



MAG. LAYERS Scientific- Technics Co., Ltd.



MLB- 160808- 0060L- N2

Reliability Report

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DESCRIPTION

1. Mag.Layers Co., Ltd. is executing the testing process seriously, All the test data is attached.
2. To use the report in whole, can't be separated.
3. The report can't be used by other way.
4. The report is in vain when separately.
5. Please see the attached data for comparision and reference.



CONTENTS

PAGE	TEST ITEM	REMARK
PAGE5	THERMAL SHOCK	1-10PCS
PAGE6	HUMIDITY RESISTANCE	11-20PCS
PAGE7	HIGH TEMPERATURE RESISTANCE	21-30PCS
PAGE8	PRODUCTS STRENGTH	31-40PCS
PAGE9	REFLOW	
PAGE10	VIBRATION	
PAGE11	THE TEST REPORT OF VIBRATION	
PAGE12	MTBF	31-40
PAGE13	THE TEST REPORT OF MTBF	



ENVIRONMENT TEST DATA

TEST ITEM	THERMAL SHOCK						
TEST P/N	MLB-160808-0060L-N2						
TEST CONDITION	TEMPERATURE CYCLES -55°C THEN +125°C FOR 30 MINUTES EACH. CYCLES:100						
THE PERIOD OF TEST	FROM Jan 9, 2006 AM8:00 To Jan 15, 2006 PM5:00						
DATA BEFORE TEST			DATA AFTER TEST			VARIATION(%)	REMARK
SAMPLE	Z(Ω)		SAMPLE	Z(Ω)		Z(Ω)	DESCRIPTION
1	59.9		1	62.2		3.84%	1-10pcs
2	58.4		2	61.4		5.14%	
3	58.6		3	62.3		6.31%	
4	55.5		4	58.5		5.41%	
5	50.5		5	53.1		5.15%	
6	58.3		6	62.3		6.86%	
7	62.7		7	66.7		6.38%	
8	59.3		8	61.4		3.54%	
9	55.5		9	59.0		6.31%	
10	59.4		10	60.5		1.85%	
11			11			#DIV/0!	
12			12			#DIV/0!	
13			13			#DIV/0!	
14			14			#DIV/0!	
15			15			#DIV/0!	
16			16			#DIV/0!	
17			17			#DIV/0!	
18			18			#DIV/0!	
19			19			#DIV/0!	
20			20			#DIV/0!	
21			21			#DIV/0!	
22			22			#DIV/0!	
23			23			#DIV/0!	
24			24			#DIV/0!	
25			25			#DIV/0!	
26			26			#DIV/0!	
27			27			#DIV/0!	
28			28			#DIV/0!	
29			29			#DIV/0!	
30			30			#DIV/0!	

REMARK The value of Z should be within $\pm 10\%$ TEST RESULT: PASS (The value of Z all within $\pm 10\%$)Approved Miiin Prepared : Kinway



ENVIRONMENT TEST DATA

TEST ITEM	HUMIDITY RESISTANCE						
TEST P/N	MLB-160808-0060L-N2						
TEST CONDITION	60°C 、90%RH FOR 1000 HOURS WITH RATING CURRENT						
THE PERIOD OF TEST	FROM Feb 14, 2006 PM5:30 To Mar 28, 2006 AM8:30						
DATA BEFORE TEST		DATA AFTER TEST			VARIATION(%)		REMARK
SAMPLE	Z(Ω)	SAMPLE	Z(Ω)	Z(Ω)			DESCRIPTION
1	59.4	1	57.5	-3.20%			11-20pcs
2	58.3	2	60.6	3.95%			
3	58.7	3	61.4	4.60%			
4	57.2	4	59.1	3.32%			
5	62.0	5	64.1	3.39%			
6	56.2	6	57.6	2.49%			
7	59.9	7	61.7	3.01%			
8	56.8	8	58.5	2.99%			
9	61.3	9	63.2	3.10%			
10	56.1	10	58.6	4.46%			
11		11		#DIV/0!			
12		12		#DIV/0!			
13		13		#DIV/0!			
14		14		#DIV/0!			
15		15		#DIV/0!			
16		16		#DIV/0!			
17		17		#DIV/0!			
18		18		#DIV/0!			
19		19		#DIV/0!			
20		20		#DIV/0!			
21		21		#DIV/0!			
22		22		#DIV/0!			
23		23		#DIV/0!			
24		24		#DIV/0!			
25		25		#DIV/0!			
26		26		#DIV/0!			
27		27		#DIV/0!			
28		28		#DIV/0!			
29		29		#DIV/0!			
30		30		#DIV/0!			

REMARK The value of Z should be within $\pm 10\%$ TEST RESULT: PASS (The value of Z all within $\pm 10\%$)

Approved

Miin

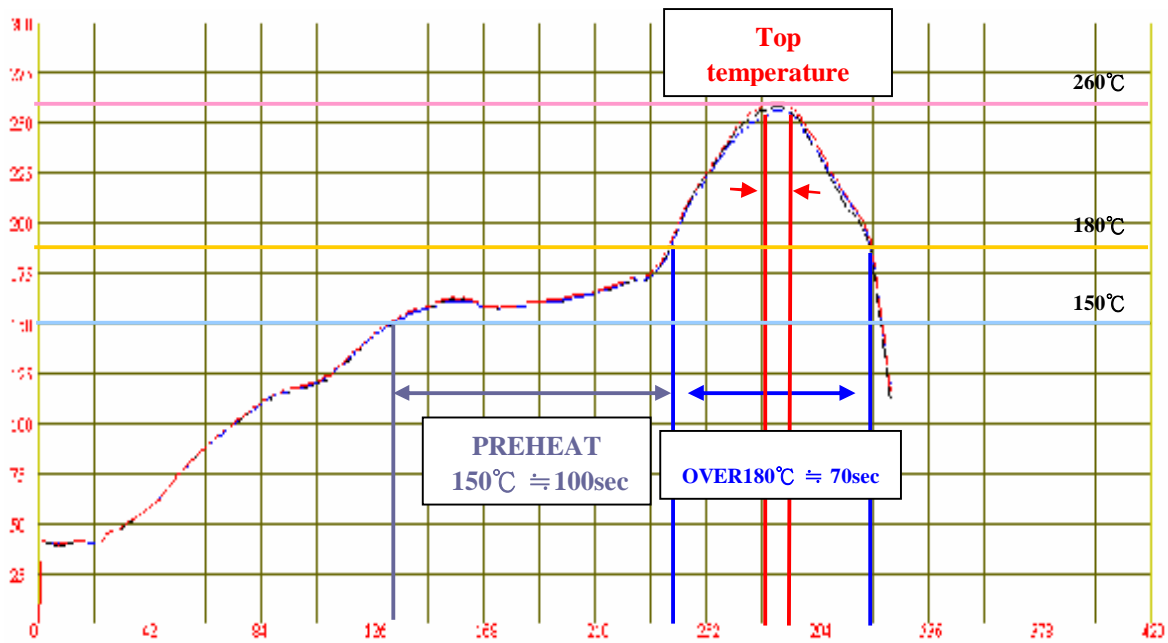
Prepared :

Kinway



REFLOW 260°C

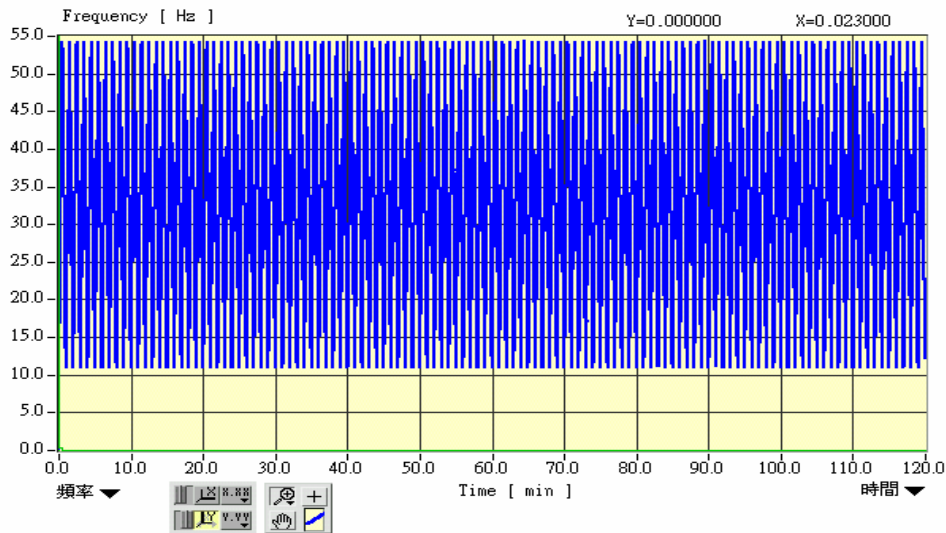
IR REFLOW 260°C (260°C ± 5°C/Time max 10sec)





VIBRATION TEST REPORT

1. Company Name : MAG. LAYERS Scientific-Technics Co., Ltd.
2. Date : Jan 23, 2006
3. Lot No. : Experimentation
4. TIME : PM 06:16:27
5. Test type : Vibration Test
6. Test time : 120.0min
7. The beginning of Frequency : 10.0Hz
8. Vibration Mode : Linear Vibration Frequency test
9. The ending of Frequency : 55.0Hz
10. The amplitude of vibration : 1.5mm
11. Cycle times : 120.0cycles
12. Test time : 1.0min/cycle
13. Vibrate times : 3.510E+5cycles
14. Test Part No. : MLB-160808-0060L-N2



TESTER : kinway

TEST RESULT : OK



SAMPLES P/N	MLB-160808-0060L-N2		TEST CONDITION			
TESTED SAMPLES	30	PCS.	<ul style="list-style-type: none"> • Operate TEMP(T1) : 25 °C • Hasten TEMP(T2) : 80 °C 	Test Times	START	2006/03/01
TEST HRS	1000	HRS	<ul style="list-style-type: none"> • Operate CURRENT(A1) : 650 mA • Hasten CURRENT(A2) : 780 mA 		FINISHED	2006/04/12

PRODUCT SPECIFICATION & FAILURE DEFINITION	TEST RESULT
ΔL/L within ± 5 %	<ul style="list-style-type: none"> • TEST RESULT = PASS • A.F = (A2/A1) ^ 3 * 2 ^ ((T2-T1) / 10) = 78.20 • TOTAL TEST HRS = 2,346,011 HRS. • FIT(Failure In Time) = 980.39 (Failure / 10⁹ Hrs) • CONFIDENT LEVEL 90% MTTF= 1,020,005 HRS.

TEST PROCEDURE INTERPRETATION :

1. The life test is not reach 10% failure

2. r= 0 pcs

r	TIME (HRS)	r	TIME (HRS)
r1		r6	
r2		r7	
r3		r8	
r4		r9	
r5		r10	

TEMP.	25	°C
R. H.	60	%

APPROVED BY : *Min*

PREPARED BY : *Kinway*