報告編號
Report No.：SQA080706

產品承認報告
PRODUCT QUALIFICATION REPORT

Description : 外製成品

Supplier: N

TXC P/N : 7B25000185

Conclusion: ☐ Conditional Approval ☐ Full Approval ☑ Reject

Major Issue:
1.電測F+*69PCS(規格±9ppm,實測9.03~15.14ppm)
2.電測DLD2*1PCS NG(規格差異7.5Ω,實測10.03Ω)
3.Drop Test FL*1PCS NG(規格差異±5ppm,實測-5.45ppm)
4.ReflowTest FL*1PCS NG(規格差異±5ppm,實測5.21ppm)
5.Reflow Test RR*1PCS NG(規格差異±5Ω,實測8.99Ω)
6.Marking NG(字體大小/位置/空格不符)
7.銀面污染

Minor Issue:
1.拉力測試NG(規格20~80gms,實測31~103gms)
2.對機差異大
3.產品編號NG(規範30PCS正面,實物33PCS反面)
規格無法符合需求,請重新送樣

EVALUATED BY *Rita Wu*

APPROVED BY : *Y.H. Huang*

ISSUED DATE : **24-Jul-08**

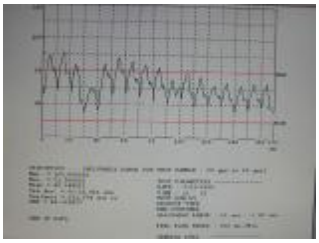
Supplier: N TXC P/N : 7B25000185

	CARRIER長	CARRIER寬	CARRIER高	CARRIER帶寬	Bar Code標籤	MARKING	粗細漏測試
規格	5.40±0.2	3.60±0.2	1.40±0.2	12.000	N/A	NG	OK
實測	5.36	3.49	1.35	12.03			
判定	OK	OK	OK	OK			

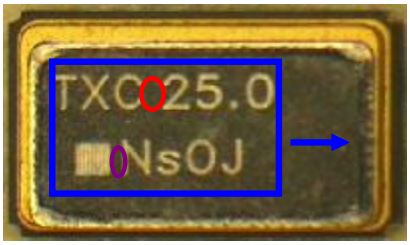
	SAMPLE長	SAMPLE寬	SAMPLE高	BLANK尺寸	銀面尺寸	拉力測試	推力測試
規格	5.00±0.15	3.50±0.15	0.9±0.15	1.7825*3.4883	1.5465*1.6737	NG	N/A
實測	5.03	3.23	0.98			Reflow Test	Drop Test
判定	OK	OK	OK			FL*1PCS NG	FL*1PCS NG RR*1PCS NG

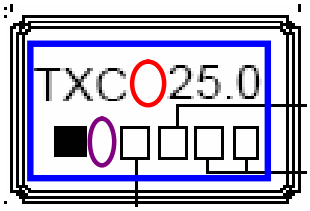
	電測	溫測	備註
判定	F+*69PCS DLD2*1PCS NG	OK	1.對機差異大 2.產品編號NG(規範30PCS正面)

Taping拉力

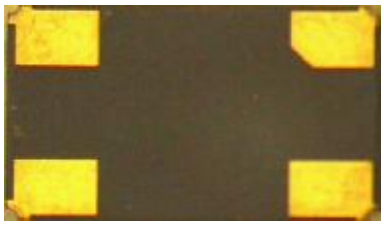


MARKING

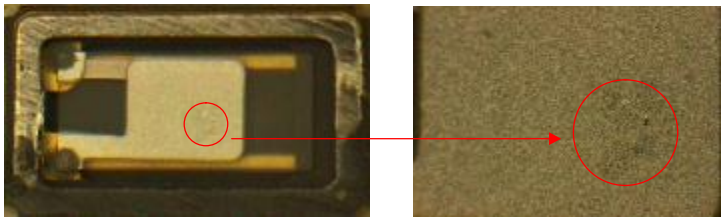




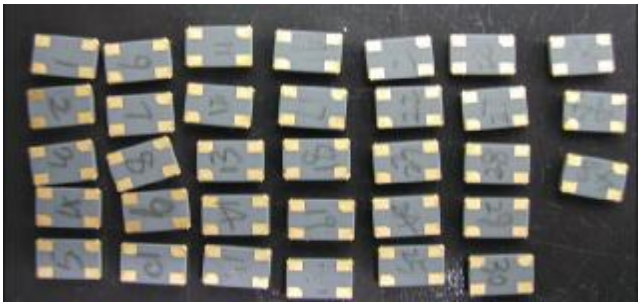
PKG



銀面 污染



產品編號NG(規範30PCS正面)



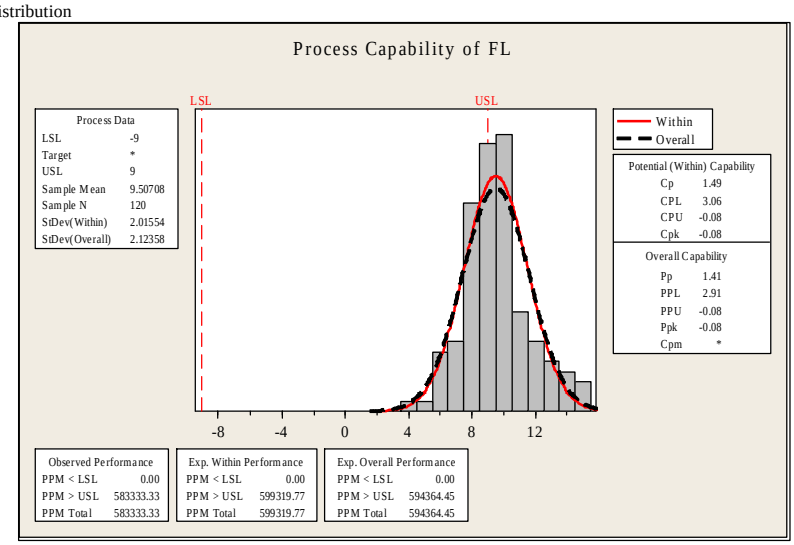
INITIAL ELECTRICAL TEST

F+*69PCS

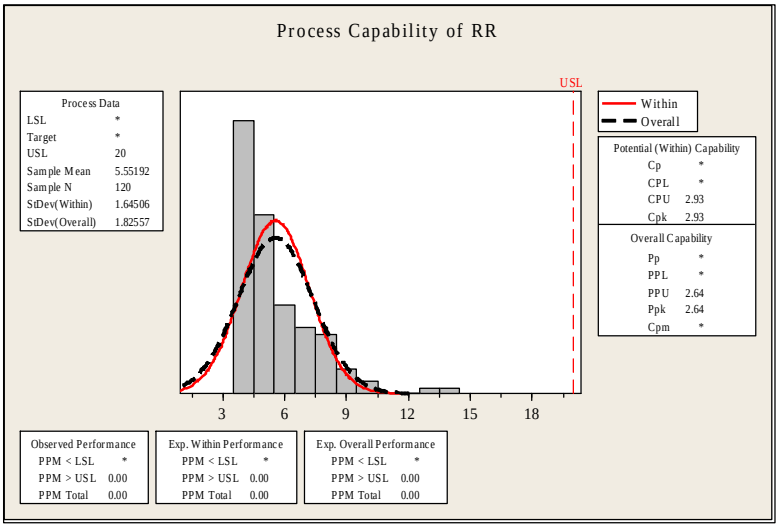
TEST RESULT NG DLD2*1PCS NG

ITEM	FL Tol	RR	C0	C1	L	C0/C1	DLD2	FLD2	RLD2	SPDB	Q	TS
	ppm	Ohms	pF	fF	mH		Ohms	ppm	ohms	db	k	ppm/pF
USL	9	20	2.2	N/A	N/A	N/A	7.5	7.5	27	-3	65	9.528
LSL	-9	N/A	1.8	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	6.352
Max.	15.14	13.96	2.11	7.39	6.04	287.64	10.03	6.72	18.71	-13.66	239.72	7.58
Min.	4.17	3.76	1.85	6.71	5.49	263.51	0.25	0.31	3.82	-9999.00	64.24	7.02
Mean	9.51	5.55	1.96	7.04	5.76	278.34	1.63	1.77	6.62	-9915.79	176.06	7.30
STD	2.12	1.82	0.05	0.12	0.10	4.15	1.52	0.95	2.90	911.53	42.52	0.10
CPK	-0.08	2.64	NA	NA	NA	N/A	1.29	2.00	NA	NA	NA	NA

Frequency Distribution



RR Distribution



EXCEL EXPORT PRINTOUT FORMAT
Run Name 7B25000185

Run Date : 22-¤Cª¢-2008 10:19 am
S&A 250B: 9.60 Report: 4.62
Descriptio‹ 7B25000185

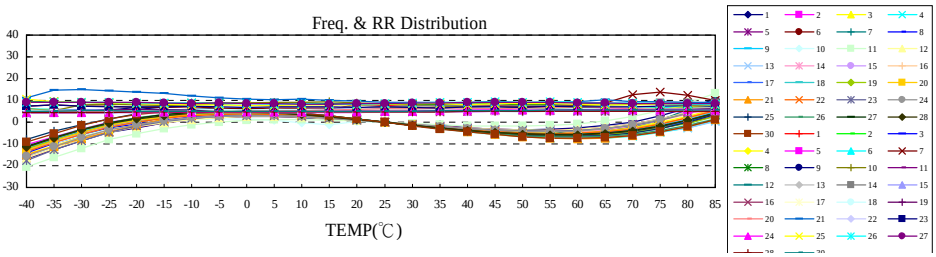
Reference 25000000 (Using Measured FL)
Power: 100.00 uW Into 10.0 ohms
PL: No Load CL: 20.00 pF

ITEM	FR	FL	FL Tol	RR	C0	C1	L	C0/C1	DLD2	FLD2	RLD2	SPDB	Q	TS
	PPM	HZ	ppm	Ohms	pF	fF	mH		Ohms	ppm	ohms	db	k	ppm/pF
	USL		9	20	2.2	N/A	N/A	N/A	7.5	7.5	27	-3.5	65	9.528
	LSL		-9	N/A	1.8	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	6.352
Max.	-144.07	25000378.57	15.14	13.96	2.11	7.39	6.04	287.64	10.03	6.72	18.71	-13.66	239.72	7.58
Min.	-162.28	25000104.23	4.17	3.76	1.85	6.71	5.49	263.51	0.25	0.31	3.82	-9999.00	64.24	7.02
AVG	-152.32	25000237.67	9.51	5.55	1.96	7.04	5.76	278.34	1.63	1.77	6.62	-9915.79	176.06	7.30
STD	3.15	52.99	2.12	1.82	0.05	0.12	0.10	4.15	1.52	0.95	2.90	911.53	42.52	0.10
CPK	NA	NA	-0.08	2.64	NA	NA	NA	N/A	1.29	2.00	NA	NA	NA	NA
#1	-150.05	25000187.98	7.52	6.60	1.90	6.87	5.90	276.63	2.63	2.54	6.63	-9999.00	140.26	7.17
#2	-150.47	25000215.24	8.61	4.73	1.93	6.90	5.87	280.29	0.97	2.00	4.97	-9999.00	194.99	7.17
#3	-153.34	25000210.32	8.41	4.63	1.97	7.03	5.76	279.88	0.31	0.52	4.73	-9999.00	195.39	7.29
#4	-148.90	25000275.48	11.02	5.02	1.97	6.95	5.83	283.05	3.09	2.29	8.08	-9999.00	182.37	7.20
#5	-155.02	25000182.97	7.32	4.15	2.00	7.08	5.73	282.31	0.48	0.58	4.28	-9999.00	216.62	7.31
#6	-149.85	25000265.71	10.63	5.23	1.94	6.97	5.81	278.18	2.29	1.35	7.42	-9999.00	174.65	7.24
#7	-154.66	25000178.69	7.15	5.95	1.96	7.05	5.75	277.86	1.56	1.24	6.07	-9999.00	151.86	7.31
#8	-150.43	25000212.39	8.50	7.71	1.89	6.90	5.88	274.20	0.46	0.84	7.87	-9999.00	119.70	7.20
#9	-153.83	25000252.63	10.11	4.83	2.01	7.14	5.68	282.03	0.28	0.98	5.01	-9999.00	184.62	7.37
#10	-149.81	25000232.99	9.32	7.96	1.94	6.97	5.81	278.94	1.70	3.05	9.01	-9999.00	114.76	7.24
#11	-159.94	25000223.84	8.95	4.58	2.09	7.39	5.49	283.00	0.63	1.05	4.90	-9999.00	188.19	7.57
#12	-154.68	25000151.04	6.04	4.32	1.94	6.97	5.82	278.34	0.93	1.02	5.14	-9999.00	211.51	7.24
#13	-151.90	25000223.11	8.92	4.96	1.93	6.99	5.80	275.90	0.93	1.49	4.90	-9999.00	183.70	7.27
#14	-146.41	25000248.52	9.94	5.76	1.90	6.81	5.95	278.97	1.44	2.78	5.59	-9999.00	162.38	7.10
#15	-148.47	25000246.56	9.86	5.21	1.90	6.85	5.92	277.74	1.00	1.31	4.91	-9999.00	178.17	7.14
#16	-148.64	25000211.10	8.44	4.28	1.89	6.81	5.95	277.97	0.36	1.39	4.22	-9999.00	218.27	7.11
#17	-152.38	25000242.37	9.69	4.99	1.95	7.04	5.76	276.89	1.06	1.43	5.55	-9999.00	181.20	7.31
#18	-146.55	25000247.15	9.89	5.38	1.88	6.79	5.97	276.23	2.29	1.18	7.11	-9999.00	174.12	7.10
#19	-149.68	25000263.40	10.54	4.99	1.94	6.96	5.82	278.31	2.08	0.59	7.19	-9999.00	183.34	7.23
#20	-151.85	25000202.40	8.10	5.79	1.97	6.97	5.82	281.99	1.24	2.19	5.61	-9999.00	157.70	7.22
#21	-149.60	25000274.25	10.97	8.93	1.90	6.96	5.83	272.78	3.31	1.71	12.22	-9999.00	102.50	7.25
#22	-153.26	25000221.97	8.88	4.06	2.01	7.07	5.74	284.18	0.92	1.68	4.10	-9999.00	222.11	7.30
#23	-156.86	25000104.23	4.17	6.45	1.93	6.96	5.83	278.01	1.08	1.41	7.12	-9999.00	141.80	7.23
#24	-151.71	25000206.46	8.26	4.48	1.99	6.97	5.82	285.74	0.72	1.01	4.75	-9999.00	204.02	7.20
#25	-149.98	25000227.59	9.10	7.77	1.92	6.91	5.86	277.65	2.03	1.87	9.39	-9999.00	118.54	7.19
#26	-147.90	25000281.48	11.26	7.98	1.91	6.90	5.88	277.40	5.29	2.57	13.20	-9999.00	115.65	7.18
#27	-153.64	25000200.48	8.02	7.98	1.88	7.00	5.79	269.09	1.62	1.76	9.56	-9999.00	113.95	7.31
#28	-157.11	25000234.19	9.37	4.40	2.05	7.28	5.57	282.02	1.20	1.35	5.55	-9999.00	198.81	7.48
#29	-153.08	25000227.28	9.09	4.30	1.96	7.04	5.76	277.76	0.58	1.28	4.79	-9999.00	210.08	7.31
#30	-152.89	25000255.13	10.21	4.68	1.95	7.08	5.73	275.88	1.19	1.61	4.85	-9999.00	192.08	7.35
#31	-147.10	25000293.21	11.73	7.08	1.95	7.01	5.78	278.76	3.57	4.29	8.83	-9999.00	128.24	7.27
#32	-152.25	25000309.67	12.39	6.20	1.98	7.09	5.72	278.80	10.03	6.72	16.16	-9999.00	144.81	7.34
#33	-150.30	25000289.45	11.58	8.77	1.89	6.96	5.83	271.51	3.55	2.21	12.32	-9999.00	104.35	7.26
#34	-146.81	25000378.20	15.13	4.19	1.97	7.05	5.75	278.87	1.17	2.30	4.34	-9999.00	215.71	7.30
#35	-148.51	25000354.84	14.19	4.20	1.99	7.09	5.72	280.27	0.25	1.23	4.10	-9999.00	214.13	7.33
#36	-150.77	25000249.31	9.97	4.37	1.97	7.00	5.79	281.51	1.07	1.81	4.36	-9999.00	208.29	7.25
#37	-152.41	25000255.06	10.20	4.79	1.98	7.08	5.73	279.83	1.15	1.85	5.10	-9999.00	187.74	7.33
#38	-147.48	25000280.12	11.20	7.12	1.86	6.87	5.90	270.13	3.92	2.74	8.71	-9999.00	130.14	7.19
#39	-151.93	25000213.05	8.52	4.12	1.97	6.98	5.81	282.56	0.94	1.17	4.60	-9999.00	221.58	7.23
#40	-153.83	25000238.80	9.55	6.46	1.99	7.12	5.70	279.44	0.35	0.91	6.74	-9999.00	138.47	7.36
#41	-155.83	25000141.19	5.65	4.92	1.97	7.05	5.75	279.36	7.41	2.67	12.32	-9999.00	183.53	7.30
#42	-154.80	25000230.13	9.21	7.98	1.98	7.12	5.69	277.52	3.14	2.41	11.04	-9999.00	112.10	7.37
#43	-151.56	25000208.76	8.35	5.05	1.98	7.06	5.74	279.72	3.09	3.15	6.81	-9999.00	178.47	7.31
#44	-157.38	25000159.03	6.36	4.97	1.85	7.03	5.77	263.51	0.43	3.08	5.04	-9999.00	182.51	7.36
#45	-151.65	25000222.85	8.91	5.26	1.96	6.99	5.80	280.29	1.41	2.23	6.28	-9999.00	173.04	7.25
#46	-156.32	25000225.39	9.02	7.54	1.90	7.17	5.65	265.02	0.55	1.01	8.09	-9999.00	117.71	7.48
#47	-155.24	25000120.06	4.80	7.03	1.99	7.01	5.78	283.82	1.32	0.92	7.78	-9999.00	129.26	7.25
#48	-152.08	25000228.23	9.13	5.71	1.97	7.02	5.78	280.06	2.36	2.49	5.81	-9999.00	158.79	7.27
#49	-152.63	25000251.44	10.06	3.98	1.96	7.07	5.73	277.35	1.15	1.41	4.31	-9999.00	226.42	7.33
#50	-147.70	25000378.57	15.14	4.50	1.96	7.09	5.72	275.95	0.52	1.32	4.92	-9999.00	199.88	7.35
#51	-154.93	25000188.16	7.53	5.11	1.98	7.06	5.74	280.70	3.61	1.13	8.69	-9999.00	176.39	7.30
#52	-153.82	25000253.92	10.16	4.16	2.00	7.15	5.67	279.75	0.54	1.20	4.07	-9999.00	214.24	7.38
#53	-151.10	25000315.91	12.64	9.56	1.95	7.06	5.74	275.75	2.72	3.18	12.32	-9999.00	94.35	7.33
#54	-146.75	25000247.14	9.89	4.84	1.89	6.81	5.95	277.97	0.56	0.92	4.81	-9999.00	192.95	7.11
#55	-156.93	25000239.25	9.57	3.95	2.08	7.28	5.57	285.49	0.84	1.88	4.20	-9999.00	221.02	7.47
#56	-153.28	25000261.01	10.44	7.23	1.92	7.09	5.72	270.24	1.26	2.09	8.44	-9999.00	124.33	7.38
#57	-152.78	25000211.80	8.47	10.25	1.95	6.93	5.85	282.00	4.75	2.00	10.15	-9999.00	89.61	7.19
#58	-154.15	25000258.02	10.32	4.45	1.98	7.15	5.67	277.60	1.11	1.28	5.32	-9999.00	200.16	7.40
#59	-150.76	25000265.30	10.61	3.97	1.96	7.02	5.78	279.54	0.70	1.69	4.31	-9999.00	228.69	7.28
#60	-147.07	25000230.41	9.22	8.89	1.85	6.75	6.01	274.26	3.28	1.44	12.16	-9999.00	106.12	7.07
#61	-149.24	25000287.64	11.51	5.95	1.95	6.98	5.81	279.90	0.94	1.79	6.85	-9999.00	153.24	7.24
#62	-154.46	25000233.48	9.34	4.19	1.98	7.13	5.69	278.29	0.75	1.00	4.87	-9999.00	212.91	7.38
#63	-148.49	25000310.34	12.41	7.04	1.99	7.14	5.68	278.19	1.81	3.80	8.08	-9999.00	126.53	7.39
#64	-150.91	25000292.01	11.68	5.25	1.94	7.08	5.73	274.43	1.11	2.79	6.33	-9999.00	171.28	7.35
#65	-155.63	25000190.00	7.60	7.13	1.96	7.11	5.70	275.96	1.12	0.66	8.19	-9999.00	125.56	7.37
#66	-162.28	25000144.40	5.78	4.76	2.07	7.32	5.54	282.41	3.62	4.17	8.26	-9999.00	183.01	7.51
#67	-152.41	25000223.93	8.96	4.40	1.97	7.03	5.77	281.03	1.20	1.96	4.67	-9999.00	206.16	7.28
#68	-155.61	25000305.79	12.23	12.91	1.94	7.30	5.55	266.13	5.62	2.55	18.71	-9999.00	67.57	7.58
#69	-151.96	25000213.18	8.53	4.49	1.98	6.98	5.81	283.43	0.84	2.12	5.26	-9999.00	203.06	7.22
#70	-155.36	25000217.37	8.69	4.11	1.97	7.14	5.68	275.77	3.41	1.59	7.44	-9999.00	217.16	7.39
#71	-156.60	25000253.88	10.16	4.04	2.07	7.29	5.56	284.30	0.39	1.15	3.94	-9999.00	216.42	7.48
#72	-154.13	25000185.36	7.41	4.22	1.98	7.03	5.77	281.40	0.76	1.66	4.16	-9999.00	214.60	7.28
#73	-152.42	25000241.66	9.67	5.09	1.97	7.08	5.73	278.45	0.54	2.43	6.06	-9999.00	176.67	7.33
#74	-154.91	25000206.17	8.25	4.23	2.00	7.13	5.68	280.37	0.73	1.09	4.46	-9999.00	210.80	7.37
#75	-152.98	25000205.42	8.22	4.20	1.97	7.03	5.77	280.99	0.67	1.68	4.76	-9999.00	215.85	7.28
#76	-154.44	25000174.78	6.99	4.18	1.96	7.02	5.78	279.46	0.25	1.04	4.11	-9999.00	217.04	7.28
#77	-153.80	25000226.60	9.06	4.25	1.98	7.08	5.72	279.50	1.01	1.01	5.19	-9999.00	211.48	7.33
#78	-144.07	25000351.08	14.04	7.25	1.88	6.89	5.88	273.33	1.91	1.57	7.98	-9999.00	127.50	7.20
#79	-154.53	25000180.48	7.22	4.11	1.99	7.04	5.76	281.93	0.69	1.52	4.02	-9999.00	220.13	7.28
#80	-156.20	25000273.12	10.92	4.03	2.11	7.32	5.54	287.64	0.51	1.21	3.95	-9999.00	215.63	7.49
#81	-151.09	25000250.67	10.03	4.14	1.96	7.01	5.78	279.59	0.66	1.06	4.35	-9999.00	219.24	7.27
#82	-147.18	25000361.51	14.46	3.88	1.94	7.02	5.77	276.74	1.20	1.88	4.29	-9999.00	233.41	7.29
#83	-151.34	25000312.97	12.52	5.74	1.98	7.13	5.68	278.11	1.72	2.61	5.67	-9999.00	155.46	7.38
#84	-155.35	25000149.22	5.97	5.77	1.97	7.03	5.77	279.62	0.72	0.69	6.45	-9999.00	156.93	7.28
#85	-149.42	25000250.87	10.03	4.95	1.91	6.93	5.85	275.95	0.86	1.58	5.08	-9999.00	185.54	7.21
#86	-156.64	25000217.44	8.70	6.95	2.06	7.24	5.60	285.29	0.57	1.34	6.64	-9999.00	126.48	7.43
#87	-151.84	25000240.40	9.62	4.11	1.96	7.02	5.77	279.38	1.59	1.50	5.54	-9999.00	220.83	7.28
#88	-150.93	25000251.09	10.04	4.14	1.97	7.01	5.78	281.26	0.93	1.83	4.11	-9999.00	219.24	7.26
#89	-155.09	25000216.24	8.65	4.22	1.99	7.13	5.68	279.63	0.34	0.64	4.27	-13.66	211.48	7.37
#90	-154.05	25000232.35	9.29	3.86	2.01	7.12	5.69	282.12	0.86	1.66	3.84	-9999.00	231.45	7.35
#91	-154.86	25000350.79	14.03	13.96	1.92	7.10	5.71	270.02	3.39	5.18	15.35	-9999.00	64.24	7.39
#92	-148.86	25000331.27	13.25	4.10	1.97	7.06	5.75	279.40	0.60	1.45	4.00	-9999.00	220.09	7.31
#93	-154.11	25000196.21	7.85	4.13	1.97	7.05	5.75	278.71	0.46	0.71	4.22	-9999.00	218.41	7.31
#94	-152.28	25000241.77	9.67	8.24	1.89	7.00	5.79	270.55	2.20	1.75	10.47	-9999.00	110.38	7.30
#95	-155.11	25000190.07	7.60	3.87	1.97	7.08	5.73	278.55	0.76	1.63	3.83	-9999.00	232.45	7.33
#96	-153.39	25000199.01	7.96	6.20	1.96	7.02	5.77	279.12	2.24	1.94	8.04	-9999.00	146.20	7.28
#97	-151.90	25000240.68	9.63	3.98	1.96	7.03	5.77	278.90	1.08	1.72	4.16	-9999.00	228.00	7.28
#98	-152.40	25000191.92	7.68	7.90	1.90	6.95	5.84	273.47	2.40	2.03	10.45	-9999.00	116.08	7.24
#99	-152.51	25000236.69	9.47	4.37	1.98	7.05	5.75	280.33	1.05	1.80	4.56	-9999.00	206.69	7.30
#100	-152.66	25000233.88	9.36	3.76	1.98	7.06	5.74	280.77	0.74	1.19	3.82	-9999.00	239.72	7.30
#101	-149.96	25000263.39	10.54	9.03	1.89	6.95	5.83	272.33	2.34	1.19	9.46	-9999.00	101.43	7.25
#102	-155.09	25000223.84	8.95	4.57	1.99	7.14	5.68	278.19	0.48	0.55	4.71	-9999.00	195.39	7.38
#103	-151.63	25000318.29	12.73	6.22	1.99	7.15	5.67	277.71	0.89	1.30	7.07	-9999.00	143.15	7.39
#104	-155.43	25000191.89	7.68	3.86	1.96	7.09	5.72	275.95	0.79	1.54	3.82	-9999.00	232.91	7.35
#105	-148.23	25000284.64	11.39	5.65	1.94	6.94	5.84	279.70	2.35	1.88	7.64	-9999.00	162.22	7.21
#106	-147.09	25000193.13	7.73	5.29	1.86	6.71	6.04	276.54	0.83	1.80	6.06	-9999.00	179.49	7.02
#107	-152.12	25000238.08	9.52	6.14	1.98	7.06	5.74	280.66	0.66	2.10	6.13	-9999.00	146.75	7.31
#108	-152.74	25000169.23	6.77	4.33	1.96	7.05	5.75	278.62	2.09	3.22	5.88	-9999.00	208.91	7.30
#109	-155.95	25000260.07	10.40	4.55	2.02	7.25	5.59	278.90	0.36	0.31	4.80	-9999.00	192.96	7.48
#110	-149.67	25000260.17	10.41	4.53	1.90	6.94	5.84	273.86	0.53	1.04	5.01	-9999.00	202.60	7.24
#111	-152.74	25000244.04	9.76	3.99	1.97	7.06	5.74	278.35	1.00	1.65	4.04	-9999.00	225.68	7.32
#112	-151.85	25000189.93	7.60	4.20	1.97	6.94	5.84	283.65	1.15	1.87	4.39	-9999.00	218.41	7.19
#113	-154.26	25000163.25	6.53	4.60	1.97	7.01	5.78	280.98	0.95	1.81	4.52	-9999.00	197.38	7.26
#114	-160.21	25000189.93	7.60	4.62	2.07	7.33	5.53	282.58	1.81	0.97	6.38	-9999.00	187.70	7.53
#115	-151.35	25000252.08	10.08	4.28	1.97	7.03	5.77	280.28	0.29	1.22	4.40	-9999.00	211.60	7.28
#116	-153.39	25000193.47	7.74	6.14	1.96	6.97	5.81	281.02	3.02	0.99	9.10	-9999.00	148.64	7.23
#117	-147.22	25000312.84	12.51	6.54	1.91	6.91	5.86	276.15	3.55	2.90	10.18	-9999.00	140.78	7.20
#118	-150.19	25000374.75	14.99	6.79	1.97	7.12	5.70	276.16	4.85	4.02	11.63	-9999.00	131.63	7.38
#119	-155.50	25000156.08	6.24	7.73	1.89	7.05	5.75	268.31	4.49	0.65	12.19	-9999.00	116.87	7.36
#120	-151.50	25000224.14	8.97	4.32	1.98	6.99	5.80	283.63	0.80	1.74	4.20	-9999.00	210.90	7.23

FREQUENCY vs. TEMPERATURE TEST

SAMPLE SIZE : 30 PCS (No. 1 ~ No. 30)
TEST DATE : 24-Jul-08
CRITERIA : -10 ℃ ~ 70 ℃ LESS THAN ± 10 **PPM** 20 **Ω**

TEST RESULT : **PASS**



MEASURED DATA

UNIT : PPM

TEMPERATURE FREQUENCY. TEST

No. \ ℃	-40	-35	-30	-25	-20	-15	-10	-5	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85
1	-16.8	-12.7	-8.6	-4.8	-2.6	-0.4	1.1	2.0	2.5	2.6	2.1	1.6	0.7	0.0	-1.1	-1.2	-2.7	-3.2	-3.6	-3.1	-2.7	-1.6	0.1	2.9	6.5	10.6
2	-10.4	-6.8	-3.3	-0.1	1.8	3.3	4.4	4.8	4.8	4.3	3.6	2.6	1.3	0.0	-1.4	-2.8	-4.2	-5.2	-5.9	-6.3	-6.3	-6.0	-5.0	-3.2	0.1	3.5
3	-14.7	-10.8	-6.9	-3.3	-1.2	0.8	2.2	2.8	3.1	3.0	2.5	1.9	1.0	0.0	-1.1	-2.1	-3.1	-3.9	-4.3	-4.6	-4.3	-3.6	-2.3	-0.1	2.7	6.2
4	-11.7	-8.2	-4.6	-1.0	1.3	3.2	4.5	4.9	4.9	4.4	3.7	2.7	1.4	0.0	-1.5	-2.9	-4.3	-5.6	-6.5	-7.2	-7.5	-7.2	-6.5	-4.8	-2.5	0.5
5	-16.5	-12.3	-8.3	-4.5	-2.3	-0.2	1.3	2.1	2.5	2.6	2.2	1.6	0.9	0.0	-0.9	-1.8	-2.6	-3.3	-3.6	-3.6	-3.3	-2.4	-0.9	1.5	4.5	8.1
6	-12.8	-8.5	-5.0	-1.0	0.2	2.2	3.4	3.9	4.0	3.7	3.1	2.2	1.0	0.0	-1.2	-2.4	-3.5	-4.4	-5.2	-5.7	-5.6	-5.2	-4.3	-2.6	-0.4	2.6
7	-13.2	-9.3	-5.9	-2.1	0.1	2.1	3.5	3.7	3.8	3.6	3.2	2.2	1.1	0.0	-1.3	-2.8	-3.9	-4.8	-3.4	-3.9	-6.2	-3.4	-2.2	0.8	5.8	10.1
8	-14.0	-9.9	-6.1	-2.8	-0.7	1.0	2.2	2.9	3.1	3.1	2.8	2.1	1.1	0.0	-1.2	-2.2	-3.5	-4.3	-5.0	-5.3	-5.3	-4.7	-3.4	-1.4	1.3	4.7
9	-11.7	-7.9	-4.3	-1.2	1.3	2.9	4.1	4.5	4.5	4.1	3.4	2.4	1.3	0.0	-1.3	-2.6	-3.8	-4.7	-5.4	-5.8	-5.8	-5.3	-4.2	-2.1	0.5	3.9
10	-12.2	-9.7	-6.1	-3.2	-1.3	0.1	1.2	1.4	1.5	0.9	-0.4	-1.1	0.3	0.0	-1.2	-2.9	-4.8	-5.8	-6.8	-6.8	-6.8	-6.4	-5.4	-3.6	-1.1	2.3
11	-20.6	-16.2	-11.9	-8.0	-5.4	-3.0	-1.2	0.0	0.8	1.1	1.2	0.9	0.4	0.0	-0.7	-1.2	-1.7	-1.9	-1.9	-1.6	-0.8	0.7	2.5	5.3	8.8	13.1
12	-16.5	-12.2	-8.2	-4.6	-2.2	-0.3	1.3	2.2	2.6	2.6	2.3	1.6	0.8	0.0	-1.0	-1.9	-2.7	-3.3	-3.6	-3.7	-3.3	-2.4	-0.8	1.5	4.4	8.3
13	-11.0	-7.2	-3.6	-0.4	1.6	3.2	4.4	4.9	4.7	4.3	3.6	2.5	1.2	0.0	-1.6	-3.0	-4.4	-5.5	-6.3	-6.9	-7.1	-6.8	-6.0	-4.5	-2.6	0.3
14	-12.8	-8.7	-4.9	-1.6	0.5	2.3	3.6	4.0	4.2	3.9	3.2	2.3	1.2	0.0	-1.2	-2.4	-3.8	-4.8	-5.4	-5.5	-4.8	-3.6	-1.8	0.8	3.7	7.6
15	-13.1	-9.1	-5.5	-2.2	0.5	2.1	3.6	4.4	4.4	4.1	3.4	2.4	1.3	0.0	-1.3	-2.6	-3.9	-4.9	-5.7	-5.8	-5.3	-4.5	-3.1	-1.0	1.6	5.1
16	-15.4	-11.1	-7.3	-3.7	-1.4	0.6	2.0	2.7	3.0	2.9	2.5	1.8	1.0	0.0	-1.1	-2.1	-3.0	-3.7	-4.0	-4.2	-3.9	-3.1	-1.6	0.8	3.6	7.4
17	-12.1	-8.0	-4.5	-1.4	0.8	2.6	3.7	4.2	4.3	4.0	3.4	2.3	1.2	0.0	-1.3	-2.6	-3.8	-4.9	-5.6	-6.1	-6.1	-5.6	-4.4	-2.3	0.3	3.7
18	-12.1	-7.7	-4.1	-0.9	1.2	2.9	3.9	4.4	4.5	4.1	3.5	2.3	1.2	0.0	-1.4	-2.6	-3.9	-4.9	-5.5	-5.8	-5.7	-5.0	-3.9	-1.6	1.1	4.6
19	-12.5	-8.3	-4.6	-1.3	0.7	2.4	3.5	4.0	4.0	3.8	3.2	2.3	1.2	0.0	-1.3	-2.5	-3.7	-4.7	-5.5	-6.0	-6.0	-5.5	-4.6	-2.8	-0.5	2.6
20	-13.0	-8.4	-4.6	-1.4	0.8	2.4	3.5	4.0	4.0	3.8	3.0	2.2	1.1	0.0	-1.2	-2.5	-3.6	-4.6	-5.1	-5.3	-5.0	-4.1	-2.8	-0.5	2.1	5.5
21	-15.1	-11.2	-7.8	-4.5	-1.5	1.5	4.0	5.1	5.2	4.8	3.9	2.8	1.5	0.0	-1.5	-2.9	-4.4	-5.5	-6.8	-7.4	-7.6	-7.2	-6.3	-4.4	-2.0	1.1
22	-13.5	-9.3	-5.5	-2.2	0.1	1.8	3.1	3.6	3.8	3.6	3.0	2.1	1.1	0.0	-1.2	-2.3	-3.4	-4.3	-4.9	-5.2	-5.0	-4.4	-3.1	-0.8	1.9	5.4
23	-17.7	-12.7	-8.5	-4.6	-1.9	0.3	1.8	2.7	3.0	3.0	2.6	1.8	1.0	0.0	-1.1	-2.1	-3.0	-3.6	-3.9	-4.0	-3.7	-2.9	-1.5	0.8	4.0	7.7
24	-15.5	-11.1	-7.1	-3.7	-1.3	0.6	2.0	2.7	3.0	3.0	2.6	1.9	0.9	0.0	-1.0	-2.1	-3.0	-3.8	-4.2	-4.3	-4.0	-3.0	-1.3	1.2	4.1	7.7
25	-7.9	-4.2	-1.2	1.5	3.8	5.5	6.0	6.1	5.6	4.9	4.0	2.8	1.4	0.0	-1.4	-2.9	-4.2	-5.4	-6.1	-6.6	-6.6	-6.1	-5.0	-3.0	0.0	3.6
26	-11.0	-6.9	-3.3	-0.2	2.0	3.6	4.7	5.1	5.3	4.9	4.1	2.8	1.5	0.0	-1.5	-2.9	-4.2	-5.3	-6.2	-6.7	-6.8	-6.5	-5.6	-3.8	-1.4	1.6
27	-11.2	-7.1	-3.5	-0.4	1.7	3.4	4.5	4.9	4.8	4.4	3.6	2.6	1.3	0.0	-1.3	-2.6	-3.7	-4.6	-5.2	-5.5	-5.6	-5.1	-3.9	-1.9	0.8	4.2
28	-11.5	-7.2	-3.5	-0.7	1.4	3.0	4.1	4.5	4.5	4.1	3.5	2.5	1.3	0.0	-1.3	-2.6	-3.8	-4.8	-5.5	-5.9	-5.8	-5.3	-4.1	-1.9	0.7	4.1
29	-12.5	-7.9	-4.1	-1.0	1.1	2.8	3.8	4.4	4.3	4.0	3.3	2.2	1.2	0.0	-1.3	-2.6	-3.7	-4.6	-5.3	-5.6	-5.7	-5.0	-3.8	-1.8	1.0	4.3
30	-9.1	-5.2	-1.5	1.4	3.4	4.8	5.5	5.8	5.7	5.1	4.2	3.0	1.5	0.0	-1.6	-3.1	-4.5	-5.7	-6.7	-7.3	-7.5	-7.1	-6.3	-4.4	-2.0	1.1

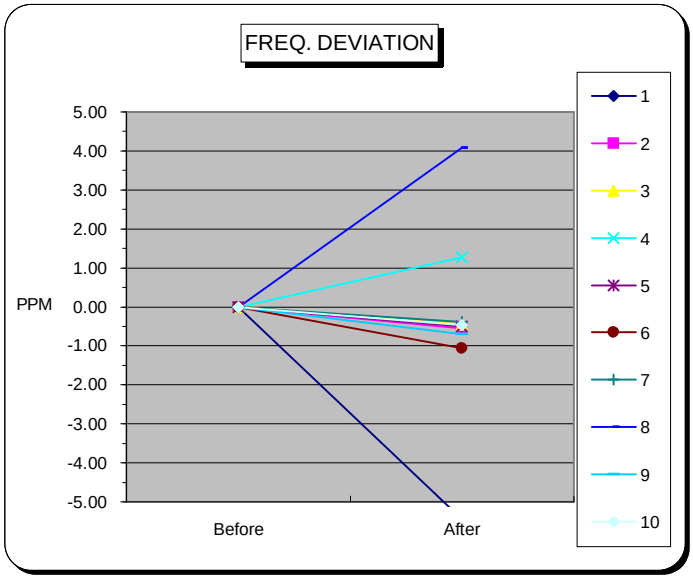
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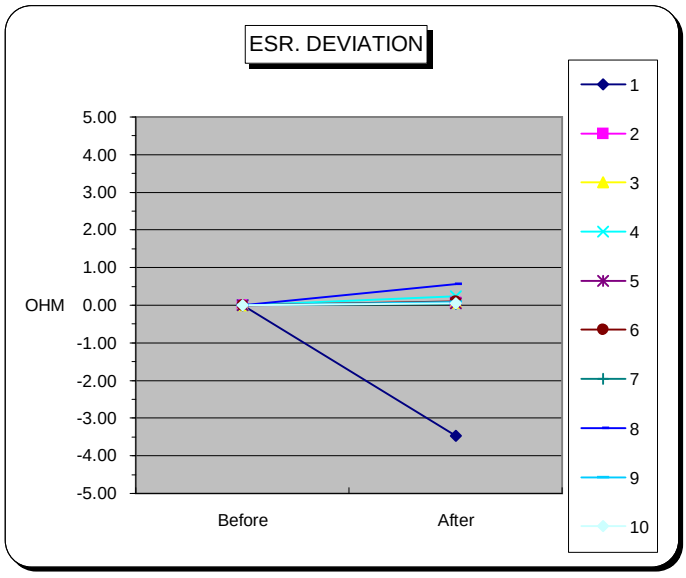
TEMPERATURE CI TEST

No. \ ℃	-40	-35	-30	-25	-20	-15	-10	-5	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85
1	4.6	4.5	4.6	5.0	4.6	4.7	4.6	4.7	4.8	5.0	5.1	5.5	8.1	7.7	8.1	7.9	7.5	7.7	7.6	7.9	7.7	8.2	8.1	8.5	8.7	8.5
2	4.8	4.7	4.8	4.6	4.6	4.7	4.7	4.8	4.7	4.9	4.8	4.9	4.8	4.9	5.2	5.8	6.0	5.7	5.5	5.8	5.6	5.7	5.9	6.7	6.7	6.5
3	4.5	4.6	4.8	4.6	4.6	4.6	4.7	4.6	5.1	4.9	4.9	5.0	5.0	5.0	5.1	5.1	5.6	5.4	5.5	5.7	5.6	5.5	5.9	5.2	5.2	5.2
4	5.9	5.8	5.5	5.5	5.5	5.4	5.3	5.5	5.4	5.4	5.4	5.5	5.5	5.4	5.8	6.0	5.9	5.7	5.5	5.7	5.8	6.0	6.1	6.2	7.2	6.8
5	4.2	4.2	4.2	4.3	4.4	4.5	4.7	4.9	4.7	4.5	4.6	4.5	4.5	4.7	4.7	4.9	4.7	4.9	5.2	4.9	4.9	5.0	5.1	4.9	4.8	5.0
6	6.1	5.8	5.5	5.6	5.7	5.5	5.5	5.5	5.5	5.6	5.5	5.7	5.8	5.8	5.9	6.1	6.1	6.0	6.0	6.1	6.2	6.2	6.4	6.5	7.8	7.4
7	7.3	8.0	7.4	7.2	6.9	6.8	7.0	6.6	6.3	6.5	6.4	6.4	6.2	6.4	6.4	6.8	6.6	7.2	7.2	7.4	8.2	8.8	12.5	13.7	12.2	9.9
8	9.4	9.3	9.0	8.7	8.7	8.6	8.8	8.9	8.9	8.8	8.9	8.5	8.2	8.2	8.0	8.1	8.3	8.5	8.0	8.3	8.0	8.0	8.2	8.2	8.4	8.6
9	5.4	5.4	5.5	5.7	6.7	5.7	5.4	5.4	5.3	5.2	5.2	5.3	5.4	5.3	5.3	6.1	5.9	6.0	5.6	5.6	5.6	5.6	5.8	5.6	6.1	5.9
10	6.1	5.3	8.0	8.4	7.8	7.8	8.0	8.2	8.8	9.0	9.2	9.3	8.8	8.4	7.8	7.3	6.9	6.8	6.6	6.6	6.5	6.3	6.3	5.9	6.3	5.9
11	4.6	4.6	4.5	4.7	4.6	4.7	4.5	4.9	4.8	5.1	5.6	5.0	5.0	5.0	5.3	5.1	5.3	5.6	5.6	5.5	5.5	5.5	5.3	5.3	5.4	5.5
12	4.6	4.6	4.5	4.7	4.6	4.6	4.6	4.7	4.8	4.9	4.9	4.6	4.8	4.8	4.9	4.9	4.9	5.0	4.9	4.9	5.0	5.0	5.0	4.9	5.0	5.2
13	5.2	5.2	5.2	5.3	5.5	5.4	5.3	5.2	5.2	5.3	5.2	5.3	5.4	5.4	5.6	5.6	5.8	5.8	5.9	6.0	6.1	6.1	6.5	6.3	6.4	6.8
14	4.3	4.3	4.4	4.4	4.6	4.5	4.7	5.0	4.9	5.2	5.2	5.6	7.8	7.1	7.4	7.6	7.6	7.5	7.6	7.7	8.2	8.3	8.6	8.8	9.0	8.9
15	4.6	5.7	5.5	5.4	5.6	5.1	5.0	4.9	5.4	5.1	5.8	5.8	6.4	5.9	5.8	6.0	5.7	5.7	5.5	5.5	5.4	5.4	5.5	5.4	5.3	5.3
16	4.2	4.3	4.3	4.6	4.4	4.5	4.6	4.5	4.3	4.6	5.0	4.9	4.8	4.6	4.8	4.8	4.9	5.2	5.2	5.2	5.0	5.1	5.2	5.2	5.1	5.1
17	5.4	5.2	5.1	5.1	5.2	5.4	5.2	5.3	5.2	5.4	5.9	5.4	5.9	5.6	5.6	5.6	5.5	5.4	5.4	5.6	5.8	5.9	5.7	5.5	5.5	5.4
18	5.4	5.3	5.4	5.2	5.5	5.4	5.6	5.8	5.7	5.8	5.6	5.7	6.0	5.9	6.4	6.3	6.3	6.6	6.0	6.0	6.3	6.0	6.2	5.8	6.1	6.0
19	4.8	4.9	5.1	5.6	5.9	5.7	5.7	4.8	5.0	5.1	4.9	5.0	5.0	5.0	5.0	5.4	5.1	5.2	5.2	5.3	5.9	5.4	5.6	5.9	5.8	6.1
20	4.8	5.1	5.0	4.6	4.7	4.7	4.8	4.7	5.0	5.1	5.2	5.5	5.9	6.1	6.2	6.5	6.4	6.3	6.5	6.9	7.2	6.7	6.3	5.9	5.8	5.7
21	11.2	14.8	15.1	14.5	13.9	13.4	12.1	11.3	10.6	10.3	10.6	10.0	9.6	9.2	9.2	9.1	8.8	9.6	8.8	9.1	9.4	10.3	9.5	9.3	9.2	9.0
22	4.1	4.1	4.3	4.3	4.3	4.6	4.4	4.6	4.3	4.4	4.4	4.6	4.6	4.6	4.8	5.1	4.7	5.1	4.7	4.9	5.0	5.0	5.1	4.9	4.9	5.0
23	7.4	8.0	7.3	7.1	7.0	7.1	7.2	7.0	6.7	7.2	7.0	6.9	6.7	6.9	6.6	6.5	6.9	6.9	6.8	7.4	6.9	7.0	7.1	7.3	7.6	7.4
24	4.5	4.5	4.5	4.5	4.6	4.6	4.5	4.7	4.7	4.7	4.7	4.9	4.9	4.9	5.0	5.2	5.6	5.6	5.6	5.7	5.6	5.9	5.8	5.7	5.8	5.6
25	10.6	9.4	9.1	8.7	8.4	8.2	8.1	8.1	7.8	7.8	7.9	7.9	8.1	8.2	8.5	8.5	7.9	8.7	8.7	8.5	8.3	8.1	7.9	8.2	8.0	7.9
26	9.1	9.0	9.3	9.0	8.8	8.9	8.9	8.7	8.5	8.3	8.4	8.2	8.3	8.5	8.9	9.0	9.1	9.4	9.2	9.4	9.0	9.0	8.9	8.6	8.3	8.3
27	9.2	9.2	9.1	9.1	9.2	8.9	8.7	8.7	8.6	8.4	8.3	8.4	8.4	8.5	8.8	8.7	9.0	9.1	9.1	9.2	8.9	8.7	8.5	8.5	8.5	8.4
28	4.4	4.5	4.5	4.5	4.7	4.6	4.6	4.6	4.8	4.7	4.7	4.7	4.7	4.8	4.7	4.8	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.9	4.9
29	4.6	4.8	4.8	4.5	4.5	4.6	4.7	4.7	4.6	4.6	4.6	4.7	4.7	4.7	4.7	4.8	4.9	4.9	4.9	4.9	5.0	5.7	5.1	5.0	5.1	5.3
30	4.9	4.9	5.2	5.2	4.9	5.0	5.0	5.0	5.1	5.1	5.1	5.1	5.0	5.0	5.1	5.2	5.3	5.3	5.3	5.5	5.5	5.5	5.5	5.4	5.5	5.5

Drop Test

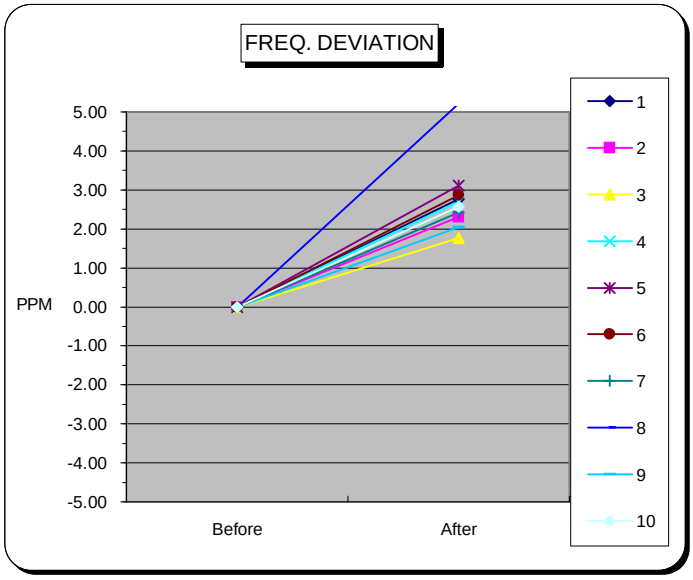
P/N NO.	7B25000185
Test Item	75cm*3次
Criteria	Frequency deviation ±5ppm / ESR ±5Ω
Sample Size	10PCS
Test Date	2008/7/24
Test Result	FL*1PCS NG(規格差異±5ppm,實測-5.45ppm)
Inspector	Rita Wu

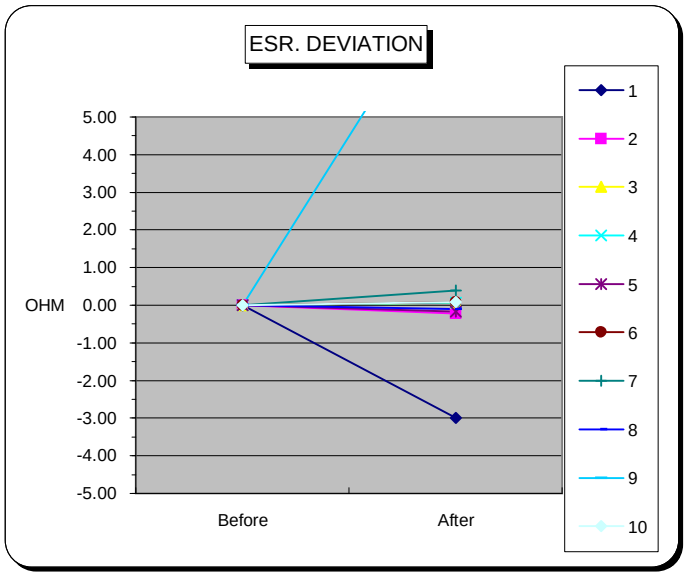




Reflow Test

P/N NO.	7B25000185
Test Item	260℃*3次
Criteria	Frequency deviation ±5ppm / ESR ±5Ω
Sample Size	10PCS
Test Date	2008/7/24
Test Result	FL*1PCS NG(規格差異±5ppm,實測5.21ppm)/ RR*1PCS NG(規格差異±5Ω,實測8.99Ω)
Inspector	Rita Wu





對機差異 (N-TXC)

Crystal	FR	FL	FL	RR	C0	C1	Q	TS
	ppm	Hz	ppm	Ohms	pF	fF	k	ppm/pF
1	-7.49	-261.57	-8.96	-0.38	-0.04	-0.07	9.99	-0.05
2	-8.26	-265.63	-9.13	-0.18	-0.07	-0.08	9.89	-0.04
3	-7.37	-249.82	-8.49	-0.27	-0.06	-0.09	14.52	-0.05
4	-8.46	-276.34	-9.55	-0.33	-0.03	-0.08	14.95	-0.06
5	-6.77	-200.56	-5.02	-0.24	-0.04	-0.02	13.60	0.01
6	-8.00	-264.61	-9.08	-0.16	-0.05	-0.07	7.30	-0.04
7	-7.77	-259.44	-8.88	-0.22	-0.05	-0.09	7.98	-0.06
8	-7.61	-246.13	-8.35	-0.34	-0.06	-0.07	6.93	-0.04
9	-7.95	-257.56	-8.80	-0.18	-0.09	-0.08	9.20	-0.03
10	-8.13	-297.53	-10.40	-0.73	-0.04	-0.07	12.91	-0.05
11	-6.23	-195.78	-4.83	-0.05	-0.02	-0.02	2.62	-0.01
12	-7.45	-255.12	-8.70	-0.20	-0.04	-0.09	13.15	-0.06
13	-8.19	-275.40	-9.52	-0.20	-0.05	-0.10	10.67	-0.07
14	-7.87	-263.15	-9.03	0.09	-0.05	-0.09	-0.31	-0.07
15	-7.95	-265.92	-9.14	-0.11	-0.05	-0.11	6.81	-0.09
16	-7.80	-258.78	-8.85	-0.22	-0.04	-0.09	14.78	-0.07
17	-7.91	-259.73	-8.89	-0.19	-0.04	-0.08	9.34	-0.05
18	-7.96	-258.61	-8.84	-0.45	-0.04	-0.08	18.05	-0.05
19	-7.57	-260.07	-8.90	0.06	-0.04	-0.10	0.16	-0.07
20	-7.85	-257.50	-8.80	-0.33	-0.06	-0.10	11.96	-0.07
21	-8.05	-270.94	-9.34	-0.45	-0.04	-0.08	6.81	-0.06
22	-6.85	-203.07	-5.12	-0.18	-0.03	-0.01	10.90	0.00
23	-7.30	-248.53	-8.44	-0.25	-0.06	-0.08	7.49	-0.05
24	-7.64	-251.29	-8.55	-0.05	-0.07	-0.09	4.71	-0.04
25	-7.65	-259.50	-8.88	-0.09	-0.05	-0.09	3.02	-0.06
26	-8.05	-264.81	-9.09	0.04	-0.05	-0.08	0.81	-0.05
27	-7.78	-261.39	-8.96	-0.05	-0.05	-0.08	2.16	-0.05