

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number:

0330014023

Status:

Active

Overview:

[mx150_sealed_connector_system](#)

Description:

MX150™ Female Terminal, Silver (Ag) Plating, 22 AWG, Right Reel Payoff, Small Polarization Rib, Contact Material Thickness 0.30mm (.012")

Documents:

[Drawing \(PDF\)](#)

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

General

Product Family

Crimp Terminals

Series

33001

Comments

Right Reel Payoff, Small Polarization Rib

Crimp Quality Equipment

Yes

Overview

[mx150_sealed_connector_system](#)

Product Name

MX150™

Physical

Gender

Female

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

0.5

Electrical

Current - Maximum per Contact

22A

Voltage - Maximum

250V

Material Info

Reference - Drawing Numbers

Sales Drawing

SD-33012-002



image - Reference only

Series

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

33001Series

Use With

[33472](#) Dual Row Housing. [33476](#) Hybrid Housing. [33471](#) Single Row Housing

Application Tooling | FAQ

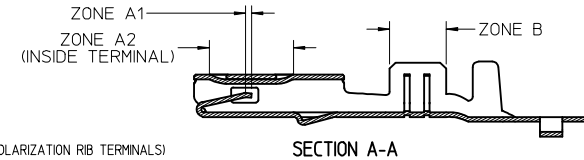
Tooling specifications and manuals are found by selecting the products below. Crimp Height Specifications are then contained in the Application Tooling Specification document.

Global

Description	Product #
Manual Extraction Tool	0638131500
Hand Crimp Tool, 18-22AWG	0638116000
Hand Crimp Tool, Metric 0.05 and 0.75	0638116200

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

PLATING INFORMATION



PLATING NOTES: (FOR SMALL AND LARGE POLARIZATION RIB TERMINALS)

1. PRECIOUS METAL PLATING:

ZONE A1 AND ZONE A2:
PER MOLEX ES-88 REVISION REL

BASE LAYER: ELECTRODEPOSITED DUCTILE SULFAMATE NICKEL
THICKNESS: 125 - 225 MICROMETERS

PRECIOUS LAYER: GOLD OR SILVER

GOLD: ELECTRODEPOSITED GOLD
THICKNESS: 0.76 MICROMETERS MINIMUM

SILVER: ELECTRODEPOSITED PURE SILVER (0.5% MAX IMPURITIES)
THICKNESS: 19 - 33 MICROMETERS
FINISH: SEMI-BRIGHT
ANTI-TARNISH TREATMENT FOR SILVER PLATING
EVABRITE WS

ZONE B:
TIN PLATING: PER MOLEX ES-88 REVISION REL

BASE LAYER: ELECTRODEPOSITED DUCTILE SULFAMATE NICKEL
THICKNESS: 125-225 MICROMETERS

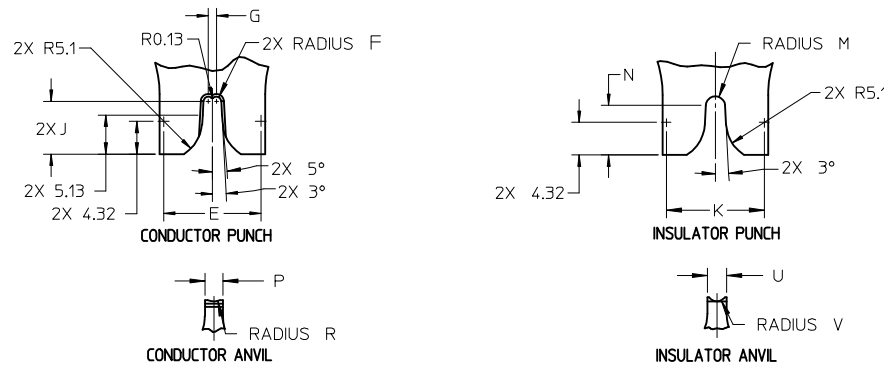
TIN LAYER: ELECTRODEPOSITED 100% TIN MATTE FINISH
THICKNESS: 250 - 400 MICROMETERS

2. TIN PLATING: (ENTIRE TERMINAL)

BASE LAYER: ELECTRODEPOSITED ADVANCED TIN BARRIER
THICKNESS: 0.25-100 MICROMETERS

TIN LAYER: ELECTRODEPOSITED REFLOW TIN, 100% TIN
NO BRIGHTENERS
THICKNESS: 050-100 MICROMETERS

DIMENSIONS FOR LARGE POLARIZATION RIB TERMINAL ONLY



CRIMP TOOL INFORMATION

SEE TABLE 2 FOR TABLED DIMENSIONS

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
PLATING: SEE PLATING NOTES ABOVE

3. MEETS PERFORMANCE SPECIFICATION FOR CABLE TO TERMINAL
ELECTRICAL CRIMPS PER SAE/USCAR-21 (8/2001)

4. MEETS PERFORMANCE STANDARD FOR AUTOMOTIVE ELECTRICAL
CONNECTOR SYSTEMS FOR SAE/USCAR-2, REV. 4 (TEMP CLASS 3)
(4/2001)

5. MEETS ELECTRICAL CONNECTION SYSTEM DESIGN SPECIFICATION
(SDS) REV.11 (5/2002)

6. MEETS FIELD CORRELATED LIFE TEST (FCLT) PER
SAE/USCAR-20 (11/2001)

7. MEETS WIRING COMPONENT DESIGN GUIDELINES SAE/USCAR-12
REV 2 (12/2001)

8. TSC ON A DIMENSION TO BE INTERPRETED AS DISTANCE TO
A THEORETICAL SHARP CORNER AS IF THE RADIUS WERE NOT
PRESENT

9. DRAWING CONFORMS TO AVP-(T401/T406)-001 REVISION A
DATED 2/16/99

10. REFERENCE 97B5-14474-AAB FOR LARGE POLARIZATION RIB
CAVITY SPECIFICATION

11. INSERTION FORCE (TIN) AVG. FROM PV TESTING =
3.8N LARGE POLARIZATION RIB
3.5N SMALL POLARIZATION RIB
(REFERENCE)

12. ALL DIMENSIONS EXCEPT ①, ②, ③ & ④ ARE COMMON TO
BOTH SMALL AND LARGE POLARIZATION RIB TERMINALS

13. REFERENCE PK-31300-516 FOR REEL DIRECTION

14. REFERENCE CS-33012-002 FOR ADDITIONAL CRIMP INFORMATION

ENTER DESCRIPTION
EC NO: UAU2010-0107
DRAWN BY: DRINKER GUSON
CHKD BY: DHIR
APPR: BMOSER
2009/08/19
2009/08/20

QUALITY SYMBOLS
▽=0
▽=0
REV

GENERAL TOLERANCES
(UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± .005	± .0005
3 PLACES	± .010	± .0010
2 PLACES	± .020	± .0020
1 PLACE	± .030	± .0030
ANGULAR	± 3 °	

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	

SCALE
2:1

DESIGN UNITS
METRIC

THIRD ANGLE
PROJECTION

MX150
RECEPTACLE TERMINAL

MOLEX INCORPORATED

DOCUMENT NO.
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

	13	12	11	10	9	8	7	6	5	4	3	2	1	
	TABLE 1 - TERMINAL CRIMP DIM. REFERENCE TABLE													
	SUPPLIER PART NO.	FORD PART NO.	PLATING	WIRE SIZE (awg)	WIRE SPECIFICATION	CONDUCTOR CH (SEC Z-Y) ±0.05 mm	CONDUCTOR CW (SEC Z-Z) ±0.10 mm	INSULATOR IH (SEC Y-Y) ±0.10 mm	INSULATOR IW (SEC Y-Y) ±0.10 mm	WIRE PULL FORCE (N)				
J	SMALL POLARIZATION RIB													
	RIGHT PAYOFF	LEFT PAYOFF												
	33012-2001	33012-3001	7C3T-14474-EA	TIN	14	MIL-123A	1.65	2.45	2.90	2.75	268			
					16	MIL-135A1	1.65	2.45	2.70	2.60	268			
						MIL-123A	1.35	2.45	2.40	2.60	222			
	33012-2002	33012-3002	7C3T-14474-DA	TIN	18	MIL-123A	1.25	2.15	2.00	2.30	157			
						SAE J1128 (IGXL)	1.25	2.15	2.40	2.60	158			
					20	MIL-123A	1.15	2.15	1.90	2.10	128			
						HIFLON WIRE ¹	1.15	2.15	1.90	2.10	135			
						SAE J1128 (IGXL)	1.15	2.15	2.00	2.30	105			
I	33012-2003	33012-3003	7C3T-14474-CA	TIN	22	MIL-123A	1.00	1.60	1.85	1.90	88			
						JASO D 611 (AVSSI)	1.60	2.45	2.90	2.75	231			
	33012-2001	33012-3001	7C3T-14474-EA	TIN		2.00mm ² MIL-126A1	1.40	2.45	2.60	2.60	257			
						150mm ² MIL-126A1	1.30	2.15	2.00	2.30	211			
	33012-2002	33012-3002	7C3T-14474-DA	TIN		1.00mm ² MIL-126A1	1.30	2.15	2.00	2.30	211			
						0.75mm ² MIL-126A1	1.25	2.15	1.95	2.10	142			
						MIL-126A1	1.10	1.60	1.80	1.90	111			
	33012-2003	33012-3003	7C3T-14474-CA	TIN		0.50mm ² JASO D 611 (AVSSI)	1.10	1.60	1.85	1.90	125			
	33012-2003*	33012-3003*	7C3T-14474-CA*	TIN		0.35mm ² WSK-1A348-A2	0.95	1.60	1.70	1.90	50			
H	33001-2003	33001-3003	7C3T-14474-HA	GOLD	14	MIL-123A	1.65	2.45	2.90	2.75	268			
					16	MIL-135A1	1.65	2.45	2.70	2.60	268			
						MIL-123A	1.35	2.45	2.40	2.60	222			
						MIL-123A	1.25	2.15	2.00	2.30	157			
					18	SAE J1128 (IGXL)	1.25	2.15	2.40	2.60	158			
						MIL-123A	1.15	2.15	1.90	2.10	128			
					20	HIFLON WIRE ¹	1.15	2.15	1.90	2.10	135			
						SAE J1128 (IGXL)	1.15	2.15	2.00	2.30	105			
	33001-2005	33001-3005	7C3T-14474-FA	GOLD	22	MIL-123A	1.00	1.60	1.85	1.90	88			
						JASO D 611 (AVSSI)	1.60	2.45	2.90	2.75	231			
	33001-2003	33001-3003	7C3T-14474-HA	GOLD		2.00mm ² MIL-126A1	1.40	2.45	2.60	2.60	257			
						150mm ² MIL-126A1	1.30	2.15	2.00	2.30	211			
						1.00mm ² MIL-126A1	1.30	2.15	2.00	2.30	211			
						0.75mm ² MIL-126A1	1.25	2.15	1.95	2.10	142			
	33001-2005	33001-3005	7C3T-14474-FA	GOLD		0.50mm ² JASO D 611 (AVSSI)	1.10	1.60	1.85	1.90	111			
	33001-2005*	33001-3005*	7C3T-14474-FA*	GOLD		0.35mm ² WSK-1A348-A2	0.95	1.60	1.70	1.90	50			
	33001-4001	33001-5001	7U5T-14474-UA	SILVER**	14	MIL-123A	1.65	2.45	2.90	2.75	268			
					16	MIL-135A1	1.65	2.45	2.70	2.60	268			
						MIL-123A	1.35	2.45	2.40	2.60	222			
						MIL-123A	1.25	2.15	2.00	2.30	157			
					18	SAE J1128 (IGXL)	1.25	2.15	2.40	2.60	158			
						MIL-123A	1.15	2.15	1.90	2.10	128			
					20	HIFLON WIRE ¹	1.15	2.15	1.90	2.10	135			
						SAE J1128 (IGXL)	1.15	2.15	2.00	2.30	105			
	33001-4002	33001-5002	7U5T-14474-TA	SILVER**	22	MIL-123A	1.00	1.60	1.85	1.90	88			
						JASO D 611 (AVSSI)	1.60	2.45	2.90	2.75	231			
	33001-4001	33001-5001	7U5T-14474-UA	SILVER**		2.00mm ² MIL-126A1	1.40	2.45	2.60	2.60	257			
						150mm ² MIL-126A1	1.40	2.45	2.60	2.60	257			
						1.00mm ² MIL-126A1	1.30	2.15	2.00	2.30	211			
						0.75mm ² MIL-126A1	1.25	2.15	1.95	2.10	142			
	33001-4003	33001-5003	7U5T-14474-SA	SILVER**		0.50mm ² JASO D 611 (AVSSI)	1.10	1.60	1.85	1.90	111			
	33001-4003*	33001-5003*	7U5T-14474-SA*	SILVER**		0.35mm ² WSK-1A348-A2	0.95	1.60	1.70	1.90	50			
E	LARGE POLARIZATION RIB													
	33012-2021	33012-3021	7C3T-14474-LA	TIN	14	MIL-123A	1.65	2.45	2.90	2.75	268			
					16	MIL-135A1	1.65	2.45	2.70	2.60	268			
						MIL-123A	1.35	2.45	2.40	2.60	222			
						MIL-123A	1.25	2.15	2.00	2.30	157			
					18	SAE J1128 (IGXL)	1.25	2.15	2.40	2.60	158			
						MIL-123A	1.15	2.15	1.90	2.10	128			
					20	HIFLON WIRE ¹	1.15	2.15	1.90	2.10	135			
						SAE J1128 (IGXL)	1.15	2.15	2.00	2.30	105			
	33012-2023	33012-3023	7C3T-14474-JA	TIN	22	MIL-123A	1.00	1.60	1.85	1.90	88			
						JASO D 611 (AVSSI)	1.60	2.45	2.90	2.75	231			
	33012-2021	33012-3021	7C3T-14474-LA	TIN		2.00mm ² MIL-126A1	1.40	2.45	2.60	2.60	257			
						150mm ² MIL-126A1	1.40	2.45	2.60	2.60	257			
						1.00mm ² MIL-126A1	1.30	2.15	2.00	2.30	211			
						0.75mm ² MIL-126A1	1.25	2.15	1.95	2.10	142			
	33012-2023	33012-3023	7C3T-14474-JA	TIN		0.50mm ² JASO D 611 (AVSSI)	1.10	1.60	1.85	1.90	111			
	33012-2023*	33012-3023*	7C3T-14474-JA*	TIN		0.35mm ² WSK-1A348-A2	0.95	1.60	1.70	1.90	50			
	33001-2021	33001-3021	7C3T-14474-PA	GOLD	14	MIL-123A	1.65	2.45	2.90	2.75	268			
					16	MIL-135A1	1.65	2.45	2.70	2.60	268			
						MIL-123A	1.35	2.45	2.40	2.60	222			
						MIL-123A	1.25	2.15	2.00	2.30	157			
					18	SAE J1128 (IGXL)	1.25	2.15	2.40	2.60	158			
						MIL-123A	1.15	2.15	1.90	2.10	128			
					20	HIFLON WIRE ¹	1.15	2.15	1.90	2.10	135			
						SAE J1128 (IGXL)	1.15	2.15	2.00	2.30	105			
	33001-2023	33001-3023	7C3T-14474-MA	GOLD	22	MIL-123A	1.00	1.60	1.85	1.90	88			
						JASO D 611 (AVSSI)	1.60	2.45	2.90	2.75	231			
	33001-2021	33001-3021	7C3T-14474-PA	GOLD		2.00mm ² MIL-126A1	1.40	2.45	2.60	2.60	257			
						150mm ² MIL-126A1	1.40	2.45	2.60	2.60	257			
						1.00mm ² MIL-126A1	1.30	2.15	2.00	2.30	211			
						0.75mm ² MIL-126A1	1.25	2.15	1.95	2.10	142			
	33001-2023	33001-3023	7C3T-14474-MA	GOLD		0.50mm ² JASO D 611 (AVSSI)	1.10	1.60	1.85	1.90	111			
	33001-2023*	33001-3023*	7C3T-14474-MA*	GOLD		0.35mm ² WSK-1A348-A2	0.95	1.60	1.70	1.90	50			
	33001-4021	33001-5021	7U5T-14474-RA	SILVER**	14	MIL-123A	1.65	2.45	2.90	2.75	268			
					16	MIL-135A1	1.65	2.45	2.70	2.60	268			
						MIL-123A	1.35	2.45	2.40	2.60	222			
						MIL-123A	1.25	2.15	2.00	2.30	157			
					18	SAE J1128 (IGXL)	1.25	2.15	2.40	2.60	158			

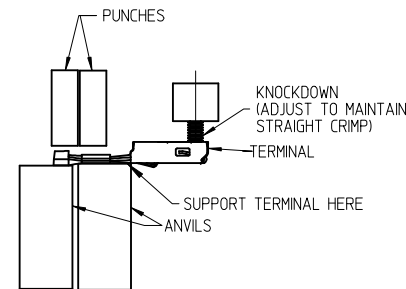
**DETAIL A
SCALE 5:1**

The drawing shows a circular feature with a central square hole. The outer circle has a diameter dimension of $\varnothing 14.030$. The inner square hole has side dimensions of 11.370 and 14.030 . The distance from the center of the circle to the top edge of the square hole is 11.370 . The distance from the center of the circle to the bottom edge of the square hole is 14.030 . The distance from the center of the circle to the left edge of the square hole is 11.370 . The distance from the center of the circle to the right edge of the square hole is 14.030 . The distance from the center of the circle to the top edge of the square hole is 11.370 . The distance from the center of the circle to the bottom edge of the square hole is 14.030 . The distance from the center of the circle to the left edge of the square hole is 11.370 . The distance from the center of the circle to the right edge of the square hole is 14.030 .

Other dimensions include:

- (2.66) THRU.
- 14.140 THRU.
- 11.260 THRU.
- 10.730
- $R\ 0.20$ (6) THRU.
- BREAK SHARP EDGES ($R\ 0.05$)
- (2.88) THRU.
- (2.80)
- 11.302 DRAFT
- 12.240
- 13.160
- 14.098 DRAFT

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/JUSCAR-21 (5-13-02)
SECTIONS 4.2 (VISUAL INSPECTION), 4.2 (CROSS SECTION
ANALYSIS) AND 4.4 (CONDUCTOR CRIMP PULLOUT FORCE)

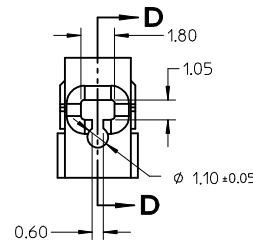
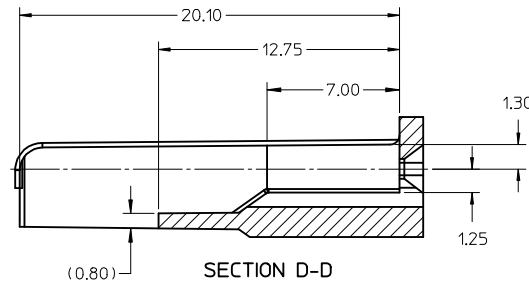
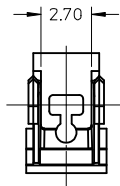


Technical drawing of a rectangular plate with two circular holes. The top view shows a rectangle with dimensions 25.40 x 17.00. The left hole is at (5.08, 20.32) and the right hole is at (20.32, 5.08). The side view shows a thickness of 6.35. A note indicates "8X 45° X 0.02" for the holes and "DRILL THRU FOR N" for the right hole.

[illegible]

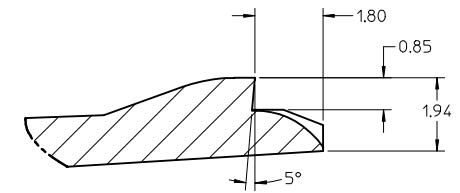
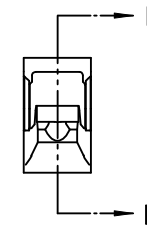
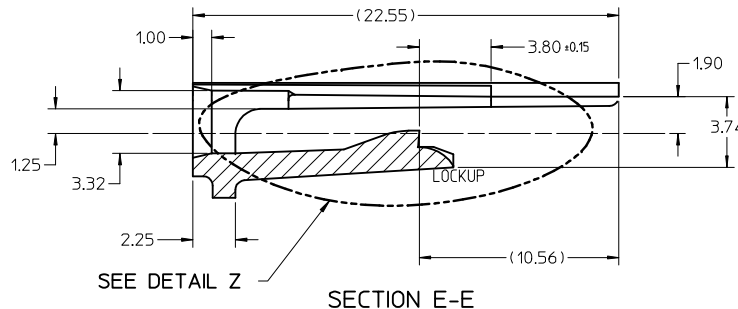
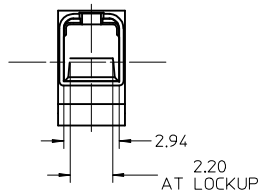
B1	ENTER DESCRIPTION	2009/08/18	2009/08/19	2009/08/20	QUALITY SYMBOLS  = 0  = 0
	EC NO: UAU2010-0107	DRWN:KFERGUSON	2009/08/18	2009/08/19	
REV		CHK'D:A.DHIR	APPR:BMOSE	DESCRIPTION	

GENERAL TOLERANCES (UNLESS SPECIFIED)			DIMENSION STYLE MM ONLY		SCALE 2:1	DESIGN UNITS METRIC	 THIRD ANGLE PROJECTION
	mm	INCH	DRAWN BY DATE L. PULLIAM 2005/06/21		MX150 RECEPTACLE TERMINAL		
4 PLACES	± ---	± ---	CHECKED BY DATE A. DHIR 2005/06/21				
3 PLACES	± 0.005	± ---	APPROVED BY DATE B. MOSER 2005/06/22		 MOLEX INCORPORATED		
2 PLACES	± 0.10	± ---					
1 PLACE	± 0.3	± ---					
ANGULAR ± 3 °			MATERIAL NO. SEE TABLE		DOCUMENT NO. SD-33012-002		SHEET NO. 3 OF 5
SIZE C	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						

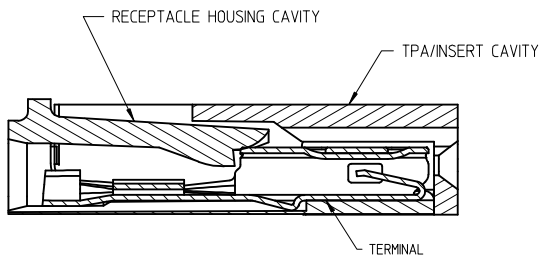


NOTES: UNLESS OTHERWISE SPECIFIED

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

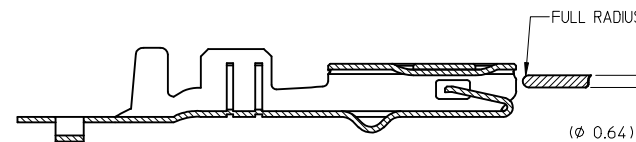
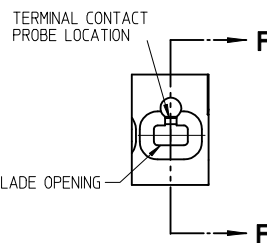


DETAIL Z
SCALE 20:1

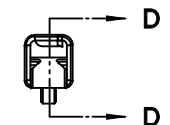


SECTION F-F

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

REV	DESCRIPTION
B1	ENTER DESCRIPTION EC NO: UAU2010-0107 DRWN:KFERGUSON 2009/08/18 CHKD:A.DHIR 2009/08/19 APPR:BMOSEY 2009/08/20

QUALITY SYMBOLS
$\nabla=0$
$\nabla=0$

GENERAL TOLERANCES (UNLESS SPECIFIED)	
4 PLACES	± 0.10
3 PLACES	± 0.005
2 PLACES	± 0.10
1 PLACE	± 0.3
ANGULAR $\pm 3^\circ$	

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

SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
5:1	METRIC	
MX150 RECEPTACLE TERMINAL		

MATERIAL NO.		DOCUMENT NO.	SHEET NO.
SEE TABLE		SD-33012-002	4 OF 5

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

	13	12	11	10	9	8	7	6	5	4	3	2	1									
TABLE 2 - TERMINAL GRIP/CRIMP TOOL DIM. REFERENCE TABLE																						
J	SUPPLIER PART NO.		FORD PART NO.	PLATING (STAMPING)	WIRE APPLICATION		WIRE SPECIFICATION	A±0.30	B±0.30	C±0.30	D±0.30	E±0.005	F±0.005	G±0.005	J±0.005	K±0.005	M±0.005	N±0.005	P±0.005	R±0.005	U±0.005	V±0.005
	SMALL POLARIZATION RIB				SAE	METRIC																
	RIGHT PAYOFF	LEFT PAYOFF																				
J	33012-2001	33012-3001	7C3T-14474-EA	TIN	14	2.0	MIL-123A JASO D 611 (AVSS)	3.9	4.4	1.7	1.6	12.82	0.6	1.19	7.05	13.12	1.35	6.91	2.44	6.11	2.72	1.40
					14	-	MIL-135A1	3.9	4.4	1.7	1.6	12.82	0.6	1.19	7.05	12.96	1.28	6.51	2.44	6.11	2.52	1.30
					16	1.5	MIL-123A/MIL-126A1	3.9	4.4	1.7	1.6	12.82	0.6	1.19	7.05	12.96	1.28	6.51	2.44	6.11	2.52	1.30
I	33012-2002	33012-3002	7C3T-14474-DA	TIN	16	1.0	MIL-123A/MIL-126A1	3.3	3.1	1.3	1.4	12.46	0.57	0.99	6.52	12.65	1.13	6.46	2.14	1.93	2.23	1.15
					18	-	SAE J1128 (IGXL)	3.3	3.1	1.3	1.4	12.46	0.57	0.99	6.52	12.96	1.28	6.51	2.14	1.93	2.52	1.30
					20	0.75	MIL-123A/MIL-126A1	3.3	3.1	1.3	1.4	12.46	0.57	0.99	6.52	12.42	1.03	6.36	2.14	1.93	2.04	1.05
H	33012-2003	33012-3003	7C3T-14474-CA	TIN	20	-	SAE J1128 (IGXL)	3.3	3.1	1.3	1.4	12.46	0.57	0.99	6.52	12.65	1.13	6.46	2.14	1.93	2.23	1.15
					22	0.5	MIL-123A/MIL-126A1 JASO D 611 (AVSS)	2.5	2.6	0.9	1.0	11.97	0.42	0.72	6.57	12.24	0.93	6.31	1.60	1.44	1.84	0.95
					22	0.35	WSK-1A348-A2	2.5	2.6	0.9	1.0	11.97	0.42	0.72	6.57	12.24	0.93	6.31	1.60	1.44	1.84	0.95
H	33001-2003	33001-3003	7C3T-14474-CA*	TIN	-	0.35	WSK-1A348-A2	2.5	2.6	0.9	1.0	11.97	0.42	0.72	6.57	12.24	0.93	6.31	1.60	1.44	1.84	0.95
					14	2.0	MIL-123A JASO D 611 (AVSS)	3.9	4.4	1.7	1.6	12.82	0.6	1.19	7.05	13.12	1.35	6.91	2.44	6.11	2.72	1.40
					14	-	MIL-135A1	3.9	4.4	1.7	1.6	12.82	0.6	1.19	7.05	12.96	1.28	6.51	2.44	6.11	2.52	1.30
H	33001-2003	33001-3003	7C3T-14474-HA	GOLD	16	1.5	MIL-123A/MIL-126A1	3.9	4.4	1.7	1.6	12.82	0.6	1.19	7.05	12.96	1.28	6.51	2.44	6.11	2.52	1.30
					18	1.0	MIL-123A/MIL-126A1	3.3	3.1	1.3	1.4	12.46	0.57	0.99	6.52	12.65	1.13	6.46	2.14	1.93	2.23	1.15
					18	-	SAE J1128 (IGXL)	3.3	3.1	1.3	1.4	12.46	0.57	0.99	6.52	12.96	1.28	6.51	2.14	1.93	2.52	1.30
H	33001-2004	33001-3004	7C3T-14474-GA	GOLD	20	0.75	MIL-123A/MIL-126A1	3.3	3.1	1.3	1.4	12.46	0.57	0.99	6.52	12.42	1.03	6.36	2.14	1.93	2.04	1.05
					20	-	SAE J1128 (IGXL)	3.3	3.1	1.3	1.4	12.46	0.57	0.99	6.52	12.65	1.13	6.46	2.14	1.93	2.23	1.15
					22	0.5	MIL-123A/MIL-126A1 JASO D 611 (AVSS)	2.5	2.6	0.9	1.0	11.97	0.42	0.72	6.57	12.24	0.93	6.31	1.60	1.44	1.84	0.95
H	33001-2005	33001-3005	7C3T-14474-FA	GOLD	-	0.35	WSK-1A348-A2	2.5	2.6	0.9	1.0	11.97	0.42	0.72	6.57	12.24	0.93	6.31	1.60	1.44	1.84	0.95
					14	2.0	MIL-123A JASO D 611 (AVSS)	3.9	4.4	1.7	1.6	12.82	0.6	1.19	7.05	13.12	1.35	6.91	2.44	6.11	2.72	1.40
					14	-	MIL-135A1	3.9	4.4	1.7	1.6	12.82	0.6	1.19	7.05	12.96	1.28	6.51	2.44	6.11	2.52	1.30
G	33001-4001	33001-5001	7U5T-14474-UA	SILVER	16	1.5	MIL-123A/MIL-126A1	3.9	4.4	1.7	1.6	12.82	0.6	1.19	7.05	12.96	1.28	6.51	2.44	6.11	2.52	1.30
					18	1.0	MIL-123A/MIL-126A1	3.3	3.1	1.3	1.4	12.46	0.57	0.99	6.52	12.65	1.13	6.46	2.14	1.93	2.23	1.15
					18	-	SAE J1128 (IGXL)	3.3	3.1	1.3	1.4	12.46	0.57	0.99	6.52	12.96	1.28	6.51	2.14	1.93	2.52	1.30
G	33001-4002	33001-5002	7U5T-14474-TA	SILVER	20	0.75	MIL-123A/MIL-126A1	3.3	3.1	1.3	1.4	12.46	0.57	0.99	6.52	12.42	1.03	6.36	2.14	1.93	2.04	1.05
					20	-	SAE J1128 (IGXL)	3.3	3.1	1.3	1.4	12.46	0.57	0.99	6.52	12.65	1.13	6.46	2.14	1.93	2.23	1.15
					22	0.5	MIL-123A/MIL-126A1 JASO D 611 (AVSS)	2.5	2.6	0.9	1.0	11.97	0.42	0.72	6.57	12.24	0.93	6.31	1.60	1.44	1.84	0.95
G	33001-4003	33001-5003	7U5T-14474-SA	SILVER	-	0.35	WSK-1A348-A2	2.5	2.6	0.9	1.0	11.97	0.42	0.72	6.57	12.24	0.93	6.31	1.60	1.44	1.84	0.95
					14	2.0	MIL-123A JASO D 611 (AVSS)	3.9	4.4	1.7	1.6	12.82	0.6	1.19	7.05	13.12	1.35	6.91	2.44	6.11	2.72	1.40
					14	-	MIL-135A1	3.9	4.4	1.7	1.6	12.82	0.6	1.19	7.05	12.96	1.28	6.51	2.44	6.11	2.52	1.30
G	33001-4002	33001-5002	7U5T-14474-TA	SILVER	16	1.5	MIL-123A/MIL-126A1	3.9	4.4	1.7	1.6	12.82	0.6	1.19	7.05	12.96	1.28	6.51	2.44	6.11	2.52	1.30
					18	1.0	MIL-123A/MIL-126A1	3.3	3.1	1.3	1.4	12.46	0.57	0.99	6.52	12.65	1.13	6.46	2.14	1.93	2.23	1.15
					18	-	SAE J1128 (IGXL)	3.3	3.1	1.3	1.4	12.46	0.57	0.99	6.52	12.96	1.28	6.51	2.14	1.93	2.52	1.30
G	33001-4003	33001-5003	7U5T-14474-SA	SILVER	20	0.75	MIL-123A/MIL-126A1	3.3	3.1	1.3	1.4	12.46	0.57	0.99	6.52	12.42	1.03	6.36	2.14	1.93	2.04	1.05
					20	-	SAE J1128 (IGXL)	3.3	3.1	1.3	1.4	12.46	0.57	0.99	6.52	12.65	1.13	6.46	2.14	1.93	2.23	1.15
					22	0.5	MIL-123A/MIL-126A1 JASO D 611 (AVSS)	2.5	2.6	0.9	1.0	11.97	0.42	0.72	6.57	12.24	0.93	6.31	1.60	1.44	1.84	0.95
G	33001-4003	33001-5003	7U5T-14474-SA*	SILVER	-	0.35	WSK-1A348-A2	2.5	2.6	0.9	1.0	11.97	0.42	0.72	6.57	12.24	0.93	6.31	1.60	1.44	1.84	0.95
					14	2.0	MIL-123A JASO D 611 (AVSS)	3.9	4.4	1.7	1.6	12.82	0.6	1.19	7.05	13.12	1.35	6.91	2.44	6.11	2.72	1.40
					14	-	MIL-135A1	3.9	4.4	1.7	1.6	12.82	0.6	1.19	7.05	12.96	1.28	6.51	2.44	6.11	2.52	1.30
F	33012-2021	33012-3021	7C3T-14474-LA	TIN	16	1.5	MIL-123A/MIL-126A1	3.9	4.4	1.7	1.6	12.82	0.6	1.19	7.05	12.96	1.28	6.51	2.44	6.11	2.52	1.30
					18	1.0	MIL-123A/MIL-126A1	3.3	3.1	1.3	1.4	12.46	0.57	0.99	6.52	12.65	1.13	6.46	2.14	1.93	2.23	1.15
					18	-	SAE J1128 (IGXL)	3.3	3.1	1.3	1.4	12.46	0.57	0.99	6.52	12.96	1.28	6.51	2.14	1.93	2.52	1.30
F	33012-2022	33012-3022	7C3T-14474-KA	TIN	20	0.75	MIL-123A/MIL-126A1	3.3	3.1	1.3	1.4	12.46	0.57	0.99	6.52	12.42	1.03	6.36	2.14	1.93	2.04	1.05
					20	-	SAE J1128 (IGXL)	3.3	3.1	1.3	1.4	12.46	0.57	0.99	6.52	12.65	1.13	6.46	2.14	1.93	2.23	1.15
					22	0.5	MIL-123A/MIL-126A1 JASO D 611 (AVSS)	2.5	2.6	0.9	1.0	11.97	0.42	0.72	6.57	12.24	0.93	6.31	1.60	1.44	1.84	0.95
F	33012-2023	33012-3023	7C3T-14474-JA	TIN	-	0.35	WSK-1A348-A2	2.5	2.6	0.9	1.0	11.97	0.42	0.72	6.57	12.24	0.93	6.31	1.60	1.44	1.84	0.95
					14	2.0	MIL-123A JASO D 611 (AVSS)	3.9	4.4	1.7	1.6	12.82	0.6	1.19	7.05	13.12	1.35	6.91	2.44	6.11	2.72	1.40
					14	-	MIL-135A1	3.9	4.4	1.7	1.6	12.82	0.6	1.19	7.05	12.96	1.28	6.51	2.44	6.11	2.52	1.30
E	33001-2021	33001-3021																				