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Part Number: [0330113001](#)
Status: **Active**
Overview: [mx150 sealed connector system](#)
Description: MX150™ Male Terminal, Silver (Ag) Plating, 22 AWG, Left Reel Payoff, Contact Material Thickness 0.30mm (.012")

Documents:

[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

General

Product Family	Crimp Terminals
Series	33011
Comments	Left Reel Payoff
Crimp Quality Equipment	Yes
Overview	mx150 sealed connector system
Product Name	MX150™

Physical

Gender	Male
Material - Metal	High Performance Alloy (HPA)
Material - Plating Mating	Silver
Material - Plating Termination	Tin
Packaging Type	Reel
Plating min: Mating (µin)	30.4
Plating min: Mating (µm)	0.76
Plating min: Termination (µin)	100
Plating min: Termination (µm)	2.5
Termination Interface: Style	Crimp or Compression
Wire Insulation Diameter	2.60mm (.102") max.
Wire Size AWG	22
Wire Size mm²	0.35, 0.50

Electrical

Current - Maximum per Contact	22A
Voltage - Maximum	250V

Material Info

Reference - Drawing Numbers

Sales Drawing	SD-33000-001
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EU RoHS

ELV and RoHS Compliant
REACH SVHC
 Not Reviewed
Halogen-Free Status
 Not Reviewed

China RoHS



Need more information on product environmental compliance?

Email productcompliance@molex.com
 For a multiple part number RoHS Certificate of Compliance, [click here](#)

Please visit the [Contact Us](#) section for any non-product compliance questions.

Search Parts in this Series

[33011Series](#)

Use With

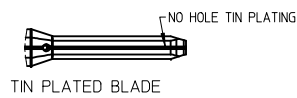
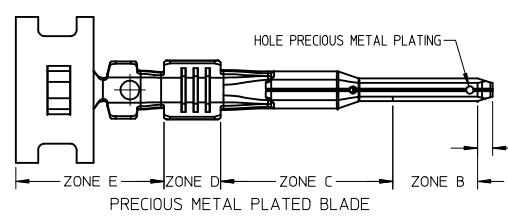
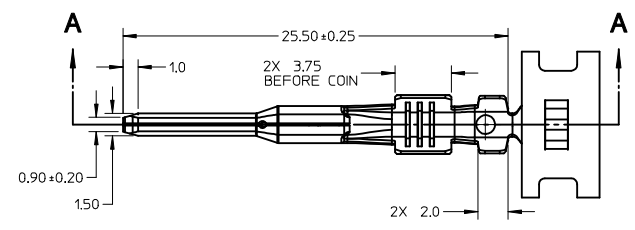
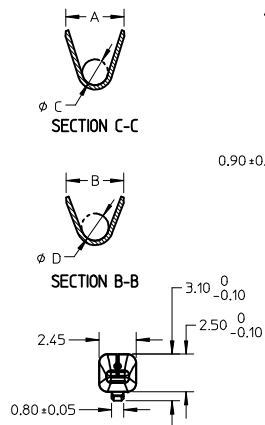
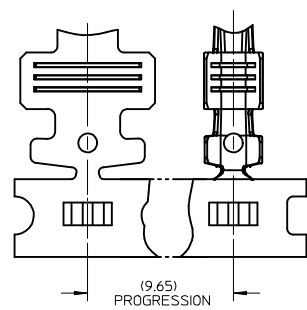
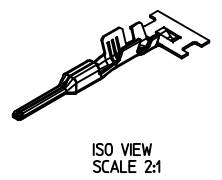
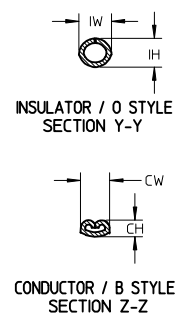
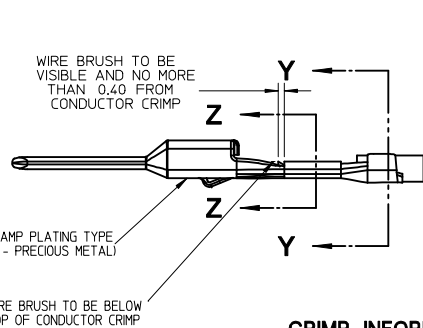
[33482](#) Dual Row Housing, [33481](#) Single Row Housing, [33486](#) Hybrid Housing

Application Tooling | FAQ

Tooling specifications and manuals are found by selecting the products below. Crimp Height Specifications are then contained in the Application Tooling Specification document.

Global

Description	Product #
Hand Crimp Tool, 18-22AWG	0638112600
FineAdjust™ Applicator	0639000600

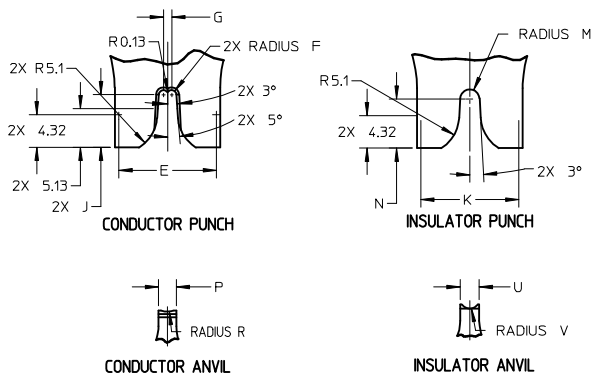


- PLATING NOTES:
- PRECIOUS METAL PLATED TERMINAL:
 - GOLD PLATING:
 - ZONE A: SHALL BE COMPLETELY COVERED WITH NICKEL TO PREVENT EXPOSED BASE METAL. REDUCED GOLD THICKNESS FROM ZONE B PERMITTED
 - ZONE B: PRECIOUS METAL PLATING PER MOLEX PLATING SPECIFICATION ES-88
 - BASE LAYER: ELECTRODEPOSITED DUCTILE SULFAMATE NICKEL THICKNESS: 1.25 - 2.25 MICROMETERS
 - GOLD LAYER: ELECTRODEPOSITED GOLD THICKNESS: 0.76 MICROMETERS MINIMUM
 - ZONE C: SHALL BE COMPLETELY COVERED WITH NICKEL TO PREVENT EXPOSED BASE METAL. REDUCED PLATING THICKNESS FROM ZONE B AND ZONE D PERMITTED
 - ZONE D: TIN PLATING PER MOLEX PLATING SPECIFICATION ES-88
 - BASE LAYER: ELECTRODEPOSITED DUCTILE SULFAMATE NICKEL THICKNESS: 1.25 - 2.25 MICROMETERS
 - TIN LAYER: ELECTRODEPOSITED 100% TIN, MATTE FINISH THICKNESS: 2.5 - 4.0 MICROMETERS
 - ZONE E: SHALL BE COMPLETELY COVERED WITH NICKEL TO PREVENT EXPOSED BASE METAL. REDUCED THICKNESS FROM ZONE D PERMITTED
 - SILVER PLATING:
 - ZONE A: SHALL BE COMPLETELY COVERED WITH NICKEL TO PREVENT EXPOSED BASE METAL. REDUCED SILVER THICKNESS FROM ZONE B PERMITTED
 - ZONE B: SILVER PLATING
 - BASE LAYER: ELECTRODEPOSITED DUCTILE SULFAMATE NICKEL THICKNESS: 1.25 - 2.25 MICROMETERS
 - SILVER LAYER: ELECTRODEPOSITED PURE SILVER (0.5% MAX IMPURITIES) THICKNESS: 1.9 - 3.3 MICROMETERS FINISH: SEMI BRIGHT
 - ANTI-TARNISH: TREATMENT FOR SILVER PLATED TERMINAL - EVABRITE WS
 - ZONE C: SHALL BE COMPLETELY COVERED WITH NICKEL TO PREVENT EXPOSED BASE METAL. REDUCED PLATING THICKNESS FROM ZONE B AND ZONE D PERMITTED
 - ZONE D: TIN PLATING PER MOLEX PLATING SPECIFICATION ES-88
 - BASE LAYER: ELECTRODEPOSITED DUCTILE SULFAMATE NICKEL THICKNESS 1.25 - 2.25 MICROMETERS
 - TIN LAYER: ELECTRODEPOSITED 100% TIN, MATTE FINISH THICKNESS 2.5 - 4.0 MICROMETERS
 - ZONE E: SHALL BE COMPLETELY COVERED WITH NICKEL TO PREVENT EXPOSED BASE METAL. REDUCED THICKNESS FROM ZONE D PERMITTED
 - TIN PLATED TERMINAL (ENTIRE TERMINAL)
 - BASE LAYER: ELECTRODEPOSITED ADVANCED TIN BARRIER THICKNESS 0.25 - 1.00 MICROMETERS
 - TIN LAYER: ELECTRODEPOSITED REFLOW TIN, 100% TIN, NO BRIGHTENERS THICKNESS 0.50 - 1.00 MICROMETERS

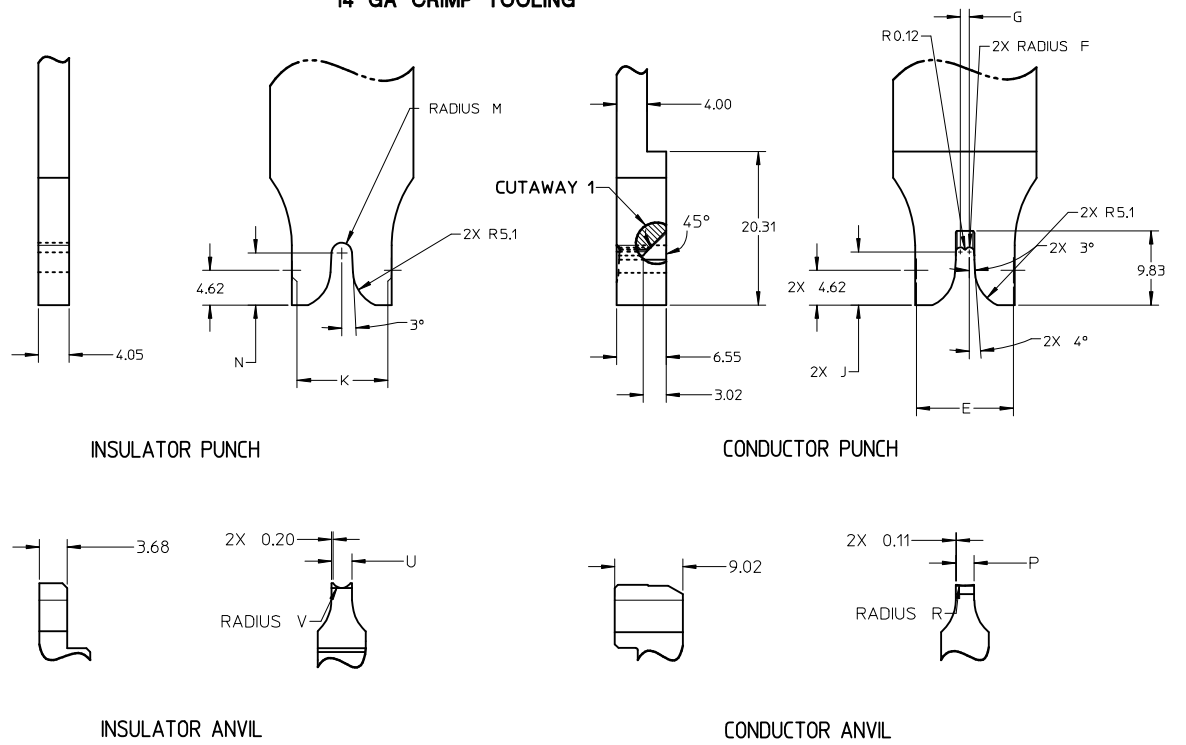
- GENERAL NOTES: (UNLESS OTHERWISE SPECIFIED)
- MATING TERMINAL SHOWN ON SD-33012-002
 - MATERIAL: ASTM B422, UNS C19025, HR04 THICKNESS: 0.30 mm ±0.01 TEMPER: FULL HARD (REF) TENSILE: 496-572 MPA PLATING: SEE PLATING NOTES
 - MEETS CRIMP PERFORMANCE SPECIFICATION SAE/USCAR-21 (RELEASED: 08/25/01)
 - MEETS PERFORMANCE STANDARD FOR AUTOMOTIVE ELECTRICAL CONNECTOR SYSTEMS SAE/USCAR-2 REV 3 (APRIL 2001)
 - MEETS FIELD CORRELATED LIFE TEST SAE/USCAR-20 (NOVEMBER 2001)
 - MEETS WIRING COMPONENT DESIGN GUIDELINES SAE/USCAR-12 REV 2 (DECEMBER 2001)
 - MEETS ELECTRICAL CONNECTION SYSTEM DESIGN SPECIFICATION (SDS) REV 11 (5/2002)
 - REFERENCE PK-31300-516 FOR REEL DIRECTION
 - REFERENCE CS-33000-001 FOR ADDITIONAL CRIMP INFORMATION

ENTER DESCRIPTION EC NO: UAU2010-0107 DRINKFERGUSON 2009/08/18 CHKD:A.DHIR 2009/08/19 APPR:BMOSER 2009/08/20	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 4:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
				DRAWN BY DATE L.PULLIAM 2006/01/31		TITLE MX150 15MM BLADE TERMINAL				
				CHECKED BY DATE A.DHIR 2006/02/01		APPROVED BY DATE B.MOSER 2006/02/02		MOLEX MOLEX INCORPORATED		
				ANGULAR ± 3°		MATERIAL NO. SEE TABLE		DOCUMENT NO. SD-33000-001		SHEET NO. 1 OF 5
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION										

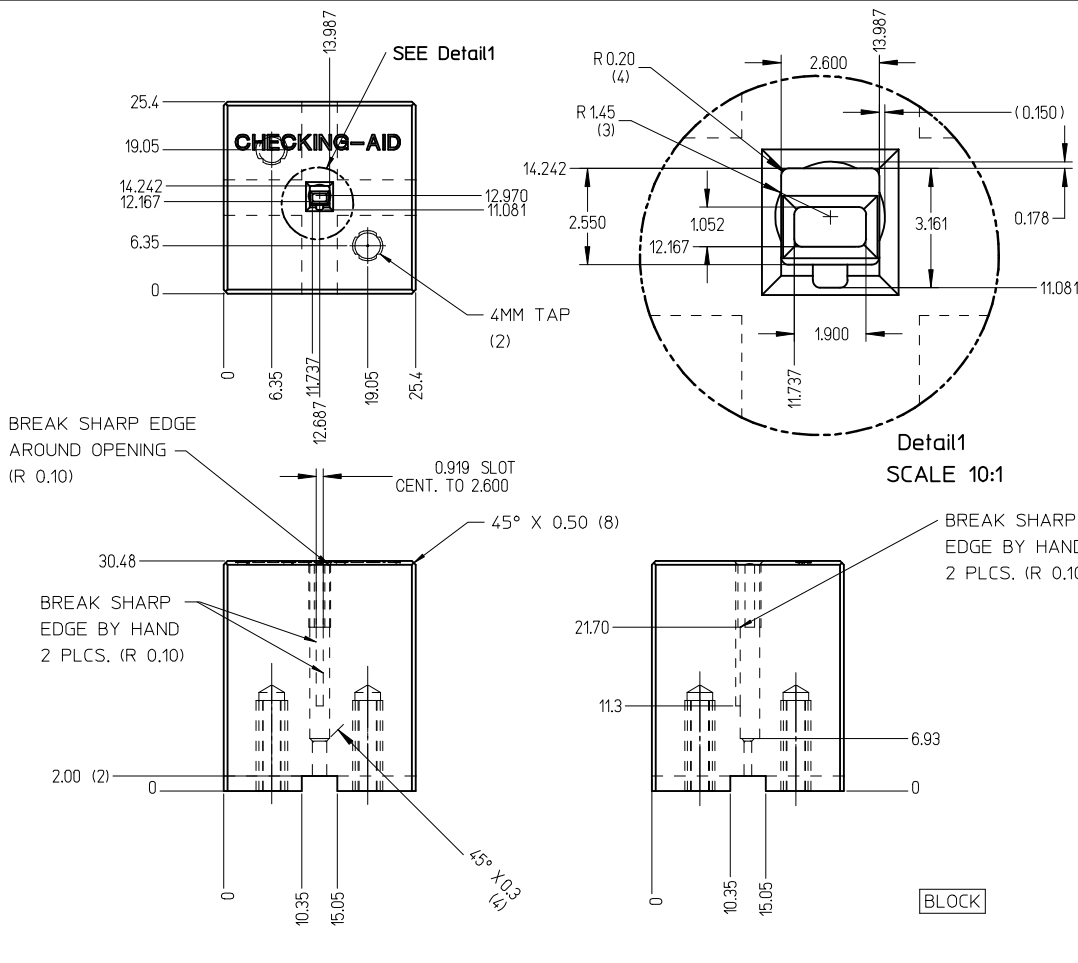
**CRIMP TOOL INFORMATION
EXCEPT 14 GA**



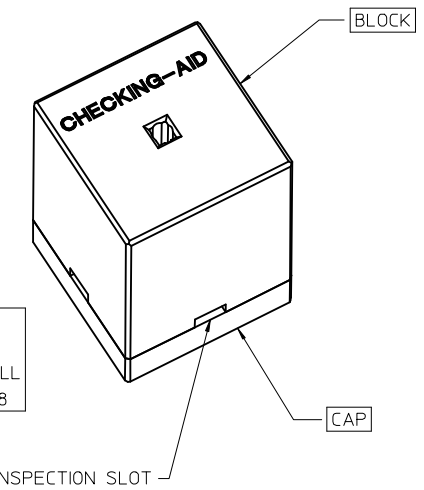
14 GA CRIMP TOOLING



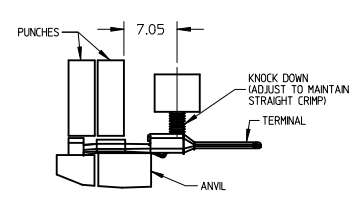
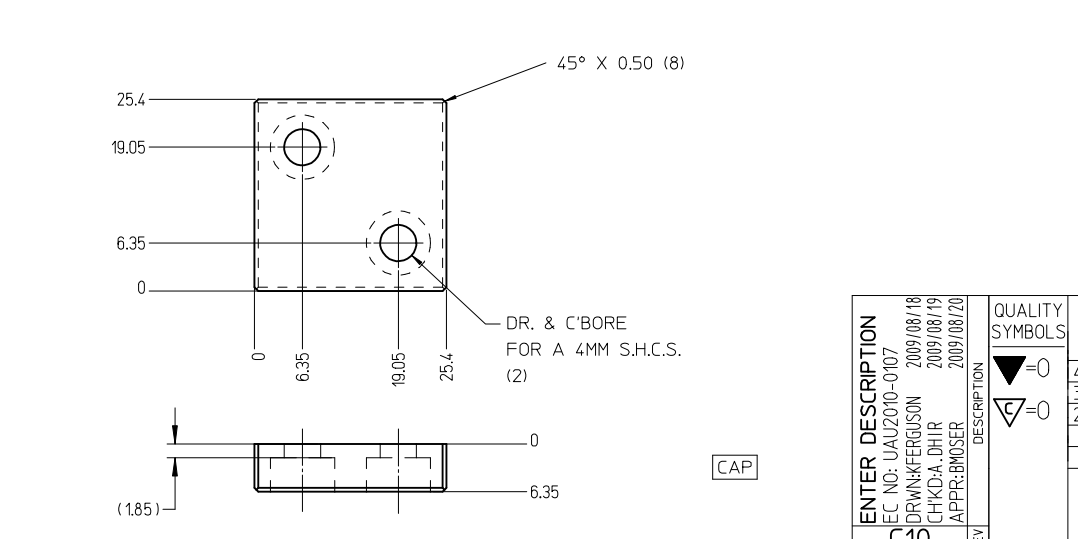
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MATERIAL NO. SEE TABLE	DOCUMENT NO. SD-33000-001	SHEET NO. 3 OF 5																		
SIZE C10			THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																	



CHECKING-AID
 2 PIECE ASM. A2 TOOL STEEL
 HARDEN & GRIND TO A ROCKWELL
 HARDNESS "C" SCALE OF 56-58

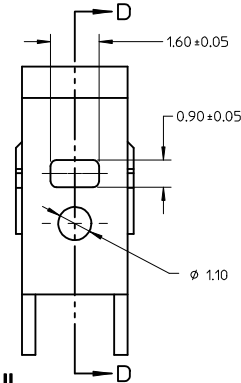
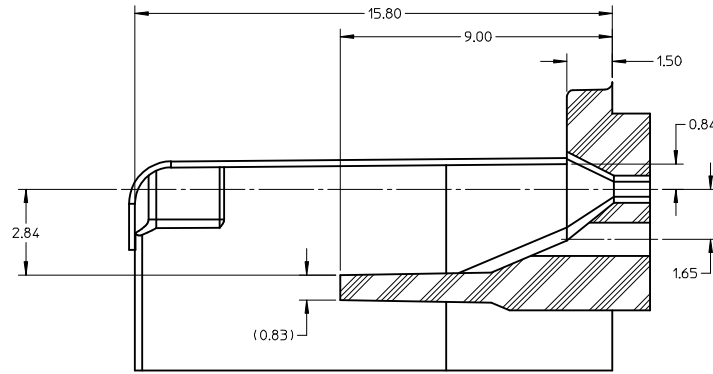
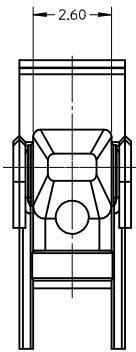


CHECKING AID TOLERANCE	
.XXX	= .005
.XX	= .03
.X	= .3



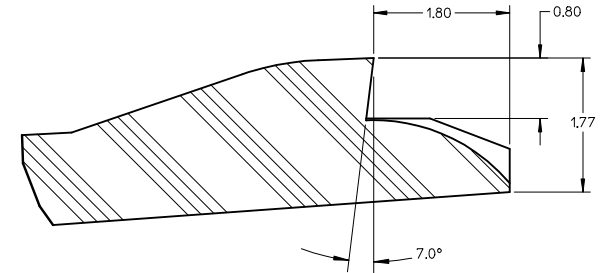
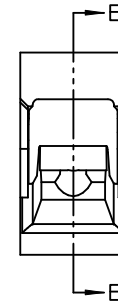
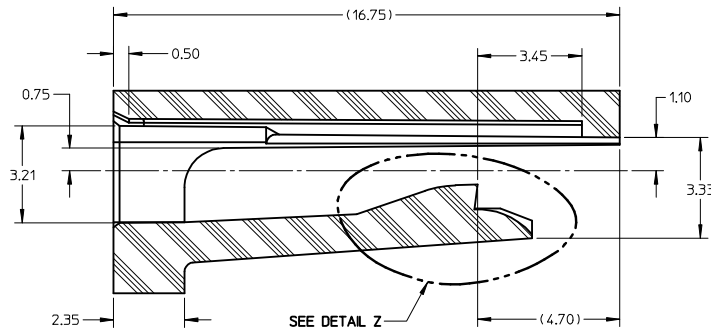
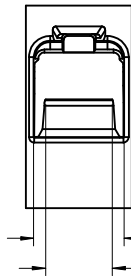
- CRIMP REQUIREMENTS:
1. CRIMP STRAIGHTNESS MUST BE MAINTAINED. USE A KNOCKDOWN TOOL LOCATED AS SHOWN. TERMINAL BOX MUST NOT BE DEFORMED
 2. AFTER CRIMPING, THE TERMINAL AND WIRE MUST FIT FREELY INTO THE CHECKING AID 33000-700. PROPER INSERTION DEPTH IS MET WHEN BLADE TIP STOPS ON CAP. SLOTS PROVIDED TO VISUALLY INSPECT STOPPAGE OF PIN TIP.
 3. FOR OTHER MECHANICAL REQUIREMENTS ON CRIMPED TERMINALS, REFER TO SAE/USCAR-21 (5-13-02) SECTIONS 4.2 (VISUAL INSPECTION), 4.3 (CROSS SECTION ANALYSIS) AND 4.4 (CONDUCTOR CRIMP PULLOUT FORCE)

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		4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.1 ± --- 1 PLACE ± 0.3 ± ---	mm INCH DRAWN BY DATE L.PULLIAM 2006/01/31 CHECKED BY DATE A.DHIR 2006/02/01 APPROVED BY DATE B.MOSER 2006/02/02	TITLE MX150 15MM BLADE TERMINAL		MOLEX INCORPORATED	DOCUMENT NO. SD-33000-001	SHEET NO. 4 OF 5
		ANGULAR ± 3°		MATERIAL NO. SEE TABLE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
		C10						



SECTION D-D

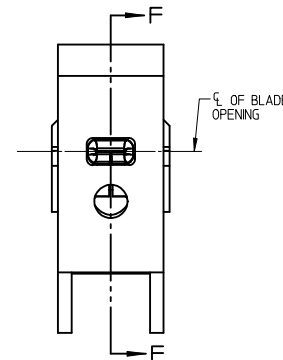
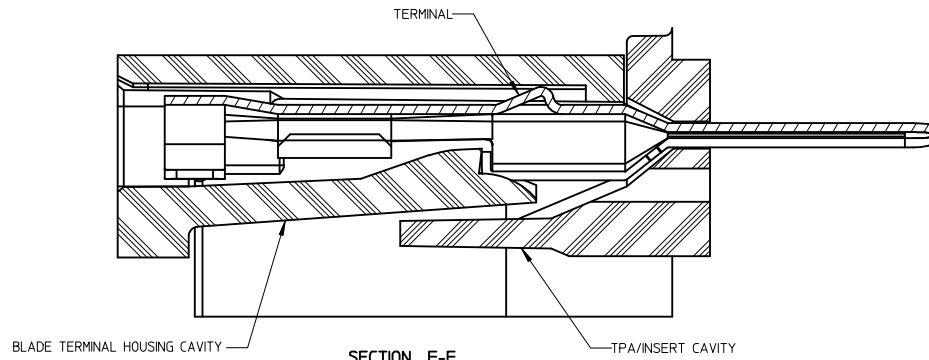
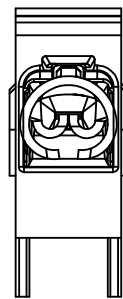
TPA/INSERT DETAIL



SECTION E-E

HOUSING DETAIL

DETAIL Z
SCALE 20:1



SECTION F-F

BLADE TERMINAL HOUSING CAVITY

TPA/INSERT CAVITY

NOTES: (UNLESS OTHERWISE SPECIFIED)

1. TOLERANCES: LINEAR ± 0.10
ANGULAR 3°
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 BLADE TERMINAL PART NUMBERS (EXCEPT P/N'S FOR UNSEALED APPLICATIONS) SPECIFIED ELSEWHERE ON THIS DRAWING

BLADE CAVITY ASSEMBLY VIEWS

ENTER DESCRIPTION EC NO: UAU2010-0107 DRAWN: FERUGSON 2009/08/18 CHKD: A.DHIR 2009/08/19 APPR: B.MOSER 2009/08/20 REV C10	QUALITY SYMBOLS $\nabla=0$ $\nabla=0$	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>± 0.15</td> <td>± 0.006</td> </tr> <tr> <td>2 PLACES</td> <td>± 0.25</td> <td>± 0.010</td> </tr> <tr> <td>1 PLACE</td> <td>± 0.38</td> <td>± 0.015</td> </tr> </table>		mm	INCH	4 PLACES	± 0.10	± 0.004	3 PLACES	± 0.15	± 0.006	2 PLACES	± 0.25	± 0.010	1 PLACE	± 0.38	± 0.015	DIMENSION STYLE MM ONLY DRAWN BY DATE L.PULLIAM 2006/01/31 CHECKED BY DATE A.DHIR 2006/02/01 APPROVED BY DATE B.MOSER 2006/02/02	SCALE 8:1 DESIGN UNITS METRIC THIRD ANGLE PROJECTION	TITLE MX150 15MM BLADE TERMINAL
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MATERIAL NO. SEE TABLE	DOCUMENT NO. SD-33000-001	SHEET NO. 5 OF 5																		
SIZE THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																				