Part Submission Warrant

Part Name: SLEEVE ASSEMBLY WIRE CONNECTOR FEMALE | Cust. Part Number: 2C5T-14A464-BA

Shown on Drawing Number: 2L1T-14A464-DA | Org. Part Number: 307001147

Engineering Change Level: AB2 | Dated: 2015/09/24

Additional Engineering Changes: N/A | Dated: N/A

Safety and/or Government Regulation: ☐ Yes ☑ No | Purchase Order No.: N/A | Weight (kg): 0.0042

Checking Aid Number: N/A | Checking Aid Eng. Change Level: N/A | Dated: N/A

ORGANIZATION MANUFACTURING INFORMATION

Molex Incorporated - Nogales DUNS: 81-222-2818
Supplier Name & Supplier/Vendor Code

Calzada Industrial Nuevo Nogales S/N, Parque Industrial Nuevo Nogales
Street Address

Nogales | Sonora | 84094 | Mexico
City | Region | Postal Code | Country

CUSTOMER SUBMITTAL INFORMATION

Nursan
Customer Name/Division

N/A
Buyer/Buyer Code

N/A
Application

MATERIALS REPORTING

Has customer-required Substances of Concern information been reported? ☑ Yes ☐ No

Submitted by IMDS or other customer format: IMDS: 15345879

Are polymeric parts identified with appropriate ISO marking codes? ☑ Yes ☐ No ☐ n/a

REASON FOR SUBMISSION (Check at least one)

- ☑ Initial submission
- ☐ Engineering Change(s)
- ☐ Tooling: Transfer, Replacement, Refurbishment, or additional
- ☐ Correction of Discrepancy
- ☐ Tooling Inactive > than 1 year
- ☐ Change to Optional Construction or Material
- ☐ Sub-Supplier or Material Source Change
- ☐ Change in Part Processing
- ☐ Parts produced at Additional Location
- ☐ Other - please specify

REQUESTED SUBMISSION LEVEL (Check one)

- ☐ Level 1 - Warrant only (and for designated appearance items, an Appearance Approval Report) submitted to customer.
- ☑ Level 2 - Warrant with product samples and limited supporting data submitted to customer.
- ☐ Level 3 - Warrant with product samples and complete supporting data submitted to customer.
- ☐ Level 4 - Warrant and other requirements as defined by customer.
- ☐ Level 5 - Warrant with product samples and complete supporting data reviewed at organization's manufacturing location.

SUBMISSION RESULTS

The results for ☑ dimensional measurements ☑ material and functional tests ☐ appearance criteria ☐ statistical process package

These results meet all design record requirements: ☑ Yes ☐ NO (If "NO" - Explanation Required)

Mold / Cavity / Production Process: 307001147 / Assembly Process

DECLARATION

I affirm that the samples represented by this warrant are representative of our parts, which were made by a process that meets all Production Part Approval Process Manual 4th Edition Requirements. I further affirm that these samples were produced at the production rate of 18,240 / 8 hours. I also certify that documented evidence of such compliance is on file and available for your review.

I have noted any deviation from this declaration below.

EXPLANATION/COMMENTS:

Is each Customer Tool properly tagged and numbered? ☐ Yes ☐ No ☑ n/a

Organization Authorized Signature: Yazmin LB | Date: 16-Dec-2022

Print Name: Yazmin Lecona B. | Phone No.: 52 631 3111300 | Fax No.:

Title: Quality Control Technician | E-mail: ppapeuro@molex.com

FOR CUSTOMER USE ONLY (IF APPLICABLE)

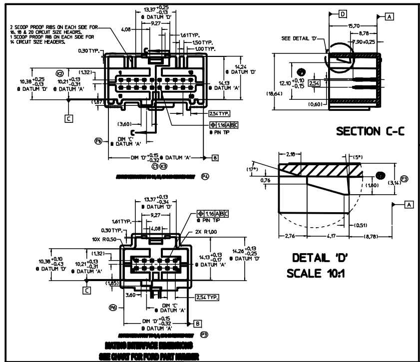
PPAP Warrant Disposition: ☐ Approved ☐ Rejected ☐ Other

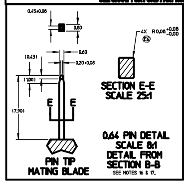
Customer Signature | Date

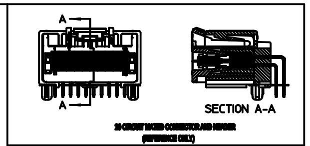
Print Name | Customer Tracking Number (optional)

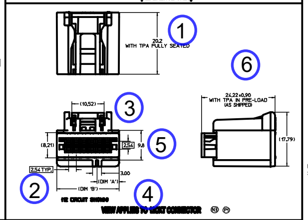
	FORD HARNESS ASSEMBLY PART NUMBER	MOLEX HARNESS ASSEMBLY PART NUMBER	POLARIZATION	CKT. SIZE	DIM 'A'	DIM 'B' (K4)	PASS THRU HOLE DIAMETER FOR HARNESS (P5)	MATING COMPONENTS			MATING INTERFACE DIMENSIONS (P6)		
								RT. ANGLE HEADER FORD P/N	VERTICAL HEADER FORD P/N	MALE IN LINE FORD P/N	DIM 'C'	DIM 'D'	
	2L1T-14A464-KA	30700-1060	POLARIZATION OPTION "1"	6	3,46	15,44	25,5	2L1T-14A624-HA	TBD	2L1T-14A624-TA	3,69	13,36	
(J1)	3F2T-14A464-KA	30700-1061	POLARIZATION OPTION "2"	6	6,46	15,44	25,5	TBD	TBD	6U5T-14A459-BA	6,69	13,36	(AA)
	TBD	30700-1062	POLARIZATION OPTION "3"	6	9,46	15,44	25,5	TBD	TBD	TBD	9,69	13,36	
	2L1T-14A464-JA	30700-1080	POLARIZATION OPTION "1"	8	4,73	15,45	25,5	2L1T-14A624-GA	3F2T-14A624-BA	2L1T-14A624-SA	4,96	15,90	(J2)
(M1)	4W1T-14A464-FA	30700-1081	POLARIZATION OPTION "2"	8	7,73	15,45	25,5	4W1T-14A624-EA	TBD	CU5T-14A459-GA	7,96	15,90	(M2) (Y1)
	TBD	30700-1082	POLARIZATION OPTION "3"	8	10,73	15,45	25,5	TBD	TBD	TBD	10,96	15,90	
	2L1T-14A464-GA	30700-1100	POLARIZATION OPTION "1"	10	6,00	17,99	26,4	2L1T-14A624-EA	TBD	2L1T-14A624-PA	6,23	18,44	
	2L1T-14A464-HA	30700-1101	POLARIZATION OPTION "2"	10	9,00	17,99	26,4	2L1T-14A624-FA	2C5T-14A624-AA	2L1T-14A624-RA	9,23	18,44	(D2)
	TBD	30700-1102	POLARIZATION OPTION "3"	10	12,00	17,99	26,4	TBD	TBD	TBD	12,23	18,44	
(A1)	2L1T-14A464-VA	30700-1120	POLARIZATION OPTION "1"	12	7,27	20,53	27,5	2L1T-14A624-ZA	2L1T-14A624-AAA	2L1T-14A624-ABA	7,50	20,98	(A2) (A3) (A4)
(H1)	4L3T-14A464-RA	30700-1121	POLARIZATION OPTION "2"	12	10,27	20,53	27,5	4L3T-14A624-GA	TBD	4C3T-14A624-UA	10,50	20,98	(H2) (L1)
	TBD	30700-1122	POLARIZATION OPTION "3"	12	13,27	20,53	27,5	TBD	TBD	TBD	13,50	20,98	
(D1)	2C5T-14A464-BA	30700-1147	POLARIZATION OPTION "1"	14	8,54	23,07	30,0	2C5T-14A624-FA	2C5T-14A624-CA	2C5T-14A624-HA	8,77	23,52	(D2)
	TBD	30700-1148	POLARIZATION OPTION "2"	14	11,54	23,07	30,0	TBD	TBD	TBD	11,77	23,52	
	TBD	30700-1149	POLARIZATION OPTION "3"	14	14,54	23,07	30,0	TBD	TBD	TBD	14,77	23,52	
	2L1T-14A464-EA	30700-1167	POLARIZATION OPTION "1"	16	9,81	25,61	32,0	2L1T-14A624-CA	2C5T-14A624-DA	2L1T-14A624-MA	10,04	26,06	(D2)
	2L1T-14A464-FA	30700-1168	POLARIZATION OPTION "2"	16	12,81	25,61	32,0	2L1T-14A624-DA	TBD	2L1T-14A624-NA	13,04	26,06	
	TBD	30700-1169	POLARIZATION OPTION "3"	16	15,81	25,61	32,0	TBD	TBD	TBD	16,04	26,06	
(D1)	2C5T-14A464-CA	30700-1187	POLARIZATION OPTION "1"	18	11,08	28,15	34,0	2C5T-14A624-GA	2C5T-14A624-EA	2C5T-14A624-BA	11,31	28,60	(D2)
(S1)	7S4T-14489-AA	30700-1188	POLARIZATION OPTION "2"	18	14,08	28,15	34,0	7S4T-14A624-AA	TBD	TBD	14,31	28,60	(S2)
(S1)	7S4T-14489-BA	30700-1189	POLARIZATION OPTION "3"	18	17,08	28,15	34,0	7S4T-14A624-BA	TBD	TBD	17,31	28,60	(S2)
	2L1T-14A464-DA	30700-1207	POLARIZATION OPTION "1"	20	12,35	30,69	36,5	2L1T-14A624-BA	2L1T-14A624-ACA	2L1T-14A624-LA	12,57	31,14	(A5)
(F1)	3W4T-14A464-FA	30700-1208	POLARIZATION OPTION "2"	20	15,35	30,69	36,5	3W4T-14A624-MA	3W4T-14A624-PA	3W4T-14A624-SA	15,57	31,14	(F2)
(F1)	3W4T-14A464-GA	30700-1209	POLARIZATION OPTION "3"	20	18,35	30,69	36,5	3W4T-14A624-NA	3W4T-14A624-RA	3W4T-14A624-TA	18,57	31,14	(F2)

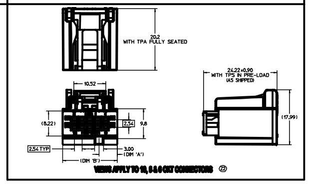
(P8)

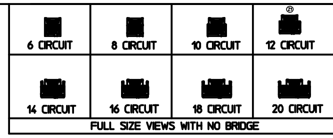


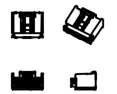


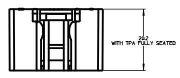


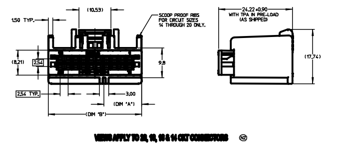


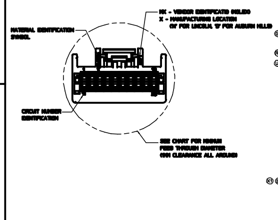












NOTES:

(G1) 1. PART MUST CONFORM TO THE ELECTRICAL CONNECTION SYSTEM DESIGN SPECIFICATION (SDS) REV 5 DATED 01/07/99, EXCEPT EL-0002 (16, 18 & 20 CIRCUITS).

(R4) 2. PART MUST CONFORM TO ES-F8DB-14A464-AA (USCAR) 07/05/95.

(U1) 3. FOR MAXIMUM TERMINAL MATING FORCE SEE DRAWING 3F2T-14474-RA.

4. ENGINEERING APPROVAL REQUIRED FOR ALL SOURCING AND TOOLING OF THIS PART.

5. FOR ENGINEERING APPROVED SOURCE SEE ENGINEERING RELEASE.

6. ENGINEERING APPROVAL OF SAMPLE FROM EACH SUPPLIER IS REQUIRED PRIOR TO AUTHORIZATION OF PART PRODUCTION.

7. CHANGES IN DESIGN COMPOSITION OR PROCESSING FROM THE PART PREVIOUSLY APPROVED FOR PART PRODUCTION REQUIRES PRIOR ENGINEERING APPROVAL.

8. ALL DIMENSIONS SHOWN IN mm, GENERAL TOLERANCES: ±0,25 ALL ONE PLACE DIMENSIONS, ±0,13 ALL TWO PLACE DIMENSIONS, ±0,5°-00' ALL ANGULAR DIMENSIONS.

9. PART MUST MATE WITH FORD HEADER PART NUMBERS: SEE CHART

10. [G] DENOTES GAGE DESIGN, GAGE DESIGNS MUST HAVE SIGNED ENGINEERING APPROVAL PRIOR TO CONSTRUCTION AND WILL BE A CONDITION OF FINAL PART APPROVAL.

(K1) (E4) 11. SOURCE IDENTIFICATION MARK CODE MUST BE PERMANENTLY APPLIED ON THE PART WITH 1,5mm LETTER SIZE FROM THE BOTTOM TO THE TOP OF THE CHARACTER AND LEGIBLE WHEREVER PACKAGE SIZE PERMITS OR OTHER AGREEMENTS ARE MADE.

12. SYSTEM CONFORMS TO AVP-(T401/T406)-001 REVISION A DATED 02/16/99.

13. 25% REGRIND ALLOWABLE IN PLASTIC COMPONENTS.

14. PACKAGING: MOLEX SPECIFICATION TBD

(E5) 15. CONNECTOR IS DESIGNED FOR USE WITH FOLLOWING FORD TERMINAL PART NUMBERS:

	SUPPLIER	SUPPLIER P/N	FORD P/N	CONDUCTOR WIRE SIZE
(R2)	MOLEX	34230-0001 (D-WIND) 34230-0002 (B-WIND)	3F2T-14474-SA	AWG 22
(R2)	MOLEX	34230-0003 (D-WIND) 34230-0004 (B-WIND)	3F2T-14474-RA	AWG 18 & 20
(AB1)	TYCO	0-1564880-1	9U5T-14474-NA	AWG 26
(P7)	TYCO	0-1393367-1	3F2T-14474-SA	AWG 22
(P7)	TYCO	0-1393366-1	3F2T-14474-RA	AWG 18 & 20

(AB1) REDUCED COLUMN STRENGTH OF AWG 26 WIRE MAY CAUSE DIFFICULTY INSERTING THE TERMINAL INTO THE CONNECTOR

16. WHEN A TIN OR GOLD TERMINAL IS USED ON THE WIRE SIDE THEN THE CORRESPONDING PLATING (i.e. TIN OR GOLD) MUST BE USED ON THE HEADER.

(B1) 17. PLATING ACCORDING TO SPECIFICATION NUMBERS ES-FADB-14A229-AA/BA/CA/DA, BRITE FINISH.

6U5T-14489-AA
7S4T-14489-BA
7S4T-14489-AA
5C5T-14489-AA
6W7T-14A464-BA
4W1T-14A464-FA
3F2T-14A464-KA
4L3T-14A464-RA
3W4T-14A464-GA
3W4T-14A464-FA
2C5T-14A464-CA
2C5T-14A464-BA
2L1T-14A464-VA
2L1T-14A464-KA
2L1T-14A464-JA
2L1T-14A464-HA
2L1T-14A464-GA
2L1T-14A464-FA
2L1T-14A464-EA

FRAME 1&

REVISIONS

ORIGINATOR	CHECKER	ENGR.APPR.	MATL.APPR.
REVISED AND REDRAWN AFTER REV. P (040427) RELEASED 5C5T-14489-AA R1 ADDED SHEET 2 TO SHOW BRIDGED GEOMETRY R2 ADDED MOLEX PART NUMBERS R3 MOVED VIEW TO SHEET 2 R4 REMOVED "EXCEPT 6,4,2 (FOR 16, 18 & 20 CIRCUITS) & 5,3,1" FROM NOTE: 2 ARCHIVED DATE: AE00-E-11658738-001 CAD: Y			
KRISHNA	WILSON	DIXON	
S1 RELEASED FORD P/N 7S4T-14489-AA & 7S4T-14489-BA S2 ADDED FORD P/N 7S4T-14A624-AA & 7S4T-14A624-BA S3 INCREASED PASS THRU HOLE DIAMETER FOR 6, 8, 10 & 12 HARNESS WITH BRIDGE BY 0,8MM ARCHIVED DATE: 10/01/04 AE00-I-11646451-002 CAD: Y			
KRISHNA	WILSON	DIXON	
T1 CORRECTED COLOR ON 6 CKT HOUSING W/ROUTING WING, FORD P/N 6W7T-14A464-BA TO GRAY ARCHIVED DATE: 5/23/05 AE00-E-11427227-205 CAD: Y			
BENES	WILSON	DIXON	
U1 CHANGED NOTE 3. ARCHIVED DATE: AELE-E-11776560-002 CAD: Y			
DEVITO	WILSON	BAUGHMAN	
V1 ADDED 12,10 DIMENSION IN SECTION C-C V2 CHANGED 1,80 TO (1,80) IN DETAIL D ARCHIVED DATE: AELE-E-11776560-037 CAD: Y			
MEYER	PRATT	BAUGHMAN	
W RELEASE FORD P/N 6U5T-14489-AA ARCHIVED DATE: AELE-E-11776560-068 CAD: Y			
BAILEY	KAKKURI	PRICE	
X1 DELETED BILL OF MATERIALS X2 UPDATED TYCO PART NUMBERS IN NOTES X3 25% REGRIND CHANGED TO 20% REGRIND ARCHIVED DATE: AELE-E-11776560-083 CAD: Y			
DICK	KAKKURI	PRICE	
Y1 ADDED PART NUMBER CU5T-14A459-GA ARCHIVED DATE: AELE-E-11776560-455 CAD: Y			
CUCU	HERFURTH	LEECE	
Z1 REVISE VIEW TO REFLECT CAPACITY TOOL Z2 SEPARATED 12CKT VIEW FROM 10, 8, 6 CKT VIEWS ARCHIVED DATE: AELE-E-11776560-702 CAD: Y			
FISCHER	BAUMAN	JBIELAW2	
AA ADDED GU5T-14A459-BA TO MATING COMPONENTS CHART AELE-E-11776560-812 20140326			
FISCHER	BAUMAN	ASANKOV01	
AB1 ADDED 9U5T-14474-NA TO TERMINAL TABLE AB2 ADDED NOTE TO ADDRESS POTENTIAL ISSUES WITH SMALL GAUGE WIRE AELE-E-11776560-883 20150924			
FISCHER	BAUMAN	ASANKOV01	

REFERENCE FOR INFORMATION CONTACT MOLEX INCORPORATED

DRAFTED IN ACCORDANCE WITH FAO ENGINEERING DRAFTING STANDARDS CURRENT AT INITIAL RELEASE

3RD ANGLE PROJ DIMENSIONS IN MILLIMETERS

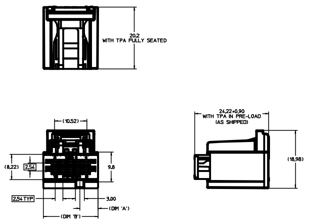
DRAWING 2L1T-14A464-DA

TITLE SLEEVE ASSEMBLY WIRE CONNECTOR FEMALE

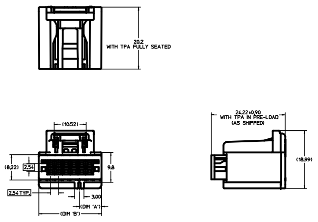
SHT 1 OF 2

(S3)

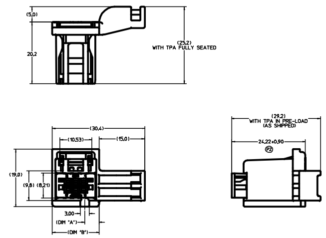
	FORD HARNESS ASSEMBLY PART NUMBER	MOLEX HARNESS ASSEMBLY PART NUMBER	POLARIZATION	CKT. SIZE	DIM 'A'	DIM 'B'	PASS THRU HOLE DIAMETER FOR HARNESS	MATING COMPONENTS			MATING INTERFACE DIMENSIONS		
								RT. ANGLE HEADER FORD P/N	VERTICAL HEADER FORD P/N	MALE IN LINE FORD P/N	DIM 'C'	DIM 'D'	
	TBD	31389-1060	POLARIZATION OPTION "1"	6	3,46	15,44	26,3	2L1T-14A624-HA	TBD	2L1T-14A624-TA	3,69	13,36	
	TBD	31389-1061	POLARIZATION OPTION "2"	6	6,46	15,44	26,3	TBD	TBD	6U5T-14A459-BA	6,69	13,36	
	TBD	31389-1062	POLARIZATION OPTION "3"	6	9,46	15,44	26,3	TBD	TBD	TBD	9,69	13,36	
(T1) (N1)	6W7T-14A464-BA	31406-1060	POLARIZATION OPTION "1"	6	9,46	15,44	36,7	2L1T-14A624-HA	TBD	2L1T-14A624-TA	9,69	13,36	
	TBD	31389-1080	POLARIZATION OPTION "1"	8	4,73	15,45	26,3	2L1T-14A624-GA	3F2T-14A624-BA	2L1T-14A624-SA	4,96	15,90	
	TBD	31389-1081	POLARIZATION OPTION "2"	8	7,73	15,45	26,3	4W1T-14A624-EA	TBD	TBD	7,96	15,90	
	TBD	31389-1082	POLARIZATION OPTION "3"	8	10,73	15,45	26,3	TBD	TBD	TBD	10,96	15,90	
●	6U5T-14489-AA	31389-1100	POLARIZATION OPTION "1"	10	6,00	17,99	27,2	2L1T-14A624-EA	TBD	2L1T-14A624-PA	6,23	18,44	
	TBD	31389-1101	POLARIZATION OPTION "2"	10	9,00	17,99	27,2	2L1T-14A624-FA	2C5T-14A624-AA	2L1T-14A624-RA	9,23	18,44	
	TBD	31389-1102	POLARIZATION OPTION "3"	10	12,00	17,99	27,2	TBD	TBD	TBD	12,23	18,44	
	TBD	31389-1120	POLARIZATION OPTION "1"	12	7,27	20,53	28,3	2L1T-14A624-ZA	2L1T-14A624-AAA	2L1T-14A624-ABA	7,50	20,98	
	TBD	31389-1121	POLARIZATION OPTION "2"	12	10,27	20,53	28,3	4L3T-14A624-GA	TBD	4C3T-14A624-UA	10,50	20,98	
	TBD	31389-1122	POLARIZATION OPTION "3"	12	13,27	20,53	28,3	TBD	TBD	TBD	13,50	20,98	
	TBD	31389-1147	POLARIZATION OPTION "1"	14	8,54	23,07	30,0	2C5T-14A624-FA	2C5T-14A624-CA	2C5T-14A624-HA	8,77	23,52	
	TBD	31389-1148	POLARIZATION OPTION "2"	14	11,54	23,07	30,0	TBD	TBD	TBD	11,77	23,52	
	TBD	31389-1149	POLARIZATION OPTION "3"	14	14,54	23,07	30,0	TBD	TBD	TBD	14,77	23,52	
	TBD	31389-1167	POLARIZATION OPTION "1"	16	9,81	25,61	32,0	2L1T-14A624-CA	2C5T-14A624-DA	2L1T-14A624-MA	10,04	26,06	
	TBD	31389-1168	POLARIZATION OPTION "2"	16	12,81	25,61	32,0	2L1T-14A624-DA	TBD	2L1T-14A624-NA	13,04	26,06	
	TBD	31389-1169	POLARIZATION OPTION "3"	16	15,81	25,61	32,0	TBD	TBD	TBD	16,04	26,06	
	TBD	31389-1187	POLARIZATION OPTION "1"	18	11,08	28,15	34,0	2C5T-14A624-GA	2C5T-14A624-EA	2C5T-14A624-BA	11,31	28,60	
	TBD	31389-1188	POLARIZATION OPTION "2"	18	14,08	28,15	34,0	7S4T-14A624-AA	TBD	TBD	14,31	28,60	(S2)
	TBD	31389-1189	POLARIZATION OPTION "3"	18	17,08	28,15	34,0	7S4T-14A624-BA	TBD	TBD	17,31	28,60	(S2)
	5C5T-14489-AA	31389-1207	POLARIZATION OPTION "1"	20	12,35	30,69	36,5	2L1T-14A624-BA	2L1T-14A624-ACA	2L1T-14A624-LA	12,57	31,14	
	TBD	31389-1208	POLARIZATION OPTION "2"	20	15,35	30,69	36,5	3W4T-14A624-MA	3W4T-14A624-PA	3W4T-14A624-SA	15,57	31,14	
	TBD	31389-1209	POLARIZATION OPTION "3"	20	18,35	30,69	36,5	3W4T-14A624-NA	3W4T-14A624-RA	3W4T-14A624-TA	18,57	31,14	



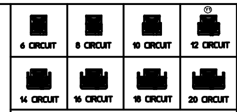
VIEWS APPLY TO 10, 8 & 6 CKT CONNECTORS WITH BRIDGE (Y2)



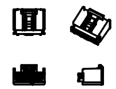
VIEW APPLIES 12 CKT CONNECTOR WITH BRIDGE (R1)

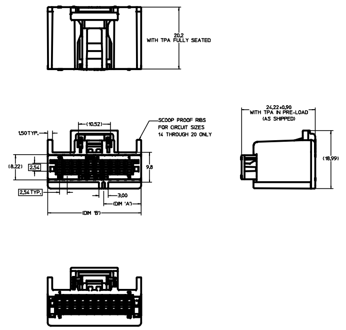


8 CKT CONNECTOR WITH WIRE ROUTING WING AND BRIDGE (R3)



FULL SIZE VIEWS WITH BRIDGE





VIEWS APPLY TO 20, 18, 16 & 14 CKT CONNECTORS WITH BRIDGE

FRAMES	LTR	REVISIONS			
1 &		ORIGINATOR	CHECKER	ENGR./APPR.	MATL./APPR.

REFERENCE FOR INFORMATION CONTACT MOLEX INCORPORATED

3RD ANGLE PROJ
DIMENSIONS IN MILLIMETERS

DRAWING 2L1T-14A464-DA

TITLE SLEEVE ASSEMBLY WIRE CONNECTOR FEMALE

SHT 2 OF 2

Molex Initial Sample Inspection Report
Quality Control

SAMPLE DESCRIPTION:	INSPECTOR:	DATE:
SLEEVE ASSEMBLY WIRE CONNECTOR FEMALE	S.Graciano	25-Mar-2022

Drawing #: 2L1T-14A464-DA	**REV: AB2** 2015/09/24	**VENDOR:** MOLEX
Molex P/N: 30700-1147		
Ford P/N: 2C5T-14A464-BA		

No.	PRINT SPEC.					Actual Measurements						UNITS	GAGE #	LEGEND
	Nominal	Tolerance				Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6			
1	20.2	+	0.25	-	0.25	20.354	20.306	20.296	20.299	20.279	20.287	MM	I-011	1
2	1.50	+	0.13	-	0.13	1.516	1.498	1.490	1.511	1.519	1.505	MM	CMM-004	1
	1.50	+	0.13	-	0.13	1.514	1.508	1.507	1.501	1.514	1.503	MM	CMM-004	1
3	2.54	+	-	-	-	2.533	2.534	2.528	2.534	2.525	2.531	MM	CMM-004	1
	2.54	+	-	-	-	2.518	2.522	2.527	2.529	2.531	2.524	MM	CMM-004	1
	2.54	+	-	-	-	2.549	2.546	2.538	2.538	2.534	2.544	MM	CMM-004	1
	2.54	+	-	-	-	2.528	2.533	2.534	2.531	2.536	2.535	MM	CMM-004	1
	2.54	+	-	-	-	2.550	2.543	2.541	2.546	2.542	2.540	MM	CMM-004	1
	2.54	+	-	-	-	2.534	2.533	2.534	2.541	2.534	2.540	MM	CMM-004	1
	2.54	+	-	-	-	2.523	2.525	2.528	2.523	2.521	2.524	MM	CMM-004	1
	2.54	+	-	-	-	2.538	2.538	2.529	2.539	2.531	2.533	MM	CMM-004	1
	2.54	+	-	-	-	2.538	2.528	2.534	2.529	2.537	2.534	MM	CMM-004	1
	2.54	+	-	-	-	2.532	2.535	2.534	2.541	2.533	2.535	MM	CMM-004	1
	2.54	+	-	-	-	2.528	2.528	2.524	2.525	2.523	2.529	MM	CMM-004	1
	2.54	+	-	-	-	2.535	2.537	2.542	2.534	2.540	2.537	MM	CMM-004	1
4	2.54	+	-	-	-	2.559	2.543	2.543	2.556	2.546	2.557	MM	CMM-004	1
	2.54	+	-	-	-	2.554	2.544	2.549	2.554	2.542	2.542	MM	CMM-004	1
	2.54	+	-	-	-	2.529	2.544	2.542	2.535	2.544	2.543	MM	CMM-004	1
	2.54	+	-	-	-	2.544	2.548	2.545	2.547	2.547	2.545	MM	CMM-004	1
	2.54	+	-	-	-	2.563	2.543	2.541	2.564	2.551	2.545	MM	CMM-004	1
	2.54	+	-	-	-	2.555	2.553	2.548	2.552	2.553	2.550	MM	CMM-004	1
	2.54	+	-	-	-	2.555	2.550	2.552	2.554	2.549	2.553	MM	CMM-004	1
5	3.00	+	0.13	-	0.13	3.008	2.983	2.981	3.002	3.035	3.009	MM	I-011	1
6	9.8	+	0.25	-	0.25	9.767	9.792	9.823	9.841	9.780	9.763	MM	I-011	1
7	24.22	+	0.90	-	0.90	24.024	24.022	24.066	24.036	24.065	24.031	MM	I-011	1
8	Housing Color **" GRAY "**					OK	OK	OK	OK	OK	OK			VISUAL
9	TPA Color **" RED "**					OK	OK	OK	OK	OK	OK			VISUAL
10	Circuit Size **" 14 "**					OK	OK	OK	OK	OK	OK			VISUAL
11	Weight (kg)					0.0042								
12	Notes: 4,5,6,7,8,9,11,13,14					OK	OK	OK	OK	OK	OK			
13	Notes: 1,2,3,10,12,15,16,17					REVIEWED	REVIEWED	REVIEWED	REVIEWED	REVIEWED	REVIEWED			

DIMENSION "OUT OF TOLERANCE"

MARKED THUS "X"

LEGEND:

1 Accepted
2 Rejected
3 Conditional
4 Tool life QCC.

Control Plan

Prototype	Pre-launch	Production X	Key Contact/Phone	Date(Orig.)	Date (Rev.)
Control Plan Number			Carlos O. Ibarra González 631 980 0169	February 9, 2001	July 5, 2021 Rev: "AG"
Part Number / Latest Change Level			**Core Team**	**Customer Engineering Approval/Date (If Req'd)**	
30700-1 & 31389-1X			G. Tolano (group leader), C. Martinez (manuf. Eng), C. Ibarra (Sr. QE)	N/A	
New automatic assembly process				GCN# 10723266	
Part Name / Description			**Supplier/Plant Approval/Date**	**Customer Quality Approval/Date(If Req'd)**	
SLEVEE ASSEMBLY WIRE CONNECTOR FEMALE			N/A	N/A	
Supplier / Plant	**Supplier Code**		**Other Approval Date (If Req'd)**	**Other Approval Date (If Req'd)**	
Molex Nogales, Mexico	N/A		N/A	N/A	

Part / Process Number	Process Name / Operation Description	Machine, Device Jig, Tools For Mfg.	Characteristics			Special Char. Class.	Methods					Reaction Plan
							Product/Process Specification/ Tolerance	Evaluation Measurement Technique	Sample		Control Method	
			No.	Product	Process				Size	Freq.		
1.0	Incoming inspection	N/A	1	Housing (30700-2XXX)		None	Correct circuti size (6 to 20 Ckts) Polarization 1, 2 & 3 color Gray, Black & Natural	Visual	AQL	Each lot received	Inspection plan / Drawing	Reject parts and report to supplier , follow Procedure O20
			2	TPA (30700-3XXX)		None	Correct Ckt Size / Red Color	Visual	AQL	Each lot received	Inspection plan / Drawing	Reject parts and report to supplier , follow Procedure O20
2.0	Set-Up assembly Line	3105-HDAC-1 3105-30700-01 & 3105-30700-02	1	Correct circuit size	Load correct program P/N in machine screen (circuit size, polarization)	None	Load correct components in production area	Visual	According inspection plan	Each Set-Up	Inspection plan / Drawing / Golden Samples	Stop Set-Up and notify to group leader
2.1	QC set- up inspection	3105-HDAC-1 3105-30700-01 & 3105-30700-02	1	None	Check the correct program was loaded, validating all detection devices are working correctly according Part number is assembled in machine.	None	None	Visual	According inspection plan	Each Set-Up	Inspection plan / Drawing / golden samples.	Reject Set-Up
			2	None	Part height 24.22 mm	None	+/-0.090 mm	Caliper / digital indicator	5 PCs,	Each Set-up and shifth	Inspection plan / Drawing.	Reject Set-Up

			3	None	Part width (Dimension B on drawing)	None	+/- 0.13 mm	Caliber / Digital indicator	5 PCs,	Each Set-up and shifth	Inspection plan / Drawing.	Reject Set-Up
3.0	Manually Place TPA into the hopper	3105-30700-01 & 3105-30700-02	1	None	Correct TPA part number / Circuit size is used	None	None	Visual	According inspection plan	Each time TPA is loaded in to the Hopper	Set-Up validation / inspection plan / Drawing	Stop process, report it to Q.C. and segregate suspect parts according procedure O20.
3.1	TPA hopper	3105-30700-01 & 3105-30700-02	1	None				Visual	According inspection plan	Each time TPA is loaded in to the Hopper	Inspection plan	
3.2	TPA bowl feeder	3105-30700-01 & 3105-30700-02	1	None				Visual	According inspection plan	Each time TPA is loaded in to the Hopper	Inspection plan	
3.3	Feeder track from bowl	3105-30700-01 & 3105-30700-02	1	None				Visual	According inspection plan	Each time TPA is loaded in to the Hopper	Inspection plan	
3.4	Manually place TPA into the feeder track	3105-HDAC-1	1	None				Visual	According inspection plan	Each time TPA is loaded in to the Hopper	Inspection plan	
3.5	Escapement	3105-30700-01 & 3105-30700-03	5	None				Visual	According inspection plan	Each time TPA is loaded in to the Hopper	Inspection plan	
3.6	Transfer TPA to vision inspection (if apply)	3105-30700-01 & 3105-30700-02	6	None				Visual	According inspection plan	During assembly process	Inspection plan / golden samples	
3.7	Automatic vision system inspection (TPA) (If apply)	3105-30700-01 & 3105-30700-02	7	Correct TPA part number (according circuti size)	Reject TPA's blocked holes.	None	TPA free of blocked holes	Automatic inspection system	100%	During assembly process	Golden Samples with blocked holes pass through vision system system every set-up and each start shift	Stop process and segregate suspect parts according procedure O20.
4.0	manually place housing in to the hopper	3105-30700-01 & 3105-30700-02	1	None				Visual	According inspection plan	Each time HOUSING is loaded in to the Hopper	Inspection plan / Drawing / vision system inspection.	
4.1	Housing hopper	3105-30700-01 & 3105-30700-02	1	None				Visual	According inspection plan	Each time HOUSING is loaded in to the Hopper	Visual inspection during process	
4.2	Housing bowl feeder	3105-30700-01 & 3105-30700-02	1	None	Correct hosuing color,			Visual	According inspection plan	Each time TPA is loaded in to the Hopper	Visual inspection during process	

4.3	Feeder track	3105-30700-01 & 3105-30700-02	1	None	polarization and circuit size loaded in machine.	None	Correct part number, color and circuit size	Visual	According inspection plan	Each time TPA is loaded in to the Hopper	Visual inspection during process	Stop process and segregate suspect parts according procedure O20.
4.4	Manually place housing into the feeder track	3105-HDAC-1	1	None				Visual	According inspection plan	Each time TPA is loaded in to the Hopper	Visual inspection during process	
4.5	Escapement	3105-30700-01 & 3105-30700-02	1	None				Visual	According inspection plan	Each time TPA is loaded in to the Hopper	Visual inspection during process	
4.6	Transfer housing to vision inspection (if apply)	3105-30700-01 & 3105-30700-02	1	None				Visual	According inspection plan	Each time TPA is loaded in to the Hopper	Visual inspection during process	
4.7	Automatic vision system (HOUSING) (if apply)	3105-30700-01 & 3105-30700-02	1	None	Reject housing with wrong polarization rib.			Automatic inspection system	100%	During assembly process	Golden Samples with wrong polarization housing pass through vision system every set-up and each start shift	Stop process and segregate suspect parts according procedure O20.
5.0	Reject shuttle (COMPONENTS)	3105-HDAC-1 3105-30700-01 & 3105-30700-02	1	Reject defectives parts	Segregate rejected parts automatically	None	None	Automatic inspection system	100%	During assembly process	Golden Samples with wrong housing pass through vision system system every set-up and each start shift	Stop process and segregate suspect parts according procedure O20.
6.0	Assembly TPA into HOUSING (PRE-LOCK)	3105-HDAC-1 3105-30700-01 & 3105-30700-02	1	None	TPA in prelock posiiton (33.80 mm Reference FORD drawing)	None	+/- 0.90 mm Reference FORD drawing)	Automatic inspection system	100%	During assembly process	TPA / HOUSING assembly area tooling design. VISION SYSTEM VERIFICATION WITH GOLDEN SAMPLES. (TPA FULL SEATED / TPA MISSALIGNED) pass through vision system every set-up and each start shift	Stop process and segregate suspect parts according procedure O20.
7.0	Verify TPA in Pre-lock	3105-HDAC-1 3105-30700-01 & 3105-30700-02	1	None	TPA in prelock posiiton (33.80 mm Reference FORD drawing)	None	+/- 0.90 mm Reference FORD drawing)	Automatic inspection system	100%	During assembly process	VISION SYSTEM VERIFICATION WITH GOLDEN SAMPLES. (TPA FULL SEATED / TPA MISSALIGNED) pass through vision system every set-up and each start shift	Stop process and segregate suspect parts according procedure O20.

8.0	Reject Shuttle (FG)	3105-HDAC-1 3105-30700-01 & 3105-30700-02	1	None	Segregate rejected parts automatically	None	None	Automatic inspection system	100%	During assembly process	Golden Samples with defects pass through vision system system every set-up and each start shift	Stop process and segregate suspect parts according procedure O20.

9.0	Shuttel Finish Goods to the auto packing system	3105-HDAC-1 3105-30700-01 & 3105-30700-02	1	None	Pass accepted parts to packaging area .	None	Quantity according circuti size and PK drawing	Automatic operation	100%	During assembly process	Sensor to count parts are drop to the box. / PK-30907-417	Stop process and report it to Q.C.
10.0	Manually stick the label over the box.	3105-HDAC-1 3105-30700-01 & 3105-30700-02	1	None	Place correct identification label in box.	None	Correct part number and traceability should be printed on label.	Visual	100%	During assembly process	Inspection plan / Drawing / Set-Up verification	Stop process and segregate suspect parts according procedure O20.
10.1	Place the bag & partition in to the box	3105-HDAC-1 3105-30700-01 & 3105-30700-02	1	None	Place plastic bag and partions according PK drawing	None	None	Visual	100%	Each box	PK-30907-417	Stop process and segregate suspect parts according procedure O20.
10.2	Place the box over the input conveyor	3105-30700-01 & 3105-30700-02	1	None	Box with identification label	None	None	Visual	100%	Each box	Operator training	Stop process and report ir to group leader.
10.3	Auto-Shuttle empty box to packing location	3105-30700-01 & 3105-30700-02	1	None	Keep enougth boxes ready to filled out with parts.	None	None	Automatic detection	100%	During assembly process	Automatic detection if auto_shuttle is empty, Machine will stop	Stop process and report ir to group leader.
11.0	Verify the box in position	3105-HDAC-1 3105-30700-01 & 3105-30700-02	1	None	Boxes should be in correct position to assure they will be filled correctly	None	None	Automatic counter	100%	During assembly process	PK-30907-417	Stop process and segregate suspect parts according procedure O20.
12.0	Place FG into box (see packaging drawing)	3105-HDAC-1 3105-30700-01 & 3105-30700-02	1	None	Pack quantity according PK drawing	None	None	Automatic counter	100%	During assembly process	PK-30907-417	Stop process and segregate suspect parts according procedure O20.
12.1	Turn packing servo to next partition (3 times)	3105-30700-01 & 3105-30700-02	2									
12.2	Eject / pull fully loaded box	3105-HDAC-1 3105-30700-01 & 3105-30700-02	3									

13.0	Manually remove box from the outlet conveyor	3105-30700-01 & 3105-30700-02	1	None	Move boxes to Q/.C. inspection area	None	None	Visual	100%	During assembly process	Automatic detection if outlet conveyotr is full, Machine will stop	Stop process and report ir to group leader.
14.0	Part count verification (thru weight scale)	3105-HDAC-1 3105-30700-01 & 3105-30700-02	1	None	Quantity according PK drawing	None	None	Weight count	100%	During assembly process	PK-30907-417	Stop process and segregate suspect parts according procedure O20.
15.0	Q. C. Audit	3105-HDAC-1 3105-30700-01 & 3105-30700-02	1	None	Free of damaged and no missing components	None	Audit 10% from each box	Visual inspection (just TPA position and cosmetic)	10%	During assembly process	inspection plan / INSP100	Stop process and segregate suspect parts according procedure O20. / Send back to production to be 100% sorted
16.0	100% visual inspection	3105-HDAC-1 3105-30700-01 & 3105-30700-02	1	None	Free of damaged and no missing components	None	Inspect 100%	Visual inspection	100%	Just parts rejected by quality	Inspection plan / O20 procedure	Segregate parts and inspect 100% after that inspection notify Q.C. (step #15)
17.0	Send parts to warehouse	3105-HDAC-1 3105-30700-01 & 3105-30700-02	1	None	All accepted parts be confirmed in SAP and send to warehouse	None	None	Visual	100%	Just accepted parts	SAP confirmation process / production program	In case accepted parts are not confirmed notify group leader.
18.0	Ship parts to the customer	3105-HDAC-1 3105-30700-01 & 3105-30700-02	1	None	Send correct parts and quantity on time to customers	None	None	RF guns / SAP program	100%	Each shipment	SAP program / Delivery Notes / Shiping area procedures	Stop shipping process and notify warehouse supervisor
19.0	Product Periodic Verification.	3105-HDAC-1 3105-30700-01 & 3105-30700-02	1		Dimensional and functional verification	None	Annual dimensional periodic verification	Full dimensional according customer drawing	6 Pieces	Annual	DOC103	Communicate to quality engineer.
							Functional special validation	According product specification	Determinate by engineering	Each change it could affect the product functionallity	PCN process	Communicate to customer

Assy Part 307001147

0307002147 HDAC64 DR FEM HSNG 14 CKT GRY POL 1
(0899921451)

0307003140 HDAC64 FEM 14 CKT TPA
(0899920273)

Idemitsu Chemicals U.S.A. Corporation

3000 Town Center, Suite 2820,,Southfield,MI 48075 USA,
TEL: 248-355-9590 FAX: 248-355-9330

Certificate of Analysis

To whom it may concern
We hereby certify that the following commodity has been tested by us and its quality corresponds to the description as mentioned below.

Product Name/Grade/Color No./Package	Xarec N WA 7030-02 CJ781101 Stone Gray		
Lot No.	LC1201QCJ2	**Lot Size**	1,480.000 kg
Customer Part No.	899921451	**Delivery Date**	05/03/2022
PO No.	1009058388	**Sales Order**	1100016919
Customer Name	Molex		

Properties	Testing Method	Unit	Specification	Test Result
Ash Content	ISO 3451-1A	%	28.0 - 32.0	30.8
Tensile Strength, Break	ISO 527, 5mm/min	MPa	> 150	177
Tensile Elongation,Break	ISO 527, 5mm/min	%	> 2.2	2.6
Melt Viscosity T5 , 400sec-1	DOWN 101821	Pascal sec	108 - 224	121
Melt Viscosity T10 , 400sec-1	DOWN 101821	Pascal sec	68 - 199	99

Idemitsu Chemicals U.S.A. Corporation
Date: 04/29/2022

Ryosuke Kondo

Authorized Signature(s)

Celanese

MOLEX INC.
700 UPLAND
LINCOLN NE 68521
USA

CRISTI NYMAN
Phone: 402-458-8918
Fax: 630-813-8518

The Verst Group
Ticona Polymers
1100 Burlington Pike
FLORENCE KY 41042
USA

Type 4 Certificate of Analysis

CELANEX 3300-2 ES3144 RED M0

Customer Part No.:	0899920273	**Cert Issue Date**:	31 May 2022
Formula No.:	3300-2	**Qty Shipped**:	2,000.000 KG
Catalog:	20000804	**Order Item /date**:	2490533 10 / 25 May 2021
Color No.:	ES3144	**Delivery item/date**:	87511552 900001 / 25 Apr 2022
Produced at:	Florence, KY, USA	**Account #**:	2066402
		Customer PO No.:	1007394092
		Rail car:	53551 / 53551

Batch 0001603060

In reference to the above, this is to advise you that this is a standard product and meets the following requirements:

SPECIFICATIONS: CELANEX 3300-2 RED

BATCH RELEASE DATA	UoM	Value	Limit
Date when Batch Was Produced		20211112	
Ash Content	%(m)	29.91	28.00 - 32.00
Melt Visc. (scanning)@1000/s	Pascal sec	232.6	160.0 - 350.0
Melt Visc. (scanning)@400/s	Pascal sec	324.3	260.0 - 430.0

ANNUAL TESTS (REVISED ON)	UoM	Value	Limit
Flexural modulus (20 Nov 2021)	MPa	9757	min. 8000
Flexural Stress (20 Nov 2021)	MPa	221.1	min. 180.0
Izod Notched Impact Strength (20 Nov 2021)	kJ/m²	9.85	min. 5.00
Tensile Stress at break (20 Nov 2021)	MPa	144.0	min. 100.0

COMMENTS

These test data are determined based on standard ISO and/or ASTM testing procedures.

Polyester Global Business Line

If you have questions regarding this letter, please call your Customer Service Team at 800-526-4960.