

MP-A 02

Part No. 3182-0001

Test Report

Product Specification no. PRS-2082

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Rev.	ECN	Date	Prepared by	Checked by	Approved by

MP-A 02 Test Report

1. Purpose / 目的

MP-A 02 コネクタの性能を PRS-2082 に基づいて評価する。

To evaluate the performance of MP-A 02 Connector in accordance with PRS-2082.

2. Specimen / 試料

MP-A 02 (P/N: 3182-0001)

Cable clamp (3mm) for ϕ 1.13 coaxial cable (Dai-ichi seiko P/N: 2912-030*)

Cable clamp (6mm) for ϕ 1.13 coaxial cable (Dai-ichi seiko P/N: 2912-060*)

Cable jacket (Outside diameter ϕ 1.13 +0.08/-0.05) of ϕ 1.13 coaxial cable ※1

※1・・・RF-MF50161 (NISSEI Electric co.,ltd)

3. Test Sequence / 試験順序

全ての評価は表 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. Conclusion / 結論

All specimens satisfied the requirements of the product specification PRS-2082.

全ての試料が製品規格(PRS-2082)の条件を満足した。

4-1 試験順序と試料数 / Test Sequence and Sample Quantity

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		
挿入力 Mating Force	1,4									
抜去力 Un-mating Force	2,5									
耐久性 Durability	3	2								
耐振動性 Vibration			2							
耐衝撃性 Shock				2						
熱衝撃 Thermal Shock					2					
高温寿命 High Temperature Life						2				
湿度 (定常状態) Humidity (Steady State)							2			
低温試験 Cold Test								2		
半田付け性 Solder ability									1	
半田耐熱性 Soldering Heat Resistance										1
試料数 Specimen Quantity.	10 pcs.	10 pcs.	5 pcs.	5 pcs.	5 pcs.	5 pcs.	5 pcs.	5 pcs.	5 pcs.	5 pcs.

※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.

5. Results / 結果

Test Item	Measurements	Spec.	n	Unit	Data				Judge.
					AVE.	MAX.	MIN.	σ	
A									
Mating Force									
Cable Clamp 3mm	Initial	25 MAX.	10	N	7.010	8.20	6.10	0.743	OK
	5cycles				3.120	3.80	2.50	0.487	OK
Cable Clamp 6mm	Initial		7.780	9.10	6.60	0.760	OK		
	5cycles		3.780	4.50	3.20	0.426	OK		
Cable Jacket ϕ 1.13	Initial		8.050	9.00	7.40	0.521	OK		
	5cycles		3.250	3.60	2.90	0.259	OK		
Un-mating Force									
Cable Clamp 3mm	Initial	2 MIN.	10	N	2.710	3.50	2.30	0.363	OK
	5cycles	1 MIN.			1.950	2.30	1.60	0.242	OK
Cable Clamp 6mm	Initial	2 MIN.	10	N	2.960	3.60	2.50	0.372	OK
	5cycles	1 MIN.			2.190	2.60	1.50	0.328	OK
Cable Jacket ϕ 1.13	Initial	2 MIN.	10	N	3.890	4.60	3.40	0.378	OK
	5cycles	1 MIN.			3.030	3.70	2.40	0.430	OK

B									
Durability									
Cable clamp 3mm									
Contact Resistance	Initial	70 MAX	10	m Ω	5.875	6.12	5.54	0.172	OK
	5cycles				5.970	6.56	5.52	0.308	OK
Apearance	After test	No abnormality	-	-	No abnormality				OK
Cable clamp 6mm									
Contact Resistance	Initial	70 MAX	10	m Ω	5.709	6.01	5.49	0.185	OK
	5cycles				5.938	6.29	5.50	0.214	OK
Apearance	After test	No abnormality	-	-	No abnormality				OK

C									
Shock									
Cable clamp 3mm									
Contact Resistance	Initial	70 MAX	5	m Ω	6.728	6.93	6.45	0.189	OK
	After test				6.737	6.95	6.18	0.318	OK
Electrical discontinuity	During test	1 μ s MAX.	-	-	No discontinuity				
Apearance	After test	No abnormality	-	-	No abnormality				OK
Cable clamp 6mm									
Contact Resistance	Initial	70 MAX	5	m Ω	6.027	6.26	5.84	0.195	OK
	After test				6.514	6.96	6.14	0.306	OK
Electrical discontinuity	During test	1 μ s MAX.	-	-	No discontinuity				
Apearance	After test	No abnormality	-	-	No abnormality				OK

D									
Vibration									
Cable clamp 3mm									
Contact Resistance	Initial	70 MAX	5	m Ω	6.728	6.93	6.45	0.189	OK
	After test				6.550	6.88	6.10	0.303	OK
Electrical discontinuity	During test	1 μ s MAX.	-	-	No discontinuity				
Apearance	After test	No abnormality	-	-	No abnormality				OK
Cable clamp 6mm									
Contact Resistance	Initial	70 MAX	5	m Ω	6.027	6.26	5.84	0.195	OK
	After test				6.338	6.62	6.15	0.182	OK
Electrical discontinuity	During test	1 μ s MAX.	-	-	No discontinuity				
Apearance	After test	No abnormality	-	-	No abnormality				OK

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Test Item	Measurements	Spec.	n	Unit	Data				Judge.	
					AVE.	MAX.	MIN.	σ		
Cold test										
Cable clamp 3mm										
E	Contact Resistance	Initial	70 MAX	5	m Ω	6.680	6.97	6.40	0.261	OK
		After test				6.369	6.73	6.03	0.257	OK
	Apearance	After test	No abnormality	-	No abnormality				OK	
Cable clamp 6mm										
E	Contact Resistance	Initial	70 MAX	5	m Ω	6.574	6.82	6.32	0.210	OK
		After test				6.459	6.70	6.06	0.241	OK
	Apearance	After test	No abnormality	-	No abnormality				OK	
Heat test										
Cable clamp 3mm										
F	Contact Resistance	Initial	70 MAX	5	m Ω	6.277	6.49	6.17	0.139	OK
		After test				6.511	6.82	6.24	0.228	OK
	Apearance	After test	No abnormality	-	No abnormality				OK	
Cable clamp 6mm										
F	Contact Resistance	Initial	70 MAX	5	m Ω	6.164	6.31	5.83	0.202	OK
		After test				6.622	6.78	6.40	0.174	OK
	Apearance	After test	No abnormality	-	No abnormality				OK	
Thermal Shock										
Cable clamp 3mm										
G	Contact Resistance	Initial	70 MAX	5	m Ω	6.455	6.86	5.88	0.416	OK
		After test				6.731	6.90	6.57	0.131	OK
	Apearance	After test	No abnormality	-	No abnormality				OK	
Cable clamp 6mm										
G	Contact Resistance	Initial	70 MAX	5	m Ω	6.108	6.42	5.84	0.254	OK
		After test				6.517	6.83	6.29	0.278	OK
	Apearance	After test	No abnormality	-	No abnormality				OK	
Humidity (Steady state)										
Cable clamp 3mm										
H	Contact Resistance	Initial	70 MAX	5	m Ω	6.124	6.40	5.91	0.189	OK
		After test				6.197	6.51	6.00	0.206	OK
	Apearance	After test	No abnormality	-	No abnormality				OK	
Cable clamp 6mm										
H	Contact Resistance	Initial	70 MAX	5	m Ω	6.147	6.61	5.89	0.298	OK
		After test				6.321	6.54	6.14	0.145	OK
	Apearance	After test	No abnormality	-	No abnormality				OK	
Surface Mount Solderability test										
J	Solder wetting area	After test	95 MIN	5	%	95 MIN.			OK	
Resistance to Reflow Soldering Heat										
Cable clamp 3mm										
K	Apearance	After test	No abnormality	5	-	No abnormality			OK	
	Cable clamp 6mm									
K	Apearance	After test	No abnormality	5	-	No abnormality			OK	





