MP-A04

Part No. 3224-000*

Test Report

Product Specification no. PRS-2235

1	T18045	May 9, 2018	M.Nomoto	S.Kawamura	K.Yotsutani
0	T16186	December 23, 2016	S.Kamada	S.Taguchi	K.Yotsutani
Rev.	ECN	Date	Prepared by	Checked by	Approved by

1. Purpose

MP-A04 の性能を PRS-2235 に基づいて評価する。
To evaluate the performance of MP-A04 in accordance with PRS-2235.

2. Specimen

(1) MP-A04 （Part No. 3224-000*）
(2) Cable clamp 3mm (Au) for φ1.37 coaxial cable (Dai-ichi seiko Part No. 3223-0301)
6mm (Sn) for φ1.37 coaxial cable (Dai-ichi seiko Part No. 3223-0602)

3. Test Sequence

全ての評価は Table 1 の試験順序に従って行った。
All the evaluations were performed in accordance with Table 1 Test Sequence.

4. Result

表 A～K、グラフ 1～9 参照。試験条件の詳細は PRS-2235 参照。n 数は測定データを意味する。
See Table A to K, Graph 1 to 9. For the details of the testing conditions and requirements, see PRS-2235.
The “n” in the tables show the number of measurement points.

5. Conclusion

全ての試料が製品規格（PRS-2235）の必要条件を満足した。
All the specimens met the requirements of PRS-2235.

Table 1 試験順序と試料数／Test Sequence and Sample Quantity

試験項目 Test Item	グループ／Group									
	A	B	C	D	E	F	G	H	J	K
接触抵抗 Contact Resistance		1,3	1,3	1,3	1,3	1,3	1,3	1,3		2
挿入力 Mating Force	1,4									
抜去力 Unmating Force	2,5									
耐久性 Durability	3	2								
耐振動性 Vibration			2							
耐衝撃性 Shock				2						
低温試験 Cold Test					2					
高温試験 Heat Test						2				
熱衝撃 Thermal Shock							2			
湿度（定常状態） Humidity (Steady State)								2		
半田付け性 Solder ability									1	
半田耐熱性 Soldering Heat Resistance										1
試料数（pcs） Specimen Quantity (pcs)	10	10	5	5	5	5	5	5	5	5

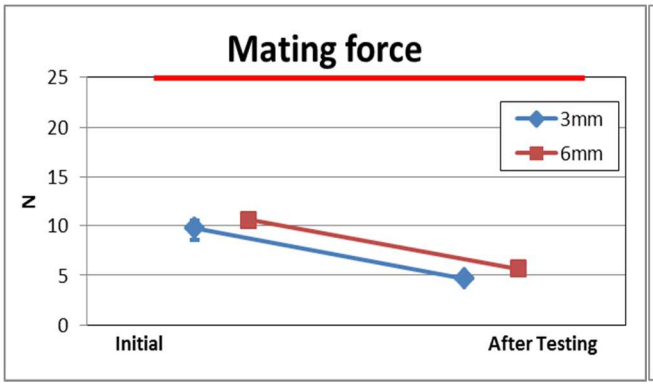
※グループ表中の番号は、試験順序を示す。／Numbers indicate sequence in which tests are performed.

Table 2-1　試験結果／Test result

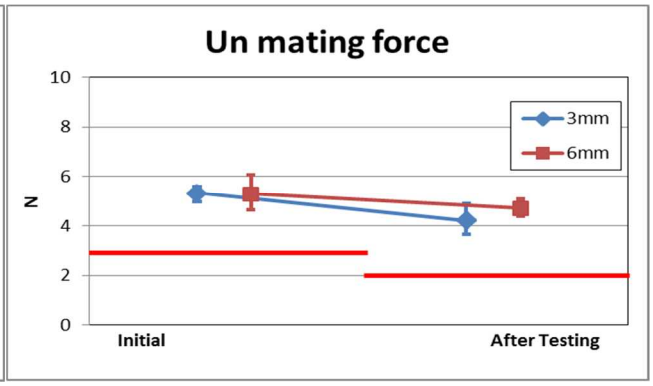
	Test Item / Measurements		Spec.	Unit	n	Data AVE.	Data MAX.	Data MIN.	Data S	Judgement
A	Mating Force									
	Cable Clamp 3mm	Initial	25 MAX.	N	10	9.80	10.4	9.1	0.50	Pass
		After 5 cycles				4.68	5.3	4.1	0.47	Pass
	Cable Clamp 6 mm	Initial			10	10.56	11.3	9.3	0.79	Pass
		After 5 cycles				5.65	6.2	5.2	0.46	Pass
	Unmating Force									
	Cable Clamp 3mm	Initial	3 MIN.	N	10	5.34	5.6	5.0	0.28	Pass
		After 5 cycles	2 MIN.			4.21	4.9	3.6	0.49	Pass
	Cable Clamp 6 mm	Initial	3 MIN.		10	5.30	6.1	4.6	0.55	Pass
		After 5 cycles	2 MIN.			4.70	5.1	4.4	0.31	Pass
B	Durabily									
	Cable Clamp 3mm									
	Contact Resistance	Initial	70 MAX.	mΩ	10	5.70	5.9	5.6	0.13	Pass
		After 5 cycles				6.97	7.2	6.8	0.17	Pass
	Appearance	After test	No abnormality	-		No abnormality				Pass
	Cable Clamp 6mm									
	Contact Resistance	Initial	70 MAX.	mΩ	10	5.87	6.1	5.7	0.16	Pass
		After 5 cycles				7.11	7.5	6.5	0.39	Pass
	Appearance	After test	No abnormality	-		No abnormality				Pass
C	Vibration									
	Cable Clamp 3mm									
	Contact Resistance	Initial	70 MAX.	mΩ	5	5.01	5.1	4.9	0.09	Pass
		After 5 cycles				7.42	8.1	6.8	0.56	Pass
	Electrical discontinuity	Durng test	1μs MAX.	-		No discontinuity				Pass
	Appearance	After test	No abnormality	-		No abnormality				Pass
	Cable Clamp 6mm									
	Contact Resistance	Initial	70 MAX.	mΩ	5	6.01	6.2	5.8	0.14	Pass
		After 5 cycles				6.51	6.7	6.3	0.18	Pass
	Electrical discontinuity	Durng test	1μs MAX.	-		No discontinuity				Pass
	Appearance	After test	No abnormality	-		No abnormality				Pass
D	Shock									
	Cable Clamp 3mm									
	Contact Resistance	Initial	70 MAX.	mΩ	5	6.50	6.6	6.2	0.17	Pass
		After 5 cycles				6.45	6.7	6.2	0.21	Pass
	Electrical discontinuity	Durng test	1μs MAX.	-		No discontinuity				Pass
	Appearance	After test	No abnormality	-		No abnormality				Pass
	Cable Clamp 6mm									
	Contact Resistance	Initial	70 MAX.	mΩ	5	5.74	5.9	5.4	0.23	Pass
		After 5 cycles				5.77	6.1	5.4	0.25	Pass
	Electrical discontinuity	Durng test	1μs MAX.	-		No discontinuity				Pass
	Appearance	After test	No abnormality	-		No abnormality				Pass
E	Cold test									
	Cable Clamp 3mm									
	Contact Resistance	Initial	70 MAX.	mΩ	5	5.47	5.6	5.3	0.11	Pass
		After 5 cycles				7.09	7.2	7.0	0.07	Pass
	Appearance	After test	No abnormality	-		No abnormality				Pass
	Cable Clamp 6mm									
	Contact Resistance	Initial	70 MAX.	mΩ	5	5.93	6.1	5.6	0.22	Pass
		After 5 cycles				6.47	6.7	6.3	0.16	Pass
	Appearance	After test	No abnormality	-		No abnormality				Pass

Table 2-2　試験結果／Test result

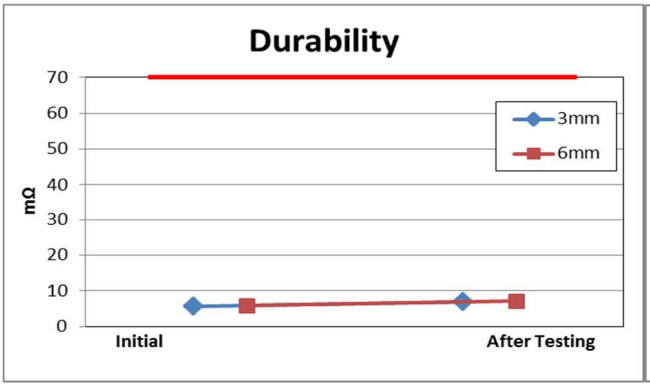
	Test Item / Measurements		Spec.	Unit	n	Data AVE.	Data MAX.	Data MIN.	Data S	Judgement
F	Heat test									
	Cable Clamp 3mm									
	Contact Resistance	Initial	70 MAX.	mΩ	5	5.62	5.9	5.3	0.24	Pass
		After test				7.45	8.0	6.9	0.43	Pass
	Appearance	After test	No abnormality	-		No abnormality				Pass
	Cable Clamp 6mm									
	Contact Resistance	Initial	70 MAX.	mΩ	5	5.48	5.9	5.1	0.31	Pass
		After test				5.99	6.3	5.8	0.17	Pass
	Appearance	After test	No abnormality	-		No abnormality				Pass
G	Thermal Shock									
	Cable Clamp 3mm									
	Contact Resistance	Initial	70 MAX.	mΩ	5	6.60	6.8	6.4	0.12	Pass
		After test				6.54	7.1	6.0	0.48	Pass
	Appearance	After test	No abnormality	-		No abnormality				Pass
	Cable Clamp 6mm									
	Contact Resistance	Initial	70 MAX.	mΩ	5	6.00	6.1	5.9	0.06	Pass
		After test				6.22	6.4	6.1	0.11	Pass
	Appearance	After test	No abnormality	-		No abnormality				Pass
H	Humidity (Steady state)									
	Cable Clamp 3mm									
	Contact Resistance	Initial	70 MAX.	mΩ	5	5.20	5.4	4.9	0.19	Pass
		After test				7.39	7.8	7.0	0.34	Pass
	Appearance	After test	No abnormality	-		No abnormality				Pass
	Cable Clamp 6mm									
	Contact Resistance	Initial	70 MAX.	mΩ	5	5.89	6.8	5.5	0.51	Pass
		After test				5.93	6.3	5.5	0.33	Pass
	Appearance	After test	No abnormality	-		No abnormality				Pass
J	Solderability									
	Solder wetting area	After test	No abnormality	-	5	No abnormality				Pass
K	Soldering Heat Resistance									
	Cable Clamp 3mm									
	Contact Resistance	After test	70 MAX.	mΩ	5	5.80	6.1	5.5	0.21	Pass
	Appearance	After test	No abnormality	-		No abnormality				Pass
	Cable Clamp 6mm									
	Contact Resistance	After test	70 MAX.	mΩ	5	6.05	6.4	5.9	0.20	Pass
	Appearance	After test	No abnormality	-		No abnormality				Pass



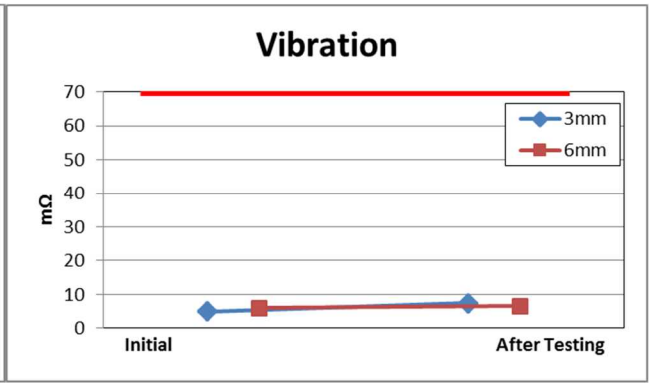
Graph 1 挿入力 / Mating force



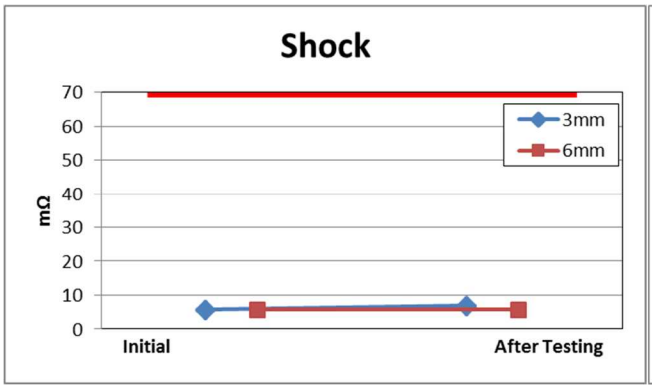
Graph 2 抜去力 / Un mating force



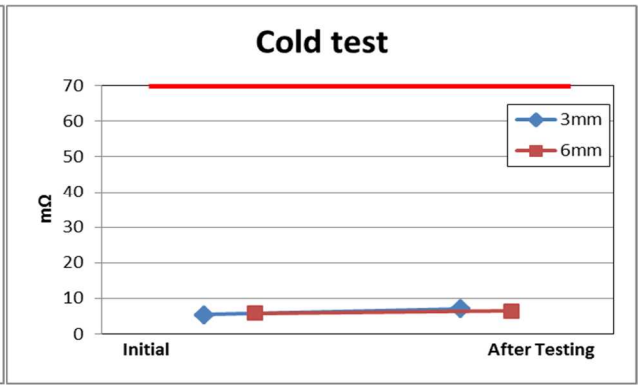
Graph 3 耐久性 / Durability



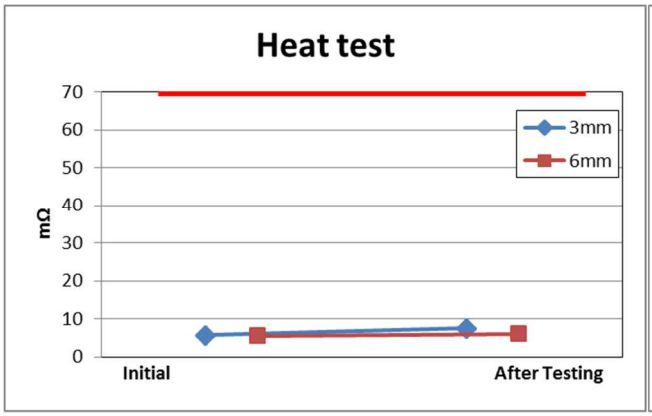
Graph 4 耐振動性 / Vibration



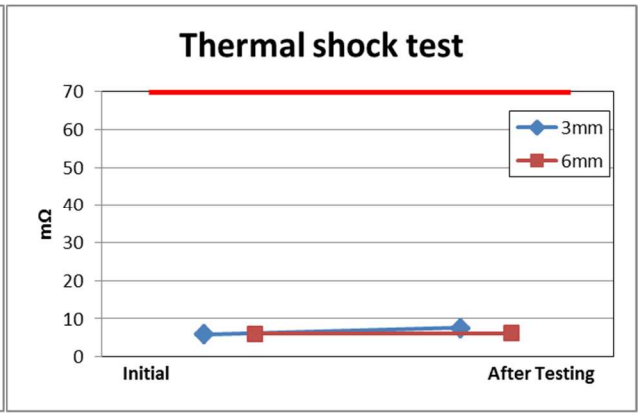
Graph 5 耐衝撃性 / Shock



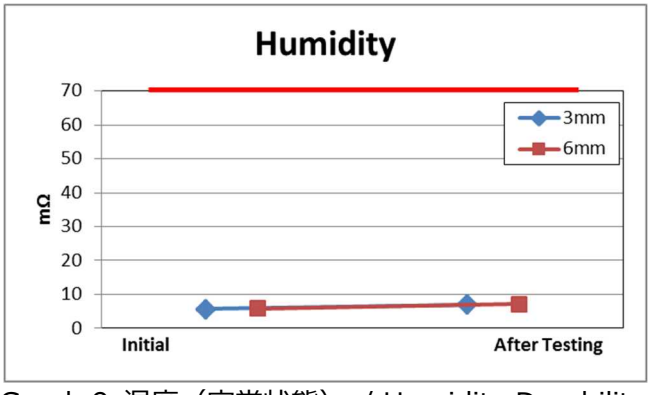
Graph 6 低温試験 / Cold test



Graph 7 高温試験 / Heat test



Graph 8 熱衝撃 / Thermal shock



Graph 9 湿度（定常状態） / Humidity Durability