






Qualification Test Report

BLOWER MOTOR 3P PLUG HSG

October 28, 2014.



Tested & Reported By	Reviewed By	Approved By	Test Date	From September 26, 2014 To October 27, 2014
			Classification	Unrestricted

● TE CONNECTIVITY VERIFICATION TEST REPORT

Test Name : Verification for BLOWER MOTOR 3P PLUG HSG.

1. Introduction

1-1 Purpose

Testing was performed on the BLOWER MOTOR 3P PLUG HSG to determine if it conformance to the requirements of Specification 108-61076 Rev.B

1-2 Scope

This report covers the electrical, mechanical, environmental performance requirements of the BLOWER MOTOR 3P PLUG HSG.

The testing was performed between September 26, 2014 and October 27, 2014.

1-3 Test Samples

The test samples were randomly selected from normal current production lots.

P/N	Description
1743492-1	BLOWER MOTOR 3P PLUG HSG
1743490-1	BLOWER MOTOR 3P HDR ASS'Y

1-4 Conclusion

The BLOWER MOTOR 3P PLUG HSG meets the electrical, mechanical and environmental performance requirements of Specification 108-61076 Rev.B

2. Test Result

NO.	Test Items	Requirements	Judgment		
2.1	Examination of Product	Meets requirements of product drawing and AMP Specification 114-5203. No Physical damage.	Acceptable		
Electrical Requirements					
2.2	Termination Resistance(Low Level)	10 mΩ Max. (Initial) 20 mΩ Max. (Final)	Acceptable		
2.3	Dielectric withstanding Voltage	No creeping discharge nor flashover shall occur. Current leakage : 5mA Max.	Acceptable		
2.4	Insulation Resistance	500 MΩ Min. (Initial) 500 MΩ Min. (Final)	Acceptable		
2.5	Temperature Rising	30°C Max. under loaded specified current or rating current.	Acceptable		
Mechanical Requirements					
2.6	Crimp Tensile Strength	Wire Size		Tensile Strength(kgf Min.)	Acceptable
		mm ²	AWG		
		0.14	#26	2	
		0.22	#24	3	
		0.31	#22	5	
2.7	Post Retention Force	Mating Side 49N (5.0kgf) Min.	Acceptable		
2.8	Contact Retention Force	14.7N(1.5Kgf)Min. per contact	Acceptable		
2.9	Contact Insertion Force	6.37N (0.65kgf) Max. per contact	Acceptable		
2.10	Connector Mating Force	Initial & After 30 Cycles 34.3N(3.5Kgf)Max	Acceptable		
2.11	Connector Unmating Force	Initial 1.96N(0.2 Kgf) Min. After 30 Cycles 1.18N(0.12 Kgf)Min.	Acceptable		
2.12	Durability(Repeated Mate/Unmating)	20 mΩ Max.(Final)	Acceptable		
2.13	Vibration (Low Frequency)	No electrical discontinuity greater than 1 μ sec. shall occur. 20 mΩ Max.(Final)	Acceptable		
2.14	Physical Shock	No electrical discontinuity greater than 1 μ sec. Shall occur. Final 20 mΩ Max.	Acceptable		
2.15	Solderability	Wet Solder Coverage : 95 % Min.	Acceptable		
2.16	Connector Locking Strength	24.5N (2.5 kgf) Min.	Acceptable		
2.17	Contact Mating Force	5.88N (0.6 kgf) Max.	Acceptable		
2.18	Contact Unmating Force	Initial 0.2N (20gf) Min. After 30 Cycle 0.1N (10gf) Min.	Acceptable		

NO.	Test Items	Requirements	Judgment
Environmental Requirements			
2.19	Resistance to Cold	20 mΩ Max. (Final)	Acceptable
2.20	Thermal Shock	20 mΩ Max. (Final)	Acceptable
2.21	Humidity-Temperature Cycling	Insulation resistance(final) 500 MΩ Min. Termination resistance 20 mΩ Max. (Final)	Acceptable
2.22	Salt Spray	20 mΩ Max. (Final)	Acceptable
2.23	Temperature Life (Heat Aging)	20 mΩ Max.(Final)	Acceptable