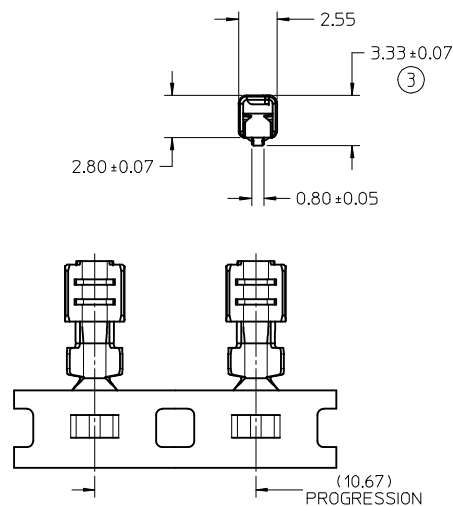


DIMENSIONS FOR LARGE POLARIZATION RIB TERMINAL ONLY

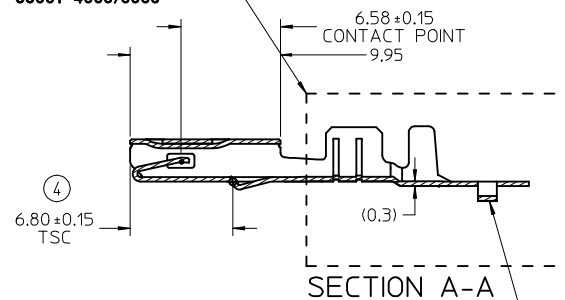
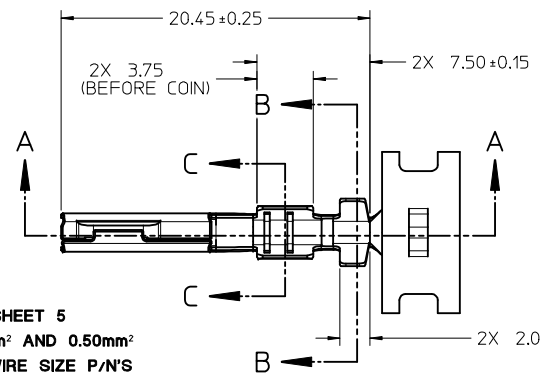
NOTES: (UNLESS OTHERWISE SPECIFIED)

- 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) (5/2004)
- MEETS ELECTRICAL CONNECTION SYSTEM DESIGN SPECIFICATION (SDS) REV.11 (5/2002)
- MEETS FIELD CORRELATED LIFE TEST (FCLT) PER SAE/USCAR-20 (6/2004)
- 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), (3) & (4) ARE COMMON TO BOTH SMALL AND LARGE POLARIZATION RIB TERMINALS
- REFERENCE PK-31300-516 FOR REEL DIRECTION
- REFERENCE AS-33012-002 FOR CRIMP INFORMATION



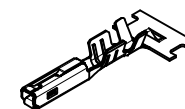
STAMP PLATING TYPE
Sn-TIN, Au-GOLD OR
Ag-SILVER IN THIS
AREA

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

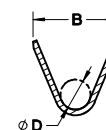


SECTION A-A

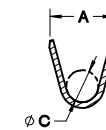
CARRIER BUMP DIRECTION
POINTS DOWN FOR TIN PLATED TERMINALS
POINTS UP FOR PRECIOUS PLATED TERMINALS



SCALE 2:1



SECTION B-B SCALE 5:1



SECTION C-C SCALE 5:1

ENTER DESCRIPTION
EC NO: UAU2014-0473
DRAWN BY JENNINGS01 2013/09/18
CHKD:
APPR: BMOSER 2014/01/03

REV	DESCRIPTION
1	QUALITY SYMBOLS
2	QUALITY SYMBOLS
3	QUALITY SYMBOLS

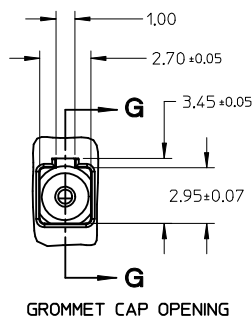
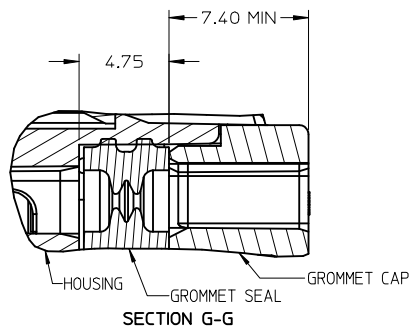
GENERAL TOLERANCES (UNLESS SPECIFIED)	
mm	INCH
4 PLACES ± .005	± .0005
3 PLACES ± .005	± .0005
2 PLACES ± .010	± .001
1 PLACE ± .03	± .003
ANGULAR ± 3 °	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	

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

SCALE 4:1	DESIGN UNITS METRIC		THIRD ANGLE PROJECTION
TITLE			
MX150 RECEPTACLE TERMINAL			
MOLEX INCORPORATED			
DOCUMENT NO. SD-33012-002			SHEET NO. 1 OF 5

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)		150-2.00mm²						
				33012-2002	RIGHT (B)	18	20/18AWG	3.3	3.1	1.3	1.4		
				33012-3002	LEFT (D)		0.75-1.00mm²						
				33012-2003	RIGHT (B)	22	22AWG	2.5	2.6	0.9	1.0		
				33012-3003	LEFT (D)								
			33012-2004	RIGHT (B)	M3	0.35-0.50mm²	2.5	2.7	0.9	1.54 ±0.1			
			33012-3004	LEFT (D)									
			Au	33001-2003	RIGHT (B)	14	16/14AWG	3.9	4.4	1.7	1.6	HIGH PERFORMANCE Au	
				33001-3003	LEFT (D)		150-2.00mm²						
				33001-2004	RIGHT (B)	18	20/18AWG	3.3	3.1	1.3	1.4		
				33001-3004	LEFT (D)		0.75-1.00mm²						
				33001-2005	RIGHT (B)	22	22AWG	2.5	2.6	0.9	1.0		
				33001-3005	LEFT (D)								
			33001-2006	RIGHT (B)	M3	0.35-0.50mm²	2.5	2.7	0.9	1.54 ±0.1			
			33001-3006	LEFT (D)									
			Ag	33001-4001	RIGHT (B)	14	16/14AWG	3.9	4.4	1.7	1.6	HIGH PERFORMANCE Ag	
				33001-5001	LEFT (D)		150-2.00mm²						
				33001-4002	RIGHT (B)	18	20/18AWG	3.3	3.1	1.3	1.4		
				33001-5002	LEFT (D)		0.75-1.00mm²						
				33001-4003	RIGHT (B)	22	22AWG	2.5	2.6	0.9	1.0		
				33001-5003	LEFT (D)								
			33001-4005	RIGHT (B)	M3	0.35-0.50mm²	2.5	2.7	0.9	1.54 ±0.1			
			33001-5005	LEFT (D)									
LARGE POLARIZATION RIB - NOT TO BE USED IN MX150 SEALED CONNECTORS													
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)		150-2.00mm²						
				33012-2022	RIGHT (B)	18	20/18AWG	3.3	3.1	1.3	1.4		
				33012-3022	LEFT (D)		0.75-1.00mm²						
				33012-2023	RIGHT (B)	22	22AWG	2.5	2.6	0.9	1.0		
			33012-3023	LEFT (D)	0.35-0.50mm²								
			Au	33001-2021	RIGHT (B)	14	16/14AWG	3.9	4.4	1.7	1.6	HIGH PERFORMANCE Au	
				33001-3021	LEFT (D)		150-2.00mm²						
				33001-2022	RIGHT (B)	18	20/18AWG	3.3	3.1	1.3	1.4		
				33001-3022	LEFT (D)		0.75-1.00mm²						
				33001-2023	RIGHT (B)	22	22AWG	2.5	2.6	0.9	1.0		
			33001-3023	LEFT (D)	0.35-0.50mm²								
			Ag	33001-4021	RIGHT (B)	14	16/14AWG	3.9	4.4	1.7	1.6	HIGH PERFORMANCE Ag	
				33001-5021	LEFT (D)		150-2.00mm²						
				33001-4022	RIGHT (B)	18	20/18AWG	3.3	3.1	1.3	1.4		
				33001-5022	LEFT (D)		0.75-1.00mm²						
				33001-4023	RIGHT (B)	22	22AWG	2.5	2.6	0.9	1.0		
			33001-5023	LEFT (D)	0.35-0.50mm²								

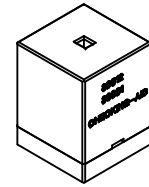
* REFERENCE AS-33012-002 FOR SPECIFIC WIRE TYPES



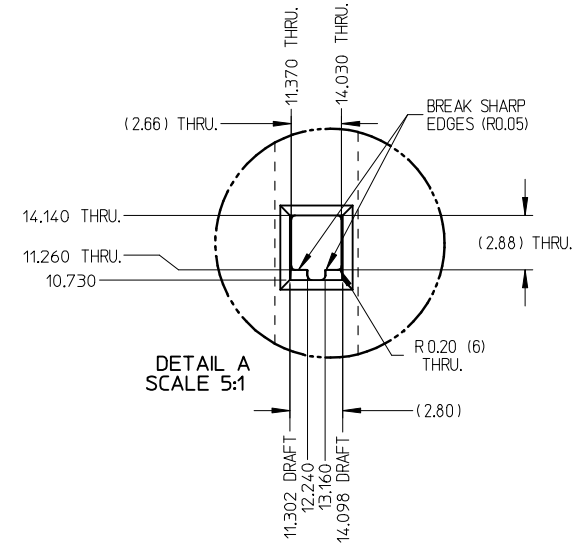
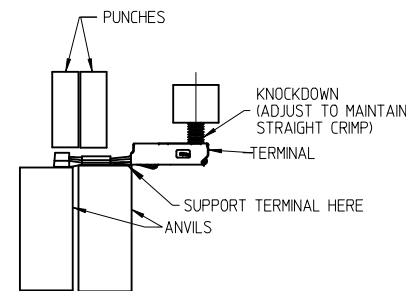
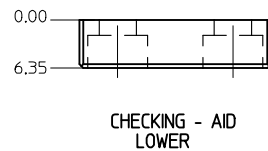
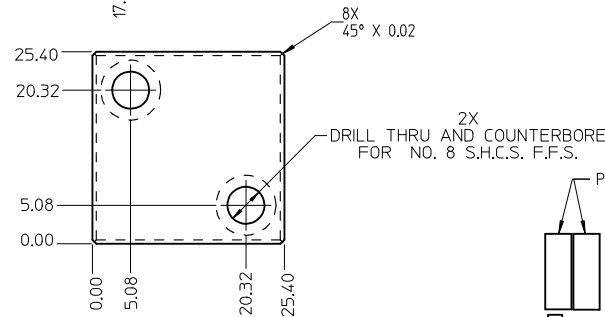
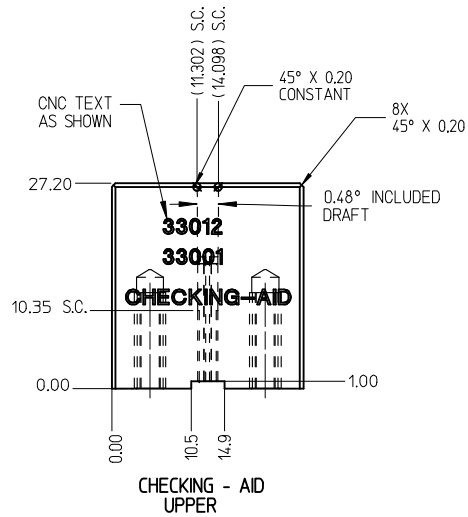
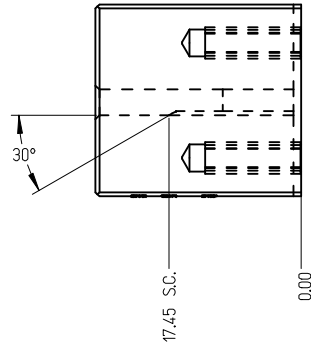
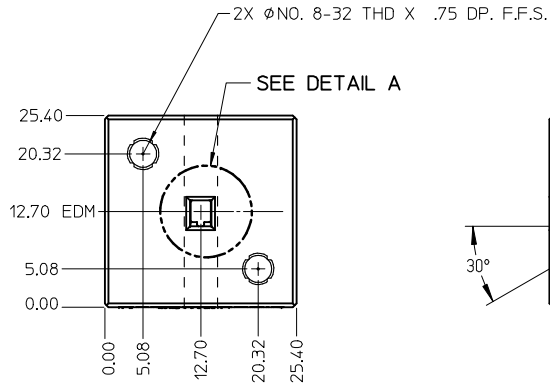
GROMMET SEAL / CAP CONFIGURATION TO MODIFY LARGE POLARIZATION RIB CAVITY TO ACCEPT SMALL POLARIZATION RIB APPLICATIONS

ENTER DESCRIPTION EC NO: UAU2014-0473 DRAWN BY: JENNINGS01 2013/09/18 CHKD: APPR: BMOSER 2014/01/03 REV:	QUALITY SYMBOLS ▽=0 ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE METRIC	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		DOCUMENT NO. SD-33012-002		
		2 PLACES ± 0.10 1 PLACE ± 0.3		ANGULAR ± 3 °		SHEET NO. 2 OF 5		
		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		

THIS CHECKING - AID IS FOR SMALL POLARIZATION RIB TERMINALS ONLY



CHECKING - AID ASSEMBLY
SCALE 1:1

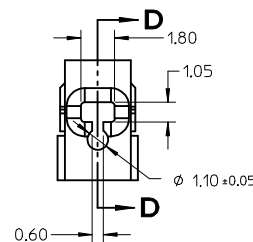
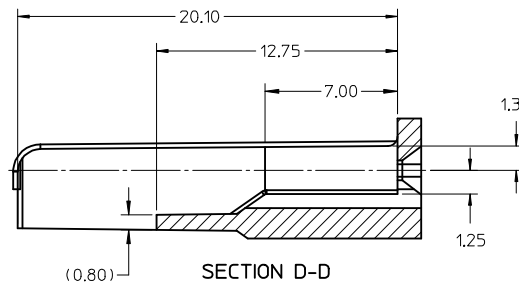
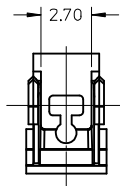


CRIMP REQUIREMENTS:

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)

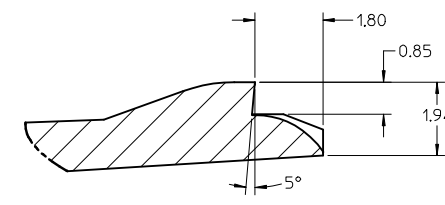
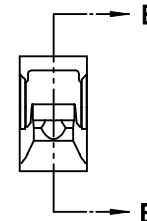
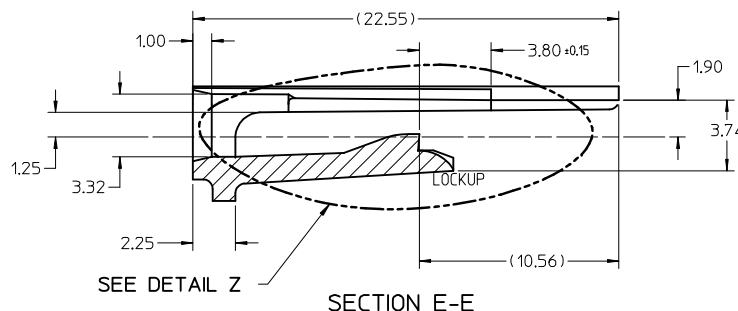
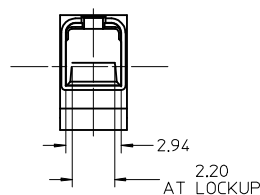
UPPER & LOWER
CHECKING-AID
A2 TOOL STEEL
HARDEN & GRIND
ROCKWELL "C" 56-58

ENTER DESCRIPTION EC NO: UAU2014-0473 DRWN:BJENNINGS01 2013/09/18 CHKD: APPR:BMOSER 2014/01/03	DESCRIPTION	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		molex MOLEX INCORPORATED				
			2 PLACES	± 0.10	± ---									
			1 PLACE	± 0.3	± ---	MATERIAL NO. SEE TABLE		DOCUMENT NO. SD-33012-002						
			ANGULAR ± 3 °											
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			SIZE C		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION									

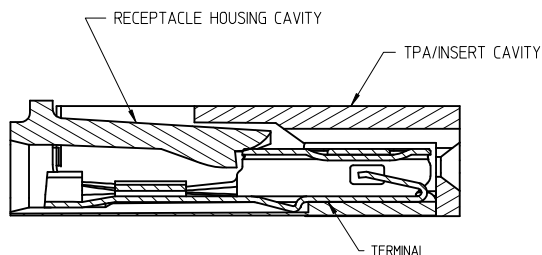


NOTES: UNLESS OTHERWISE SPECIFIED

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

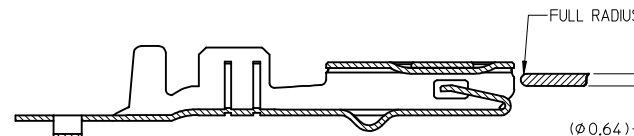
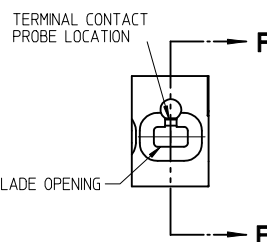


DETAIL Z
SCALE 20:1

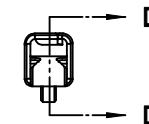


SECTION F-F

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

FOR PROBING INFORMATION REFERENCE
MOLEX MX150 APPLICATION SPEC AS-33472-100

PREFERRED PROBING LOCATION
IS NOT ON SPRING MEMBER

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

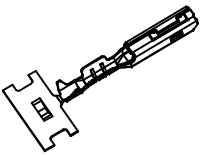
ENTER DESCRIPTION
EC NO: UAU2014-0473
DRAWN BY: JENNINGS01 2013/09/18
CHKD: APPR: BMOSER 2014/01/03

REV	DESCRIPTION
1	QUALITY SYMBOLS
2	QUALITY SYMBOLS
3	QUALITY SYMBOLS

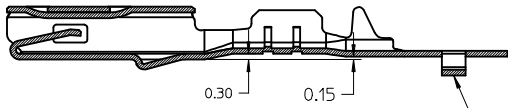
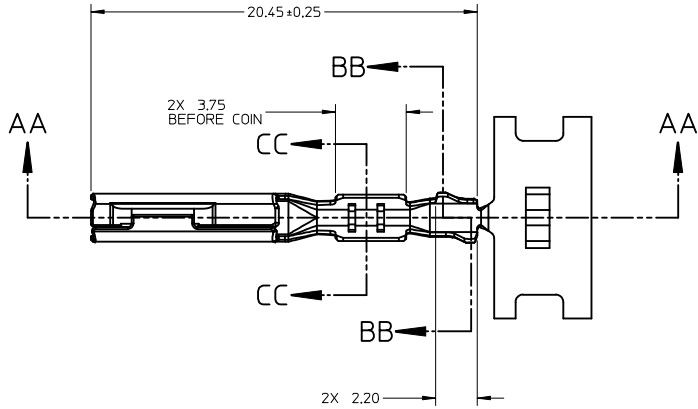
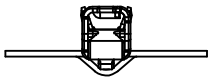
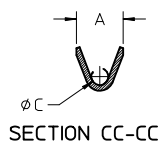
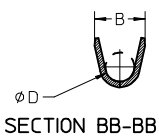
GENERAL TOLERANCES (UNLESS SPECIFIED)	
mm	INCH
4 PLACES ± 0.10	± 0.004
3 PLACES ± 0.005	± 0.0002
2 PLACES ± 0.10	± 0.004
1 PLACE ± 0.3	± 0.012
ANGULAR $\pm 3^\circ$	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	

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	DESIGN UNITS	THIRD ANGLE PROJECTION
5:1	METRIC	
MX150 RECEPTACLE TERMINAL		
MOLEX INCORPORATED		
DOCUMENT NO.		SHEET NO.
SD-33012-002		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: UAU2014-0473 DRWN:8 JENNINGS01 2013/09/18 CHKD: APPR:BMOSER 2014/01/03	DESCRIPTION	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	± ---	MATERIAL NO. SEE TABLE				
			1 PLACE	±0.3	± ---	SIZE C		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		
			ANGULAR ± 3 °		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS					