

MINI RF Switch Connector

1. INTRODUCTION

1.1 Purpose

Testing was performed on the TE Connectivity (TE) RF Switch Connector to determine their conformance to the requirements of Product Specification 108-160040.

1.2 Scope

To determine the electrical and mechanical performance of the RF Switching Connector, when tested according to Tyco Electronics Design Objectives 108-160040.

1.3 Conclusion

All results meet the requirement according to Tyco Electronics Design Objectives 108-160040.

1.4 Product Part Number

2081956-1 RF Switch



1.5 Test plan and results:

试验项目	试验分组Test Groups										
Test Items	A组	B组	C组	D组	E组	F组	G組	H组	I组	J组	
外观检测 Examination of product	1, 11	1	1,3	1,	1,	1, 6	1,6	1, 3	1,3	1,5	
接触电阻 Contact Resistance	2, 12	1/		2, 4	2, 4	2, 7	2, 7			2, 4	
绝缘电阻 Insulation Resistance	3					3, 8	3, 8				
耐电压 Withstanding Voltage	4					4, 9	4, 9				
电压驻波比 V.S.W.R	5, 13										
插入损耗 Insertion loss	6, 14										
隔离度 Isolation	7, 15										
插拔力 Mating &Unmating force	8, 10										
接触压力 Allowed push force		2, 4									
机械寿命 Durability	9	3									
焊点粘接力 Adhered of Electrode Teminal			2								
振动 Vibration				3							
冲击 Shock					3						
湿度试验 Humidity						5					
冷热冲击 Thermal Shock							5				
可焊性 Solder ability								2			
耐焊接热 Resistance to Soldering heat									2		
盐雾测试 Salt Spray										3	
毎組样品数量 Sample Qty	5pcs	Spcs	5pcs	5pcs	5pcs	5pcs	Spcs	Spcs	5pcs	5pcs	
试验结果 Test Result	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	

备注 Remark:

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^{1.} A/B…J组试验按照数字顺序展开;Group of A/B/C……J according to the number order for test. 2.报告中NA表示不适用此项。/表示不须填写; "NA" is meaning of not applicable & "/" is meaning of no need.



2. Test content

项目	判定标准			id!	验结果 T	est res	ult		
Items	Criteria Spec.	1#	2#	3#	4#	5#	max.	min.	aver.
外观检查 Visual examination	应该无毛边、裂纹、破损、 氧化: There should be no crack, damage or oxidation.	OK	OK	OK	OK	OK	1	7	1
	2. 10±0. 15	2. 102	2.115	2.104	2. 115	1.109	2. 115	1.109	1.824
尺寸检查 Examination	0.50±0.05	0.498	0.492	0.495	0.493	0.492	0.498	0.492	0.494
of dimension	0.45±0.10	0.456	0.451	0.467	0. 453	0.458	0.467	0.451	0.458
or dimension	□ 0.08max	0.002	0.009	0.012	0.006	0.009	0.012	0.002	0.007
接触电阻 Contact	Inner contact res. 70 mΩ max	66, 82	67. 67	67. 19	66. 45	66, 53	67. 67	66, 45	66. 9
Resistance	Ourer contact res. 20 mΩ max	10. 19	10. 31	10. 25	10. 33	10. 41	10. 41	10. 19	10, 30
绝缘电阻 Insulation Resistance	500 MΩ min	OK	OK	OK	OK	OK	1	1	1
耐压 Withstanding Voltage	300V AC, 1min	OK	OK	OK	OK	OK	1	7	1
电压驻波比 V. S. W. R	0.88GHz 1.2 max	1.017	1.012	1.016	1.015	1,016	1.017	1.012	1.01
	1.88GHz 1.2 max	1.018	1.015	1.018	1.016	1.018	1.018	1.015	1.01
	1.99GHz 1.2 max	1.017	1.012	1.017	1.015	1.017	1.017	1.012	1.01
	2.40GHz 1.2 max	1,032	1.035	1.033	1,036	1.034	1.036	1.032	1.03
	3.00GHz 1.2 max	1,070	0.071	1.076	1.073	1.075	1.076	0.071	0.87
V. 3. W. D.	4.00GHz 1.3 max	1, 178	1, 175	1.173	1.176	1, 174	1.178	1.173	1, 17
	5.00GHz 1.3 max	1. 235	1. 236	1. 234	1, 237	1, 236	1. 237	1. 234	1. 23
	6.00GHz 1.3 max	1. 147	1. 145	1.143	1. 147	1, 142	1. 147	1.142	1.14
	0~6,00GHz 1.3max	1. 280	1. 289	1. 284	1. 287	1, 283	1, 289	1, 280	1, 28
	0.88GHz 0.1(-dB)max	0.014	0.012	0.016	0.013	0.015	0.016	0.012	0.01
	1.88GHz 0.1(-dB)max	0.033	0.035	0.032	0, 036	0.031	0.036	0.031	0.03
	1.99GHz 0.1(-dB)max	0.019	0.017	0,012	0.016	0.017	0.019	0.012	0.01
插入损耗	2. 40GHz 0. 1 (-dB) max	0.050	0.052	0.056	0.053	0.054	0.058	0.050	0.05
Insertion	3.00GHz 0.1(-dB)max	0.016	0.017	0.013	0.018	0.015	0.018	0.013	0.01
loss	4.00GHz 0.2(-dB)max	0.032	0.035	0.034	0.036	0.031	0.036	0.031	0.03
	5.00GHz 0.2(-dB)max	0.086	0.089	0.086	0.084	0.086	0.089	0.084	0.08
	6.00GHz 0.2(-dB)max	0.048	0.045	0.043	0.045	0.042	0.048	0.042	0.04
	0~6.00GHz 0.2(-dB)max 0.88GHz 20(-dB)min	0. 132 42. 69	0. 134 42. 71	0. 136 42. 68	0. 131 42. 61	0. 134 42. 65	0. 136 42. 71	0. 131 42. 61	0.13 42.6
	1.88GHz 20(-dB)min	36.39	36, 32	36. 41	36. 38	36. 32	36. 41	36. 32	36.3
	1. 99GHz 20 (-dB) min	36.04	36. 06	36. 05	36. 01	36. 05	36. 06	36. 01	36. 0
U EXTORETION	2. 40GHz 20 (-dB) min	34. 61	34. 25	34. 17	34, 56	34. 24	34. 61	34.17	34.3
隔离度	3. 00GHz 20 (-dB) min	31. 65	31.67	31, 61	31.54	31, 65	31. 67	31.54	31.6
Isolation	4. 00GHz 15 (-dB) min	27. 18	27. 34	27. 28	27. 36	27. 41	27. 41	27. 18	27. 3
	5. 00GHz 15 (~dB) min	25. 47	25. 37	25. 42	25. 36	25. 39	25. 47	25. 36	25. 4
	6.00GHz 15(-dB)min	24. 71	24. 64	24, 77	24. 62	24. 68	24. 77	24.62	24.6
	0~6.00GHz 15(-dB)min	24.72	24. 78	24. 73	24. 76	24. 78	24. 78	24.72	24. 7
插扳力 Mating &	Mating force:30N max	19. 25	19. 17	19. 24	19. 36	19. 18	19. 36	19. 17	19. 2
	Unmating force: (5-30)N	10.78	10.65	10. 28	10.24	10.61	10.78	10. 24	10.5

机械寿命Durability

将母座焊接在测试板上,然后,通过捕拔力测试仪沿配合方向以每分钟25±3毫米的速度捕拔公母头100个循环,然后测试参数。

Mate and un-mate the receptacle connector(soldered to the test board) and plug connector 500 cycles at the speed of 25± 3mm/minutes along the mating direction by the push-push machine;

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插拔力 Mating &	Mating force:30N max	13. 74	13. 61	13.92	13. 24	13.09	13. 92	13.09	13. 52	
unmating	Unmating force: (5-30)N	10.85	10. 17	10.65	10.54	10.69	10.85	10. 17	10. 58	
接触电阻 Contact	Inner contact res. 70 mΩ max	68. 25	68. 11	67.86	67.44	68, 09	68. 25	67.44	67. 95	
Resistance	Ourer contact res. 20 mΩ max	10.92	10.78	10.86	10. 44	10. 56	10. 92	10.44	10.71	
	0.88GHz 1.2 max	1.018	1.017	1.013	1,018	1.015	1.018	1.013	1.016	
	1.88GHz 1.2 max	1.019	1.020	1.015	1.019	1.018	1,020	1.015	1.018	
	1.99GHz 1.2 max	1.017	1.016	1.012	1.016	1.015	1.017	1.012	1.015	
电压驻波比	2.40GHz 1.2 max	1.033	1.035	1.035	1.032	1.036	1.036	1.032	1.034	
V. S. W. R	3,00GHz 1,2 max	1.071	1.069	1.065	1.069	1,065	1,071	1.065	1.068	
7. D. H. K	4.00GHz 1.3 max	1.179	1.178	1.181	1.183	1.176	1.183	1.176	1.179	
	5.00GHz 1.3 max	1.237	1, 235	1.238	1.237	1.232	1.238	1.232	1. 236	
	6.00GHz 1.3 max	1.150	1.157	1.149	1.152	1.156	1, 157	1.149	1. 153	
	0~6.00GHz 1.3max	1. 282	1. 287	1.283	1.289	1. 285	1. 289	1.282	1. 285	
	0.88GHz 0.1(-dB)max	0.026	0.024	0.026	0.023	0.025	0.026	0.023	0.025	
	1.88GHz 0.1(-dB)max	0.020	0.024	0.021	0.025	0.023	0.025	0.020	0.023	
COMMENTAL SERVICE	1.99GHz 0.1(-dB)max	0.003	0.005	0.002	0.006	0.001	0.006	0.001	0.003	
插入损耗 Insertion	2.40GHz 0.1(-dB)max	0.067	0.065	0.063	0.066	0.064	0.067	0.063	0.065	
	3.00GHz 0.1(-dB)max	0.000	0.001	0.002	0.001	0.000	0.002	0.000	0.001	
loss	4.00GHz 0.2(-dB)max	0.053	0.056	0.053	0.057	0.052	0.057	0.052	0.054	
	5.00GHz 0.2(-dB)max	0.063	0.063	0.067	0.062	0.065	0.067	0.062	0.064	
	6.00GHz 0.2(-dB)max	0.076	0.079	0.074	0.077	0.075	0.079	0.074	0.076	
	0~6,00GHz 0.2(-dB)max	0, 153	0.153	0.157	0.155	0.152	0.157	0.152	0.154	
	0.88GHz 20(-dB)min	42.70	42.71	42, 76	42.69	42.71	42.76	42.69	42.71	
	1,88GHz 20(-dB)min	36. 40	36, 42	36. 45	36, 39	36. 41	36.45	36.39	36, 41	
	1.99GHz 20(-dB)min	35. 98	36.01	35.92	35, 95	35. 95	36.01	35. 92	35, 96	
隔离度	2.40GHz 20(-dB)min	34.53	34.51	34. 55	34.56	34. 52	34.56	34.51	34, 53	
Isolation	3.00GHz 20(-dB)min	31.68	31.65	31.62	31,67	31.65	31.68	31.62	31, 65	
1301411011	4.00GHz 15(-dB)min	27.19	27. 17	27. 24	27. 19	27.11	27, 24	27.11	27.18	
	5.00GHz 15(-dB)min	25. 54	25. 56	25, 51	25. 53	25. 54	25.56	25. 51	25.54	
	6,00GHz 15(-dB)min	24.64	24, 65	24.61	24, 66	24.65	24, 66	24.61	24.64	
	0~6,00GHz 15(-dB)min	24.63	24.64	24, 65	24, 67	24.63	24, 67	24.63	24.64	
A組判定 Criteria for	在以上标准范围内 In the spec.	ОК	ок	ок	OK	ок	OK	ок	OK	
group A	设备名称 E	设备型	弓 Model	下次校准日	日期Next o	cal. Date				
	1、显微镜 Microscope					ZTX-E		NA		
使用设备	2、直流低阻抗测试仪 Low I	747439738	511	2	019. 07. 16	3				
Equipment	2、量源低度預測域化 Low DC res. tester 3、绝緣电阻测试仪Isolation res. tester					581A		019. 01. 04		
used	3、絶線电阻测试仪Isolation res.tester 4、耐压测试仪Withstand voltage tester					120	2019. 01. 04			
	5、二次元 The two dimens					EV-01	2019. 07. 16			
	6、网络分析仪Network ana	E5071CMY46524941			2019. 01. 04					
	or 195033 to Miletwork and	a) nor			20011001	40054041		010.01.0		

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测试探针



室温Room Temp.: 26℃ 室内湿度Room R. H.: 60%RH B 组 Group B

判定标准	判定标准 试验结果 Test result									
Criteria Spec.	6#	7#	8#	9#	10#	max.	min.	aver.		
应该无毛边、裂纹、破损、 氧化; There should be no crack, damage or oxidation.	OK	OK	ОК	OK	ОК	1.	/	1		
1. 5N-2. 5N	2. 17	2. 24	2.16	2. 33	2. 41	2. 41	2. 16	2. 26		
	Criteria Spec. 应该无毛边、裂纹、破损、 氧化: There should be no crack, damage or oxidation.	Criteria Spec. 6# 应该无毛边、裂纹、破损、 氧化: There should be no crack, damage or oxidation.	Criteria Spec. 6# 7# 应该无毛边、裂纹、破损、 氧化: There should be no crack, damage or oxidation.	Criteria Spec. 6# 7# 8# 应该无毛边、裂纹、破损、 氧化: There should be no crack, damage or oxidation.	Criteria Spec. 6# 7# 8# 9# 应该无毛边、裂纹、破损、 氧化: There should be no crack, damage or oxidation. OK OK OK	Criteria Spec. 6# 7# 8# 9# 10# 应该无毛边、裂纹、破损、 氧化: There should be no crack, damage or oxidation. OK OK OK OK	Criteria Spec. 6# 7# 8# 9# 10# max. 应该无毛边、裂纹、破损、 氧化: There should be no crack, damage or oxidation.	Criteria Spec. 6# 7# 8# 9# 10# max. min. 应该无毛边、裂纹、破损、 氧化: There should be no crack, damage or oxidation.		

接触压力Allow push force

如下图所示,通过测试探针以轴向力下压开关的动弹片,使开关完全断开,测试所施加的力; Push the connector switch from on-state to off-state. Using a test probe as shown in the Figure with the required force along the axis direction.

Equipment	1、显微镜 Microscope					NH32-ZTX-E		NA NA		
使用设备	设备名称 E	quipment	name		设备型	号 Model	下次校准	日期Next	cal. Dat	
B組判定 Criteria for group B	在以上标准范围内 In the spec.	OK	OK	ОК	OK	ОК	OK	ОК	OK	
外观检查 Visual examination	应该无毛边、裂纹、破损、 氧化: There should be no crack, damage or oxidation.	ОК	ОК	ОК	OK	ОК	1	£	1	
接触压力 Allow push force	1. 5N-2. 5N	1.95	2. 01	1.96	1. 93	1. 97	2. 01	1. 93	1. 96	

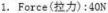
C 组 Group C 室温Room Temp.: 26℃ 室内湿度Room R. H.: 60%RH

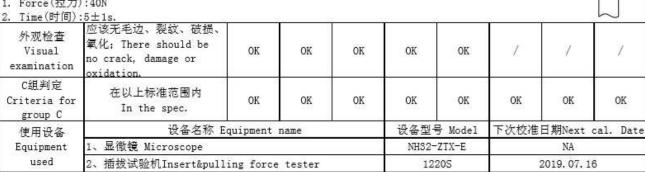
项目	判定标准	试验结果 Test result									
Items Criteria Spec.	11#	12#	13#	14#	15#	max.	min.	aver.			
外观检查 Visual examination	应该无毛边、裂纹、破损、 氧化; There should be no crack, damage or oxidation.	OK	OK	OK	OK	OK	1	7	1		

焊点粘接力Adhered of Electrode Terminal

将样品焊在测试PCB上,按图示方法在下述条件下测量;

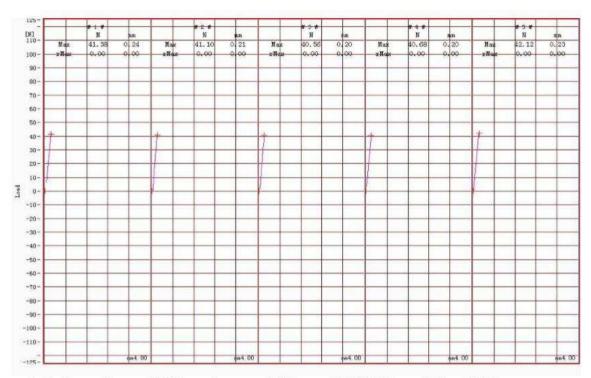
DUT samples soldered on the PCB, measure recording to figure under condition as following





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D 组 Group D 室温Room Temp.: 26℃ 室内湿度Room R.H.: 60%RH

项目	判定标准	试验结果 Test result										
Items	Criteria Spec.	16#	17#	18#	19#	20#	max.	min.	aver.			
外观检查 Visual examination	应该无毛边、裂纹、破损、 氧化; There should be no crack, damage or oxidation.	ОК	ОК	ОК	OK	OK	/	/	1			
接触电阻	Inner contact res. 70 m Ω max	66. 35	67. 24	66, 87	66, 64	67.09	67. 24	66, 35	66, 84			
Contact Resistance	Ourer contact res.	10. 42	10. 61	10. 29	10.34	10. 25	10. 61	10. 25	10.38			

振动Vibration

频率Frequency: 10Hz-100Hz-10Hz/20min;

半振幅amplitude: 3mm (P-P);

最大加速度Peak value of acceleration: 60m/s² (6G);

方向和时间Direction & durability :3 times at each of X、Y、Z axis, 10-100-10Hz/20min

试验过程中电不连续时间不超过1us, 1次。

No discontinuities more than 1 µs, 1 times at the testing process

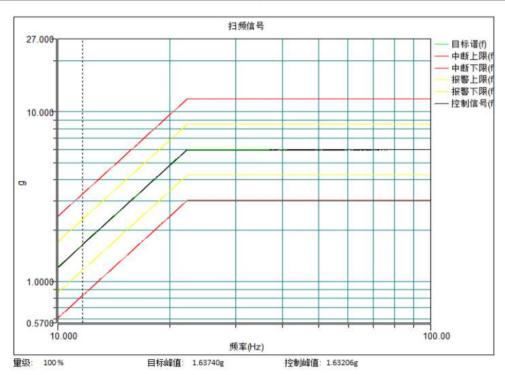
接触电阻	Inner contact res. $70 \text{ m}\Omega$ max	68. 35	67.44	67.56	68. 24	67.25	68. 35	67. 25	67, 77		
Contact Resistance	Ourer contact res. 20 mΩ max	10.86	10.62	10.79	10.86	10.83	10.86	10.62	10. 79		
外观检查 Visual examination	应该无毛边、裂纹、破损、 氧化; There should be no crack, damage or oxidation.	ОК	ОК	OK	OK	OK	/	7	7		
D組判定 Criteria for group D	在以上标准范围内 In the spec.	OK	ок	ок	ОК	OK	OK	OK	OK		
	设备名称 E	quipment	name		设备型号 Model		下次校准日期Next cal. Dat				
使用设备	日设备 1、显微镜 Microscope					-ZTX-E	NA				
Equipment	2、直流低阻抗测试仪 Low	DC res. te	ester		HG2511			2019. 07. 1	6		
used	3、振动试验机 Vibration test equipment					EV-206		2019. 01. 11			
	4、瞬断仪Moment disconne	4、瞬断仪Moment disconnection tester					2019. 01. 04				

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Remark:

	目标谱									
目标谱加速度峰值:	6g									
目标谱速度峰值:	0.419882 m/s									
目标谱位移峰峰值:	6mm									
振动台加速度 (峄值):	50.0000 g	:								
振动台速度 (峰值):	1.6000 m/s									
振动台位移(峰-峰值):	25.0000 mm									



NOTE: 1. The test result is responsible for the specimens only.

2. Do not partial or whole copy without the written permission of ECT Lab.

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E 组 Group E 室温Room Temp.: 26℃ 室内湿度Room R.H.: 60%RH

项目	判定标准	试验结果 Test result										
Items	Criteria Spec.	21#	22#	23#	24#	25#	max.	min.	aver.			
外观检查 Visual examination	应该无毛边、裂纹、破损 、氧化; There should be no crack, damage or oxidation.	ОК	ОК	ОК	ОК	OK	1	7	7			
接触电阻	Inner contact res. 70 mΩ max	66. 24	66. 86	67. 19	66. 65	66. 36	67. 19	66. 24	66. 66			
Contact Resistance	Ourer contact res. 20 mΩ max	10,67	10,62	10.51	10.73	10, 46	10.73	10, 46	10,60			

机械冲击Mechanical Shock

振幅峰值Peak value of acceleration: 735m/s2 (75G),

持续时间 Durability: 6ms

波型Wave type: Half sinusoldal

方向和循环次数: X、Y、Z三个轴向六个面各3次,总共18次;

Shock direction & times : Each 3 times at six surfaces of X. Y. Z axis, total 18 times,

试验过程中电不连续时间不超过1us, 1次。

No discontinuities more than 1 µs, ltimes at the testing.

接触电阻	Inner contact res. 70 mΩ max	68. 17	68. 24	67. 78	68. 19	67, 56	68, 24	67.56	67.99	
Contact Resistance	Ourer contact res. $20 \text{ m}\Omega$ max	10.95	10.89	10.87	10, 98	10. 54	10, 98	10. 54	10.85	
外观检查 Visual examination	应该无毛边、裂纹、破损 、氧化: There should be no crack, damage or oxidation.	OK	ок	ок	OK	OK	1	1	1	
E組判定 Criteria for group E	在以上标准范围内 In the spec.	OK	ок	OK	OK	OK	OK	OK	OK	
A MANUSTRA AND THE STREET	设备名称 E	quipment	ipment name			号 Model	下次校准日期Next cal. Da			
ALL PER VICE	1、显微镜 Microscope				NH32	-ZTX-E		NA		
使用设备	2、直流低阻抗测试仪 Low	HG:	2511		2019.07.1	.6				
quipment used	3、机械冲击试验机 Mechanical shock equipment					3040	2019. 01. 04			
	4、瞬断仪Moment disconne	ction te	ster	***************************************	NAC 1	NM-11A	2019. 01. 04			

备注 Remark:

在冲击试验过程中没有发现电不连续现象。

There is no discovery of discontinuities at the testing process.

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F 组 Group F 室温Room Temp.: 26℃ 室内湿度Room R.H.: 60%RH

项目	判定标准	. <u>20</u> 0		1	验结果				
Items	Criteria Spec.	26#	27#	28#	29#	30#	max.	min.	aver.
外观检查 Visual examination	应该无毛边、聚纹、破损、 氧化: There should be no crack, damage or oxidation.	OK	OK	ОК	OK	OK	1	1	1
接触电阻 Contact Resistance	Inner contact res. 70 mΩ max	66.56	67.12	67.09	66, 92	66.87	67.12	66.56	66.91
	Ourer contact res. 20 mΩ max	10.33	10.41	10.28	10.35	10.24	10.41	10.24	10.32
绝缘电阻 Insulation Resistance	500 MΩ min	OK	OK	OK	OK	OK	1	7	/
耐压 Withstanding Voltage	300V AC, 1min	OK	OK	OK	OK	OK	1	7	1

湿度试验Humidity

对已配合的连接器施加下列条件测试apply the following environment to the mating connector.

温度temperature: 60℃ 湿度humidity: 95%RH 时间durability: 96H

备注: 所有测试应在试验完成后静置于室温条件下1~2小时内完成:

Remark: Measurements should be done within 1~2hours at the room conditions.

接触电阻	Inner contact res. 70 mΩ max	67.45	68. 12	67.68	67.35	68. 09	68. 12	67.35	67.74	
Contact Resistance	Ourer contact res. 20 mΩ max	10.86	10.73	10.78	10.64	10.61	10.86	10.61	10.72	
绝缘电阻 Insulation Resistance	500 MΩ min	OK	OK	OK	OK	OK	1	1	1	
耐压 Withstanding Voltage	300V AC, 1min	OK	OK	OK	OK	OK	/	1	1	
外观检查 Visual examination	应该无毛边、裂纹、破损、 氧化; There should be no crack, damage or oxidation.	OK	OK	OK	OK	OK	/	Ĩ	/	
F组判定 Criteria for group F	在以上标准范围内 In the spec.	OK	OK	OK	OK	OK	OK	OK	OK	
19010 - 53.55	设备名称 E	quipment	name		设备型	号 Model	下次校准日期Next cal. Date			
	1、显微镜 Microscope				NH32-ZTX-E		NA NA			
使用设备 Equipment	2、宣流低阻抗测试仪 Low DC res. tester					2511	2019, 07, 16			
	3、绝缘电阻测试仪Isolation res.tester					TH2681A		2019. 01. 04		
used	4、耐压测试仪Withstand voltage tester					JB7120		2019. 01. 04		
	5、环境试验箱Environment				GXP-401		2019. 01. 04			

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G 组 Group G 室温Room Temp.: 26℃ 室内湿度Room R.H.: 60%RH

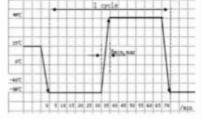
项目	判定标准	试验结果 Test result									
Items	Criteria Spec.	31#	32#	33#	34#	35#	max.	min.	aver.		
外观检查 Visual examination	应该无毛边、裂纹、破损、 氧化; There should be no crack, damage or oxidation.	OK	OK	OK	OK	OK	/	1	1		
接触电阻	Inner contact res. 70 mΩ max	67.09	67.34	66.86	66.54	67.09	67.34	66.54	66.98		
Contact Resistance	Ourer contact res. 20 mΩ max	10.31	10.33	10.29	10.36	10.28	10.36	10.28	10.31		
绝缘电阻 Insulation Resistance	500 MΩ min	OK	OK	OK	OK	OK	1	/	1		
耐压 Withstanding Voltage	300v AC, 1min	OK	OK	OK	OK	OK	/	/	/		

冷热冲击Thermal Shock

对已插合之试验样品施加以下条件,50个循环:

Apply the following environment condition 50 times to the mated samples.

备注: 所有测试应在试验完成后静置于室温条件下1~2小时内完成; Remark: Measurements should be done within 1~2hours at the room conditions.



接触电阻	Inner contact res. 70 mΩ max	68.09	67.87	67.45	68.12	67.98	68. 12	67.45	67.90	
Contact Resistance	Ourer contact res. 20 mΩ max	10.75	10.82	10.67	10.81	10.69	10.82	10.67	10.75	
绝缘电阻 Insulation Resistance	500 MΩ min	OK	OK	OK	OK	OK	/	1	1	
耐压 Withstanding Voltage	300v AC, 1min	OK	OK	OK	OK	OK	1	1	1	
外观检查 Visual examination	应该无毛边、裂纹、破损、 氧化: There should be no crack, damage or oxidation.	OK	OK	OK	OK	OK	1	1	1	
G組判定 Criteria for group G	在以上标准范围内 In the spec.	OK	OK	OK	OK	OK	OK	OK	OK	
1500 150	设备名称 E	quipment	name	(2)	设备型号 Model		下次校准日期Next cal. Date			
312323	1、显微镜 Microscope				NH32	-ZTX-E	NA NA			
使用设备	2、直流低阻抗测试仪 Low DC res. tester					HG2511		2019, 07, 16		
Equipment used	3、绝缘电阻测试仪Isolation res.tester					TH2681A		2019. 01. 04		
useu	4、耐压测试仪Withstand voltage tester					JB7120		2019. 01. 04		
	5、冲击试验箱Thermal sho	ck chambe	5、冲击试验箱Thermal shock chamber					2019, 01, 04		

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<u>H</u>组 Group <u>H</u> 室温Room Temp.: <u>26</u>℃ 室内湿度Room R.H.: <u>60%</u>RH

项目	判定标准	试验结果 Test result								
Items	Criteria Spec.	36#	37#	38#	39#	40#	max.	min.	aver.	
外观检查 Visual examination	应该无毛边、裂纹、破损、 氧化、沾污: There should be no crack, damage, or oxidation.	OK	OK	OK	OK	OK	1	1	/	

可焊性 Solderability

按下列条件对已配合的连接器进行测试.

Apply the following environment to the mating connector

温度Temperature : 245±5℃ 持续时间Duration : 3~5 second

观测Test sample should be observed by the magnification of 10times after the test.

外观检查 Visual examination	吃锡面积大于95%及以上; At least 95% covered by a continuous new solder coat.	OK	OK	OK	OK	OK	Z	1	/	
使用设备	设备名称 Equipment name					设备型号 Model		下次校准日期Next cal. Date		
Equipment	1、显微镜 Microscope	NH32-ZTX-E		NA						
used	2、锡炉 Solder bath				BD-1	OORA		2019.01.09		

I 组 Group I 室温Room Temp.: 26℃ 室内湿度Room R. H.: 60%RH 项目 判定标准 试验结果 Test result Items Criteria Spec. 41# 42# 43# 44# 45# min. aver. max. 应该无毛边、裂纹、破损、 外观检查 氧化: There should be Visual OK OK OK OK OK. 1 no crack, damage or examination oxidation. 尺寸检查 Examination □ 0.08max 0.012 0,008 0.004 0.012 0.005 0.012 0.004 0.008 of dimension

耐焊接热试验Resistance to soldering heat

Apply the fillowing environment to the mating connector

Temperature:260 ± 2°C

Duration:3~5%min , IR Refloe CYCLE:2cycles

按下列条件对已配合的连接器进行测试,温度: 260±2℃

持续时间:3~5%分钟,过炉2次

备注: 每次试验后应用40倍放大镜进行观察

Remarks: The samples should be observed by the X40 microscope after each test.

尺寸检查 Examination	□ 0.08max	0, 016	0,009	0, 005	0.015	0.007	0,016	0, 005	0,010	
of dimension	L. O. COMMA	0.010	0.003	0.000	0.010	0,001	0.010	0.000	0.010	
外观检查 Visual examination	应该无毛边、裂纹、破损、 氧化: There should be no crack, damage or oxidation.	OK	OK	OK	OK	OK	/	1	7	
I组判定 Criteria for group I	在以上标准范围内 In the spec.	OK	OK	OK	OK	OK	/	1	7	
	设备名称 Equipment name					设备型号 Model		下次校准日期Next cal. Date		
使用设备	1、显微镜 Microscope					NH32-ZTX-E		NA NA		
Equipment used	2、二次元 The two dimension					2515EV-01		2019. 07. 16		
used	3、回流焊炉 Refolw solder equipment					NS-800111		2019. 01. 04		

备注 Remark:

试验后测量平面度图片



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J组 Group J 室温Room Temp.: 26℃ 室内湿度Room R.H.: 60%RH

项目	判定标准	试验结果 Test result								
Items Cr:	Criteria Spec.	46#	47#	48#	49#	50#	max.	min.	aver.	
外观检查 Visual examination	应该无毛边、裂纹、破损、 氧化; There should be no crack, damage or oxidation.	OK	OK	OK	OK	OK	/	1	/	
接触电阻 Contact Resistance	Inner contact res. 70 mΩ max	67.62	66. 58	67.09	66.86	66.54	67.62	66.54	66.94	
	Ourer contact res. 20 mΩ max	10.19	10.24	10.36	10.28	10.31	10.36	10.19	10. 28	

盐雾测试Salt Spray test

对已插合的连接器施加以下试验条件:

Apply the following condition to the mated connectors:

试验箱温度chamber temperature: 35±2℃

盐水浓度Salt water density: 5±1%

沉降速率Spray speed: 1~2m1/h/80cm2

时间Duration: 48 hours

注意: 试验后应在不高于38°C的清水中清洗,然后置于室温环境下恢复1~2小时后进行检测。

Notes: after the salt spray test, the samples should be washed in the clean water (temperature should no more than 38°C), and then place in the room temperature for recovery 1°2 hours, final inspection.

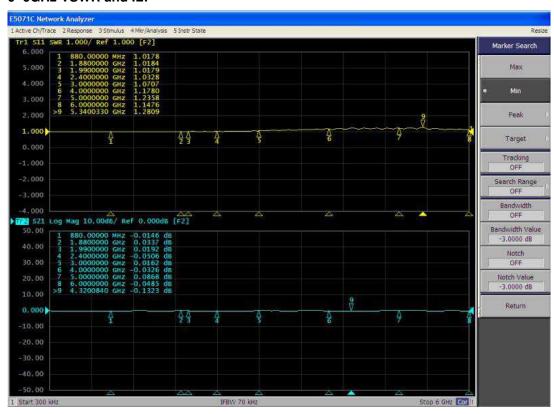
外观检查 Visual examination	应该无毛边、裂纹、破损、 氧化; There should be no crack, damage or oxidation.	OK	OK	OK	OK	OK	7	7	1	
接触电阻 Contact Resistance	Inner contact res. 70 mΩ max	68, 45	68. 02	67.79	67.77	67.85	68, 45	67.77	67.98	
	Ourer contact res. 20 mΩ max	10.89	10.84	10.87	10.83	10.95	10.95	10.83	10.88	
J组判定 Criteria for group J	在以上标准范围内 In the spec.	OK	OK	OK	OK	OK	OK	OK	OK	
	设备名称 E	quipment	name		设备型号 Model		下次校准日期Next cal. Date			
使用设备 Equipment used	1、显微镜 Microscope					NH32-ZTX-E		NA		
	2、直流低阻抗测试仪 Low DC res.tester					HG2511		2019. 07. 16		
useu	3、盐雾试验箱Salt spray	GX-150		2019. 07. 16						

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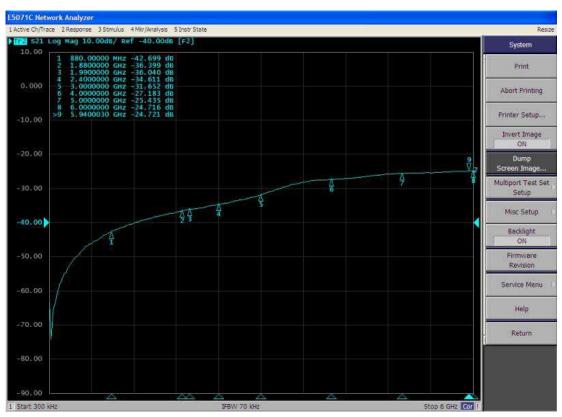


Appendix

0~6GHz VSWR and IL:



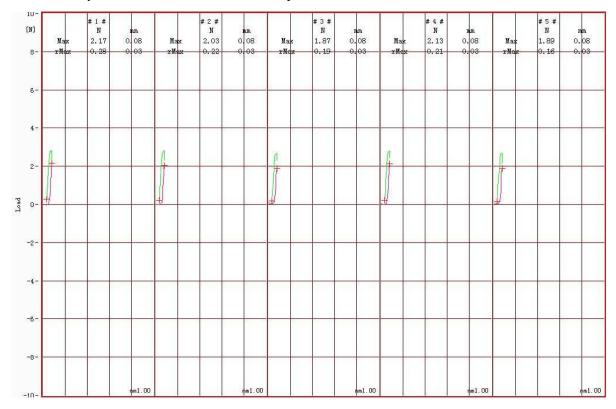
0~6GHz Isolation:



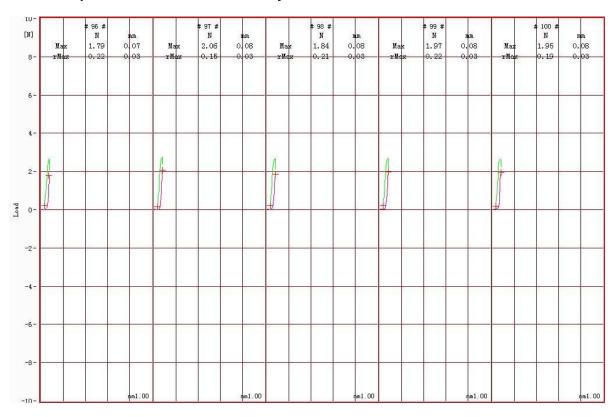
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The contact pressure curves for the first 5 cycles:



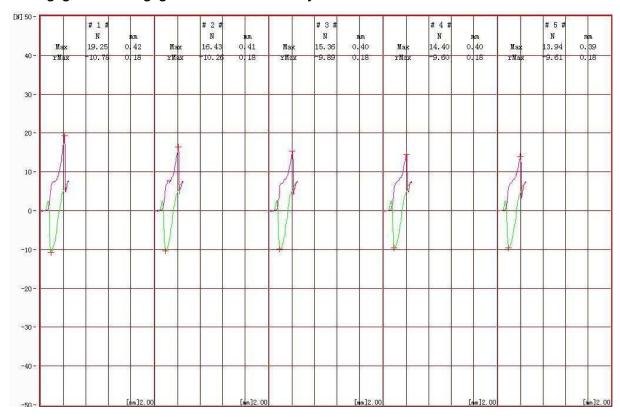
The contact pressure curves for the last 5 cycles:



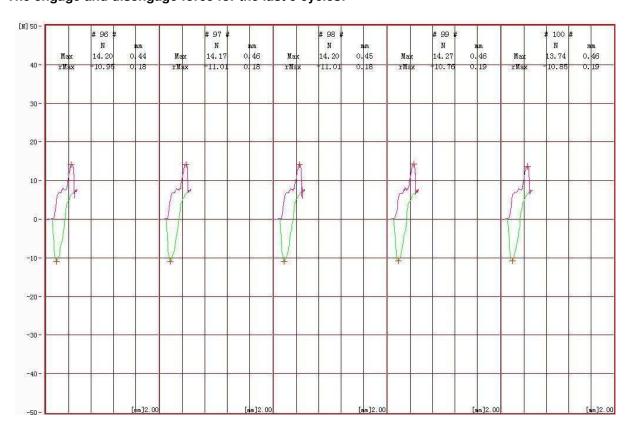
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The engage and disengage force for the first 5 cycles:



The engage and disengage force for the last 5 cycles:



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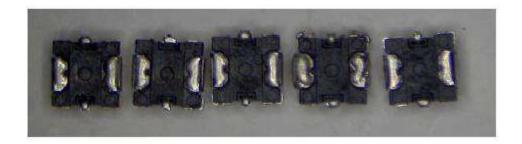
Salt Spray after 48H

48h盐雾OK图片





吃锡OK



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