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PPAP Package for:

**Newark Electronics
Customer Part Number: 14AC5685
(TE Connectivity Part Number): 1-2296696-1
AUG-2021**

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Nondisclosure Agreement

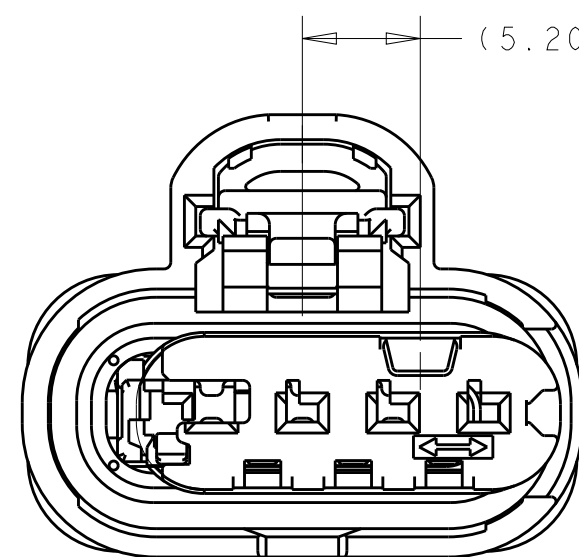
If a nondisclosure agreement has been reached with your company, it will be included on the following page(s). Please review the terms of this agreement to ensure that further actions associated with information contained within this PPAP package do not violate these terms.

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.

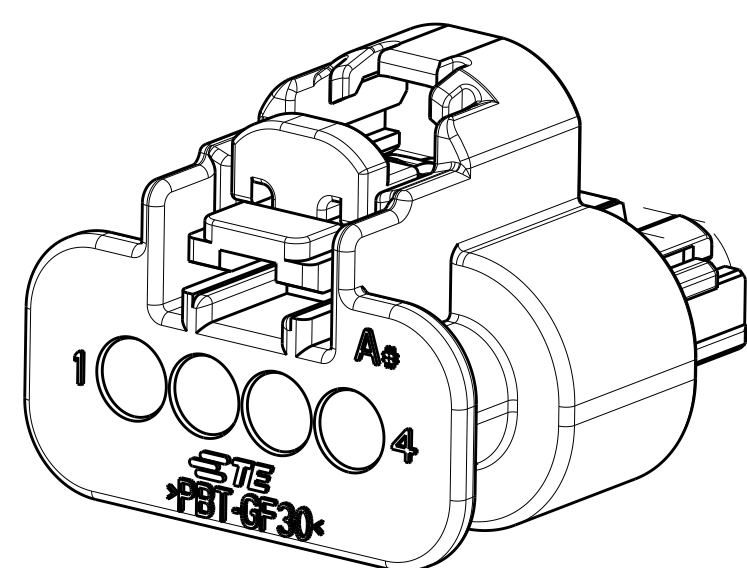


Section 1

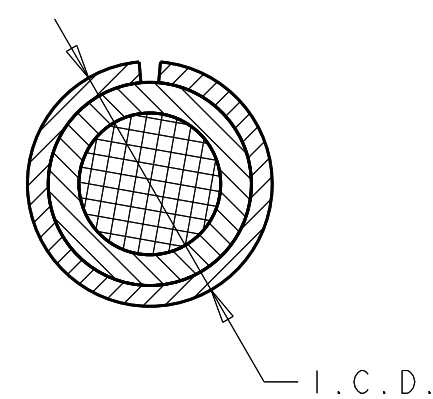
Design Records



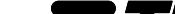
KEY CODE G 
SCALE 3:1



ISOMETRIC VIEW
SCALE 3:1



INSULATION CRIMP DIMENSIONS

THIS DRAWING IS A CONTROLLED DOCUMENT.		DWG. 21MAY2013 VISHNU, P 29MAY2013 MD BROWN 29MAY2013 MD BROWN 29MAY2013		 TE Connectivity	
DIMENSIONS: mm		TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PLC ± 1 PLC ±0.3 2 PLC ±0.15 3 PLC ± 4 PLC ± ANGLES ±		NAME PLUG ASSEMBLY, SEALED, 4 POSITION, MCON	
		PRODUCT SPEC - APPLICATION SPEC -		SIZE CASE CODE DRAWING NO A100779 C=2296696	
MATERIAL -		FINISH -		RESTRICTED TO GM	
		WEIGHT -		SCALE 4:1 SHEET 1 OF 1 REV A	
		RESTRICTED CUSTOMER			

SECURE DISTRIBUTION TO TE324854
ON 2020-12-11T23:53:25Z. TE CONNECTIVITY CONFIDENTIAL & PROPRIETARY INFORMATION



Section 2

Engineering Change Documents



Product Change Notification

Current Date: 12-Jul-2021

TE Connectivity

Product Change Notification: P-21-021172

PCN Date: 08-JUL-21

TE would like to inform you of the following change(s) to the listed TE Connectivity Product. In case of any further questions about this change(s), please contact your TE Connectivity Sales Engineer. Affected part, drawing and/or specification numbers are listed on the attached sheet(s).

General Product Description:

4P,1.2mm,CB,MCON,PeriSeal,30D,HCR,RED

Description of Changes

TE is building a replacement mold for the 4p peripheral Seal. No change to fit, form or function.

Reason for Changes:

Product improvement. Current Tool is beyond useful life. Replacing tool to avoid quality issues from worn tooling.

Estimated Dates:

Last Order Date (Obsolete Parts Only):

First Date To Ship (Changed Parts Only):

08-OCT-2021

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 Discontinued per PCN	Customer Drawing	Alias Part Number(s)	Substitute Part Number	Substitute Alias Part Number(s)	Description Of Difference
1-2203529-2	NO					
1-2203529-5	NO					
1-2203773-1	NO					
1-2203773-2	NO					
1-2296696-1	NO					
1-2296696-2	NO					
1-2296696-3	NO					
1-2296696-6	NO					
1-2296696-7	NO					
2203773-1	NO					
2203773-2	NO					
2203773-7	NO					
2296700-3	NO					
2296700-6	NO					
2300498-1	NO					
2300498-2	NO					
2300498-6	NO					
2300498-7	NO					



Section 3

Customer Engineering Approval



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

Section 9

Dimensional Results

**WINSTON-SALEM DIMENSIONAL INSPECTION**

3900 Reidsville Road (067-060)

Winston-Salem, NC 27101

Request Number: WDI-20211455

Part Name:	PLUG ASSEMBLY, SEALED, 4 POSITION, MCON			
Part Number:	1-2296696-1	Report Date:	3-Aug-2021	Unit: MM
Print Number:	2296696	Requested by:	STACIE ICE	
Print Revision:	A	Vendor:	QSR	
Tool Number:	4466-2	Cavity\Die Out:	428 CAVITY MOLD	

Inspection equipment and measurement of uncertainty: Refer to Instrument ID and certificate of calibration

WDI Technician:	Sandra Hays	Measurement Method Device:	MICRO-VU VERTEX CMM (E2993-0078)
Email Address:	sandra.hays@te.com		MITUTOYO INDICATOR (95-757098-009-BB)
Reviewed by:	Austin Ward		
Review Date:	10-Aug-2021		

REPORT HEADING

LABEL = DIMENSION (PRINT) LABEL	LOWER = LOWER TOLERANCE OR LOWER LIMIT OF A RANGE
DESC = FEATURE DESCRIPTION	MMD = MEASUREMENT METHOD DEVICE
NOMINAL = NOMINAL VALUE	ACTUAL = ACTUAL MEASURED VALUE
UPPER = UPPER TOLERANCE OR UPPER LIMIT OF A RANGE	DEV>TOL = DEVIATION GREATER THAN UPPER OR LOWER TOLERANCE

NOTES**MEASUREMENTS OF REFERENCE DIMENSION ARE NOT TO BE USED FOR MANUFACTURING OR INSPECTION PURPOSES AND ARE FOR INFORMATION ONLY**

Measurement report applies to all versions of:

1-2296696-X	1-2300498-X	1-2203773-X
2296696-X	2300498-X	2203773-X

Dimension 6 applies to Key A only

- Notes added by Stacie Ice

TE Sustaining Product Engineer

10-Aug-21

WINSTON-SALEM DIMENSIONAL INSPECTION

LABEL	DESC	NOMINAL	UPPER	LOWER	MMD	1		2		3		4		5		6		7	
						ACTUAL	DEV>TOL	ACTUAL	DEV>TOL	ACTUAL	DEV>TOL	ACTUAL	DEV>TOL	ACTUAL	DEV>TOL	ACTUAL	DEV>TOL	ACTUAL	DEV>TOL
1		24.70	0.20	0.20	Micro Vu	24.878		24.816		24.885		24.731		24.854		24.829		24.847	
2		26.50	0.20	0.20	IND	26.476		26.440		26.423		26.464		26.377		26.449		26.394	
3		19.50	REF		Micro Vu	18.507		18.586		18.462		18.785		18.323		18.378		18.538	
4		19.50	0.20	0.20	Micro Vu	19.406		19.397		19.427		19.424		19.377		19.486		19.411	
5		4.00	REF		Micro Vu	4.008		4.010		4.014		4.014		4.009		4.000		4.002	
5		4.00	REF		Micro Vu	4.004		4.002		3.994		3.991		4.024		3.978		4.017	
6	Key A	2.80	REF		Micro Vu	2.808		2.815		2.840		2.772		2.791		2.844		2.814	
PRINT NOTE 1		Shipped in pre-latched positions			Visual	Comply		Comply		Comply		Comply		Comply		Comply		Comply	
PRINT NOTE 2-16					Info Only	Comply		Comply		Comply		Comply		Comply		Comply		Comply	



Section 10

Material, Performance Test Results



ENGINEERING SAMPLE EVALUATION REPORT

PART NAME:
4 WAY, FEMALE, SEALED, 1.2mm MCON

PART NO.:
EU5T-14A464-RAB (2300498-1), EU5T-14A464-NB (2300498-2),
EU5T-14A464-NAB (2300498-3), FU5T-14A464-ALB (2300498-6),
FU5T-14A464-BBB (2300498-7),
EU5T-14A464-SA (1-2203529-5), EU5T-14A464-HB (1-2203529-2)

CHANGE TYPE:

CHECK APPLICABLE:

SUBMITTED BY: Stacie Ice

CURRENT MANUFACTURING SITE:

QSR

FUTURE MANUFACTURING SITE:

QSR

TOOL MOVE:

PROCESS CHANGE:

MATERIAL/MATERIAL SUPPLIER CHANGE:

CAPACITY TOOL:

X

SUPPLIER: TE Connectivity

DATE SUBMITTED: July 26th, 2021

MADE TO DRAWING DATED:

EU5T-14A464-NB
EU5T-14A464-HB

CHANGE DETAILS: New Capacity Peripheral Seal mold

This document is intended to obtain final approval for the validation of a new capacity mold (4466-2). Mold will be located at QSR.

APPROVED:

☒

REJECTED:

PRODUCT ENGINEERING SIGNATURE*:

Joseph Chappelle

DATE: Jul 30, 2021

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.



Design Verification Plan and Report

Jul 30, 2021

page 2 of 6

System: CPSC 18.01.07 Connectors			Ford part number (s): EU5T-14A464-RAB (2300498-1), EU5T-14A464-NB (2300498-2), EU5T-14A464-NAB (2300498-3), FU5T-14A464-ALB (2300498-6), FU5T-14A464-BBB (2300498-7), EU5T-14A464-SA (1-2203529-5), EU5T-14A464-HB (1-2203529-2)			Model Year and Program: Multiple			Ford Design Engineer: Joe Chappelle <i>Joe Chappelle</i>		
Temperature Class	T4	T1, T2, T3, T4 T5	Supplier: TE Connectivity						Ford Design Engineer Approval		
Vibration Class	V4	V1, V2,V3, V4, V5	Reason for Validation:	Capacity Tool	Part Level:	PV - production	Plan:		Report: 26July2021		
Sealing Class	S3	S1, S2,S2.5, S3									
Test Name/Source	Acceptance Criteria	Test Results	Design Level Tested	Sample Size		Timing		Remarks			
				Required	Tested	Sched.	Actual				
Group W Pressure/Vacuum Stand Alone 5.9.8											
W-1. Visual Inspection - SAE/USCAR-2 5.1.8 To document the physical appearance of test samples.	The connectors assemblies must not show , with the aid of 10X magnification, any evidence of deterioration, cracks, deformities, etc., that could affect their functionality or distort their appearance. Connector locking mechanism must function without breaking	PASS	PV	10			7/26/2021	Test Request 20210906ACL			
W-1a. Sample preparation must have terminal crimp angles as defined by: Ford SDS EL-0001 5G	Crimp angle as defined on terminal drawing, typically +/-3°	Sample Preparation Step	PV				7/26/2021				



Design Verification Plan and Report

System: CPSC 18.01.07 Connectors			Ford part number (s): EU5T-14A464-RAB (2300498-1), EU5T-14A464-NB (2300498-2), EU5T-14A464-NAB (2300498-3), FU5T-14A464-ALB (2300498-6), FU5T-14A464-BBB (2300498-7), EU5T-14A464-SA (1-2203529-5), EU5T-14A464-HB (1-2203529-2)			Model Year and Program: Multiple			Ford Design Engineer: Joe Chappelle		
Temperature Class	T4	T1, T2, T3, T4 T5	Supplier: TE Connectivity						Ford Design Engineer Approval		
Vibration Class	V4	V1, V2,V3, V4, V5	Reason for Validation:	Capacity Tool	Part Level:	PV - production	Plan:		Report: 26July2021		
Sealing Class	S3	S1, S2,S2.5, S3									
Test Name/Source	Acceptance Criteria	Test Results	Design Level Tested	Sample Size		Timing		Remarks			
				Required	Tested	Sched.	Actual				
W-2. Connector and/or Terminal Cycling USCAR-2, 5.1.7	10 mate/unmate cycles	Conditioning Step	PV	10				7/26/2021			
W-3 Insulation Resistance USCAR-2, 5.6.5	Resistance between every combination of two adjacent terminals must exceed 100MΩ at 500 VDC (Includes terminals that may be separated by one or move vacant terminal cavities) USCAR-2, 5.5.1	MaxMinAve ≥50GΩ≥50GΩ≥50GΩ						7/26/2021			
W-4. Pressure/Vacuum Leak USCAR-2, 5.6.6.3 (7 Psi)	Pressure = There must be no loss in the applied pressure and no bubbles visible exiting any test samples Vacuum = see Isolation Resistance	PASS						7/26/2021			
W-5 Insulation Resistance USCAR-2, 5.6.5	Resistance between every combination of two adjacent terminals must exceed 100MΩ at 500 VDC (Includes terminals that may be separated by one or move vacant terminal cavities) USCAR-2, 5.5.1	MaxMinAve ≥50GΩ≥50GΩ≥50GΩ						7/26/2021			
W-8. Heat Soak USCAR-2, 5.6.6.3.10	70 hours at Temperature Class Conditioninf Step	Conditioning Step						7/26/2021	70hrs @150°		
W-9. Pressure/Vacuum Leak USCAR-2, 5.6.6.3 (4 Psi)	Pressure = There must be no loss in the applied pressure and no bubbles visible exiting any test samples Vacuum = see Isolation Resistance	PASS						7/26/2021			
	Resistance between every combination of two adjacent	MaxMinAve									



Design Verification Plan and Report

page 4 of 6

System: CPSC 18.01.07 Connectors			Ford part number (s): EU5T-14A464-RAB (2300498-1), EU5T-14A464-NB (2300498-2), EU5T-14A464-NAB (2300498-3), FU5T-14A464-ALB (2300498-6), FU5T-14A464-BBB (2300498-7), EU5T-14A464-SA (1-2203529-5), EU5T-14A464-HB (1-2203529-2)			Model Year and Program: Multiple			Ford Design Engineer: Joe Chappelle		
Temperature Class	T4	T1, T2, T3, T4 T5	Supplier: TE Connectivity			Part Level: PV - production			Ford Design Engineer Approval		
Vibration Class	V4	V1, V2,V3, V4, V5	Reason for Validation:	Capacity Tool	Plan:				Report: 26July2021		
Sealing Class	S3	S1, S2,S2.5, S3									
Test Name/Source	Acceptance Criteria	Test Results	Design Level Tested	Sample Size		Timing		Remarks			
				Required	Tested	Sched.	Actual				
W-10 Insulation Resistance USCAR-2, 5.6.5	terminals must exceed 100MΩ at 500 VDC (Includes terminals that may be separated by one or move vacant terminal cavities) USCAR-2, 5.5.1	≥50GΩ ≥50GΩ ≥50GΩ					7/26/2021				
W-9. Visual Inspection - SAE/USCAR-2 5.1.8 To document the physical appearance of test samples. & When disconnecting the samples, use care not to allow any residual solution to enter the interior of any connector half. Careful examination is required to d	The connectors assemblies must not show , with the aid of 10X magnification, any evidence of deterioration, cracks, deformities, etc., that could affect their functionality or distort their appearance. Connector locking mechanism must function without breaking	PASS	PV	10			7/26/2021				

Test Part Inventory Page

	Male Connector Test	Female Connector Test
Terminal Test Part Numbers		1670146-3 (female) 6W8T-14474-PA
Seal Test Part Numbers		2098582-1 EU5T-10C930-AA
Clip/Cover etc. Test Part Numbers		N/A



Design Verification Plan and Report

System: CPSC 18.01.07 Connectors			Ford part number (s): EU5T-14A464-RAB (2300498-1), EU5T-14A464-NB (2300498-2), EU5T-14A464-NAB (2300498-3), FU5T-14A464-ALB (2300498-6), FU5T-14A464-BBB (2300498-7), EU5T-14A464-SA (1-2203529-5), EU5T-14A464-HB (1-2203529-2)			Model Year and Program: Multiple			Ford Design Engineer: Joe Chappelle		
Temperature Class	T4	T1, T2, T3, T4 T5	Supplier: TE Connectivity			Part Level: PV - production			Ford Design Engineer Approval		
Vibration Class	V4	V1, V2,V3, V4, V5	Reason for Validation:	Capacity Tool	Plan:				Report: 26July2021		
Sealing Class	S3	S1, S2,S2.5, S3									
Test Name/Source	Acceptance Criteria	Test Results	Design Level Tested	Sample Size		Timing		Remarks			
				Required	Tested	Sched.	Actual				
Mating Device Used Part Numbers						2203111-2 (Mating Male Inline) EU5T-14624-AA					
Terminal Test Part Numbers						2141116-3					
Connector Test Part Numbers						1-2300498-2 CPA Version of EU5T-14A464-NB					
Wire Gauge and Type						XLPE - 0.50mm2					

Test	USCAR req't	1pc Orig Valid.	2pc Orig Valid.	1pc Mold 4466-2	2pc Mold 4466-2
Connector to Connector Mating Force, TPA engaged	75N Max	Min: 24.98 Max: 28.50 Avg: 26.80	Min: 16.46 Max: 22.68 Avg: 19.12	Min: 24.92 Max: 28.42 Avg: 26.94 St Dev: 1.16	Min: 24.45 Max: 30.75 Avg: 27.40 St Dev: 2.22

4P MCON 1.2CB _Capacity Seal Mold 4466-2_Ford PV Report_26July2021

Final Audit Report

2021-07-30

Created:	2021-07-26
By:	DALE SHIELDS (djshields@te.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAAWvxqP781YOoCqL8PBKla_8R-cY4CzK-n

"4P MCON 1.2CB _Capacity Seal Mold 4466-2_Ford PV Report _26July2021" History

-  Document created by DALE SHIELDS (djshields@te.com)
2021-07-26 - 5:55:59 PM GMT- IP address: 198.175.154.212
-  Document emailed to JCHAPP19 (jchapp19@ford.com) for signature
2021-07-26 - 5:56:33 PM GMT
-  Email viewed by JCHAPP19 (jchapp19@ford.com)
2021-07-30 - 8:13:07 PM GMT- IP address: 136.2.17.165
-  Document e-signed by JCHAPP19 (jchapp19@ford.com)
Signature Date: 2021-07-30 - 8:15:41 PM GMT - Time Source: server- IP address: 136.2.17.165
-  Agreement completed.
2021-07-30 - 8:15:41 PM GMT

Testing Purpose:	Product Validation Report
EWO Number:	N/A - TE Capacity Molds
Model Year:	N/A
First Using Program:	N/A
Application:	SIR, Ignition Coils, etc
Notes:	This PIR report is to validate a new (replacement) HCR peripheral seal mold for the MC0N 4P product family. The peripheral seal part number is 22020320-1. Validation done on the high temp version and surrogate will be used for the SIR version.

Customer Information				Supplier Information				Connector Information				GM Approval																					
GM Connector Part Number(s) 13515953, 13515956, 13515957, 13514090, 13514097, 13514098, 13514099, 13514099				Connector Supplier Name: TE Connectivity Supplier Part Number(s) 2296700-3, 2296700-4, 2296700-7, 2296700-X, 1-2296956-1, 1-2296956-2, 1-2296956-3, 1-2296956-4, 1-2296956-7, 2296956-96-X, 1-2296956-X				Connector Sealed X Unsealed				Pretest: Post Test: GM CVE - 19JUL21																					
								Plug Size 4 POSN																									
								Part Description: Plug Assembly, Sealed, 4 POSN MCON																									
GM Terminal Part Number				Primary Terminal		Secondary Terminal		Temperature Class: T4 /T3				Post Test: GM CVE - 03AUG21																					
Other Information				Terminal Supplier	Terminal Type	Terminal Part No.	Terminal Supplier	Terminal Type	Terminal Part No.	Vibration Class: V4 / V1																							
Wire Type				TE	1.2	1670146-3				Sealing Class S3																							
Tool Number 4466-2 Tool Revision Number				TE	1.2	1418544-3				Connector Mating Force Class: M3																							
Tool Location QSR																																	
Primary Terminal or Connector (****)																Secondary Terminal/Connector (****)																Notes	
Sample Description		Test Number	Test Start Date	Test Completion Date	Test Results					Sample Description		Test Number	Test Start Date	Test Completion Date	Test Results																		
Terminal Size (mm)	Wire Size				Minimum	Maximum	Average	Standard Deviation	Pass/Fail	Terminal Size (mm)	Wire Size				Minimum	Maximum	Average	Standard Deviation	Pass/Fail														
Connector to Connector Engagement Force (Section 4.2.8) Test Sequence 29D																																	
									PASS																								
1.2	0.5	20210905 ACL	07/12/21	07/14/21	24.92N	28.42N	26.94N	1.16	PASS															Data for the 1pc MCON HT design									
									PASS																								
Thermal Aging (Section 4.4.1) Test Sequence 31A																																	
									PASS																								
1.2	0.5				>50GQ	>50GQ	>50GQ		PASS																								
1.2	0.5				No ingress of water or bubbles				PASS																								
1.2	0.5	20210906 ACL	7/19/21	7/26/21	>50GQ	>50GQ	>50GQ		PASS																								
1.2	0.5				ENVIRONMENTAL ONLY				PASS															Note: 70hrs @ 150°C for HT Note: Max temp tested. Surrogate to be used for T3 (120°C) applications									
1.2	0.5				No ingress of water or bubbles				PASS																								
1.2	0.5				>50GQ	>50GQ	>50GQ		PASS																								
									PASS																								

		Original Tool		New QSR Seal Mold
GMW3191		Deviation	Mold A Plug	4466-2
Connector to Connector Engagement Force	75N Max		Min 24.98 Max 28.50 Avg 26.80	Min: 24.92 Max: 28.42 Avg: 26.94 St Dev: 1.16

TE Connectivity Corporation
8000 Piedmont Triad Pkwy
Greensboro NC 27409-9407

C e r t i f i c a t e o f A n a l y s i s

Date: 04/30/2021

Page: 1 / 1

Your order from 01/21/2021

Order No. : 2714884496

Material No. : 1-704402-1

Delivery no./Pos. : 52636972 / 900001

Order : 14885549

Material : REEDLITE BLUE PBT

Old Material No. : CPBT02803

Material-no. : NB5SAD

Batch No. : USPC047315

Quantity : 99.999 LB

On the batch, of which the consignment is a part, the following values were determined.

Inspection characteristic/-method	Specification	Result
COLOR - VISUAL		
CONTAMINATION - VISUAL		
PELLET COUNT		54 Pel./g
PELLET LENGTH		0.100 IN
PELLET DIAMETER		0.090 IN
Let Down Ratio (%)		3

The above particulars do not release the customer from the obligation to carry out an inspection of goods received.

This report does not require a signature.

Management System Certified according to ISO 9001, ISO 14001 and OHSAS 18001

Maquilas Teta Kawi SA de CV
Carret Internacional Km 1969
Guadalajara-Nogales Km.2
85340 Empalme - Sonora
MEXICO

C e r t i f i c a t e o f A n a l y s i s

Date: 28.06.2021
Page: 1 / 2

Your order from 13.05.2021

Order No. : 2716452281
Material No. : 3-1573497-5

Delivery no./Pos. : 52762427 / 900001
Order : 15071819
Material : RAL3002 CARMINE RED PBT B4300 G6
Old Material No. : NB33620086
Material-no. : NB33620086
Batch No. : USPB033205
Quantity : 54.000 LB

On the batch, of which the consignment is a part, the following values were determined.

Inspection characteristic/-method	Specification	Result
COLOR - VISUAL		Pass
CONTAMINATION - VISUAL		Pass
DE	0.00 - 1.00	0.44 CMC
L	Report	41.20 CIELAB
DL	-9999.00 - +9999.00	-0.76 CIELAB
a	Report	38.09 CIELAB
Da	-9999.00 - +9999.00	0.04 CIELAB
b	Report	16.21 CIELAB
Db	-9999.00 - +9999.00	0.32 CIELAB

Certificate of Analysis

Customer:

MAQUILAS TETAKAWI SA DE CV
CARRET INT KM 1969
85340 EMPALME SON

Product Number

: 52498924

Product Name

: ULTRADUR® B 4300 G6 UNCOLORED
POLYBUTYLENE TEREPHTHALATE 726KG
FIBREBOARD IBC

Vehicle

:

Batch/Lot

: A521177C1

Manuf.Date

: Jun-27-2021

Shipped Date

:

Shipped Quantity

:

Delivery Date

:

Order Number

:

Delivery Note

:

Attention:

FAX:

Cust Prod:

Cust Prod Name:

Cust P.O.:

Cust P.O. Line:

Inspection Certificate 3.1 according to EN 10204

Characteristic	Result	UOM	-----Specification-----		Test Method
			Minimum	Maximum	
ASH CONTENT	29.685	%	28.000	32.000	ASTMD5630
Moisture	0.01	%		0.05	ASTM6869 / ISO15512B
VN-PBT	103	ml/g	100	110	ISO 307

Test Report 2.2 according to EN 10204

ANNUAL TEST

Comments :
The above results are means of individual test values determined on samples taken during production of the lot specified.

This product is approved to the following specifications:

WSK-M4D725-A
WSS-M4D7258-B1
ESB-M4D354
GMP-PBT-010
GMW16733
MS-DB400 CPN2252
TM-1007 101130 and 201130

Certificate of Analysis

Customer:	Product Number	: 52736788
TE CONNECTIVITY CORPORATION	Product Name	: ULTRADUR® B 4300 G3 UNCOLORED
8000 PIEDMONT TRIAD PKWY		POLYBUTYLENE TEREPHTHALATE 726KG
GREENSBORO NC 27409-9407		FIBREBOARD IBC
	Vehicle	:
	Batch/Lot	: WF1022064
	Manuf.Date	: Jan-22-2021
Attention:	Shipped Date	:
FAX:	Shipped Quantity	: 3,201.112 LB
Cust Prod: 704734-4	Delivery Date	: Mar-25-2021
Cust Prod Name: ULD.B4300G3 UN 726KG 11G	Order Number	: 117988293 000010
Cust P.O.: 2715023174		
Cust P.O. Line: 1	Delivery Note	: 145337607 900001

Inspection Certificate 3.1 according to EN 10204

Characteristic	Result	UOM	-----Specification-----		Test Method
			Minimum	Maximum	
Ash / Filler Content	15.1	%	13.0	17.0	ASTM5630/ISO3451
Moisture Content	0.01	%	0.01	0.04	ASTM D6869 / ISO 15512B
Viscosity Number for PBT, PSU and PES	110	ml/g	98	118	ISO1628 (Phenol/Dichlorb.

Comments :

The data shown are the results of tests performed on the lot specified.

This product is approved to the following specifications:

GMP.PBTP.006
GMW16733

Certificate of Analysis

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

Product Number : 52736788
Product Name : ULTRADUR® B 4300 G3 UNCOLORED
POLYBUTYLENE TEREPHTHALATE 726KG
FIBREBOARD IBC

Vehicle :
Batch/Lot : WF1056062
Manuf.Date : Feb-25-2021
Shipped Date :
Shipped Quantity : 9,603.336 LB
Delivery Date : Mar-25-2021
Order Number : 117988293 000010
Delivery Note : 145337607 900002

Attention: FAX:
Cust Prod: 704734-4
Cust Prod Name: ULD.B4300G3 UN 726KG 11G
Cust P.O.: 2715023174
Cust P.O. Line: 1

Inspection Certificate 3.1 according to EN 10204

Characteristic	Result	UOM	-----Specification-----		Test Method
			Minimum	Maximum	
Ash / Filler Content	15.1	%	13.0	17.0	ASTM5630/ISO3451
Moisture Content	0.01	%	0.01	0.04	ASTM D6869 / ISO 15512B
Viscosity Number for PBT, PSU and PES	108	ml/g	98	118	ISO1628 (Phenol/Dichlorb.

Comments :

The data shown are the results of tests performed on the lot specified.

This product is approved to the following specifications:

GMP.PBTP.006
GMW16733

Certificate of Analysis

Customer:

TE CONNECTIVITY CORPORATION
8350 E OLD VAIL RD
TUCSON AZ 85747-9197

Product Number : 50116737
Product Name : ULTRADUR® B4300G6 HR LS BK15045
POLYBUTYLENE TEREPHTHALATE 726KG
Fibreboard IBC

Vehicle : 53226
Batch/Lot : 0209753829
Manuf.Date : Jun-17-2021
Shipped Date :

Attention:

FAX:

Cust Prod: 1573435-2

Shipped Quantity : 20,807.228 LB

Cust Prod Name: ULD.B4300G6 HR LS BK15045 726KG 11G Order Number : 118236500 000010

Cust P.O.: 2716740126

Delivery Date : Jul-19-2021

Cust P.O. Line: 1

Delivery Note : 145668021 900003

Inspection Certificate 3.1 according to EN 10204

Characteristic	Result	UOM	-----Specification-----		Test Method
			Minimum	Maximum	
Moisture Content	0.01	%		0.05	ASTM D6869 / ISO 15512B
Viscosity Number for PBT, PSU and PES	102	ml/g	95	120	ISO1628 (Phenol/Dichlorb.
Ash / Filler Content	30.64	%	28.00	32.00	ASTM5630/ISO3451
Melt Flow Rate 265/2.16	14.00	g/10min	8.00		ASTM D1238A

Comments :

Results shown are the means of individual test values for those samples taken during production.

This product is approved to the following specification:

GMW16459-PBT-GF30

Thank you for choosing a BASF Product



CERTIFICATE OF CONFORMANCE

TAC MATERIALS - QSR TWINSBURG

1700 HIGHLAND ROAD
TWINSBURG OH 44087
330-425-8472

DATE: 08/02/2021

Pack Slip No: 63004-01

Customer: TE HARRISBURG

Customer PO: 2550189422

<u>Customer Part Number</u>	<u>Revision</u>	<u>Description</u>	<u>Supplier PN</u>
2203528-1	A	4P PERIMETER SEAL	311018

Total Shipped: 150,000.00

We Certify that all materials and processes used in the production of the finished part above conform to the requirements of the listed purchase order and/or applicable drawings and specifications.

AUTHORIZED BY: Rich Rybka 08/02/2021



Section 11

Initial Process Studies

**No critical dimensions related to
the seal, no CPK will be provided**

Not Applicable

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



Certification Date: 2018-07-11

Latest Issue: 2018-07-11

Page: 1 of 2

...making excellence a habit.™

Expiry Date: 2021-07-10

This certificate remains the property of BSI and shall be returned immediately upon request.

An electronic certificate can be authenticated [online](http://www.bsigroup.com/ClientDirectory). Printed copies can be validated at www.bsigroup.com/ClientDirectory

To be read in conjunction with the scope above or the attached appendix.

Further clarifications regarding the scope of this certificate and the applicability of IATF 16949 requirements may be obtained by consulting the organization.

IATF Contracted Office: BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.

Location

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

Registered Activities

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

Page: 2 of 2

This certificate remains the property of BSI and shall be returned immediately upon request.

An electronic certificate can be authenticated [online](http://www.bsigroup.com/ClientDirectory). Printed copies can be validated at www.bsigroup.com/ClientDirectory

To be read in conjunction with the scope above or the attached appendix.

Further clarifications regarding the scope of this certificate and the applicability of IATF 16949 requirements may be obtained by consulting the organization.

IATF Contracted Office: BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.

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

Informe de la MDS

Sustancias de conjuntos y materiales

Este informe está reservado exclusivamente para uso interno de la industria del automóvil. La distribución a clientes que no pertenecen al sector de la automoción es una violación de las condiciones de uso, y no está permitida sin una autorización por escrito de DXC Technology. El análisis no está permitido.

1. Empresa y nombre de producto

1.1 Datos del proveedor

Nombre [ID]: **Tyco Electronics GAD [913]**
Número DUNS: **-**
Calle/Código postal: **Amperestr. 12-14**
Nac./Cód. postal/Ciudad: **DE 64625 Bensheim**
No. Proveedor: **-**
Persona de contacto: **IMDS Team (India) Engineering Services**
- Teléfono: **-**
- N.º fax: **-**
- Dirección de correo electrónico: **imds@te.com**

1.2 Identificación del producto

N.º componente/artículo: **1-2296696-1**
Descripción: **4 Position MCON Plug Assembly**
No. Reporte de muestra: **-**
Fecha de reporte de muestra: **-**
No. Orden de Compra: **-**
No. Factura de entrega: **-**
MDS Preliminar: **No**
Multiorigen: **No**
ID/versión IMDS: **626978106 / 11**
ID de nodo: **1009343355**
Estado de la MDS (Fecha de modificación): **Publicado internamente (25/03/2021)**

Informe de la MDS

Sustancias de conjuntos y materiales

No deben incluirse materiales que están sujetos a prohibiciones legales.
Las sustancias peligrosas, formadas o liberadas durante su uso, también se deben declarar.
Recuerde: La lista GADSL de sustancias que deben ser declaradas

2. Caracterización del componente

N.º componente/artículo: 1-2296696-1

Descripción: 4 Position MCON Plug Assembly

No. Reporte de muestra: -

ID/versión IMDS: 626978106 / 11

ID de nodo: 1009343355

Nivel de árbol	 Descripción  Descripción  Nombre  Nombre de la sustancia	 N.º componente/artículo  N.º artículo/mat.  N.º material  N.º CAS	 ID/versión IMDS	 Cantidad	 Peso  [g]	 Porción  [%]	 Porción (desde - hasta)  [%]	 Clasif.  GADSL, SVHC	 Marcado de componentes  Reciclado (Consumidor/industr.)  Aplicación [ID]
1	 4 Position MCON Plug Assembly	 1-2296696-1	626978106 / 11		5.418				
└2	 4P Sealed MCON Plug Housing - Black	 2303905-1	618137487 / 3	1	4.312				 Sí
└3	 PBT-GF30	 1573435-2	448749639 / 4		4.312			 5.1.a	 No
└4	 GF-Fibre	 -				30			

ID/versión IMDS: **626978106 / 11**
 Usuario: **Moreno, Paul**

Página: **3 / 5**
 Fecha: **11/08/21 22:44:21**

Nivel de árbol	 Descripción  Descripción  Nombre  Nombre de la sustancia	 N.º componente/artículo  N.º artículo/mat.  N.º material  N.º CAS	 ID/versión IMDS	 Cantidad	 Peso  [g]	 Porción  [%]	 Porción (desde - hasta)  [%]	 Clasif.  GADSL, SVHC	 Marcado de componentes  Reciclado (Consumidor/industr.)  Aplicación [ID]
└4	 Further Additives, not to declare	 system				5.5			
└4	 PBT	 -				64			
└4	 Carbon black	 1333-86-4				0.5			
└2	 4P MCON Sealed Fenmale ISL-Blue	 2303906-8	626978295 / 3	1	0.789				 Sí
└3	 PBT-GF15	 704734-4 + 1-704402-1	309409743 / 5		0.789			 5.1.a	 No
└4	 PBT-GF15	 704734-4	98895942 / 3			97.5		 5.1.a	
└5	 GF-Fibre	 -				15			
└5	 Further Additives, not to declare	 system				1			
└5	 PBT	 -				84			
└4	 PBT Colorant Masterbatch	 1-704402-1	309095175 / 5			2.5	2 - 3	 5.1.b	
└5	 PBT	 -				56.428571	50 - 60		
└5	 Zinc sulphide	 1314-98-3				36.428571	30 - 40	 D / P	
└5	 Sustancias confidenciales	 *****				7.142857			
└2	 4 P PERIMETER SEAL	 2203528-1	653954202 / 1	1	0.137				 No aplica
└3	 _VMQ	 A2900RR			0.137			 5.3	 No
└4	 VMQ	 -				63.8			
└4	 Siloxanes and Silicones, di-Me, Me vinyl, vinyl group-terminated	 68083-18-1				27			

Nivel de árbol	 Descripción  Descripción  Nombre  Nombre de la sustancia	 N.º componente/artículo  N.º artículo/mat.  N.º material  N.º CAS	 ID/versión IMDS	 Cantidad	 Peso  [g]	 Porción  [%]	 Porción (desde - hasta)  [%]	 Clasif.  GADSL, SVHC	 Marcado de componentes  Reciclado (Consumidor/industr.)  Aplicación [ID]
└4	 Silicon dioxide	 7631-86-9				1.6			
└4	 Siloxanes and silicones, di-Me, Me Ph	 63148-52-7				1.8			
└4	 Dimethylsilicone	 63148-62-9				0.2			
└4	 Cerium-tetrahydroxide	 12014-56-1				0.4		 D	
└4	 Nepheline syenite	 37244-96-5				4.5			
└4	 Synthetic iron oxide (Fe2O3)	 1332-37-2				0.7			
└2	 Front Loaded Sealed CPA - Red	 2138343-1	320209481 / 14	1	0.18				 No aplica
└3	 PBT-GF30	 17669-1 + 3-1573497-5	668311786 / 4		0.18			 5.1.a	 No
└4	 PBT-GF30	 17669-1	48049287 / 6			97.5		 5.1.a	
└5	 GF-Fibre	 -				30			
└5	 Further Additives, not to declare	 system				1			
└5	 PBT	 -				69			
└4	 PBT Colorant Masterbatch	 3-1573497-5	668231210 / 2			2.5	2 - 3	 5.1.b	
└5	 PBT	 -				90.947368	85 - 95		
└5	 Zinc sulphide	 1314-98-3				2.984211	1.2 - 4.2	 D / P	
└5	 Zinc oxide	 1314-13-2				0.059474	0 - 0.1	 D / P	
└5	 Sustancias confidenciales	 *****				6.008949			

Ésta es una copia no controlada de un documento creado por IMDS. Fin del informe.

ID/versión IMDS: **626978106 / 11**
Usuario: **Moreno, Paul**

Página: **5 / 5**
Fecha: **11/08/21 22:44:21**

Leyenda

 Multiorigen Componente



Section 18

Part Submission Warrant

Part Submission Warrant

Part Name _____ Cust. Part Number _____

Shown on Drawing Number _____ Org. Part Number _____

Engineering Change Level _____ Dated _____

Additional Engineering Changes _____ Dated _____

Safety and/or Government Regulation Yes No Purchase Order No. _____ Weight (kg) _____

Checking Aid Number _____ Checking Aid Engineering Change Level _____ Dated _____

ORGANIZATION MANUFACTURING INFORMATION

CUSTOMER SUBMITTAL INFORMATION

Organization Name and Supplier Code _____

Street Address _____

City _____ Region _____ Postal Code _____ Country _____

Customer Name/Division _____

Buyer/Buyer Code _____

Application _____

MATERIALS REPORTING

Has customer-required Substance of Concern information been reported Yes No NA

Submitted by IMDS or other customer format _____

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

REASON FOR SUBMISSION (Check at least one)

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

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 / hours

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

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

Organization Authorized Signature Pablo Guillermo Jimenez Date _____

Print Name _____ Phone No. _____ Fax _____

Title _____ Email _____

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