SC-17

Part No. 3394-0001

Test Report

Product Specification no. PRS-2438

1	T22153	December 12, 2022	M. Hidaka	S. Suzuki	Y. Hashimoto
0	T18002	March 6, 2018	R. Hoshino	S. Kawamura	M. Takemoto
Rev.	ECN	Date	Prepared by	Checked by	Approved by

1. Purpose

To evaluate the performance of SC-17, PCB mounting clipConnector in accordance with PRS-2438.

2. Specimen

SC-17 （Part No. 3394-0001）

3. Test Sequence

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

4. Result

See Table 2-1 to 2-2, Graph 1 to 10. For the details of the testing conditions and requirements, see PRS-2438.
The “n” in the tables show the number of measurement points.

5. Conclusion

All the specimens met the requirements of PRS-2438.

Table 1 Test Sequence and Sample Quantity

Test Item	Group									
	A	B	C	D	E	F	G	H	J	K
Contact Resistance	2,6	1,3,5	1,3	1,3	1,3	1,3,5	1,3	1,3		
Mating Force	1,5									
Un-mating Force	3,7									
Durability	4					2				
Vibration		2								
Shock		4								
Thermal Shock			2							
High Temperature Life				2						
Humidity (Steady State)					2					
Humidity (Cycling)						4				
Salt Water Spray							2			
H2S Gas								2		
Solder ability									1	
Soldering Heat Resistance										1
Sample QTY.	5 pcs.	5 pcs.	5 pcs.	5 pcs.	5 pcs.	5 pcs.	5 pcs.	5 pcs.	10 pcs.	10 pcs.

※Numbers indicate test sequences

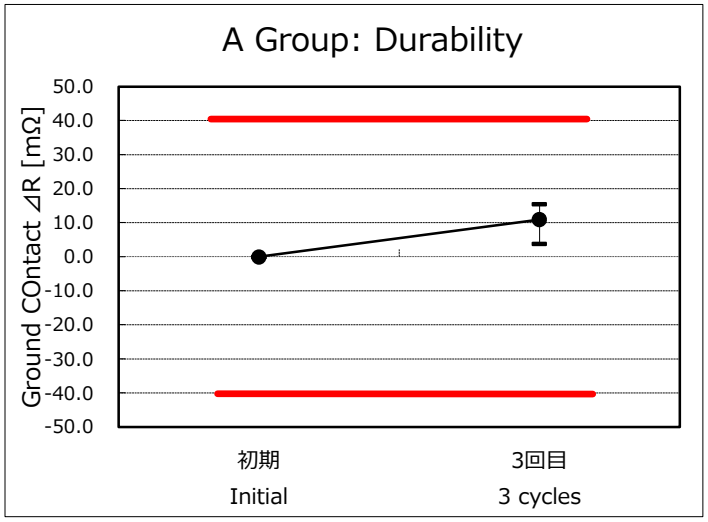
Table 2-1 Test result

Test Item	Contents of Measurement		Specifications	Sample qty.	n	Data					Judgement
						AVE.	MAX.	MIN.	s	X±3s	
A Group Durability	Ground Resistance (mΩ)	Initial	120 mΩ MAX.	5	5	52.934	56.65	49.66	-	-	Pass
		After Testing	ΔR=40 mΩ MAX.			10.940	15.49	3.85	-	-	Pass
	Mating Force (N)	Initial	29.5 N MAX.	5	5	16.084	19.58	14.14	-	-	Pass
		After Testing	29.5 N MAX.			12.288	13.37	10.61	-	-	Pass
	Unmating Force (N)	Initial	8.0 N MIN.	5	5	30.116	32.40	26.69	-	-	Pass
		After Testing	8.0 N MIN.			17.375	21.64	14.76	-	-	Pass
B Group Vibration ↓ Shock	Ground Resistance (mΩ)	Initial	120 mΩ MAX.	5	5	53.502	55.96	50.64	-	-	Pass
		After Vibration	ΔR=40 mΩ MAX.			4.344	5.31	3.32	-	-	Pass
		After Shock	ΔR=40 mΩ MAX.			5.066	6.58	3.90	-	-	Pass
	Electrical discontinuity	During Vibration	1 μsec. MAX.	5	5	No Electrical discontinuity					Pass
		During Shock				No Electrical discontinuity					Pass
	Appearance	After Vibration	No abnormality adversely affecting the performance shall occur.	5	5	No Abnormality					Pass
		After Shock				No Abnormality					Pass
C Group Thermal Shock	Ground Resistance (mΩ)	Initial	120 mΩ MAX.	5	5	53.238	55.96	51.09	-	-	Pass
		After Testing	ΔR=40 mΩ MAX.			2.292	4.00	0.01	-	-	Pass
D Group High Temperature Life	Ground Resistance (mΩ)	Initial	120 mΩ MAX.	5	5	53.008	54.76	51.71	-	-	Pass
		After Testing	ΔR=40 mΩ MAX.			2.062	2.53	1.80	-	-	Pass

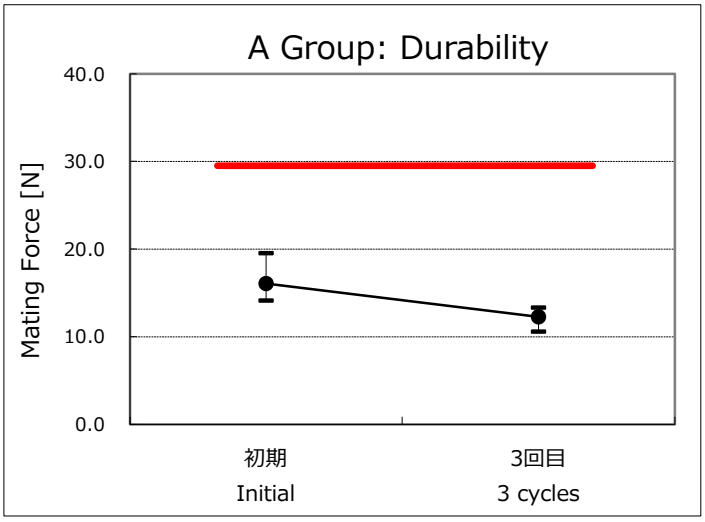
Table 2-2 Test result

Test Item	Contents of Measurement		Specifications	Sample qty.	n	Data					Judgement
						AVE.	MAX.	MIN.	s	X±3s	
E Group Humidity (Steady State)	Ground Resistance (mΩ)	Initial	120 mΩ MAX.	5	5	53.516	55.07	50.46	-	-	Pass
		After Testing	ΔR=40 mΩ MAX.			2.646	3.96	1.78	-	-	Pass
F Group Humidity (Cycling)	Ground Resistance (mΩ)	Initial	120 mΩ MAX.	5	5	52.428	54.39	49.49	-	-	Pass
		After Durability	ΔR=40 mΩ MAX.			8.374	12.37	4.41	-	-	Pass
		After Testing	ΔR=40 mΩ MAX.			10.130	15.52	4.26	-	-	Pass
G Group Salt Water Spray	Ground Resistance (mΩ)	Initial	120 mΩ MAX.	5	5	51.610	54.14	49.35	-	-	Pass
		After Testing	ΔR=40 mΩ MAX.			15.732	18.92	13.88	-	-	Pass
H Group H2S Gas	Ground Resistance (mΩ)	Initial	120 mΩ MAX.	5	5	51.618	53.22	49.80	-	-	Pass
		After Testing	ΔR=40 mΩ MAX.			17.092	19.33	14.23	-	-	Pass
J Group Solder ability	Appearance		More than 95 % of the dipped surface shall be evenly wet.	10	10	Wet 95 % MIN.					Pass
K Group Soldering Heat Resistance	Appearance		Abnormality shall not occur.	10	10	No Abnormality					Pass

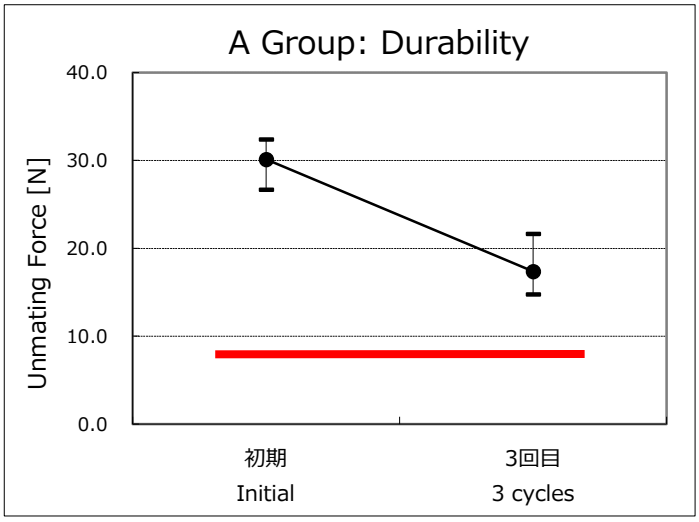
Graph 1



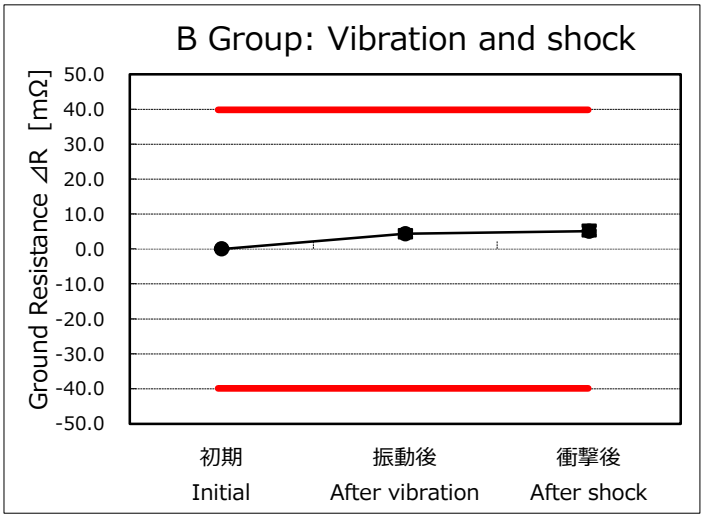
Graph 2



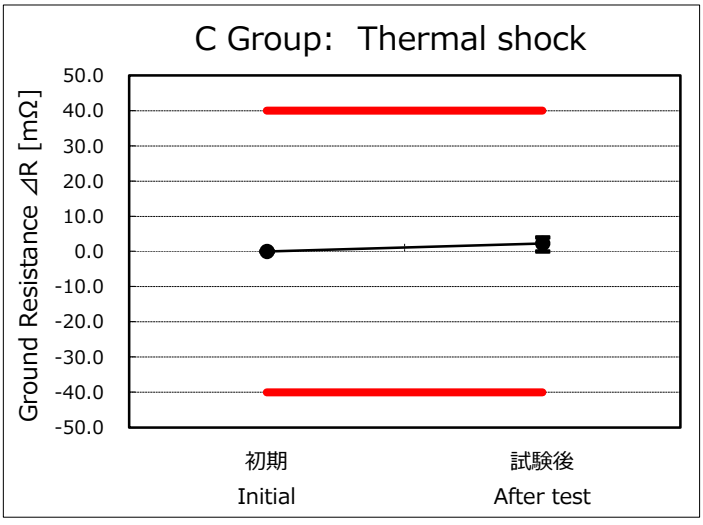
Graph 3



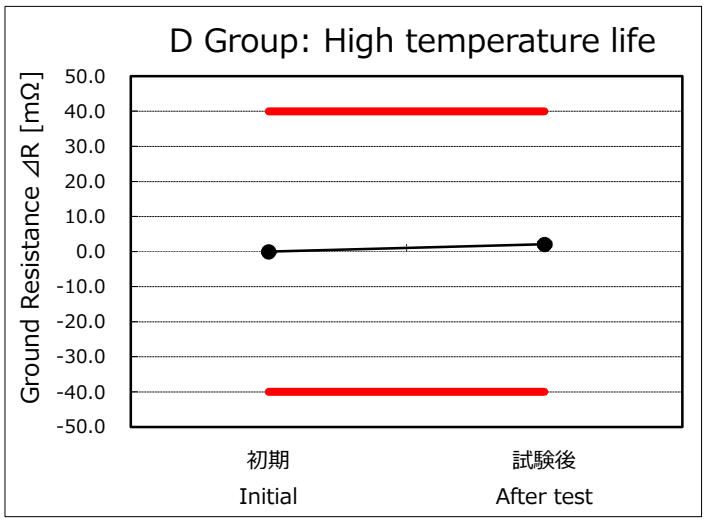
Graph 4



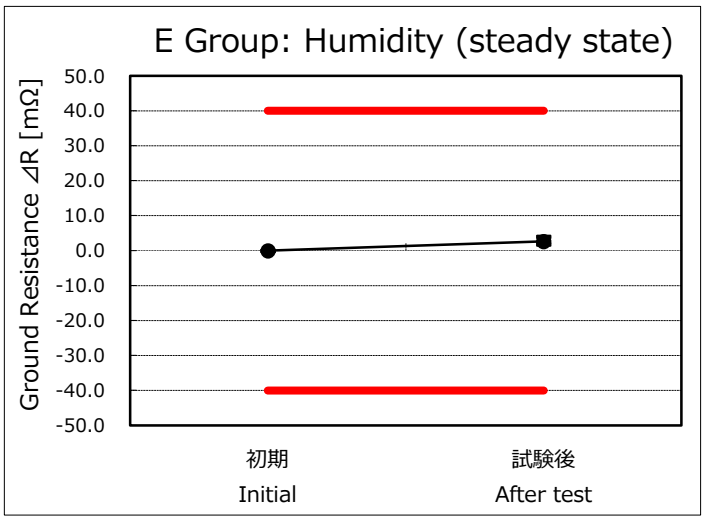
Graph 5



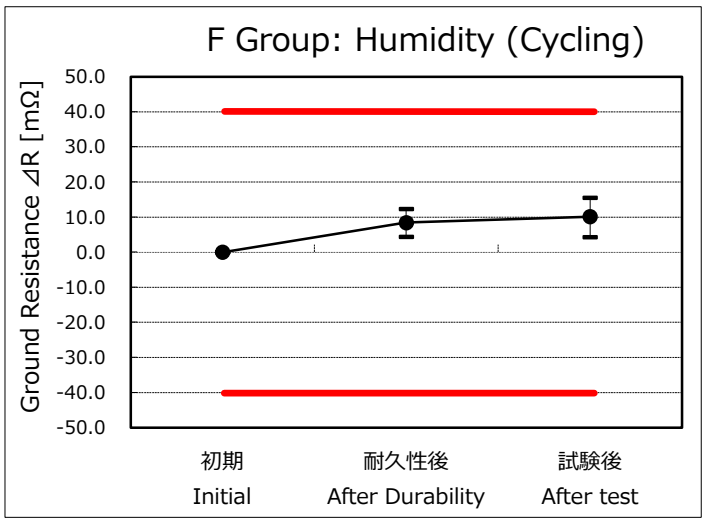
Graph 6



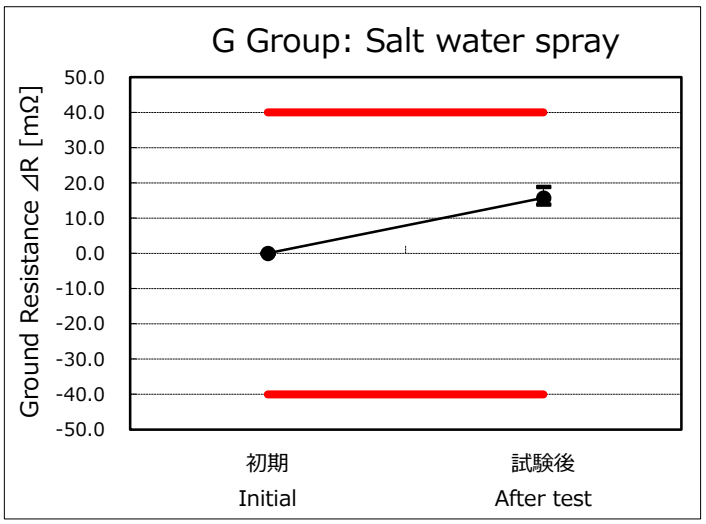
Graph 7



Graph 8



Graph 9



Graph 10