

## Excellent Integrated System Limited

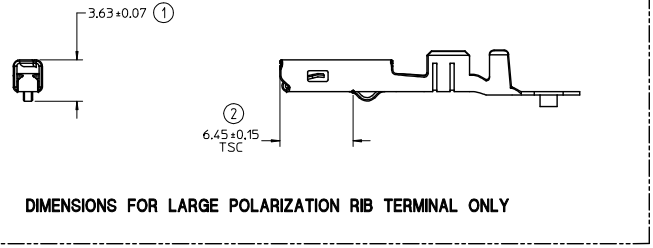
Stocking Distributor

Click to view price, real time Inventory, Delivery & Lifecycle Information:

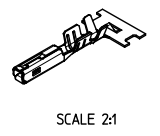
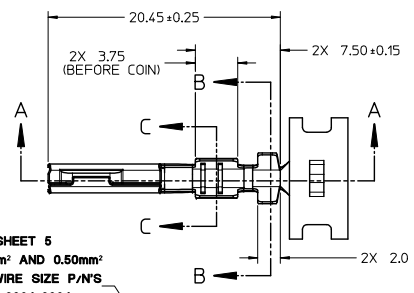
[Molex Connector Corporation](#)  
[0330122023](#)

For any questions, you can email us directly:

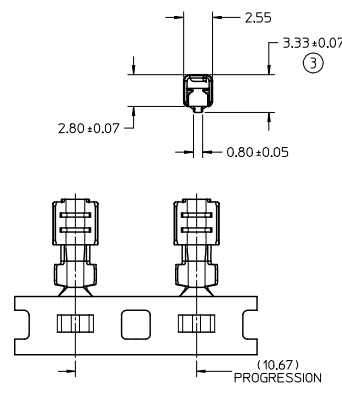
[sales@integrated-circuit.com](mailto:sales@integrated-circuit.com)



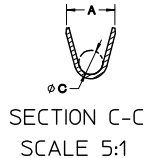
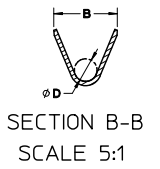
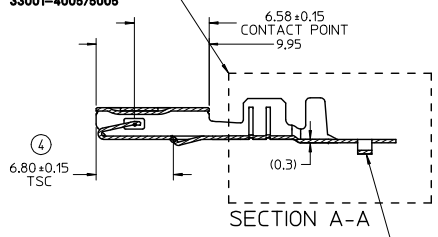
STAMP PLATING TYPE  
 Sn-TIN, Au-GOLD OR  
 Ag-SILVER IN THIS  
 AREA



- 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  
 GRP 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) SEM-BRIGHT FINISH  
 - SILVER ANTI-TARNISH + EVABRITE  
 GRP AREA - ELECTRODEPOSITED 100% TIN MATTE FINISH
  - MEETS PERFORMANCE SPECIFICATION FOR CABLE TO TERMINAL  
 ELECTRICAL CRIMPS PER SAE/USCAR-21 (8/2000)
  - 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  
 (ISDS) 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 9786-1474-AAB FOR LARGE POLARIZATION RIB  
 CAVITY SPECIFICATION
  - INSERTION FORCE (TINI) 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-31000-516 FOR REEL DIRECTION
  - REFERENCE AS-33012-002 FOR CRIMP INFORMATION



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

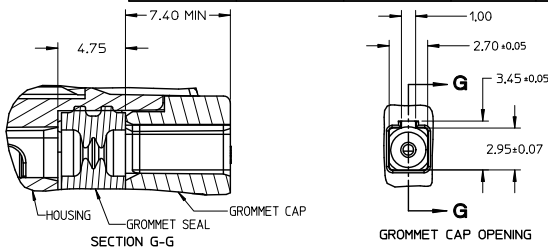


CARRIER BUMP DIRECTION  
 POINTS DOWN FOR TIN PLATED TERMINALS  
 POINTS UP FOR PRECIOUS PLATED TERMINALS

ENTER DESCRIPTION EC NO: UAU02014-0473 DRAWN BY: JENNINGS01 2013/09/18 CHKD: APPROB/MOSER 2014/01/03 REV	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	□ = 0 ▽ = 0 ▽ = 0	mm INCH 4 PLACES ± --- ± --- 3 PLACES ± 0.005 ± --- 2 PLACES ± 0.10 ± --- 1 PLACE ± 0.3 ± --- ANGULAR ± 3°	MM ONLY	4:1	METRIC	□ THIRD ANGLE PROJECTION
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE TABLE	MX150 RECEPTACLE TERMINAL 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)		150-2.00mm <sup>2</sup>					
				33012-2002	RIGHT (B)	18	20/18AWG	3.3	3.1	1.3	1.4	
				33012-3002	LEFT (D)		0.75-1.00mm <sup>2</sup>					
				33012-2003	RIGHT (B)	22	22AWG	2.5	2.6	0.9	1.0	
				33012-3003	LEFT (D)							
			33012-2004	RIGHT (B)	M3	0.35-0.50mm <sup>2</sup>	2.5	2.7	0.9	1.54 ±0.1		
			33012-3004	LEFT (D)								
			33001-2003	RIGHT (B)	14	16/14AWG	3.9	4.4	1.7	1.6	HIGH PERFORMANCE Au	
			33001-3003	LEFT (D)		150-2.00mm <sup>2</sup>						
			33001-2004	RIGHT (B)	18	20/18AWG	3.3	3.1	1.3	1.4		
			33001-3004	LEFT (D)		0.75-1.00mm <sup>2</sup>						
			33001-2005	RIGHT (B)	22	22AWG	2.5	2.6	0.9	1.0		
			33001-3005	LEFT (D)								
			33001-2006	RIGHT (B)	M3	0.35-0.50mm <sup>2</sup>	2.5	2.7	0.9	1.54 ±0.1		
			33001-3006	LEFT (D)								
			33001-4001	RIGHT (B)	14	16/14AWG	3.9	4.4	1.7	1.6	HIGH PERFORMANCE Ag	
			33001-5001	LEFT (D)		150-2.00mm <sup>2</sup>						
			33001-4002	RIGHT (B)	18	20/18AWG	3.3	3.1	1.3	1.4		
			33001-5002	LEFT (D)		0.75-1.00mm <sup>2</sup>						
			33001-4003	RIGHT (B)	22	22AWG	2.5	2.6	0.9	1.0		
			33001-5003	LEFT (D)								
			33001-4005	RIGHT (B)	M3	0.35-0.50mm <sup>2</sup>	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)		150-2.00mm <sup>2</sup>					
				33012-2022	RIGHT (B)	18	20/18AWG	3.3	3.1	1.3	1.4	
				33012-3022	LEFT (D)		0.75-1.00mm <sup>2</sup>					
				33012-2023	RIGHT (B)	22	22AWG	2.5	2.6	0.9	1.0	
				33012-3023	LEFT (D)							
			33001-2021	RIGHT (B)	14	16/14AWG	3.9	4.4	1.7	1.6	HIGH PERFORMANCE Au	
			33001-3021	LEFT (D)		150-2.00mm <sup>2</sup>						
			33001-2022	RIGHT (B)	18	20/18AWG	3.3	3.1	1.3	1.4		
			33001-3022	LEFT (D)		0.75-1.00mm <sup>2</sup>						
			33001-2023	RIGHT (B)	22	22AWG	2.5	2.6	0.9	1.0		
			33001-3023	LEFT (D)								
			33001-4021	RIGHT (B)	14	16/14AWG	3.9	4.4	1.7	1.6	HIGH PERFORMANCE Ag	
			33001-5021	LEFT (D)		150-2.00mm <sup>2</sup>						
			33001-4022	RIGHT (B)	18	20/18AWG	3.3	3.1	1.3	1.4		
			33001-5022	LEFT (D)		0.75-1.00mm <sup>2</sup>						
			33001-4023	RIGHT (B)	22	22AWG	2.5	2.6	0.9	1.0		
			33001-5023	LEFT (D)								

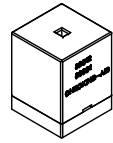
\* REFERENCE AS-33012-002 FOR SPECIFIC WIRE TYPES



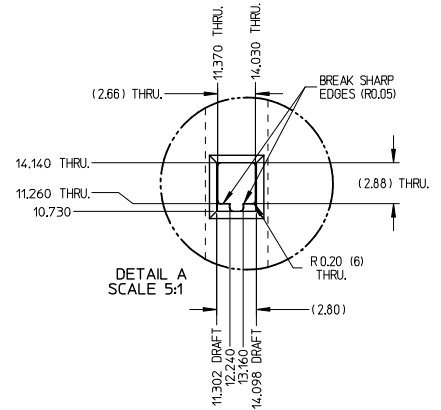
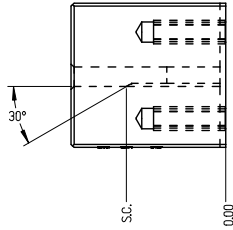
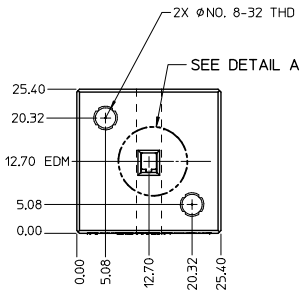
**GROMMET SEAL / CAP CONFIGURATION TO MODIFY LARGE POLARIZATION RIB CAVITY TO ACCEPT SMALL POLARIZATION RIB APPLICATIONS**

<b>ENTER DESCRIPTION</b> EC NO: 0A02014-0473 DRAWING REVISIONS: 2013/09/18 CHKD: APPR: BOMSER 2014/01/03 DESCRIPTION REV	<b>QUALITY SYMBOLS</b> ∇=0 ∇=0 ∇=0	<b>GENERAL TOLERANCES (UNLESS SPECIFIED)</b>		<b>DIMENSION STYLE</b> MM ONLY		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION		
		4 PLACES ± --- ± --- 3 PLACES ± 0.005 ± --- 2 PLACES ± 0.10 ± --- 1 PLACE ± 0.3 ± ---		DRAWN BY: L. PULLIAM DATE: 2005/06/21 CHECKED BY: A. DHIR DATE: 2005/06/21 APPROVED BY: B. MOSER DATE: 2005/06/22		METRIC		MX150 RECEPTACLE TERMINAL		
		ANGULAR ± 3°		MATERIAL NO.		DOCUMENT NO.		MOLEX INCORPORATED		SHEET NO.
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE		SD-33012-002		2 OF 5		

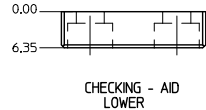
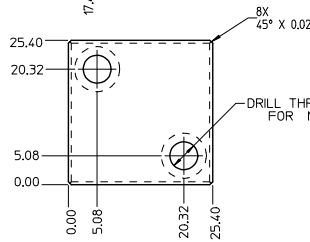
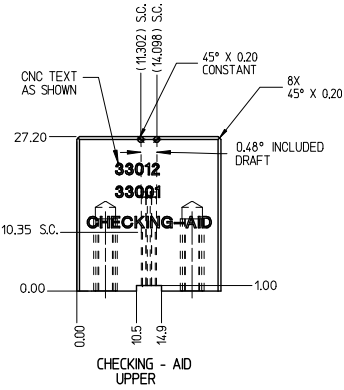
THIS CHECKING - AID IS FOR SMALL POLARIZATION RIB TERMINALS ONLY



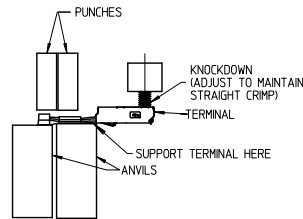
CHECKING - AID ASSEMBLY  
SCALE 1:1



DETAIL A  
SCALE 5:1



CHECKING - AID  
LOWER

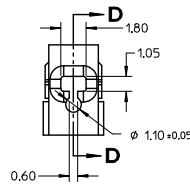
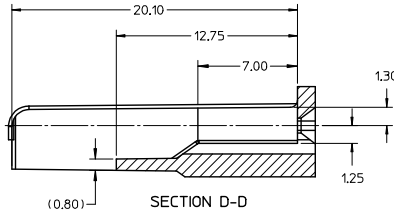
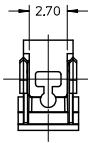


CRIMP REQUIREMENTS:

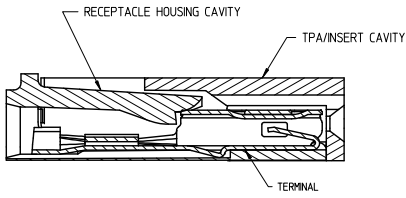
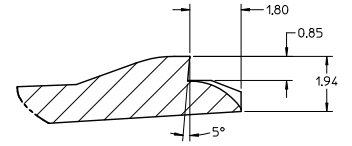
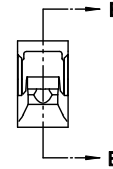
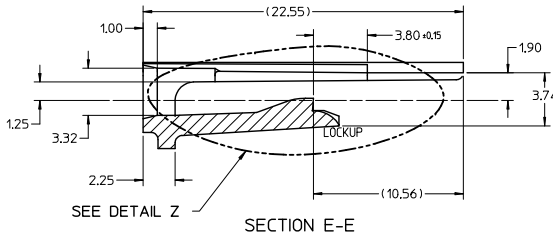
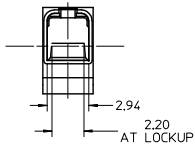
1. CRIMP STRAIGHTNESS MUST BE MAINTAINED. USE A KNOCKDOWN TOOL LOCATED AS SHOWN. TERMINAL BOX MUST NOT BE DEFORMED.
2. AFTER CRIMPING, THE CRIMPED TERMINAL (AND UP TO 5 mm OF WIRE PAST THE INSULATOR CUTOFF TAB) MUST FIT FREELY INTO THE CHECKING-AID SHOWN ON THIS PAGE.
3. FOR OTHER MECHANICAL REQUIREMENTS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

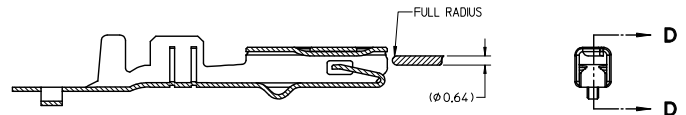
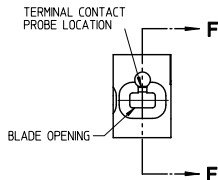
<b>ENTER DESCRIPTION</b> EC NO: UAU2014-0473 DRAWING NO: WJMS01 2013/09/16 CHKD: APPROB/MOSER 2014/01/03	<b>QUALITY SYMBOLS</b> ∇=0 ∇=0 ∇=0	<b>GENERAL TOLERANCES (UNLESS SPECIFIED)</b>		<b>DIMENSION STYLE</b> MM ONLY		SCALE 2:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
		4 PLACES ± --- INCH 3 PLACES ± 0.005 ± --- 2 PLACES ± 0.10 ± --- 1 PLACE ± 0.3 ± ---	mm INCH	DRAWN BY L. PULLIAM 2005/06/21	DATE 2005/06/21	TITLE MX150 RECEPTACLE TERMINAL			
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE TABLE	APPROVED BY B. MOSER 2005/06/22	DATE 2005/06/22	MATERIAL NO. MOLEX INCORPORATED		DOCUMENT NO. SD-33012-002	SHEET NO. 3 OF 5		
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  $\pm 0.10$   
ANGULAR  $\pm 3^\circ$
  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 RECEPTACLE  
TERMINAL PART NUMBERS SPECIFIED ELSEWHERE ON THIS DRAWING



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

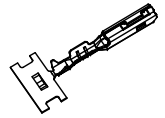


SECTION D-D FOR LARGE POLARIZATION RIB APPLICATIONS FIG. 2

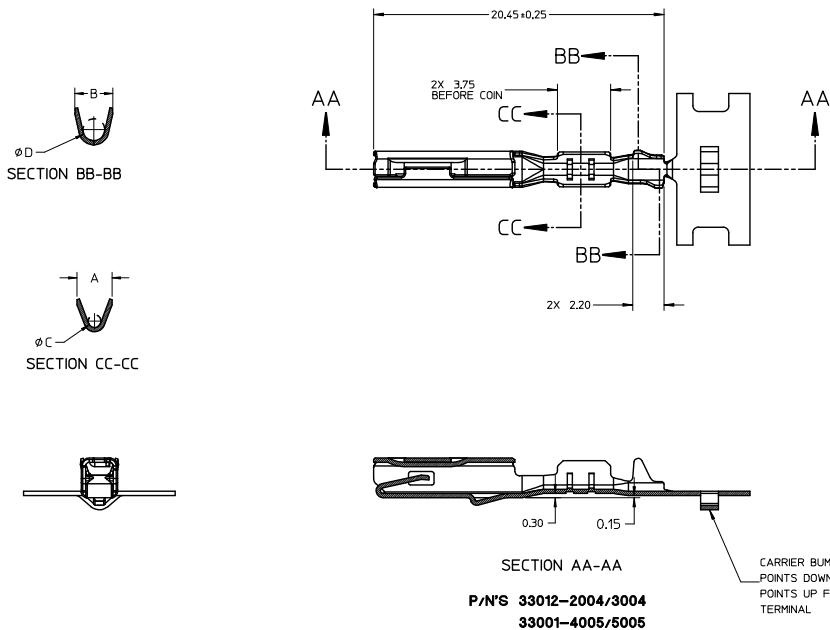
PROBING DOWN THE THROAT MUST USE THIS TERMINAL PROBE  
FOR PROBING INFORMATION REFERENCE MOLEX MX150 APPLICATION SPEC AS-33472-100

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: UAU2016-0473 DRAWN/JENNINGS01 2013/09/18 CHKD: APPENBOSER 2014/01/03	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			
REV	DESCRIPTION	4 PLACES	± 0.005	± 0.0005	CHECKED BY A. DHIR	DATE 2005/06/21	molex MOLEX INCORPORATED		
		3 PLACES	± 0.010	± 0.0010	APPROVED BY B. MOSER	DATE 2005/06/22			
		2 PLACES	± 0.10	± 0.010	MATERIAL NO.		DOCUMENT NO.	SHEET NO.	
		1 PLACE	± 0.3	± 0.03	SEE TABLE		SD-33012-002	4 OF 5	
		ANGULAR ± 3°		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			



ISO VIEW  
SCALE 2:1



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

ENTER DESCRIPTION EC NO: 0402014-0473 DRAWN/JENNINGS01 2013/09/18 CHKD: APPIR/MOSER 2014/06/03 DESCRIPTION REV	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE MM ONLY	SCALE 5:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
	▽=0	4 PLACES ± --- ± ---	DRAWN BY L. PULLIAM	DATE 2005/06/21	TITLE MX150 RECEPTACLE TERMINAL	
	▽=0	3 PLACES ± 0.005 ± ---	CHECKED BY A. DHIR	DATE 2005/06/21	MOLEX INCORPORATED	
	▽=0	2 PLACES ± 0.10 ± ---	APPROVED BY B. MOSER	DATE 2005/06/22	MATERIAL NO.	DOCUMENT NO. SD-33012-002
		1 PLACE ± 0.3 ± ---	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE	SHEET NO. 5 OF 5
		ANGULAR ± 3 °	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			