

Product Validation Plan and Report

TE Connectivity	DVE&R Number: B13334_2x9_PV1	Dept# 7294	Global Automotive Division, America's North
Component 2x9 GET 0.64 Connector Assembly GET Terminal, Silver	TE P/N 2203663-X 1393367-2	Plan Date 12/3/2012	Plan Originator Craig Martin TE Connectivity
Model Year Applications	UPG Number Concurrence	Customer Approval Customer Approval	Reporting Engineer Craig Martin
Controlling Document USCAR-2 Rev. 5		Source TE Connectivity	Report Date 8/7/13

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.

TEST PLAN													
Item No.	Procedure Or Standard	Test Description	Acceptance Criteria	Target Requirements	Test Responsibility	Test Stage	Sample			Actual Results			
							Qty	Type	Start		Compl	Qty	Type
START OF CONNECTOR SYSTEM – MECHANICAL TESTS													
1	USCAR 5.4.1	Terminal - Connector Insertion Force											
1a	USCAR 5.1.8	Visual Inspection	No visual damage to sample	No defects	TE	PV	50	E	12/14/12	8/7/13	50	E	Pass
1b	USCAR 5.4.1	Insertion Force TPA in preset position. Test # 20130291ACS	30N Max Terminal Insertion	No failures	TE	PV	18	E	7/25/13	8/7/13	18	E	3.66 N Min 5.47 N Max 22 AWG
1c	USCAR 5.4.1	Forward Stop Strength Test # 20120646ACL	50N Min or wire buckling	No failures	TE	PV	32	E	12/14/12	12/20/12	32	E	Pass 113.47 N Min 264.95 N Max
1d	USCAR 5.1.8	Visual Inspection	No visual damage to sample	No defects	TE	PV	50	E	12/14/12	8/7/13	50	E	Pass Pass

TEST PLAN				TEST REPORT											
Item No.	Procedure Or Standard	Test Description	Acceptance Criteria	Target Requirements	Test Responsibility	Test Stage	Sample		Timing		Samples Tested			Actual Results	NOTES
							Qty	Type	Start	Compl	Qty	Type	Phase		
5	USCAR 5.4.5	TPA Engage/Disengage Force													
5a	USCAR 5.1.8	Visual Inspection	No visual damage to sample	No defects	TE	PV	16	E	12/14/12	12/26/12	16	E		Pass	
5b	USCAR 5.4.5	TPA Pre-set to Lock w/terminals Test # 20120645ACS	60N Max	No failures	TE	PV	16	E	12/14/12	12/26/12	16	E		30.84 N Min 41.54 N Max	Test 2 housings from each mold cavity.
5f	USCAR 5.1.8	Visual Inspection	No visual damage to sample	No defects	TE	PV	16	E	12/14/12	12/26/12	16	E		Pass	

Revision History
Report Date

12/3/2012 First draft
12/26/2013 Record test values
8/7/2013 Record test values. Complete.

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TE Connectivity

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Plan Originator Craig Martin TE Connectivity	Plan Date 12/3/2012	
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Report Date 8/7/13	Source TE Connectivity	Reporting Engineer Craig Martin

Component 2x9 GET 0.64 Connector Assembly GET Terminal, Silver	TE P/N 2203663-X 1393367-2	UPG Number
Model Year Applications	Controlling Document USCAR-2 Rev. 5	

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Item No.	Procedure Or Standard	Test Description	Acceptance Criteria	Target Requirements	Test Responsibility	Test Stage	Sample	Timing		TEST REPORT		NOTES
								Start	Compl	Qty	Type	
START OF CONNECTOR SYSTEM – MECHANICAL TESTS												
1	USCAR 5.4.1	Terminal - Connector Insertion Force										
1a	USCAR 5.1.8	Visual Inspection	No visual damage to sample	No defects	TE	PV	50 E	12/14/12	8/7/13	50 E	Pass	
1b	USCAR 5.4.1	Insertion Force TPA in preset position. Test # 2013029 IACS	30N Max Terminal Insertion	No failures	TE	PV	18 E	7/25/13	8/7/13	18 E	3.66 N Min 5.47 N Max	22 AWG
1c	USCAR 5.4.1	Forward Stop Strength Test # 20120646ACL	50N Min or wire buckling	No failures	TE	PV	32 E	12/14/12	12/20/12	32 E	113.47 N Min 264.95 N Max	All terminals pushed on insulation crimp to avoid wire buckle.
1d	USCAR 5.1.8	Visual Inspection	No visual damage to sample	No defects	TE	PV	50 E	12/14/12	8/7/13	50 E	Pass	

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Item No.	Procedure Or Standard	Test Description	Acceptance Criteria	Target Requirements	Test Responsibility	Test Stage	Sample		Timing		Samples Tested				Actual Results
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5	USCAR 5.4.5	TPA Engage/Disengage Force													
5a	USCAR 5.1.8	Visual Inspection	No visual damage to sample	No defects	TE	PV	16	E	12/14/12	12/26/12	16	E		Pass	
5b	USCAR 5.4.5	TPA Pre-set to Lock w/terminals Test # 20120645ACS	60N Max	No failures	TE	PV	16	E	12/14/12	12/26/12	16	E		30.84 N Min 41.54 N Max	Test 2 housings from each mold cavity.
5f	USCAR 5.1.8	Visual Inspection	No visual damage to sample	No defects	TE	PV	16	E	12/14/12	12/26/12	16	E		Pass	

Amos Jones
5/3 2014

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