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PPAP Package for:

Newark Electronics
Customer Part Number: 82Y8193
(TE Connectivity Part Number): 2035363-4
Nov-2020

Nondisclosure Agreement

If a nondisclosure agreement has been reached with your company, it will be included on the following page(s). Please review the terms of this agreement to ensure that further actions associated with information contained within this PPAP package do not violate these terms.

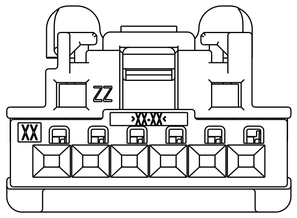
If a nondisclosure agreement HAS NOT been reached, certain documents deemed confidential by TE Connectivity will not be included in this PPAP package. These documents include but are not limited to the Design FMEA, the Process Flow Diagram, the Process FMEA and the Control Plan. These documents can be reviewed by you company but cannot be retained.

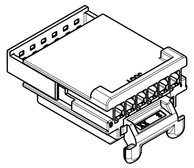
Section 1

Design Records

KEYING OPTIONS
(SHOWN WITH CPA)

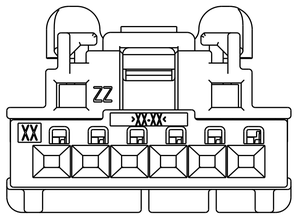
KEYING OPTION: B △6

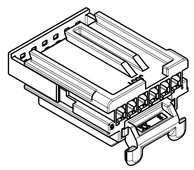




SCALE 2:1

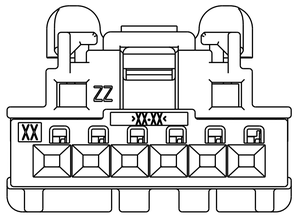
KEYING OPTION: C

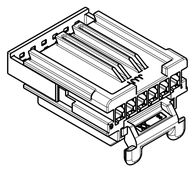




SCALE 2:1

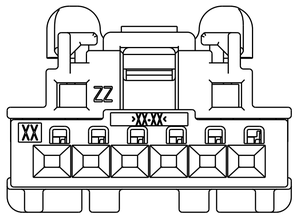
KEYING OPTION: D

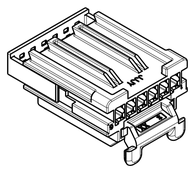




SCALE 2:1

KEYING OPTION: E





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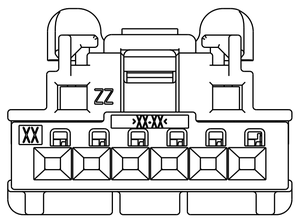
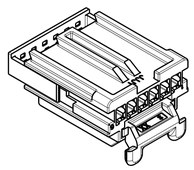
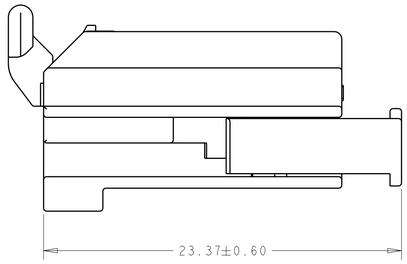
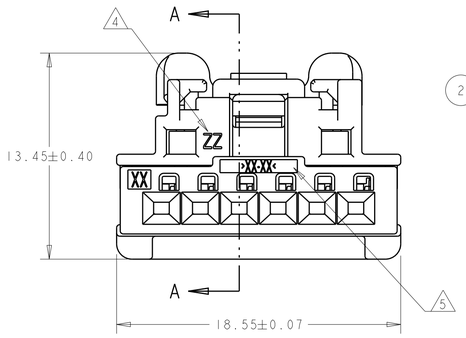
KEYING OPTION: F

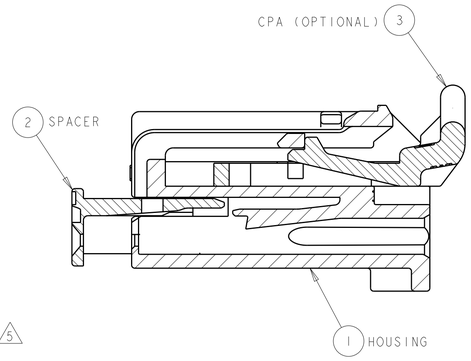




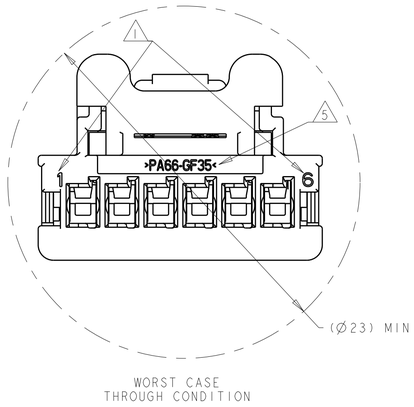
SCALE 2:1



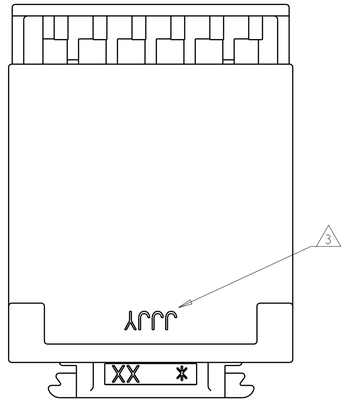


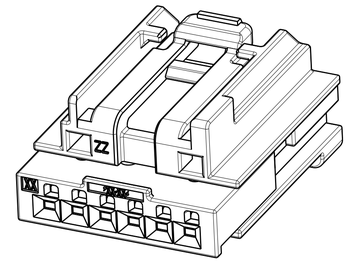


SECTION A-A



WORST CASE
THROUGH CONDITION





SCALE 4:1

1. CIRCUIT IDENTIFICATION NUMBERS LOCATED AS SHOWN.
2. SPACER AND CPA (OPTIONAL) ARE SHIPPED IN PRE-ASSEMBLED POSITION.
3. DATE CODE; FORMAT: JJJ = JULIAN DAY; Y = YEAR (4TH DIGIT).
4. MOLD CAVITY IDENTIFICATION.
5. MATERIAL IDENTIFICATION.
6. KEYING OPTION B NOT PREFERED FOR NEW APPLICATIONS.
7. PACKAGING: CONNECTOR ASSEMBLIES BULK PACKED IN CARDBOARD BOXES.
8. REFERENCE TE INSTRUCTION SHEET 408-32052.

REVISIONS

P	LTR	DESCRIPTION	DATE	DWN	APVD
	B1	REVISED PER ECO-15-011565	21AUG2015	DLD	DCM
	B2	REVISED PER ECO-17-009179	23JUN2017	DLD	DCM
	B3	REVISED PER ECO-18-009918	26JUN2018	JMS	CM
	B4	REVISED PER ECO-18-013902	31AUG2018	JMS	CM

1-2035363-0	2035363-9	2035363-8	2035363-7	2035363-6	2035363-5	2035363-4	2035363-3	2035363-2	2035363-1	DESCRIPTION	MATERIAL	COLOR	ITEM NO
A	A	A	A	A	A	A	A	A	A	<-------- ASSEMBLY PART REVISION			
										<-------- ASSEMBLY PN			
1	-	1	-	1	-	1	-	1	-	CPA	>PBT-GF15< >PBT-GF20<	RED	3
1	1	1	1	1	1	1	1	1	1	SPACER	>PBT+PC-GF30< >PBT-GF30<	RED	2
1	1	-	-	-	-	-	-	-	-	HOUSING; KEY F	>PA66-GF35<	BLACK	1
-	-	1	1	-	-	-	-	-	-	HOUSING; KEY E	>PA66-GF35<	BLACK	1
-	-	-	-	1	1	-	-	-	-	HOUSING; KEY D	>PA66-GF35<	BLACK	1
-	-	-	-	-	-	1	1	-	-	HOUSING; KEY C	>PA66-GF35<	BLACK	1
-	-	-	-	-	-	-	-	1	1	HOUSING; KEY B	>PA66-GF35<	BLACK	1
										DESCRIPTION	MATERIAL	COLOR	ITEM NO
QTY REQ'D PER ASSY										REVISION OF EACH ASSY NO (WHEN BLANK, USE DWG REVISION)			
										WEIGHT OF EACH ASSY NO (g)			
PARTS LIST													

THIS DRAWING IS A CONTROLLED DOCUMENT.

DIMENSIONS: mm

TOLERANCES UNLESS OTHERWISE SPECIFIED:
0 PLC ±-
1 PLC ±-
2 PLC ±-
3 PLC ±-
4 PLC ±-
ANGLES ±-

MATERIAL - SEE TABLE

FINISH - -

DWN D. DRUMMOND 20APR2012
CHK C. MARTIN 20APR2012
APVD C. MARTIN 20APR2012
PRODUCT SPEC - -
APPLICATION SPEC - -
WEIGHT -

TE Connectivity

NAME FEMALE ASSEMBLY, 6 POSITION (1X6), UNSEALED, GENERATION Y

SIZE A1 | CAGE CODE 00779 | DRAWING NO C-2035363 | RESTRICTED TO -

CUSTOMER DRAWING | SCALE 5:1 | SHEET 1 OF 1 | REV B4

Section 2

Engineering Change Documents

Product Change Nofic aon

Current Date: 01-Oct-2020

TE Connecvity

Product Change Nofic aon: P-20-019613 **PCN Date:** 23-SEP-20

TE would like to inform you of the following change(s) to the listed TE Connecvity Pr oduct. In case of any further quesons about this chang e(s), please contact your TE Connecvity Sales Engineer . Affected part, drawing and/or specificaon number s are listed on the a ached sheet(s).

General Product Descripon:
6 POSITION (1X6), FEMALE HOUSING, UNSEALED, GENERATION Y

Descripon of Chang es
New capacity mold for the 1x6 GEN Y housing 2035362-X. New mold is idenc al to original mold. No change to form, fit, nor funcon.

Reason for Changes:	
Product improvement. Increase molding capacity for the housing to meet demand requirements.	
Esma ted Dates:	
Last Order Date (Obsolete Parts Only):	**First Date To Ship** (Changed Parts Only):
	17-NOV-2020
Last Ship Date (Obsolete Parts Only):	**Last Date for Mixed Shipments:** (Changed Parts Only):
	No Mixed Shipments

Part Number(s) being Modified:

Part Number	Part Disconnued per PCN	Customer Drawing	Alias Part Number(s)	Substut e Part Number	Substut e Alias Part Number(s)	Descripon Of Difference
1-2035363-0	NO					
2035363-1	NO					
2035363-2	NO					
2035363-3	NO					
2035363-4	NO					
2035363-5	NO					
2035363-6	NO					
2035363-7	NO					
2035363-8	NO					

Section 3

Customer Engineering Approval

ENGINEERING SAMPLE EVALUATION REPORT

PART NAME: SLV WIR CONN - FEM

PART NO:

DU5T-14489-LA	2035363-1
DU5T-14489-MA	2035363-3
DU5T-14489-SA	2035363-4
DU5T-14489-NA	2035363-5
DU5T-14489-TA	2035363-6
DU5T-14489-PA	2035363-7
DU5T-14489-RA	2035363-9

SUBMITTED BY: Craig Martin
Generation Y 1x6 Unsealed
Connector Assembly

CURRENT MANUFACTURING SITE: TE Empalme Mexico

FUTURE MANUFACTURING SITE: TE Empalme Mexico

CHANGE TYPE:	CHECK APPLICABLE:
TOOL MOVE:	
PROCESS CHANGE:	
MATERIAL/MATERIAL SUPPLIER CHANGE:	
CAPACITY TOOL:	X

SUPPLIER: TE Connectivity

DATE SUBMITTED: 17Nov2020

MADE TO DRAWING DATED: DU5T-14489-LA 101222

CHANGE DETAILS:

TE PN X-2035363-X
Connector Assembly, Female, 6 Position Unsealed, Generation Y
Release housing capacity mold 1949869. Capacity mold will complement first mold at TE Empalme Mexico molding facility.

APPROVED: ☑
REJECTED:

PRODUCT ENGINEERING SIGNATURE*: GregoryDLeece
Gregory D Leece (Nov 18, 2020 20:01 EST)

DATE: Nov 18, 2020

IDENTIFY WITH √ REMARKS AFFECTING PRODUCT ENGINEERING CRITICAL REQUIREMENTS

***By signing this document, you state that you have verified the physical part/s with the drawing/s and agree with key dimensional data, notes and appearance.**

TE Connectivity	**Product Validation Plan and Report**	DVP&R Number: 1949869_1X6_PV1	Dept# 7294 Global Automotive Division, America's North
		Plan Date 8/7/2020	Plan Originator Craig Martin, TE Connectivity

Component	TE P/N	UPG Number	Concurrence	Customer Approval
1X6 Generation Y Female Assy	X-2035363-X		Gregory D Leece (Nov 18, 2020 20:01 EST)	Nov 18, 2020

Model Year	Applications	Controlling Document	Source	Report Date	Reporting Engineer
		USCAR-2 Rev. 6	TE Connectivity	11/17/2020	Craig Martin

PROCEDURE	TEST DESCRIPTION	ACCEPTANCE CRITERIA	TARGET REQUIREMENTS	TEST STAGE	SAMPLE TYPE	SAMPLES TESTED	ACTUAL RESULTS	NOTES
Specify the governing Test Procedure or Standard.	Provide a brief description of each test.	Specify test targets and/or pass/fail criteria. e.g. cycles, miles, volts, minimum value, no. failure, etc.	Acceptance Level	ED = engineering development DV = design verification PV = Production validation CC = continuing conformance	A = prototype (hand made) B = prototype (tooled) C = program level D = initial production E = full volume production	List quantity tested, sample type, and design phase, e.g., I, II, etc.	Actual Test Results	Describe or elaborate on unique criteria, results, etc.

.

1X6 TEST PLAN											TEST REPORT				
Item No.	Procedure Or Standard	Test Description	Acceptance Criteria	Target Requir-ments	Test Respon-sibility	Test Stage	Sample		Timing		Samples Tested			Actual Results	NOTES
							Qty	Type	Start	Compl	Qty	Type	Phase		
START OF CONNECTOR SYSTEM – MECHANICAL TESTS															
1	**USCAR 5.4.1**	**Terminal - Connector Insertion Force** Test # 20201343													
1a	USCAR 5.1.8	Visual Inspection	No visual damage to sample	No defects	TE	PV	48	E	10/23/20	10/27/11	48	E		Pass	8 Female Assemblies for 18 AWG 8 Female Assemblies for 26 AWG
1b	USCAR 5.4.1	Insertion Force TPA in preset position	30N Max Terminal Insertion	No failures	TE	PV	24 24	E	10/23/20	10/27/11	24 24	E		18 AWG 7.30 N Min 15.98 N Max 26 AWG 1.20 N Min 1.89 N Max Pass	Test each circuit cavity at least once.
1c	USCAR 5.1.8	Visual Inspection	No visual damage to sample	No Defects	TE	PV	48	E	10/23/20	10/27/11	48	E		Pass	

1X6 TEST PLAN											TEST REPORT				NOTES
Item No.	Procedure Or Standard	Test Description	Acceptance Criteria	Target Requir-ments	Test Respon-sibility	Test Stage	Sample		Timing		Samples Tested			Actual Results	
							Qty	Type	Start	Compl	Qty	Type	Phase		
2	**USCAR 5.4.1**	**Terminal - Connector Extraction Force** Test # 20201343													
2a	USCAR 5.1.8	Visual Inspection	No visual damage to sample	No Defects	TE	PV	48	E	10/23/20	10/27/11	48	E		Pass	8 Female Assemblies using 18 AWG
2b	USCAR 5.4.1	Terminal Extraction Force (Primary lock only)	30N Min	No failures	TE	PV	24	E	10/23/20	10/27/11	24	E		83.30 N Min 95.35 N Max Pass	Test each circuit cavity at least once.
2c	USCAR 5.4.1	Terminal Extraction Force (Primary & Secondary Locks after Moisture Conditioning)	60N Min	No failures	TE	PV	24	E	10/23/20	10/27/11	24	E		75.95 N Min 85.47 N Max Pass	Test each circuit cavity at least once.
2d	USCAR 5.1.8	Visual Inspection	No visual damage to sample	No Defects	TE	PV	48	E	10/23/20	10/27/11	48	E		N/A Destructive test	
3	**USCAR 5.4.2**	**Connector to Connector Mating/Unmating Force** Test # 20201343													
3a	USCAR 5.1.8	Visual Inspection	No visual damage to sample	No Defects	TE	PV	40	E	10/23/20	10/27/11	40	E		Pass	
3b	USCAR 5.4.2	Mate Fully Loaded Connector	75N Max	No failures	TE	PV	16	E	10/23/20	10/27/11	16	E		15.76 N Min 17.45 N Max Pass	16 fully loaded connectors
3c	USCAR 5.4.2.3	Unmate w/ primary lock	110N Min	No failures	TE	PV	8	E	10/23/20	10/27/11	8	E		154.60 N Min 164.84 N Max Pass	8 connector pairs without terminals.
3d	USCAR 5.4.2	Unmate w/out primary lock	75N Max	No failures	TE	PV	8	E	10/23/20	10/27/11	8	E		4.97 N Min 10.85 N Max Pass	8 connector pairs with terminals.
3e	USCAR 5.4.2.3	Disengage primary lock	70N Max	No failures	TE	PV	8	E	10/23/20	10/27/11	8	E		8.60 N Min 9.27 N Max Pass	8 connector pairs without terminals.
3f	USCAR 5.1.8	Visual Inspection	No visual damage to sample	No Defects	TE	PV	40	E	10/23/20	10/27/11	40	E		N/A Destructive test	

1X6 TEST PLAN											TEST REPORT				NOTES
Item No.	Procedure Or Standard	Test Description	Acceptance Criteria	Target Requir-ments	Test Respon-sibility	Test Stage	Sample		Timing		Samples Tested			Actual Results	
							Qty	Type	Start	Compl	Qty	Type	Phase		
4	**USCAR 5.4.5**	**TPA Engage/Disengage Force** Test # 20201464													
4a	USCAR 5.1.8	Visual Inspection	No visual damage to sample	No Defects	TE	PV	30	E	10/23/20	10/27/11	30	E		Pass	
4b	USCAR 5.4.5	TPA Pre-set to Lock w/terminals	60N Max	No failures	TE	PV	10	E	10/23/20	10/27/11	10	E		26.40 N Min 31.22 N Max Pass	
4c	USCAR 5.4.5	TPA Pre-set to Lock w/out terminals	15N Min	No failures	TE	PV	10	E	10/23/20	10/27/11	10	E		15.21 N Min 19.27 N Max Pass	
4d	USCAR 5.4.5	TPA Lock to Pre-set	60N Max 18N Min after initial removal	No failures	TE	PV	10	E	10/23/20	10/27/11	10	E		Initial 24.05 N Min 30.03 N Max Pass After Initial 20.02 N Min 28.72 N Max Pass	Use samples from 5b
4e	USCAR 5.1.8	Visual Inspection	No visual damage to sample	No Defects	TE	PV	30	E	10/23/20	10/27/11	30	E		Pass	
5	**USCAR 5.4.5**	**CPA Engage/Disengage Force** Test # 20201343													
5a	USCAR 5.1.8	Visual Inspection	No visual damage to sample	No Defects	TE	PV	40	E	10/23/20	10/27/11	40	E		Pass	
5b	USCAR 5.4.5	CPA Engage Preset to Lock (unmated)	60N Min	No failures	TE	PV	10	E	10/23/20	10/27/11	10	E		61.95 N Min 65.66 N Max Pass	
5c	USCAR 5.4.5	CPA Engage Preset to lock (mated)	15 N Max	No failures	TE	PV	10	E	10/23/20	10/27/11	10	E		8.01 N Min 11.18 N Max Pass	
5d	USCAR 5.4.5	CPA Disengage Lock to preset (mated)	30 N Max	No failures	TE	PV	10	E	10/23/20	10/27/11	10	E		10.45 N Min 13.52 N Max Pass	

1X6 TEST PLAN											TEST REPORT				NOTES
Item No.	Procedure Or Standard	Test Description	Acceptance Criteria	Target Requir-ments	Test Respon-sibility	Test Stage	Sample		Timing		Samples Tested			Actual Results	
							Qty	Type	Start	Compl	Qty	Type	Phase		
5e	USCAR 5.4.5	CPA Removal (unmated) Test # 20120045ACS	30 N Min	No failures	TE	PV	10	E	10/23/20	10/27/11	10	E		32.30 N Min 44.92 N Max Pass	
5f	USCAR 5.1.8	Visual Inspection	No visual damage to sample	No Defects	TE	PV	40	E	10/23/20	10/27/11	40	E		Pass	
END OF CONNECTOR SYSTEM – MECHANICAL TESTS															

Revision History
Report Date

8/7/2020 First draft
11/17/2020 Record test values

ESER_PVPR_DU5T-14489-LA_1X6GENY_NEWTOOL

Final Audit Report 2020-11-19

Created:	2020-11-18
By:	Sumit Das (sumit.das@te.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAATEIGc-YkA2bnixgO-RHHSW2hfiE4X-BZ

"ESER_PVPR_DU5T-14489-LA_1X6GENY_NEWTOOL" History

Document created by Sumit Das (sumit.das@te.com)
2020-11-18 - 11:46:59 PM GMT- IP address: 198.137.214.33

Document emailed to Gregory D Leece (gleece@ford.com) for signature
2020-11-18 - 11:47:55 PM GMT

Email viewed by Gregory D Leece (gleece@ford.com)
2020-11-19 - 0:54:33 AM GMT- IP address: 136.2.33.162

Document e-signed by Gregory D Leece (gleece@ford.com)
Signature Date: 2020-11-19 - 1:01:03 AM GMT - Time Source: server- IP address: 136.2.33.162

Agreement completed.
2020-11-19 - 1:01:03 AM GMT

Section 4

Design FMEA

See Section A for nondisclosure conditions.
The Design FMEA, if included, is a Class II confidential document belonging to TE Connectivity. A class II document may not be further distributed and is subject to the conditions of the nondisclosure agreement.

Section 5

Process Flow Diagram

See Section A for nondisclosure conditions.
The Process Flow Diagram, if included, is a Class II confidential document belonging to TE Connectivity. A class II document may not be further distributed and is subject to the conditions of the nondisclosure agreement.

Section 6

Process FMEA

See Section A for nondisclosure conditions.
The Process FMEA, if included, is a Class II confidential document belonging to TE Connectivity. A class II document may not be further distributed and is subject to the conditions of the nondisclosure agreement.

Section 7

Control Plan

See Section A for nondisclosure conditions.
The Control Plan, if included, is a Class II confidential document belonging to TE Connectivity. A class II document may not be further distributed and is subject to the conditions of the nondisclosure agreement.

Section 8

Measurement System Analysis

General Sales Part.
MSA is not included in the PPAP Package

2035363-4
1X6 GENERATION Y ASSY KEYC CPA
Production

Part Revision:	A
Certified Format:	TYCO ELECTRONICS
Global Portfolio Status:	N/A
End of life date:	N/A
Originator ID:	Craig Martin (US020569)
Original Date:	18 Oct 2010
Production Date:	26 Apr 2012
Market date:	29 Jun 2012
Project Number:	N/A
RDO:	0753 - Americas North T&C Sustaining
ECOC:	0K00 - Motor Vehicle Product & Manufacturing
Material Type:	ZFRT - FINISHED PRODUCT
Engineering Status:	2 - PRODUCTION
Sales Status:	2 - GENERAL SALES
Discontinuance Status:	2 - NOT PLANNED
Base UOM:	PC - PIECE

Section 9

Dimensional Results

Production Part Approval

DIMENSIONAL TEST RESULTS

ACT-1173

TE Connectivity-Empalme is accredited by ANSI-ASQ National Accreditation Board for ISO/IEC 17025 under a defined calibration and/or testing scope.

Organization: TE Connectivity

Supplier/Vendor Code: N/A

INSPECTION FACILITY:

TE Connectivity Empalme Metrology lab

Part Number: 2035363-4

Part Name: FEMALE ASSEMBLY, 6 POSITION (1X6), UNSEALED, GENERATION Y

Design Record Change Level: DWG: C-2035363 REV. B4

Engineering Change Documents: N/A

Folio: 51912

Item	Dim./Spec.	Spec. / Limits tol +	Spec. / Limits tol -	Units	Organization Measurement Results (Data) SAMPLE 1	SAMPLE 2	SAMPLE 3	SAMPLE 4	SAMPLE 5	SAMPLE 6	Ok	Not Ok	Instrument # ID
1	23.37	0.60	0.60	mm.	23.105	23.131	23.108	23.130	23.093	23.101	✔		LMMC-010
2	13.45	0.40	0.40	mm.	13.396	13.422	13.397	13.365	13.437	13.348	✔		LMMC-010
3	18.55	0.07	0.07	mm.	18.519	18.511	18.516	18.521	18.537	18.533	✔		LMMC-010
4	23	MINIMUM		mm.	OK	OK	OK	OK	OK	OK	✔		
5	CPA (OPTIONAL)			visual	OK	OK	OK	OK	OK	OK	✔		
6	SPACER			visual	OK	OK	OK	OK	OK	OK	✔		
7	HOUSING			visual	OK	OK	OK	OK	OK	OK	✔		
	NOTES:												
1	CIRCUIT IDENTIFICATION NUMBER LOCATED AS SHOWN.			visual	OK	OK	OK	OK	OK	OK	✔		
2	SPACER AND CPA (OPTIONAL) ARE SHIPPED IN PRE-ASSEMBLED POSITION.			visual	OK	OK	OK	OK	OK	OK	✔		
3	DATE CODE: FORMAT: JJJ = JULIAN DAY; Y = YEAR (4TH DIGIT).			visual	OK	OK	OK	OK	OK	OK	✔		
4	MOLD CAVITY IDENTIFICATION.			visual	OK	OK	OK	OK	OK	OK	✔		
5	MATERIAL IDENTIFICATION.			visual	OK	OK	OK	OK	OK	OK	✔		
6	KEYING OPTION B NOT PREFERED FOR NEW APPLICATIONS.			visual	OK	OK	OK	OK	OK	OK	✔		
7	PACKING: CONNECTOR ASSEMBLIES BULK PACKED IN CARDBOARD BOXES.				NOTED PER APQP TEAM						✔		
8	REFERENCE TE INSTRUCTION SHEET 408-32052.				NOTED PER APQP TEAM						✔		

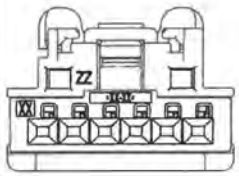
CONCLUSION:

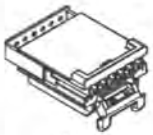
TOTAL # OF FEATURES	24	
LESS BASIC DIMENSIONS	0	
LESS REFERENCE DIMENSIONS	0	
REPORTED DIMENSIONS		24
# DIMENSIONS IN TOLERANCE		**24**
# DIMENSIONS OUT OF TOLERANCE		**0**
% DIMENSION IN TOLERANCE		**100.00** %
% DIMENSION OUT OF TOLERANCE		**0.00** %

SIGNATURE	TITLE	DATE
Omar Sánchez	Metrology Chief	October 9, 2020

KEYING OPTIONS
(SHOWN WITH CPA)

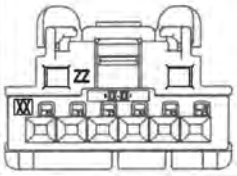
KEYING OPTION: B ⚠6

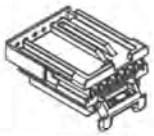




SCALE 2:1

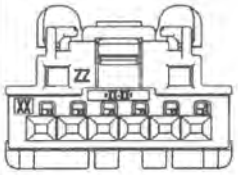
KEYING OPTION: C





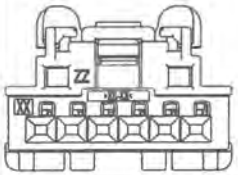
SCALE 2:1

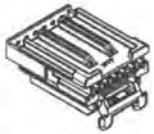
KEYING OPTION: D



SCALE 2:1

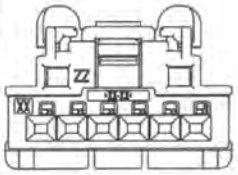
KEYING OPTION: E



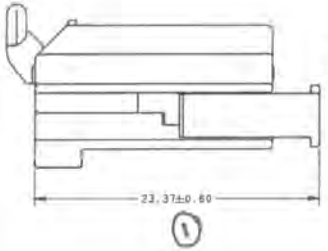


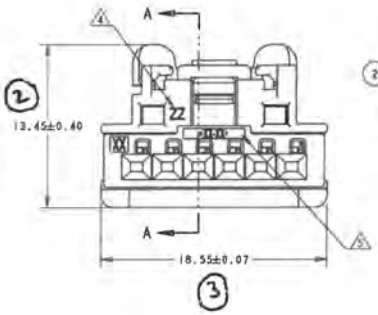
SCALE 2:1

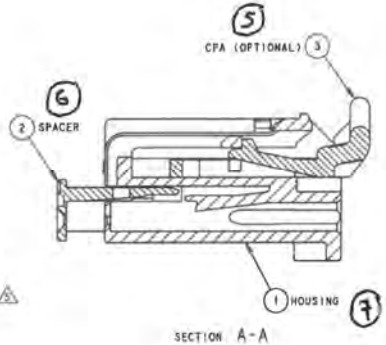
KEYING OPTION: F



SCALE 2:1







⚠1 CIRCUIT IDENTIFICATION NUMBERS LOCATED AS SHOWN.

2. SPACER AND CPA (OPTIONAL) ARE SHIPPED IN PRE-ASSEMBLED POSITION.

⚠3 DATE CODE: FORMAT: JJJ = JULIAN DAY; Y = YEAR (4TH DIGIT).

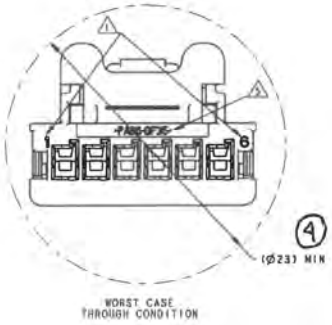
⚠4 MOLD CAVITY IDENTIFICATION.

⚠5 MATERIAL IDENTIFICATION.

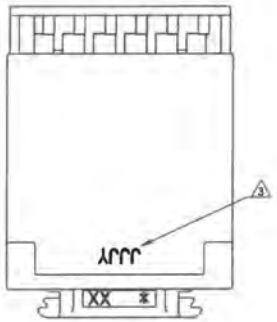
⚠6 KEYING OPTION B NOT PREFERED FOR NEW APPLICATIONS.

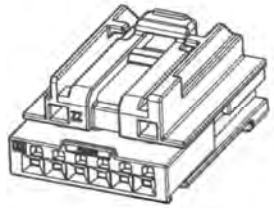
7. PACKAGING: CONNECTOR ASSEMBLIES BULK PACKED IN CARDBOARD BOXES.

8. REFERENCE TE INSTRUCTION SHEET 408-32052.



WORST CASE
THROUGH CONDITION





SCALE 4:1

REVISIONS

P	LTR	DESCRIPTION	DATE	APVD	DRAFT
	B1	REVISED PER ECO-15-011585	21AUG2015	DLD	DCW
	B2	REVISED PER ECO-17-008170	23AUG2017	DLD	DCW
	B3	REVISED PER ECO-18-008910	09AUG2018	JMS	CW
	B4	REVISED PER ECO-18-013992	31AUG2018	JMS	CW

A	A	A	A	A	A	A	A	A	A	<-------- ASSEMBLY PART REVISION			
1-2035363-0	2035363-9	2035363-8	2035363-7	2035363-6	2035363-5	2035363-4	2035363-3	2035363-2	2035363-1	<-------- ASSEMBLY PN			
1	-	1	-	1	-	1	-	1	-	CPA	>PBT-GF15< >PBT-GF20<	RED	3
1	1	1	1	1	1	1	1	1	1	SPACER	>PBT+PC-GF30< >PBT-GF30<	RED	2
1	1	-	-	-	-	-	-	-	-	HOUSING; KEY F	>PA66-GF35<	BLACK	1
-	-	1	1	-	-	-	-	-	-	HOUSING; KEY E	>PA66-GF35<	BLACK	1
-	-	-	-	1	1	-	-	-	-	HOUSING; KEY D	>PA66-GF35<	BLACK	1
-	-	-	-	-	-	1	1	-	-	HOUSING; KEY C	>PA66-GF35<	BLACK	1
-	-	-	-	-	-	-	-	1	1	HOUSING; KEY B	>PA66-GF35<	BLACK	1
										DESCRIPTION	MATERIAL	COLOR	ITEM NO
QTY REQ'D PER ASSY										REVISION OF EACH ASSY NO (WHEN BLANK, USE DWG REVISION)			
										WEIGHT OF EACH ASSY NO (g)			

PARTS LIST

Digitally signed by Gladys Garcia
Date: 2020.10.07 12:37:11 -07'00'

THIS DRAWING IS A CONTROLLED DOCUMENT.

DIMENSIONS: MM

TOLERANCES UNLESS OTHERWISE SPECIFIED:

MATERIAL: SEE TABLE

FINISH: -

DRN	D. DRUMMOND	20APR2012
CHK	C. MARTIN	20APR2012
APVD	C. MARTIN	20APR2012
PRODUCT SPEC	-	
APPLICATION SPEC	-	
WEIGHT	-	
CUSTOMER DRAWING		

TE Connectivity

FEMALE ASSEMBLY, 6 POSITION (1X6), UNSEALED, GENERATION Y

SIZE	CAGE CODE	DRAWING NO.	REVISION
A1	00779	C-2035363	-

SCALE 5:1 SHEET 1 OF 1 REV B4

Section 10

Material, Performance Test Results

Ames Industries, Inc.
2999 Elizabethtown Rd.
Hershey, PA 17033
(717) 533-3400 Fax (717) 533-7686

CERTIFICATE OF CONFORMANCE

Company: **TE CONNECTIVITY CORPORATION** A1694

PO Number **SA 2550147218**

P/N **2-1419170-0-B1** Rev **B2** Part Description **2 X 4 GET FEMALE SPACER**

Raw Material No. / Description / Supplier

1-703566-3 / VALOX 508-R RD6C017 RED / SABIC

Quantity Shipped
45,000

Lot Number **35607-0011155601**

WE CERTIFY THAT THE ABOVE PART NUMBER MEETS THE REQUIREMENTS OF THE APPL TE CONNECTIVITY CORPORATION PRODUCT PRINT AND SPECIFICATIONS. COMPLIANCE CERTIFIED BY THE UNDERSIGNED QUALITY ASSURANCE MANAGER.

Q.A. Signature: *Kevin Chabala* Date: 6/9/2020

BASF CORPORATION

BASF
We create chemistry

Certificate of Analysis

Customer:

TE CONNECTIVITY CORPORATION
8000 PIEDMONT TRIAD PKWY
GREENSBORO NC 27409-9407

Attention:
FAX:
Cust Prod: 702661-9
Cust Prod Name: ULT.A3EG7 BK23189 726KG 11G
Cust P.O.: 2713201734
Cust P.O. Line: 1

Inspection Certificate 3.1 according to EN 10204

Product Number : 52568990
Product Name : ULTRAMID® A3EG7 BLACK 23189 POLYAMIDE 726KG FIBREBOARD IBC
Vehicle :
Batch/Lot : 0209229324
Manuf.Date : Sep-10-2020
Shipped Date :
Shipped Quantity : 16,005.560 LB
Delivery Date : Oct-01-2020
Order Number : 117746080 000010
Delivery Note : 144860746 900001

Characteristic	Result	UOM	-----Specification----- Minimum	Maximum	Test Method
Ash / Filler Content	35.300	%	33.000	37.000	ASTM5630/ISO3451
Moisture Content	0.08	%		0.15	ASTM D6869 / ISO 15512B
Viscosity Number for Polyamides	143	ml/g	130	160	ISO 307

Comments :

Results shown are the means of individual test values determined on samples taken during production of the lot specified.

This product is approved for the following specifications:

MS-DB41 CPN 2224
MS-DB41 CPN 3695
M5600
M53122

Celanese

TYCO ELECTRONICS NCDC2
8000 PIEDMONT TRIAD PKWY
GREENSBORO NC 27409
USA

DAVID HAMILTON

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

Type 2 Certificate of Analysis

CELANEX 1632Z ES3144 RED (Z7)

Customer Part No.:	705038-1
Formula No.:	1632Z
Catalog:	21017405
Color No.:	ES3144
Produced at:	Florence, KY, USA

Cert Issue Date:	20 Jan 2020
Qty Shipped:	4,960.000 LB
Order Item /date:	2238232 10 / 19 Nov 2019
Delivery item/date:	86433562 900001 / 24 Jan 2020
Account #:	2080916
Customer PO No.:	2710298680
Rail car:	See Senders Inst.

Batch 0001297016

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

		UoM	Value
BATCH RELEASE DATA			
Melt Flow Rate (MFR)	(ISO 1133-1, ASTM D1238)	g/10min	9.50
Ash Content		%(m)	15.71

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.

Section 11

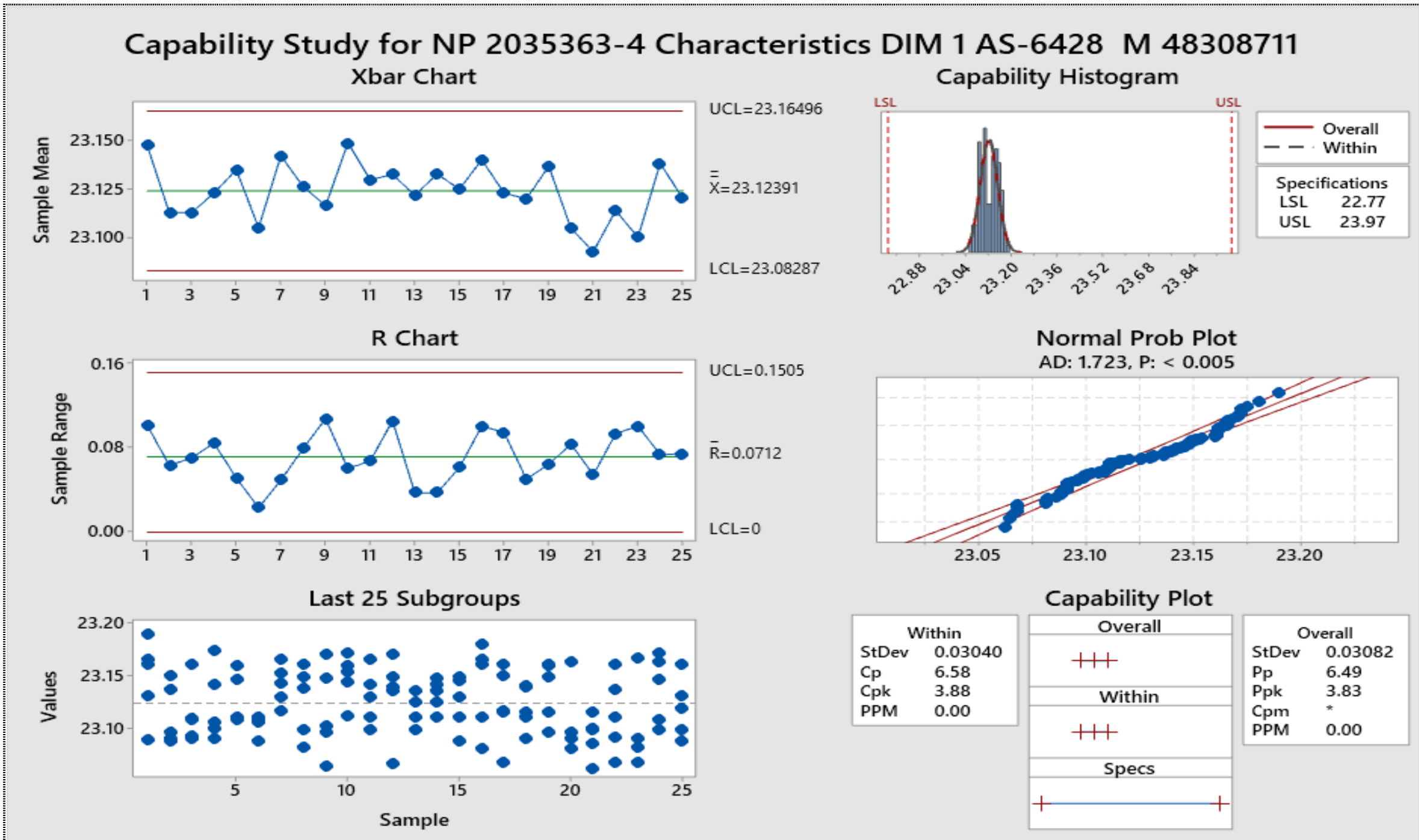
Initial Process Studies

Capability Study	**Part Number TE:**	2035363-4	**NP Customer:**	2035363	**Folio Metrologia:** 51922
	Name NP:	SFEMALE ASSEMBLY 6 POSITION (1X6) UNSEALED GENERATION Y			**DATE:** October 10, 2020

Standard Record:	2020-1129	**Machine:**	48308711	**Nombre de la Estacion:**	Ensamble

Name Characteristic:	DISTANCIA	**Work Center**	6428	**Units**	MM

Special Note / Comments:		**Cpk**	3.88



The actual process spread is represented by 6 sigma.

Section 12

Qualified Laboratory Documentation

Certificate of Registration

QUALITY MANAGEMENT SYSTEM - IATF 16949:2016

This is to certify that:

TE Connectivity
Global Automotive Division
Americas North
Carretera Internacional, KM 1969
Guadalajara-Nogales Km 2
Empalme
Sonora
85340
Mexico

operates a Quality Management System which complies with the requirements of IATF 16949:2016 for the following scope:

Design and manufacture of electrical interconnecting devices.

For and on behalf of BSI:

Carlos Pitanga, Chief Operating Officer Assurance – Americas

BSI Certificate Number: 514458-003
IATF Number: 0315420

...making excellence a habit.™

Certification Date: 2018-07-11 Latest Issue: 2018-07-11 Expiry Date: 2021-07-10

Location	Registered Activities
TE Connectivity Global Automotive Division Americas North Carretera Internacional, KM 1969 Guadalajara-Nogales Km 2 Empalme Sonora 85340 Mexico	Manufacture of interconnecting devices. Including the following remote support functions: TE Connectivity Global Automotive Division Americas North 900 Wilshire Boulevard Suite 150 Troy, MI 48084 Design and Development. TE Connectivity Global Automotive Division Americas North Fulling Mill Road Middletown, PA 17057 Design and Development, Product Testing and Customer Service. TE Connectivity Global Automotive Division Americas North 3800 Reidsville Road Winston-Salem, NC 27102 Design and Development, Product Testing and Calibration, Business Office (Quote Process) and Purchasing. TE Connectivity Global Automotive Division Americas North 20 Esna Park Drive Markham, Ontario L3R 1E1 Canada Design and Development and product testing (optics lab) TE Connectivity Global Automotive Division Americas North 2100 Paxton Street Harrisburg, PA 17111 Provision of Product Testing to TE Connectivity Manufacturing Sites. TE Connectivity North Carolina Distribution Center 8000 Piedmont Triad Parkway Greensboro, North Carolina 27409 Receiving Inspection, Storage / Inventory.

BSI Certificate Number: 514458-003

IATF Number: 0315420

Certification Date: 2018-07-11 Latest Issue: 2018-07-11 Expiry Date: 2021-07-10

Section 13

Appearance Approval Report

Not Applicable

Section 14

Sample Product

Sent in separate package
(if required)

Section 15

Master Sample

Retained at manufacturing location

Section 16

Checking Aids

Not Applicable

Section 17

Records of Compliance with Customer-Specific Requirements

MDS Report
Substances of assemblies and materials

1. Company and Product Name

1.1 Supplier Data

Name [ID]:	**Tyco Electronics GAD [913]**
DUNS Number:	**-**
Street/Postal Code:	**Amperestr. 12-14**
Nat./ZipCode/City:	**DE 64625 Bensheim**
Supplier Code:	**-**
Contact Person:	**IMDS Team (India) Engineering Services**
- Phone:	**-**
- Fax No.:	**-**
- E-Mail Address:	**imds@te.com**

1.2 Product Identification

Part/Item No.:	**2035363-4**
Description:	**6 Pos Female Unsealed Connector Assembly GET Generation Y**
Report No.:	**-**
Date of Report:	**-**
Purchase Order No.:	**-**
Bill of Delivery No.:	**-**
Preliminary MDS:	**No**
IMDS ID / Version:	**266173983 / 19**
Node ID:	**891793262**
MDS Status (Change Date):	**Internally released (12/26/2019)**

MDS Report

Substances of assemblies and materials

Materials which are subject to legal prohibitions must not be included!
Dangerous substances formed or released during use must also be declared
Please note: GADSL list for substances that require declaration

2. Characterization of the Component

Part/Item No.:	**2035363-4**	Report No.:	**-**
Description:	**6 Pos Female Unsealed Connector Assembly GET Generation Y**	IMDS ID / Version:	**266173983 / 19**
		Node ID:	**891793262**

Tree Level	Description Article Name Name Substance name	Part/Item No. Item- /Mat.-No. Material-No. CAS No.	IMDS ID / Version	Quantity	Weight [g]	Portion [%]	Portion (from - to) [%]	Classif. GADSL, SVHC	Parts Marking Recyclate (Indust./Consumer) Application [ID]
1	6 Pos Female Unsealed Connector Assembly GET Generation Y	2035363-4	266173983 / 19		2.789				
├2	6 Pos Female Housing Generation Y-Black	0-2035362-2	240548465 / 2	1	2.147				Yes
├3	PA66-GF35	702661-9	70521492 / 3		2.147			5.1.a	No

Tree Level	Description Article Name Name Substance name	Part/Item No. Item- /Mat.-No. Material-No. CAS No.	IMDS ID / Version	Quantity	Weight [g]	Portion [%]	Portion (from - to) [%]	Classif. GADSL, SVHC	Parts Marking Recyclate (Indust./Consumer) Application [ID]
4	Further Additives, not to declare	system				0.5			
4	GF-Fibre	-				35			
4	Carbon black	1333-86-4				0.5			
4	PA66	-				64			
2	Female Spacer 6 Pos (1X6) Generation Y - Red	2035361-1	240548380 / 6	1	0.326				Yes
3	PBT+PC-GF30	1-703566-3	553590750 / 1		0.326			5.1.a	No
4	PBT+PC	-				66.23431	60 - 70		
4	GF-Fibre	-				28.117155	25 - 30		
4	Further Additives, not to declare	system				1.870293	0 - 3		
4	Pigment portion, not to declare	system				1.870293	0 - 3		
4	Zinc sulphide	1314-98-3				1.90795	0.1 - 3	D / P	
2	GET, CPA Unsealed - Red	8-1419168-4	3659595 / 30	1	0.316				Yes
3	PBT-GF20	703653-2 + 702998-5	323074718 / 4		0.316			5.1.a	No
4	PBT-GF20	703653-2	251635500 / 3			97.5		5.1.a	
5	GF-Fibre	-				20			
5	Further Additives, not to declare	system				1			
5	PBT	-				79			
4	PE Colour Masterbatch	0-0702998-5	174083055 / 4			2.5	2 - 3	5.1.b	
5	PE-LD	-				70			

Tree Level	Description Article Name Name Substance name	Part/Item No. Item- /Mat.-No. Material-No. CAS No.	IMDS ID / Version	Quantity	Weight [g]	Portion [%]	Portion (from - to) [%]	Classif. GADSL, SVHC	Parts Marking Recyclate (Indust./Consumer) Application [ID]
├5	Pigment portion, not to declare	system				10			
├5	C.I. Solvent Red 135	20749-68-2				10			
├5	Chrome antimony titanium buff rutile	68186-90-3				10			
This is an uncontrolled copy of a document created by IMDS. End of the report.									

Section 18

Part Submission Warrant

TE Connectivity

PPAP North America Team

Part Submission Warrant

EPPAP:

Part Name: FEMALE ASSEMBLY, 6 POSITION (1X6), UNSEALED, GENERATION Y | Cust. Part Number: 82Y8193

Shown on Drawing Number: C-2035363 | Org.Part Number: 2035363-4

Engineering Change Level: B4 | Dated: 31-Aug-2018

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

Safety and/or Government Regulation: ☐ Yes ☑ No | Purchase Order No.: N/A | Weight (kg): 0.0027

Checking Aid Number: Not applicable | Checking Aid Engineering Change Level: N/A | Dated: N/A

ORGANIZATION MANUFACTURING INFORMATION

TE Connectivity / DUNS 588115092
Organization Name and Supplier Code

Carretera Internacional, KM 1969, Guadalajara-Nogales Km 2
Street Address

Empalme | Sonora | 85340 | México
City | Region | Postal Code | Country

CUSTOMER SUBMITTAL INFORMATION

Newark Electronics
Customer Name/Division

Not Provided
Buyer/Buyer Code

Various
Application

MATERIALS REPORTING

Has customer-required Substance of Concern information been reported Submitted by IMDS or other customer format: ☑ Yes ☐ No ☐ NA

IMDS: 266173983 / 19

Are polymeric parts identified with appropriate ISO marking codes? ☑ Yes ☐ No ☐ NA

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

P-20-019613

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 supplier's manufacturing location.

SUBMISSION RESULTS

The results for ☑ dimensional measurement ☑ 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: Assembly / Mold Tool #21-1949869

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 **Production Rate is TE Proprietary**. I also certify that documented evidence of such compliance is on file and is available for review. I have noted any deviations from this declaration below.

EXPLANATION/COMMENTS

Production Rate is TE Proprietary. PCN P-20-019613.

Is each Customer Tool properly tagged and numbered? ☐ Yes ☐ No ☑ NA

Organization Authorized Signature: *Enrique Espinoza* | Date: 11/23/2020

Print Name: Enrique Espinoza | Phone No.: n/a | Fax: n/a

Title: PPAP Technician | Email: enrique.espinoza@te.com

FOR CUSTOMER USE ONLY (IF APPLICABLE)

PPAP Warrant Disposition : ☐ Approved ☐ Rejected ☐ Other

Customer Signature | Date

Print Name | Customer Tracking Number (optional)

Section 18a

Bulk Material Requirements

Not Applicable