GENDER	SEALING	PLATING	PART NUMBER	PAYOFF DIRECTION	GRIP CODE	WIRE SIZES*	A ±0.30	B ±0.30	C ±0.30	D ±0.30	SPECIAL CHARACTERISTICS
MX150	RECEPTACLE	UNSEALED	Sn	33012-2021	RIGHT (B)	14	16/14AWG	3.9	4.4	1.7	1.6	HIGH PERFORMANCE Sn
				33012-3021	LEFT (D)	14	150-2.00mm <sup>2</sup>	3.9	4.4	1.7	1.6	
				33012-2022	RIGHT (B)	18	20/18AWG	3.3	3.1	1.3	1.4	
				33012-3022	LEFT (D)	18	0.75-1.00mm <sup>2</sup>	3.3	3.1	1.3	1.4	
				33012-2023	RIGHT (B)	22	22AWG	2.5	2.6	0.9	1.0	
				33012-3023	LEFT (D)	22	0.35-0.50mm <sup>2</sup>	2.5	2.6	0.9	1.0	
			Au	33001-2021	RIGHT (B)	14	16/14AWG	3.9	4.4	1.7	1.6	
				33001-3021	LEFT (D)	14	150-2.00mm <sup>2</sup>	3.9	4.4	1.7	1.6	
				33001-2022	RIGHT (B)	18	20/18AWG	3.3	3.1	1.3	1.4	
				33001-3022	LEFT (D)	18	0.75-1.00mm <sup>2</sup>	3.3	3.1	1.3	1.4	
				33001-2023	RIGHT (B)	22	22AWG	2.5	2.6	0.9	1.0	
				33001-3023	LEFT (D)	22	0.35-0.50mm <sup>2</sup>	2.5	2.6	0.9	1.0	
			Ag	33001-4021	RIGHT (B)	14	16/14AWG	3.9	4.4	1.7	1.6	
				33001-5021	LEFT (D)	14	150-2.00mm <sup>2</sup>	3.9	4.4	1.7	1.6	
				33001-4022	RIGHT (B)	18	20/18AWG	3.3	3.1	1.3	1.4	
				33001-5022	LEFT (D)	18	0.75-1.00mm <sup>2</sup>	3.3	3.1	1.3	1.4	
				33001-4023	RIGHT (B)	22	22AWG	2.5	2.6	0.9	1.0	
				33001-5023	LEFT (D)	22	0.35-0.50mm <sup>2</sup>	2.5	2.6	0.9	1.0	

\* REFERENCE AS-33012-002 FOR SPECIFIC WIRE TYPES

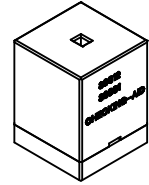


**GROMMET SEAL / CAP CONFIGURATION TO MODIFY LARGE POLARIZATION RIB CAVITY TO ACCEPT SMALL POLARIZATION RIB APPLICATIONS**

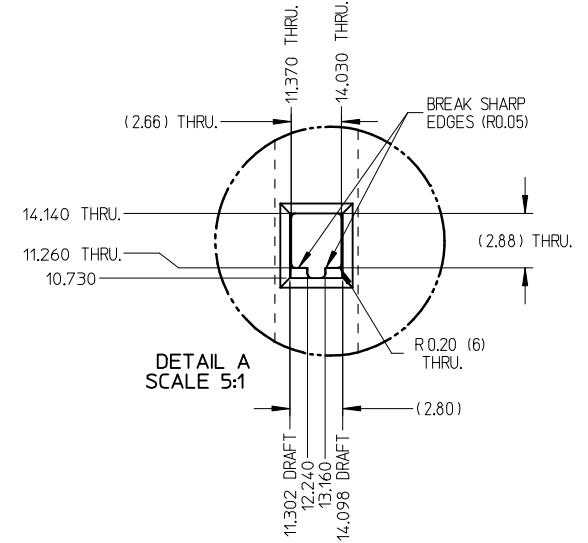
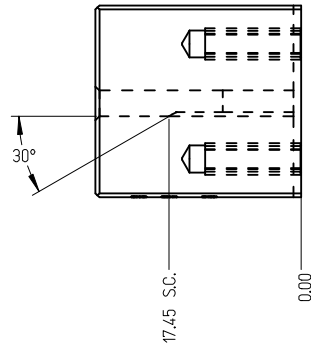
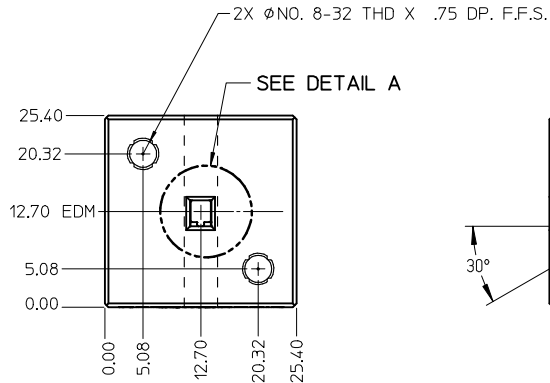
<b>ENTER DESCRIPTION</b> EC NO: UAU2014-0473 DRAWING: JENNINGS01 2013/09/18 CHKD: APPR: BMOSE 2014/01/03	<b>QUALITY SYMBOLS</b> ∇=0 ∇=0 ∇=0	<b>GENERAL TOLERANCES (UNLESS SPECIFIED)</b>		<b>DIMENSION STYLE</b> <b>MM ONLY</b>	<b>SCALE</b> <b>METRIC</b>	<b>DESIGN UNITS</b> <b>METRIC</b>	<b>THIRD ANGLE PROJECTION</b>		
		4 PLACES ± --- ± --- 3 PLACES ± 0.005 ± --- 2 PLACES ± 0.10 ± --- 1 PLACE ± 0.3 ± ---	mm INCH --- --- ± --- ± --- ± --- ± --- ± --- ± ---	DRAWN BY DATE L. PULLIAM 2005/06/21	CHECKED BY DATE A. DHIR 2005/06/21	<b>TITLE</b> <b>MX150 RECEPTACLE TERMINAL</b>			
		APPROVED BY DATE B. MOSER 2005/06/22		<b>SEE TABLE</b>		<b>MOLEX INCORPORATED</b>			
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO.	DOCUMENT NO.	SHEET NO.	<b>SD-33012-002</b> <b>2 OF 5</b>		

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

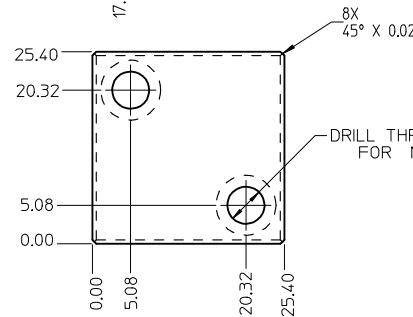
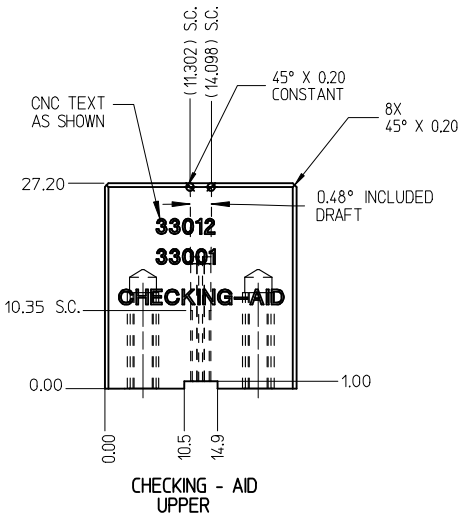
THIS CHECKING - AID IS FOR SMALL POLARIZATION RIB TERMINALS ONLY



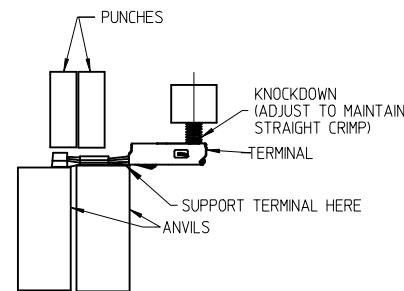
CHECKING - AID ASSEMBLY  
SCALE 1:1



DETAIL A  
SCALE 5:1



CHECKING - AID  
LOWER

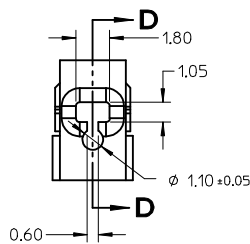
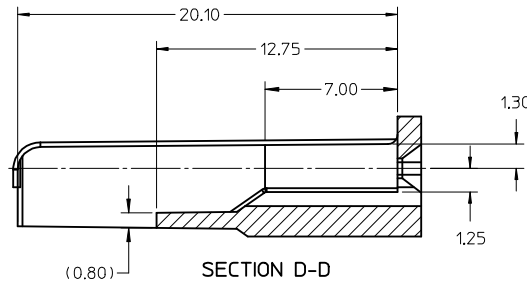
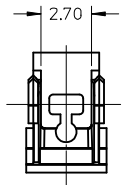


CRIMP REQUIREMENTS:

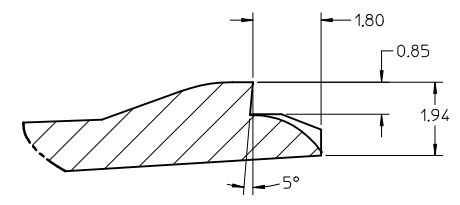
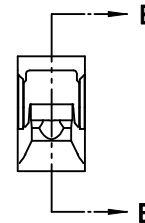
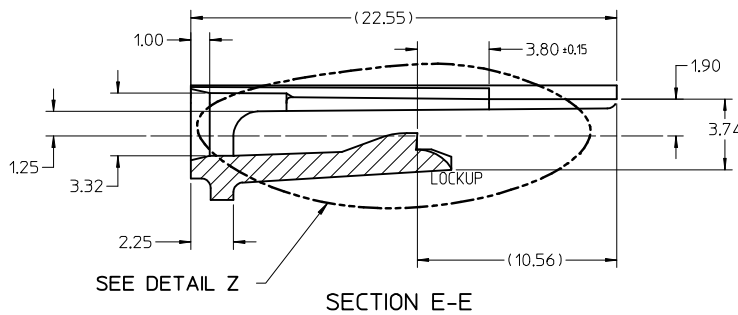
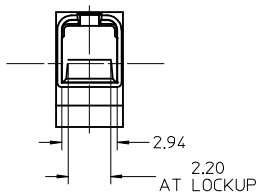
1. CRIMP STRAIGHTNESS MUST BE MAINTAINED USE A KNOCKDOWN TOOL LOCATED AS SHOWN TERMINAL BOX MUST NOT BE DEFORMED
2. AFTER CRIMPING, THE CRIMPED TERMINAL (AND UP TO 5 mm OF WIRE PAST THE INSULATOR CUTOFF TAB) MUST FIT FREELY INTO THE CHECKING-AID SHOWN ON THIS PAGE
3. FOR OTHER MECHANICAL REQUIREMENTS 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

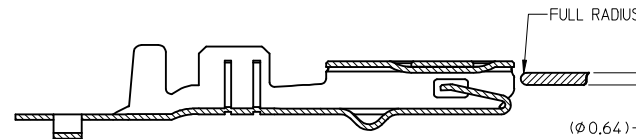
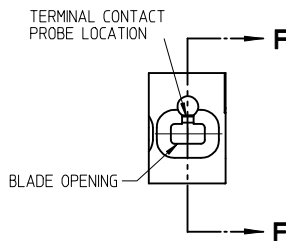
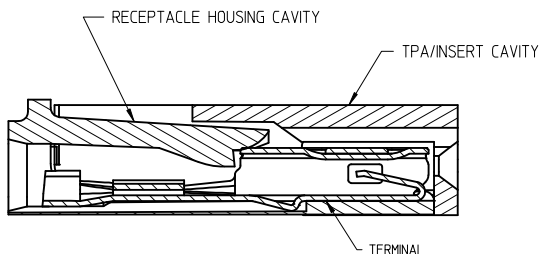
<b>ENTER DESCRIPTION</b> EC NO: UAU2014-0473 DRWNB:JENNINGS01 2013/09/18 CHKD: APPR:BMOSER 2014/01/03	QUALITY SYMBOLS 	GENERAL TOLERANCES (UNLESS SPECIFIED) <table border="1"> <thead> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> </thead> <tbody> <tr> <td>4 PLACES</td> <td>± .005</td> <td>± .0005</td> </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>		mm	INCH	4 PLACES	± .005	± .0005	3 PLACES	± 0.005	± .0005	2 PLACES	± 0.10	± .005	1 PLACE	± 0.3	± .010	DIMENSION STYLE <b>MM ONLY</b> DRAWN BY DATE L. PULLIAM 2005/06/21 CHECKED BY DATE A. DHIR 2005/06/21 APPROVED BY DATE B. MOSER 2005/06/22	SCALE <b>2:1</b> DESIGN UNITS <b>METRIC</b> THIRD ANGLE PROJECTION	MX150 RECEPTACLE TERMINAL
		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	MATERIAL NO. <b>SEE TABLE</b>	DOCUMENT NO. <b>SD-33012-002</b>	SHEET NO. <b>3 OF 5</b>	MOLEX INCORPORATED																
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																				
MATEL NO.																				



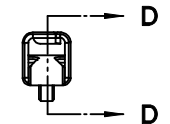
- NOTES: UNLESS OTHERWISE SPECIFIED
1. TOLERANCES: LINEAR  $\pm 0.10$   
ANGULAR  $\pm 3^\circ$
  2. ALL DRAFT WITHIN TOLERANCE.
  3. MAX RADII ON ALL CORNERS SHOWN SHARP: 0.10
  4. MAX FLASH PERMISSIBLE: 0.1
  5. EJECTOR PIN MARKS PERMISSIBLE IF FLUSH TO 0.25 BELOW SURFACE.
  6. MATERIAL: HOUSING/FINGER 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 D-D  
FOR LARGE POLARIZATION RIB APPLICATIONS  
FIG. 2



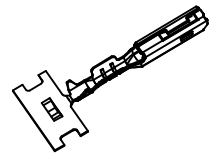
PROBING DOWN THE THROAT MUST USE THIS TERMINAL PROBE  
FOR PROBING INFORMATION REFERENCE MOLEX MX150 APPLICATION SPEC AS-33472-100

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

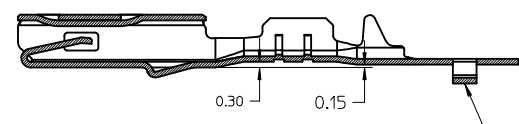
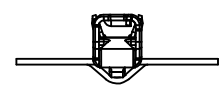
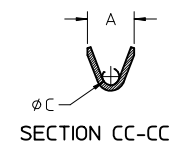
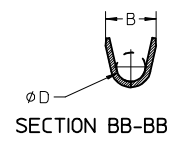
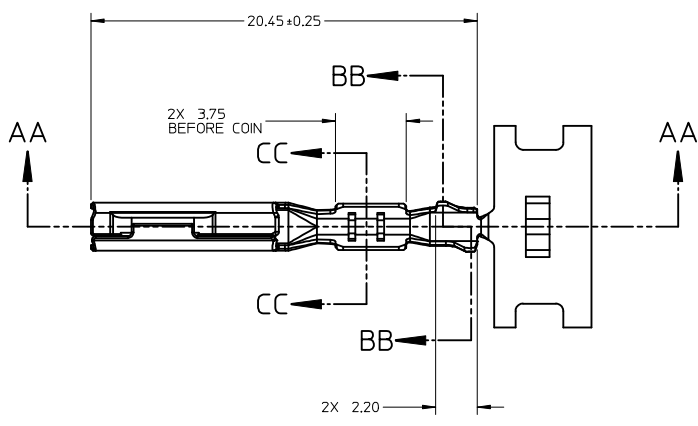
PREFERRED PROBING LOCATION IS NOT ON SPRING MEMBER  
IF ELECTRICAL CONTINUITY PROBE TOUCHES SPRING MEMBER USE PROBING AS SHOWN IN FIG. 2

<b>ENTER DESCRIPTION</b> EC NO: UAU2014-0473 DRWINB/JENNINGS01 2013/09/18 CHKD: APPR:BMOSER 2014/01/03 REV:	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE <b>MM ONLY</b>	SCALE <b>5:1</b>	DESIGN UNITS <b>METRIC</b>	THIRD ANGLE PROJECTION																											
	$\nabla = 0$ $\nabla = 0$ $\nabla = 0$	<table border="1"> <thead> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> </thead> <tbody> <tr> <td>4 PLACES</td> <td><math>\pm</math> ---</td> <td><math>\pm</math> ---</td> </tr> <tr> <td>3 PLACES</td> <td><math>\pm 0.005</math></td> <td><math>\pm</math> ---</td> </tr> <tr> <td>2 PLACES</td> <td><math>\pm 0.10</math></td> <td><math>\pm</math> ---</td> </tr> <tr> <td>1 PLACE</td> <td><math>\pm 0.3</math></td> <td><math>\pm</math> ---</td> </tr> </tbody> </table>		mm	INCH	4 PLACES	$\pm$ ---	$\pm$ ---	3 PLACES	$\pm 0.005$	$\pm$ ---	2 PLACES	$\pm 0.10$	$\pm$ ---	1 PLACE	$\pm 0.3$	$\pm$ ---	<table border="1"> <thead> <tr> <th>DRAWN BY</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td>L. PULLIAM</td> <td>2005/06/21</td> </tr> <tr> <th>CHECKED BY</th> <th>DATE</th> </tr> <tr> <td>A. DHIR</td> <td>2005/06/21</td> </tr> <tr> <th>APPROVED BY</th> <th>DATE</th> </tr> <tr> <td>B. MOSER</td> <td>2005/06/22</td> </tr> </tbody> </table>	DRAWN BY	DATE	L. PULLIAM	2005/06/21	CHECKED BY	DATE	A. DHIR	2005/06/21	APPROVED BY	DATE	B. MOSER	2005/06/22	TITLE <b>MX150 RECEPTACLE TERMINAL</b>		
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	ANGULAR $\pm 3^\circ$	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE TABLE	MATERIAL NO.	DOCUMENT NO.	SHEET NO.																											

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION



ISO VIEW  
SCALE 2:1



P/N'S 33012-2004/3004  
33001-4005/5005

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

ENTER DESCRIPTION EC NO: UAU2014-0473 DRW:BJENNINGS01 2013/09/18 CHKD: APPR:BMOSER 2014/01/03	QUALITY SYMBOLS ▽=0 ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE <b>MM ONLY</b>		SCALE 5:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION			
		4 PLACES ± --- ± ---	3 PLACES ± 0.005 ± ---	2 PLACES ± 0.10 ± ---	1 PLACE ± 0.3 ± ---	ANGULAR ± 3°	DRAWN BY L. PULLIAM	DATE 2005/06/21	TITLE MX150 RECEPTACLE TERMINAL		
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS					CHECKED BY A. DHIR	DATE 2005/06/21	MOLEX INCORPORATED		
		SEE TABLE					APPROVED BY B. MOSER	DATE 2005/06/22	MATERIAL NO. SD-33012-002	SHEET NO. 5 OF 5	