AP-10

Part No. Plug: 3531-0001-00T

Receptacle: 3927-0001-00T

Test Report

Product Specification no.PRS-2979

0	T25076	October 9, 2025	F.Jin	S.Kamada	Y.Hashimoto
Rev.	ECN	Date	Prepared by	Checked by	Approved by

1. Purpose

To evaluate the performance of AP-10Connector in accordance with PRS-2979.

2. Specimen

(1) AP-10 PLUG （Part No. 3531-0001-00T）
(2) AP-10 RECEPTACLE （Part No. 3927-0001-00T）

3. Test Sequence

All the evaluations were performed in accordance with Table 1.Test Sequence.

4. Result

See Table 3-1 to 3-2, Graph 1 to 10. For the details of the testing conditions and requirements, see PRS-2979.
The “n” in the tables show the number of measurement points.

5. Conclusion

All the specimens met the requirements of PRS-2979.

Table 1　Test Sequence and Sample Quantity

Test Item	Testing Group												
	A	B	C	D	E	F	G	H	J	K	L	M	N
Contact Resistance	2,5		1,3	1,3		1,3	1,3	1,3	1,3	1,3	1,3		
Temperature rising		1											
Mating Force/Unmating Force	1,4												
Durability	3												
Vibration			2										
Shock				2									
Electrode fastness test					1								
High Temperature Life						2							
Low Temperature Life							2						
High Temperature and humidity								2					
Temperature cycling									2				
Temperature and humidity cycling										2			
H_2S Gas											2		
Solder ability												1	
SolderingHeat Resistance (Soldering iron)													1
Specimen Quantity.	5 pcs	5 pcs	5 pcs	5 pcs	5 pcs	5 pcs	5 pcs	5 pcs	5 pcs	5 Pcs	5 pcs	5 pcs	5 pcs

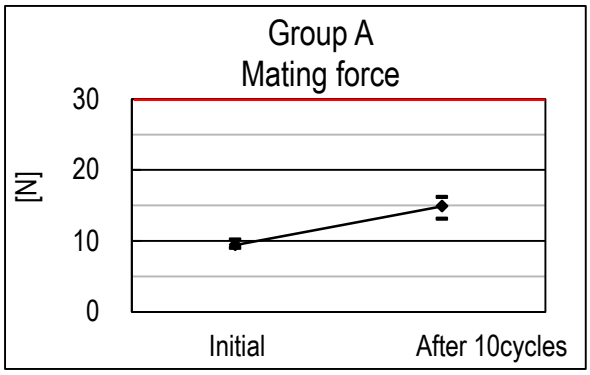
※Numbers indicate sequence in which tests are performed.

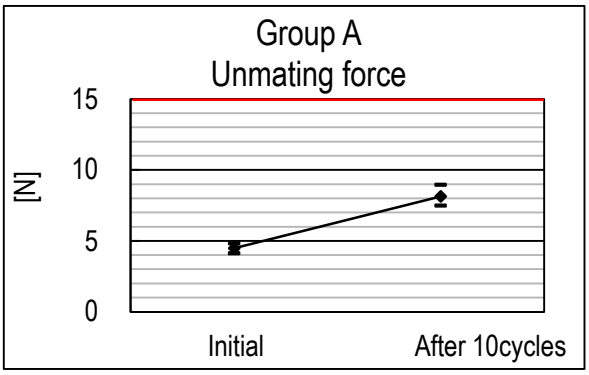
Table 3-1 /Test Result

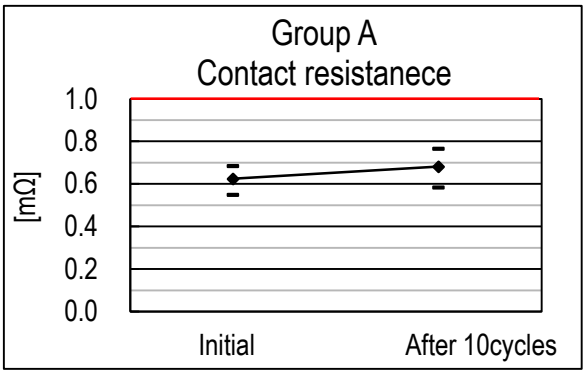
Group	Test items / Measurements	Pass criteria	n	Unit	AVE.	MAX.	MIN.	Judgement
A	Mating force							
	Initial	30N MAX.	5	N	9.444	10.24	9.04	Pass
	After 10cycles				14.902	16.21	13.15	Pass
	Unmating force							
	Initial	30N MAX.	5	N	4.480	4.85	4.14	Pass
	After 10cycles				8.144	8.97	7.51	Pass
	Contact resistance							
	Initial	1mΩ MAX.	5	mΩ	0.6246	0.686	0.551	Pass
	After 10cycles				0.6824	0.768	0.586	Pass
B	Temperature rising							
	Initial	⊿T45℃ MAX.	5	℃	5.605	6.40	4.18	Pass
C	Vibration							
	Contact resistance							
	Initial	1mΩ MAX.	5	mΩ	0.5650	0.633	0.513	Pass
	After testing				0.5848	0.661	0.523	Pass
	Electrical discontinuity							
	During test	No discontinuity greater than 1μs.	5	-	No discontinity			Pass
	Appearance							
	After testing	No abnormality	5	-	No abnormality			Pass
D	Shock							
	Contact resistance							
	Initial	1mΩ MAX.	5	mΩ	0.6246	0.686	0.551	Pass
	After testing				0.6824	0.768	0.586	Pass
	Electrical discontinuity							
	During test	No discontinuity greater than 1μs.	5	-	No discontinity			Pass
	Appearance							
	After testing	No abnormality	5	-	No abnormality			Pass
E	Electorode fastness test							
	Appearance							
	Pass criteria: No abnormality adversely affecting the performance shall not occur.							
	After testing	No abnormality	5	-	No abnormality			Pass
F	High Temperature Life							
	Contact resistance							
	Initial	1mΩ MAX.	5	mΩ	0.5732	0.636	0.531	Pass
	After testing				0.5840	0.651	0.529	Pass
	Appearance							
	After testing	No abnormality	5	-	No abnormality			Pass

Table 3-2 Test Result

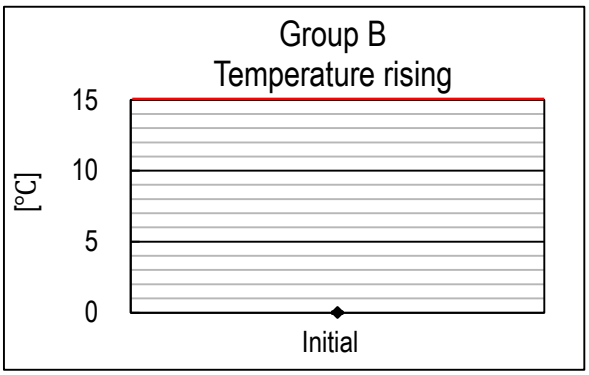
Group	Test items / Measurements	Pass criteria	n	Unit	AVE.	MAX.	MIN.	Judgement
G	Low Temperature Life							
	Contact resistance							
	Initial	1mΩ MAX.	5	mΩ	0.5710	0.683	0.519	Pass
	After testing				0.5636	0.676	0.511	Pass
	Appearance							
	After testing	No abnormality	5	-	No abnormality			Pass
H	High Temperature and humidity							
	Contact resistance							
	Initial	1mΩ MAX.	5	mΩ	0.5488	0.586	0.512	Pass
	After testing				0.5513	0.599	0.519	Pass
	Appearance							
	After testing	No abnormality	5	-	No abnormality			Pass
J	Temperature cycling							
	Contact resistance							
	Initial	1mΩ MAX.	5	mΩ	0.5506	0.591	0.519	Pass
	After testing				0.5440	0.591	0.501	Pass
	Appearance							
	After testing	No abnormality	5	-	No abnormality			Pass
K	Temperature and humidity cycling							
	Contact resistance							
	Initial	1mΩ MAX.	5	mΩ	0.5688	0.588	0.537	Pass
	After testing		5		0.5624	0.603	0.505	Pass
	Appearance							
	After testing	No abnormality	5	-	No abnormality			Pass
L	H2S Gas							
	Contact resistance							
	Initial	1mΩ MAX.	5	mΩ	0.5878	0.653	0.505	Pass
	After testing				0.6004	0.678	0.512	Pass
	Appearance							
	After testing	No abnormality	5	-	No abnormality			Pass
M	Solder ability							
	Appearance							
	Pass criteria: No abnormality adversely affecting the performance shall not occur.							
	After testing	No abnormality	5	-	No abnormality			Pass
N	Soldering Heat Resistance(Soldering iron)							
	Pass criteria: No abnormality adversely affecting the performance shall not occur.							
	After testing	No abnormality	5	-	No abnormality			Pass



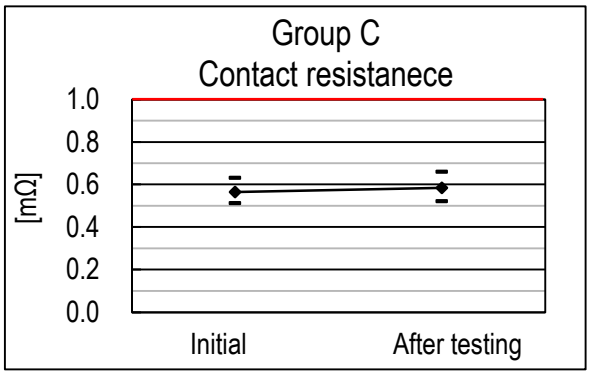




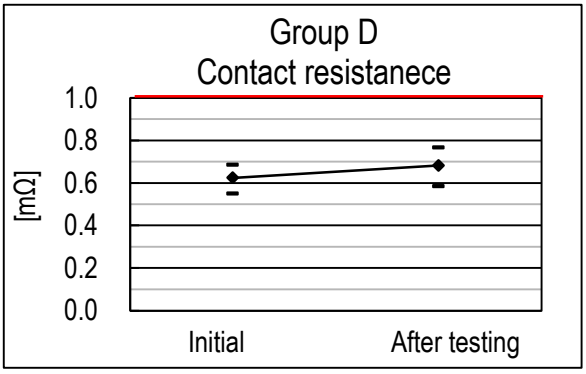
(Graph 1) Group A: Durability



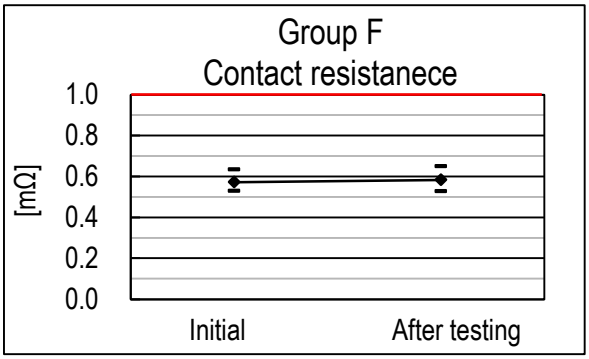
(Graph 2) Group B: Temperature rising



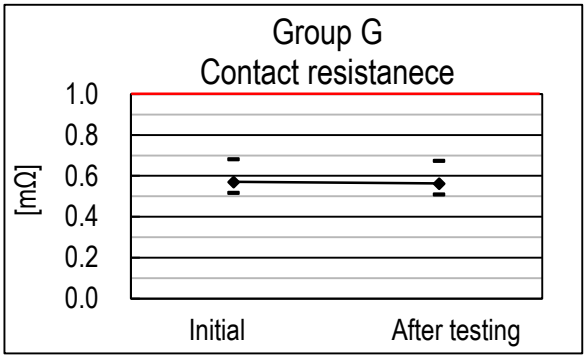
(Graph 3) Group C: Vibration



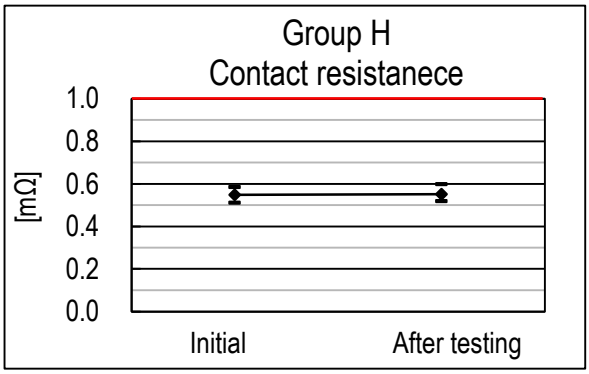
(Graph 4) Group D: Shock



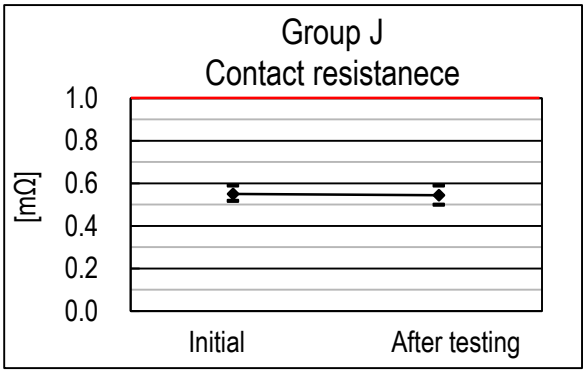
(Graph 5) Group F: High Temperature Life



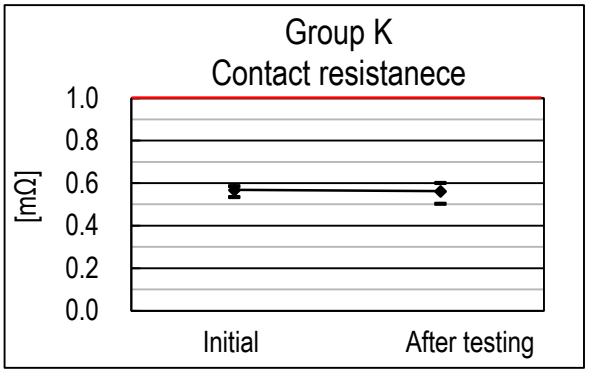
(Graph 6) Group G: Low Temperature Life



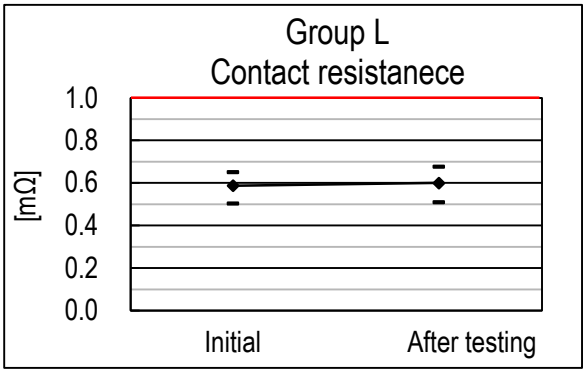
(Graph 7) Group H: High Temperature and humidity



(Graph 8) Group J: Temperature cycling



(Graph 9) Group K: Temperature and humidity cycling



(Graph 10) Group L: H2S Gas