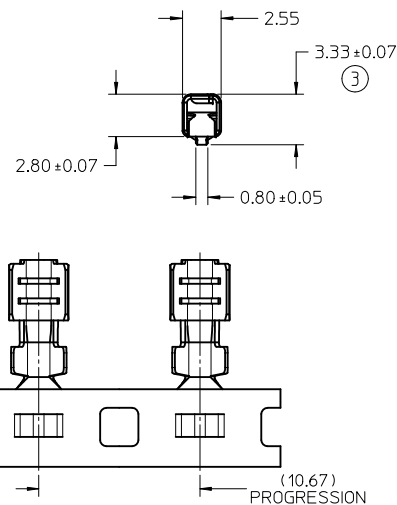


DIMENSIONS FOR LARGE POLARIZATION RIB TERMINAL ONLY

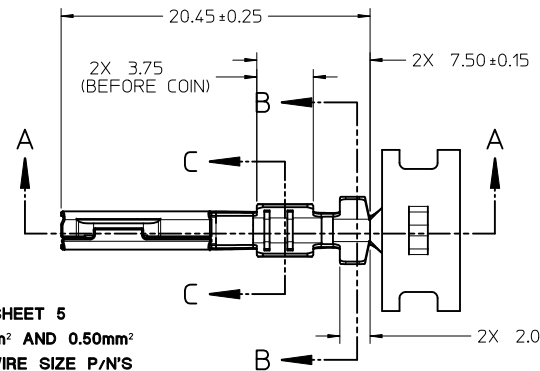
NOTES: (UNLESS OTHERWISE SPECIFIED)

- MATING TERMINAL SHOWN ON SD-33000-001
- MATERIAL: ASTM B422, UNS C19025, HR04
THICKNESS: 0.30 mm ±0.01
TEMPER: FULL HARD (REF)
TENSILE: 496 MIN MPA
- TIN PLATED TERMINAL FINISH:
OVERALL UNDERPLATE ELECTRODEPOSITED NICKEL
OVERALL ELECTRODEPOSITED REFLOW TIN
- GOLD PLATED TERMINAL FINISH:
OVERALL UNDERPLATE ELECTRODEPOSITED DUCTILE SULFAMATE NICKEL
CONTACT AREA - ELECTRODEPOSITED GOLD
GRIP AREA - ELECTRODEPOSITED 100% TIN MATTE FINISH
- 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
- MEETS PERFORMANCE SPECIFICATION FOR CABLE TO TERMINAL ELECTRICAL CRIMPS PER SAE/USCAR-21 (8/2001)
- MEETS PERFORMANCE STANDARD FOR AUTOMOTIVE ELECTRICAL CONNECTOR SYSTEMS FOR SAE/USCAR-2, REV. 4 (TEMP CLASS 3) (4/2001)
- MEETS ELECTRICAL CONNECTION SYSTEM DESIGN SPECIFICATION (SDS) REV.11 (5/2002)
- MEETS FIELD CORRELATED LIFE TEST (FCLT) PER SAE/USCAR-20 (11/2001)
- MEETS WIRING COMPONENT DESIGN GUIDELINES SAE/USCAR-12 REV 2 (12/2001)
- TSC ON A DIMENSION TO BE INTERPRETED AS DISTANCE TO A THEORETICAL SHARP CORNER AS IF THE RADIUS WERE NOT PRESENT
- REFERENCE 97BG-14474-AAB FOR LARGE POLARIZATION RIB CAVITY SPECIFICATION
- INSERTION FORCE (TIN) AVG. FROM PV TESTING =
3.8N LARGE POLARIZATION RIB
3.5N SMALL POLARIZATION RIB
(REFERENCE)
- ALL DIMENSIONS EXCEPT (1) & (2) ARE COMMON TO BOTH SMALL AND LARGE POLARIZATION RIB TERMINALS
- REFERENCE PK-31300-516 FOR REEL DIRECTION
- REFERENCE AS-33012-002 FOR CRIMP INFORMATION



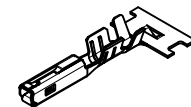
STAMP PLATING TYPE
Sn-TIN, Au-GOLD OR
Ag-SILVER IN THIS
AREA

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

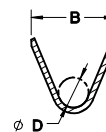


SECTION A-A

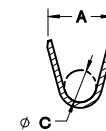
CARRIER BUMP DIRECTION
POINTS DOWN FOR TIN PLATED TERMINALS
POINTS UP FOR PRECIOUS PLATED TERMINALS



SCALE 2:1



SECTION B-B SCALE 5:1



SECTION C-C SCALE 5:1

ENTER DESCRIPTION EC NO.: UAU2011-0559 DRWN:YEN05 CHKD: B2		REVISION 2011/01/12 APPR:BMOSER 2011/01/20		DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)			DIMENSION STYLE MM ONLY		SCALE 4:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION			
							mm	INCH	DRAWN BY L. PULLIAM	DATE 2005/06/21	TITLE MX150 RECEPTACLE TERMINAL					
						4 PLACES	± ---	± ---	CHECKED BY A. DHIR		DATE 2005/06/21	MOLEX INCORPORATED				
						3 PLACES	± 0.005	± ---	APPROVED BY B. MOSER		DATE 2005/06/22					
						2 PLACES	± 0.10	± ---	MATERIAL NO.		DOCUMENT NO.					
						1 PLACE	± 0.3	± ---	SEE TABLE		SD-33012-002					
						ANGULAR ± 3 °			SIZE C		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					
						DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS										

13	12	11	10	9	8	7	6	5	4	3	2	1
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	LEFT PAYOFF DIRECTION D			SAE (AWG)	METRIC (mm²)							
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	10-0.75	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	10-0.75	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	NOT TO BE USED IN CONNECTOR SYSTEMS WITH CIRCUIT COUNTS HIGHER THAN 8 DUE TO HIGHER CONNECTOR MATE/UNMATE FORCE		
33001-4002	33001-5002	SILVER	18	18/20	10-0.75	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	10-0.75	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	10-0.75	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	NOT TO BE USED IN CONNECTOR SYSTEMS WITH CIRCUIT COUNTS HIGHER THAN 8 DUE TO HIGHER CONNECTOR MATE/UNMATE FORCE		
33001-4022	33001-5022	SILVER	18	18/20	10-0.75	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			

SECTION G-G

GROMMET CAP OPENING

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

ENTER DESCRIPTION EC NO: UAU2011-0559 DRWN: YEN05 CHKD: APPR: BMOSER 2011/01/12 2011/01/20	REV	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE MM ONLY	SCALE	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION																											
				<table><tr><td></td><td>mm</td><td>INCH</td></tr><tr><td>4 PLACES</td><td>± ---</td><td>± ---</td></tr><tr><td>3 PLACES</td><td>± 0.005</td><td>± ---</td></tr><tr><td>2 PLACES</td><td>± 0.10</td><td>± ---</td></tr><tr><td>1 PLACE</td><td>± 0.3</td><td>± ---</td></tr></table>		mm	INCH	4 PLACES	± ---	± ---	3 PLACES	± 0.005	± ---	2 PLACES	± 0.10	± ---	1 PLACE	± 0.3	± ---	<table><tr><td>DRAWN BY</td><td>DATE</td></tr><tr><td>L. PULLIAM</td><td>2005/06/21</td></tr><tr><td>CHECKED BY</td><td>DATE</td></tr><tr><td>A. DHIR</td><td>2005/06/21</td></tr><tr><td>APPROVED BY</td><td>DATE</td></tr><tr><td>B. MOSER</td><td>2005/06/22</td></tr></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 MX150 RECEPTACLE TERMINAL	
		mm	INCH																															
	4 PLACES	± ---	± ---																															
	3 PLACES	± 0.005	± ---																															
2 PLACES	± 0.10	± ---																																
1 PLACE	± 0.3	± ---																																
DRAWN BY	DATE																																	
L. PULLIAM	2005/06/21																																	
CHECKED BY	DATE																																	
A. DHIR	2005/06/21																																	
APPROVED BY	DATE																																	
B. MOSER	2005/06/22																																	
			ANGULAR ± 3 °																															
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE TABLE		MOLEX INCORPORATED																												
				SIZE C	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																													

1b_frame_C.P_AM.T
Rev. F 2009/06/18

12

11

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3

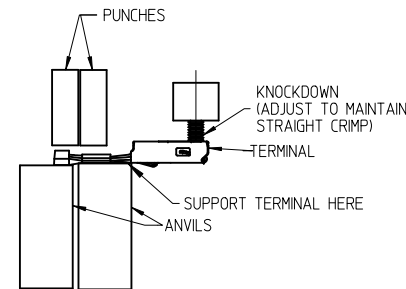
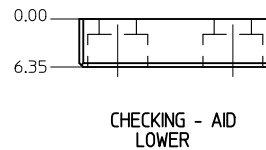
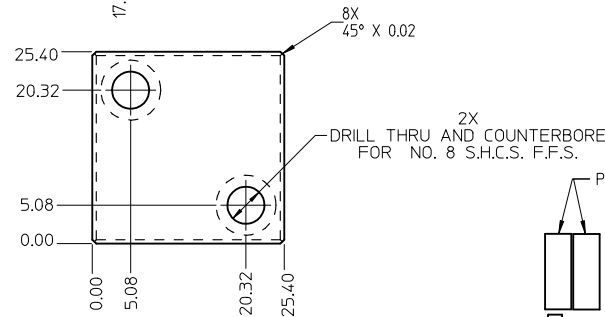
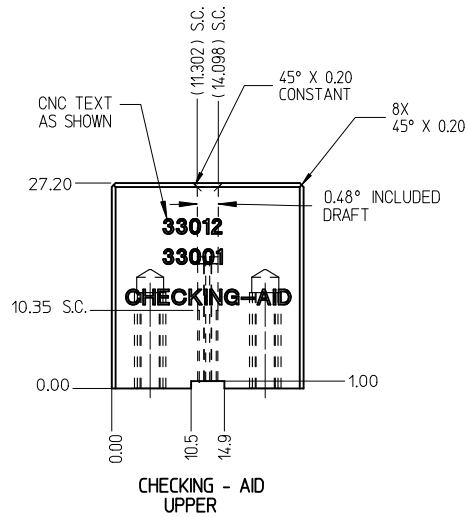
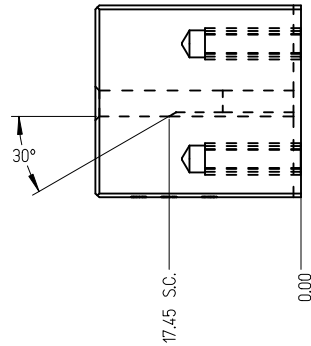
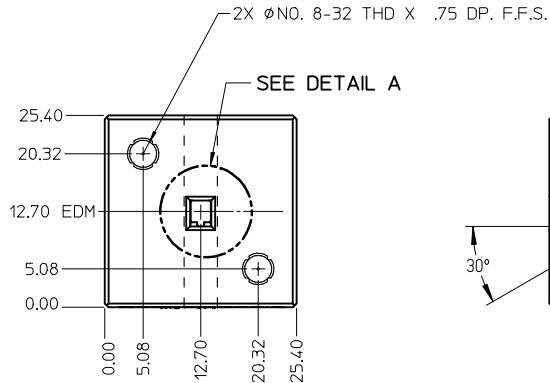
2

1

THIS CHECKING - AID IS FOR SMALL POLARIZATION RIB TERMINALS ONLY

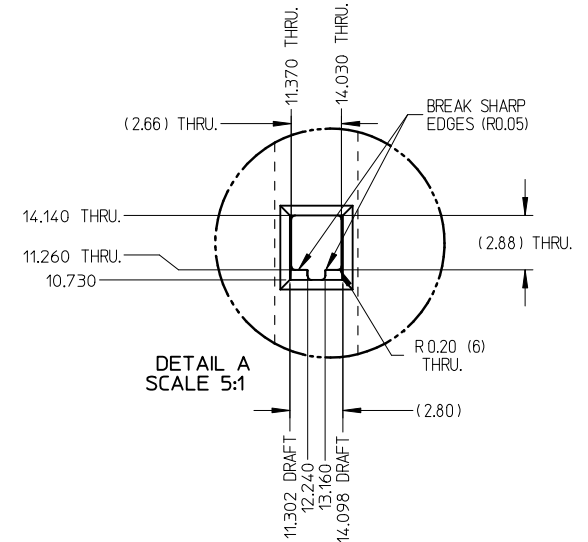


CHECKING - AID ASSEMBLY
SCALE 1:1



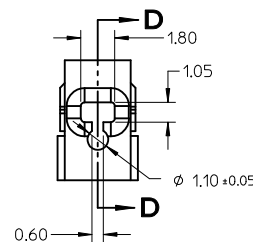
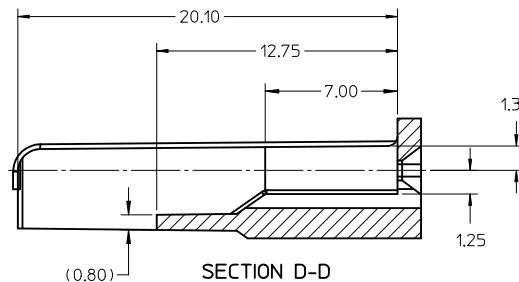
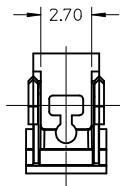
CRIMP REQUIREMENTS:

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)



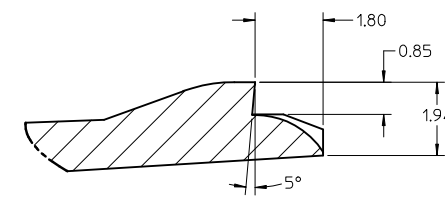
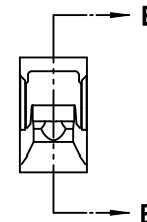
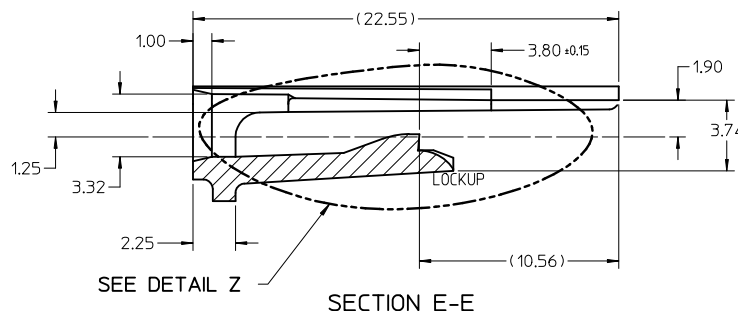
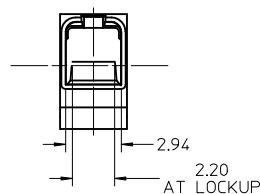
UPPER & LOWER
CHECKING-AID
A2 TOOL STEEL
HARDEN & GRIND
ROCKWELL "C" 56-58

ENTER DESCRIPTION EC NO: UAU2011-0559 DRWN:YEN05 CHKD: APPR:BMOSER	DESCRIPTION REV 2011/01/12 2011/01/20	QUALITY SYMBOLS ▽=0 ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)			DIMENSION STYLE MM ONLY		SCALE 2:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
				mm	INCH	DRAWN BY L. PULLIAM	DATE 2005/06/21	TITLE MX150 RECEPTACLE TERMINAL				
			4 PLACES	± ---	± ---	CHECKED BY A. DHIR	DATE 2005/06/21					
			3 PLACES	± 0.005	± ---	APPROVED BY B. MOSER	DATE 2005/06/22					
			2 PLACES	± 0.10	± ---	MATERIAL NO. SEE TABLE		DOCUMENT NO. SD-33012-002				
			1 PLACE	± 0.3	± ---							
			ANGULAR ± 3 °			MOLEX INCORPORATED						
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS									
	B2	SIZE C	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION									

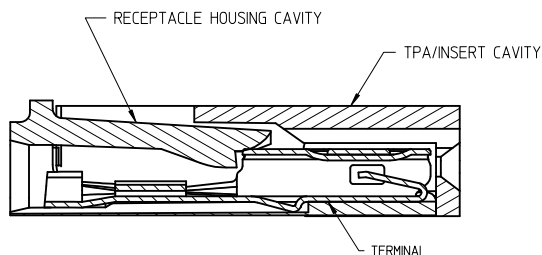


NOTES: UNLESS OTHERWISE SPECIFIED

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

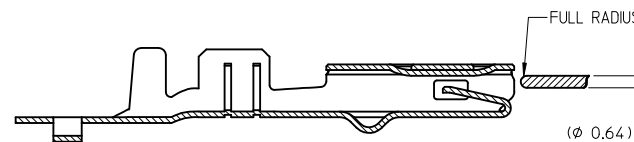
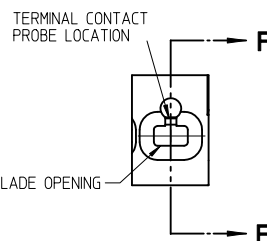


DETAIL Z
SCALE 20:1

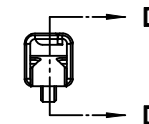


SECTION F-F

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

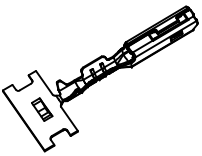
ENTER DESCRIPTION
EC NO: UAU2011-0559 2011/01/12
DRAWN BY: REN05
CHKD: APPR: BMO/SER 2011/01/20
REV

QUALITY
SYMBOLS
▽=0
▽=0
▽=0

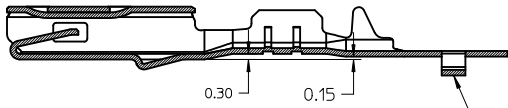
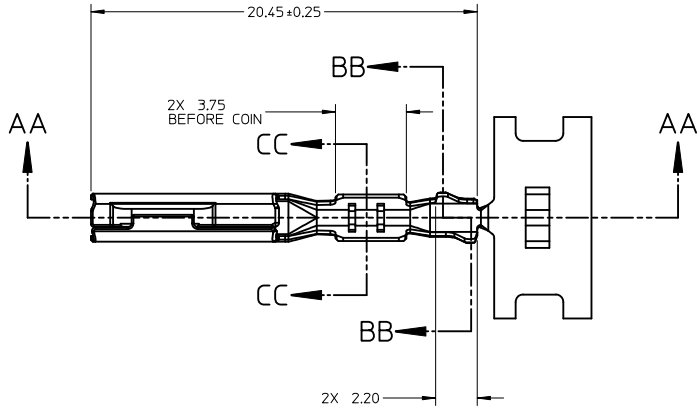
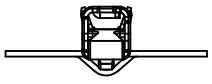
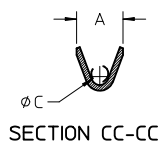
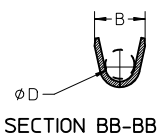
GENERAL TOLERANCES (UNLESS SPECIFIED)		
	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± 0.005	± ---
2 PLACES	± 0.10	± ---
1 PLACE	± 0.3	± ---
ANGULAR $\pm 3^\circ$		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		

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 5:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
TITLE MX150 RECEPTACLE TERMINAL		
MOLEX INCORPORATED		
DOCUMENT NO. SD-33012-002		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 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: UAU2011-0559 DRWN:REN05 CHKD: APPR:BMOSER	DESCRIPTION 2011/01/12 2011/01/20	QUALITY SYMBOLS ▽=0 ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)			DIMENSION STYLE MM ONLY		SCALE 5:1	DESIGN UNITS METRIC	 THIRD ANGLE PROJECTION		
				mm	INCH	DRAWN BY L. PULLIAM	DATE 2005/06/21	TITLE MX150 RECEPTACLE TERMINAL				
			4 PLACES	± ---	± ---	CHECKED BY A. DHIR	DATE 2005/06/21					
			3 PLACES	± 0.005	± ---	APPROVED BY B. MOSER		DATE 2005/06/22	 MOLEX INCORPORATED			
			2 PLACES	± 0.10	± ---							
			1 PLACE	± 0.3	± ---							
			ANGULAR ± 3 °			MATERIAL NO.		DOCUMENT NO.				SHEET NO.
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			SEE TABLE		SD-33012-002				5 OF 5			
B2	REV		SIZE C		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION							