



Product Change Notification

PCN Date:	Jul 17 th 2026	
Supplier Name:	Pulse	
Pulse PCN No.	PCN-100000866	
Description of Change	Epoxy change from R0113455+R0060454(Supplier: Henkel) to 081-6020.001(Supplier: Wells). Comparison: There is basically no difference in appearance & characteristics for these two silicones. There will be not any change affecting product's form, fit or customer function.	
Reason for Change	Epoxy R0060454 of Henkel has been discontinued for marketing strategic reason.	
Summary of Changes between the new and old part	Before change	After change
	1.R0113455+R0060454 2.Supplier: Henkel	1. 081-6020.001 2. Supplier: Wells
Traceability guidelines	By date code (running change). for example: 2423 S. "24" means 2024 year, "23" means the week of 23.	
Qualification Data	1.PBSR verification report   PM53912NL PM53912NL PBSR P2 2026051 PBSR P2 CPK.pdf 2.AEC-Q200 Reliability Verification Report.  AEC-Q200 PM53912NL.pdf 3.Datasheet for two types of silicone   R0060454 TDS 081-6020.001 -P HENKEL.pdf S4 TDS.pdf Please refer to the attached page for detailed information.	
Customer Part Number	Pulse Part Number	PCN target Effectivity Date
SLIC series parts	SLIC series parts	Q3 2026

Customer: Catalog part

Originator: Radio Luo

Phone: +86 18628833915

E-mail: Radio.Luo@yageo.com

The PCN affected Pulse Part number list

Total 79 parts:

P0176NLT
P0177NL
P0177NLT
P0178NL
P0179NLT
P0351NL
P0351NLT
P0353NL
P0353NLT
P0354NL
P0354NLT
P0395NLT
P0401NLT
P0420NL
P0420NLT
P0422.01NLT
P0422NL
P0422NLT
P0473NL
P0473NLT
P0527NLT
P0841SNLT
PA2743NL
PA2743NLT
PA2744NL
PA2744NLT
PA2745NL
PA2745NLT
PA2746NL
PA2746NLT
PA2747NL
PA2747NLT
PA2748NL
PA2748NLT
PA2752NLT
PA3927NLT
PE-53604NL
PE-53608NLT
PE-53634NL
PE-53700NLT
PE-53801SNLT
PE-53809SNL

PE-53810SNL
PE-53811SNL
PE-53818SNLT
PE-53819SNLT
PE-53820SNL
PE-53820SNLT
PE-53821SNL
PE-53821SNLT
PE-53822SNLT
PE-53823SNLT
PE-53824SNLT
PE-53825SNLT
PE-53826SNLT
PE-53827SNLT
PE-53828SNLT
PE-53829SNLT
PE-53910NL
PE-53910NLT
PE-53911NL
PE-53911NLT
PE-53912NL
PE-53912NLT
PE-53913NL
PE-53913NLT
PE-53914NLT
PE-54036SNLT
PE-54038SNLT
PE-54040SNL
PE-54040SNLT
PE-68280NL
PE-68280NLT
PE-53911ANLT
PG2325NLT
PAL0848SNLT
PM2744NLT
PGC6703NLT
PM3927NLT

Statement: Dear customer, please respond to this PCN requirement. If you have any special requirements, please let us know. Lack of response after 30 days will be considered acceptable of change.

Rev: A released on Jun 17th 2026

PROTO TYPE				PRE-BUILD CHECKLIST			
Part Number : PM53912NL		DWG Rev : P2		Design Center CDC		Manufacturing Engineer KellaLiu	
Similar To : P0502NL		BOM Rev : 06		Product Family SMT TOROID		Quality Engineer Tom Tang	
Test Equipment <i>List other Test Equipment below</i>		Winding Equipment <i>List other Equipment below</i>		Assembly Fixture & Tooling <i>List other Fixtures below</i>		Test Fixture <i>List other Test Fixtures below</i>	
LGR Meter	☒ Check	Kent	☐ Check	Coil Soldering	☒ Check	OCL	☒ Check
DC BIAS	☐ Check	Ruff/Jovil	☐ Check	Pin Soldering	☒ Check	DCR	☒ Check
Hi-Pot - 5kV	☒ Check	Tanac	☐ Check	Wire Stripping	☐ Check	HI-POT	☒ Check
Hi-Pot - 10kV	☐ Check	Elmer	☐ Check	Cutting Plate	☐ Check	AUTO TEST	☒ Check
PTT	☐ Check	Marsilli	☐ Check	Ink Marking	☐ Check	DC BIAS	☐ Check
DCR	☒ Check	Nittoku	☐ Check	Laser Marking	☒ Check		☐ Check
Network Analyzer	☐ Check	Auto Winder	☒ Check	TP Gauge	☐ Check		☐ Check
	☐ Check	Bench Winder	☐ Check	Go/No Go	☒ Check		☐ Check
	☐ Check	Manual	☐ Check	Encapsulation	☐ Check		☐ Check
	☐ Check		☐ Check	Molding/Forming die	☐ Check		☐ Check
	☐ Check		☐ Check	Coplanarity	☒ Check		☐ Check
	☐ Check		☐ Check	Micro welding soldering	☐ Check		☐ Check
	☐ Check		☐ Check		☐ Check		☐ Check
	☐ Check		☐ Check		☐ Check		☐ Check
Material Status <i>If "Short", list materials below</i>		Available	Packaging	Available			
P/N	Remarks		Special Notes / Remarks				
031-0483.01M (02)东磁	OK						
073-10236.01M (01)	OK						
WC1-PM53912NL(01)HaoDa	OK						
Estimated Start Build Date:		3/27/2026					
Estimated Ship Date:		4/10/2026					

PROTO TYPEBUILD SUMMARY REPORT (转量产评估报告)

Purpose(目的):

Verify and Improve New Product's Electrical Parameters / Manufacturability.(验证和改善新产品的电性参数/可制造性)

Product No.:
(产品型号)

PM53912NL

DWG Rev :

P2

Design Center

CDC

MPO1 Principal Engineer:
(参与工程师)

KellaLiu

Similar To :

P0502NL

BOM Rev :

06

Product Family

SMT TOROID

Quality Engineer

Tom Tang

Product Type:
(产品类型)

STWEP

Design Engineer:
(设计工程师)

David Gao

Start Date :

3/27/2026

Finish Date :

4/10/2026

EPS

Select Status

MANUFACTURABILITY/ACCEPTABILITY

Acceptable

Highlights:

1.130°C high temperature inductance depends on core materials, so we didn't test 130°C OCL for FG, but this part passed the AECQ-200 test, CDC tested the high temperature inductance. SPO now has the tester, and our team is designing the fixture. Done. Have received high temperature inductance fixture, SPO have sample test this item by QA.

2. Please define DCR is sample test item. Done. Refer to TLA Rev.P3

3. Base on worse case analysis and positive result during Vibration and Mechanical Shock Test, please cancel gluing epoxy between coil and spacer,please update TLA drawing. Done. Refer to TLA Rev.P3

4. Please remove maintain 2mm gap in final goods drawing, but need define this gap into coil drawing Done. Refer to TLA Rev.P3.

5. Please create WC1-PM53912NL coil into BOM. It can auto winding by machine. --- Done

KPI

QTY (数量)

Pass(合格)

Yield (实际成品率)

Yield target

Major Defects(主要的坏项)

FPY

50

50

100.0%

95.0%

FY

50

50

100.0%

98.0%

Electrical Issues (有关电性问题)

☒Electronical OK☐Electronical Fail

Item

ISSUE

Action (行动)

Who (执行者)

When (时间)

Result (结果)

1

2

3

4

5

Visual / Mechanical Issues (外观问题)

☒Visual OK☐Visual Fail

Item

ISSUE

Action (行动)

Who (执行者)

When (时间)

Result (结果)

1

2

3

4

5

Visual / Mechanical Issues (尺寸问题)

☒Size OK☐Size Fail

Item

ISSUE

Action (行动)

Who (执行者)

When (时间)

Result (结果)

1

2

3

4

5

Packing Issues (包装问题)

☒packing OK☐Packing Fail

Item

ISSUE

Action (行动)

Who (执行者)

When (时间)

Result (结果)

1

2

3

4

5

Other Issues(其它问题)

Item

ISSUE

Action (行动)

Who (执行者)

When (时间)

Result (结果)

1

2

3

4

5

Document Issues (文件问题)

☐Document OK☐Document fail

Item

ISSUE

Action (行动)

Who (执行者)

When (时间)

Result (结果)

1

2

3

4

5

Reliability: (可靠性)

Solvent Resistance

Select Status

Solderability

Select Status

Additional Supporting Information

Prepared by:

Pilot Line

N/A

QE

Tom Tang

PROD

Kaylee Ye

ME

KellaLiu

Checked by
(检查人)

Jacky Xiao

PM53912NL CPK DATA

LOT NO.:
 SAMPLE SIZE: 40
 DATE: 4/15/2026 HaoDa auto winding coil

PARAMETER:	OCL	OCL	LK	CAP	DCR	DCR	TRP	size	size	size	Hipot
CONDITION:	20KHz, 30mV	20KHz, 30mV	100KHz, 0.1V	100KHz, 0.1V	-	-	-	-	-	-	1650V AC 1mA
PIN NO.:	(1-2)	(3-4)	(1-2)short (3-4)	(1,2-3,4)	(1-2)	(3-4)	(1*-2)/(3*-4)	Length	Width	Height	(1+2) TO(3+4)
UNIT:	mH	mH	uH	pF	mOHMS	mOHMS		mm	mm	mm	
MAX SPEC.:				11.00	80	80	1.02	19.60	17.00	9.90	
MIN SPEC.:	1.8	1.8	5.5				0.98				
AVERAGE =	2.769	2.770	7.649	6.228	62.688	62.804	1.002	19.074	16.547	9.131	0.000
STD DEV =	0.074	0.074	0.187	0.555	1.941	1.817	0.000	0.024	0.016	0.023	0.000
MAX =	2.922	2.921	8.005	7.308	65.900	65.454	1.003	19.130	16.600	9.200	0.000
MIN =	2.626	2.626	7.204	5.180	59.972	60.184	1.002	19.013	16.510	9.080	0.000
Max spec for 1.33 Cpk				8.444	70.434	70.054	1.003	19.171	16.612	9.222	
Min spec for 1.33 Cpk	2.472	2.475	6.904				1.001				
Cpk for Max spec				2.865	2.972	3.154	20.318	7.166	9.361	11.197	
Cpk for Min spec	4.347	4.382	3.836				25.296				

DATA											
1	2.867	2.862	7.433	6.508	65.28	65.09	1.0021	19.07	16.56	9.13	PASS
2	2.769	2.768	7.546	6.419	64.52	62.21	1.0024	19.05	16.51	9.11	PASS
3	2.631	2.636	7.732	6.761	63.14	63.60	1.0024	19.11	16.54	9.14	PASS
4	2.813	2.812	7.617	6.428	63.90	64.35	1.0018	19.05	16.55	9.08	PASS
5	2.861	2.865	7.872	5.445	62.19	61.98	1.0023	19.05	16.54	9.12	PASS
6	2.730	2.732	7.933	6.156	65.90	62.10	1.0023	19.08	16.55	9.10	PASS
7	2.767	2.767	7.743	6.766	60.20	60.50	1.0017	19.07	16.55	9.14	PASS
8	2.756	2.754	7.760	6.921	65.38	65.27	1.0018	19.05	16.54	9.13	PASS
9	2.820	2.823	7.507	6.187	64.07	64.05	1.0018	19.11	16.55	9.12	PASS
10	2.752	2.757	7.244	5.735	63.31	62.24	1.0017	19.05	16.57	9.12	PASS
11	2.732	2.739	7.716	5.203	63.66	64.09	1.0022	19.13	16.53	9.13	PASS
12	2.769	2.772	7.204	5.466	60.70	60.85	1.0023	19.08	16.57	9.12	PASS
13	2.815	2.814	7.340	5.239	64.70	64.20	1.0021	19.07	16.58	9.13	PASS
14	2.680	2.678	7.727	5.924	60.02	60.78	1.0026	19.07	16.53	9.12	PASS
15	2.870	2.867	7.828	6.948	61.69	61.87	1.0025	19.07	16.60	9.20	PASS
16	2.698	2.700	7.702	6.214	63.96	64.64	1.0020	19.07	16.54	9.10	PASS
17	2.686	2.684	7.802	6.827	65.09	64.04	1.0023	19.09	16.53	9.16	PASS
18	2.763	2.768	7.963	5.833	61.88	62.46	1.0018	19.07	16.54	9.13	PASS
19	2.850	2.852	7.583	6.665	60.23	60.54	1.0023	19.11	16.56	9.11	PASS
20	2.689	2.690	7.733	7.153	60.67	61.22	1.0021	19.05	16.55	9.13	PASS
21	2.815	2.812	7.752	7.308	61.45	62.46	1.0023	19.07	16.54	9.12	PASS
22	2.628	2.630	7.741	6.047	62.31	63.32	1.0025	19.05	16.55	9.12	PASS
23	2.690	2.689	7.575	6.178	60.13	60.18	1.0019	19.01	16.56	9.15	PASS
24	2.763	2.769	7.425	6.411	64.12	63.45	1.0026	19.06	16.55	9.11	PASS
25	2.626	2.626	7.865	5.458	63.75	65.45	1.0022	19.05	16.54	9.13	PASS
26	2.720	2.722	7.691	6.417	65.14	64.94	1.0027	19.06	16.55	9.09	PASS
27	2.922	2.921	7.523	5.180	60.70	60.76	1.0019	19.07	16.54	9.12	PASS
28	2.879	2.878	7.533	6.401	60.09	60.34	1.0017	19.06	16.57	9.12	PASS
29	2.697	2.699	7.462	5.872	62.52	64.33	1.0023	19.07	16.54	9.14	PASS
30	2.766	2.767	7.634	5.971	64.47	65.10	1.0024	19.10	16.53	9.15	PASS
31	2.791	2.793	7.840	6.065	60.50	60.24	1.0018	19.09	16.56	9.15	PASS
32	2.686	2.690	7.639	5.974	64.37	65.20	1.0023	19.07	16.54	9.15	PASS
33	2.842	2.842	7.330	5.801	60.52	60.91	1.0018	19.11	16.56	9.11	PASS
34	2.789	2.790	7.764	7.172	64.92	64.84	1.0021	19.12	16.54	9.18	PASS
35	2.859	2.856	7.585	6.183	59.97	60.89	1.0024	19.05	16.54	9.14	PASS
36	2.795	2.793	7.770	5.924	60.51	60.21	1.0026	19.09	16.55	9.12	PASS
37	2.863	2.866	7.536	6.762	64.36	65.31	1.0025	19.09	16.53	9.16	PASS
38	2.837	2.847	7.550	5.746	65.35	65.18	1.0025	19.10	16.53	9.15	PASS
39	2.714	2.714	8.005	6.777	61.57	62.28	1.0019	19.09	16.53	9.13	PASS
40	2.751	2.749	7.773	6.690	60.31	60.73	1.0024	19.04	16.55	9.16	PASS

AEC-Q200 Test Report

Applicant:	Sui Ning Pulse Electronics Co., Ltd		
Address:	NO. 711, Middle Ring Avenue, Economic and Technological Development Zone, Sui Ning City, Sichuan, CHINA		
Sample Description:	IND, CM, 3mH, 2.5A, LCCI-50, SMT		
Product P/N:	PM53912NLT (TLA drawing Rev.P2)		
Sample Code:	2549	Received Sample Date	2025/12/16
Test Date:	2025/12/22	Qualification NO.	PQ6.100.5525
Test Result:	Pass	Test Requestion NO.	CDC-BD-2512-08
Test Standard:	AEC-Q200 Rev.: E		
Remarks	Use DMEGC suppliers as first source core run full AEC-Q200 test		

Tested:

Jenny Peng

Checked:

Veblew Fan

Approved:

Hand uei

Test engineer

Reviewed engineer

Authorized signatory

Dongguan Pulse Electronics Co., Ltd Zhuhai Branch Testing Center

Issued Date: 2026/02/10

The report is just responsible for the tested sample, the report is not valid without our stamp, the report must not be partially duplicated without our written approval; if there is any objection concerning the report, please contact us within 15days from receiving the report.

This report is based on measured values for conformity assessment and does not consider the risks associated with uncertainty, except special agreements, or requirement in standards and specifications. The potential risks associated with this judgment method possibly is caused, the testing center does not bear the responsibility.

Dongguan Pulse Electronics Co., Ltd Zhuhai Branch Testing Center
102 & 12/F, Building 1, No.99, Xingang Road, Hi-Tech Industrial Development Zone
Zhuhai City, Guangdong Province, China, Postcode: 519085
Tel: (+86) 756-3810600 Fax: (+86) 756-3810660

TABLE OF CONTENTS

Summary-----	Page3
Test Plan-----	Page5
Report 1: High Temperature Exposure (Storage)-----	Page8
Report 2: Temperature Cycling-----	Page15
Report 3: Humidity Bias -----	Page22
Report 4: High Temperature Operating Life-----	Page29
Report 5: Physical Dimension & External Visual -----	Page36
Report 6: Mechanical Shock-----	Page40
Report 7: Vibration-----	Page48
Report 8: Resistance to Soldering Heat-----	Page56
Report 9: Solderability-----	Page61
Report 10: Electrical Characterization-----	Page64
Report 11: Board Flex (SMD)-----	Page68
Report 12: Terminal Strength (SMD)-----	Page75

TEST SUMMARY

Items	Test description	Reference	Sample No.	Sample Size	Test conditions	Test results	Report Ref
0	Precondition	MIL-STD-202H-2015 method 210	#78- #308	231	Test condition K: Component temp $250 \pm 5^{\circ}\text{C}$ $30 \pm 5\text{s}$ temperature ramp/immersion and emersion rate: 1°C/s - 4°C/s ; time above 217°C , 60s-150s; number of heat cycles:1	Pass	See Initial test data report 2~4
3	High Temperature Exposure	MIL-STD-202H-2015 method 108	1#~77#	77	Stored for 1000 hours @ 125°C	Pass	Report 1
4	Temperature cycling	JESD22-A104F-2023	78#~154#	77	1000 cycles (-40°C to 125°C) 15min maximum dwell time at each temperature extreme. 1 min. maximum transition time.	Pass	Report 2
7	Humidity Bias	MIL-STD-202H-2015 method 103	155#~231#	77	1000 hours $85^{\circ}\text{C}/85\%\text{RH}$.	Pass	Report 3
8	High Temperature Operating Life	MIL-STD-202H-2015 method 108	232#~308#	77	1000 hours 125°C max (Include the temperature rise) with 2.5ADC Between Pin1 and Pin4 with Pin2 and Pin3 shorted	Pass	Report 4
9	Physical Dimension	JESD22-B100B-2003(R2021)	309#~338#	30	Verify physical dimensions to the applicable device detail specification.	Pass	Report 5
10	External Visual	MIL-STD-883L-2019 Method 2009.12			Appearance: Cracking, chipping and any other defects harmful to the characteristics should not be allowed. 10X microscope		
12	Resistance to Solvents	MIL-STD-202 Method 215	/	5	Immersion $3+0.5/-0$ minutes in Terpene de-fluxer. Brush 10 strokes (wet bristle) 2 to 3 oz. Rinse in water. Air blow dry.	Resistance to solvents is waived due to Laser marking	
13	Mechanical Shock	MIL-STD-202H-2015 Method 213	#369 - #398	30	Units are non-operating. Pulse shape: Half-sine waveform Impact acceleration: 100 g's Pulse duration: 6ms Number of shocks: 18 shocks (3 shocks for each face)	Pass	Report 6
14	Vibration	MIL-STD-202H-2015 Method 204	#339 - #368	30	5g's for 20 minutes, 12 cycles each of 3 orientations. Test from 10-2000 Hz.	Pass	Report 7

15	Resistance to Soldering Heat	MIL-STD-202H-2015 method 210	#399 - #428	30	Test condition K: Component temp $250 \pm 5^{\circ}\text{C}$ $30 \pm 5\text{s}$ temperature ramp/immersion and emersion rate: 1°C/s - 4°C/s ; time above 217°C , 60s-150s; number of heat cycles:3	Pass	Report 8
17	ESD	AEC-Q200-002 or ISO/DIS10605	/	15	Inductor/transformer design is short component, don't need control the ESD and also can pass the ESD test.	ESD can be waived for transformer	
18	Solderability	J-STD-002E	#519 - #533	15	SMD: Method B1 ($245 \pm 5^{\circ}\text{C}$), Coating Durability Category 2 (dry back conditioning: 4hours $\pm 5\text{min}$); Magnification 50x; Pre and Post electrical test not required.	Pass	Report 9
19	Electrical Characterization	User Spec.	#429 - #458	30	Test OCL @ -40°C , 25°C , 125°C	Pass	Report 10
20	Flammability	UL-94 or IEC 60695-11-5	/	N/A	V-1, V-0 or 5VA Acceptable	all plastic materials meet UL-94 or IEC 60695-11-5	
21	Board Flex (SMD)	AEC-Q200-005-2010	#459 - #488	30	Bend the board (D) X = 2mm, 60sec minimum holding time.	Pass	Report 11
22	Terminal Strength (SMD)	AEC-Q200-006-2010	#489 - #518	30	Apply a 17.7 N (1.8 Kg) force and shall be applied for 60 +1 seconds	Pass	Report 12

 PULSE QUALIFICATION PLAN 可靠性测试计划				
PLAN NUMBER PQ6.100.5525	PRODUCT: PM53912NLT	REVISION: B	DATE: 07/23/2025	PREPARED BY: Veblen Fan

1.0 PURPOSE

This is an internal Pulse Qualification Plan to qualify PM53912NLT (IND, CM, 3mH, 2.5A, LCCI-50, SMT) per Table 5 of AEC-Q200 Rev. E.

2.0 SCOPE

PM53912NLT product is designed by CDC and produced in Suining Pulse Electronics Co Ltd (遂宁普思电子有限公司).

3.0 REFERENCES

AEC-Q200 Rev. E

PM53912NLT Datasheet & TLA drawing.

4.0 PROCEDURE

4.0.1 SPO Electronics Co Ltd manufactures 548 units of PM53912NLT for the AEC-Q200 qualification test.

4.0.2 The following tests of Table 5 will be performed at CDC.

Items	Test description	Reference	Sample Size	Pre-conditioning	Test conditions	Remark
1	Pre- and Post-stress electrical Test	User Specification	All	no	Per spec	
3	High Temperature Exposure (Storage)	MIL-STD-202H-2015 Method 108	77 1#~77#	no	Stored for 1000 hours @ 125°C	
4	Temperature Cycling	JESD22-A104F.01-2023	77 78#~154#	yes 1XSRP	1000 cycles (-40°C to 125°C) 15min minimum dwell time at each temperature extreme. 1 min. maximum transition time.	Weight: 4.6g
7	Humidity Bias	MIL-STD-202H-2015 Method 103	77 155#~231#	yes 1XSRP	1000 hours 85°C/85%RH.	
8	High Temperature Operating Life	MIL-STD-202H-2015 Method 108	77 232#~308#	yes 1XSRP	1000 hours 125°C max (Include the temperature rise) with 2.5ADC Between Pin1 and Pin4 with Pin2 and Pin3 shorted	

Page 6 of 8

9	External Visual	MIL-STD-883L-2019 Method 2009.12	All	no	Inspect device construction, marking and workmanship.																					
10	Physical Dimensions	JESD22-B100B-2003(R2021)	30 309#~338#	no	Verify physical dimensions to the applicable device specification.																					
13	Mechanical Shock	MIL-STD-202H-2015 Method 213	30 369#~398#	no	Figure 1 of Method 213. Condition C <table><tr><td>Test condition</td><td>Peak value (g/s)</td><td>Normal duration (D) (ms)</td><td>Waveform</td><td>Velocity change (V) /ftsec</td></tr><tr><td>A</td><td>50</td><td>11</td><td>Half-sine</td><td>11.3</td></tr><tr><td>B</td><td>75</td><td>6</td><td>Half-sine</td><td>9.2</td></tr><tr><td>C</td><td>100</td><td>6</td><td>Half-sine</td><td>12.3</td></tr></table>	Test condition	Peak value (g/s)	Normal duration (D) (ms)	Waveform	Velocity change (V) /ftsec	A	50	11	Half-sine	11.3	B	75	6	Half-sine	9.2	C	100	6	Half-sine	12.3	
Test condition	Peak value (g/s)	Normal duration (D) (ms)	Waveform	Velocity change (V) /ftsec																						
A	50	11	Half-sine	11.3																						
B	75	6	Half-sine	9.2																						
C	100	6	Half-sine	12.3																						
14	Vibration	MIL-STD-202H-2015 Method 204	30 339#~368#	no	5g's for 20 min, 12 cycles each of 3 orientations. Test from 10-2000 Hz.																					
15	Resistance to Soldering Heat	MIL-STD-202H-2015 Method 210	30 399#~428#	no	SMD: Condition K, time above 217°C, 60s-150s																					
18	Solderability	J-STD-002E-2017	15 519#~533#	no	SMD: Method B1, Coating Durability Category 2 (dry back conditioning:4hours ±5min); Magnification 50x; Pre and Post electrical test not required.																					
19	Electrical Characterization	GB/T 8554-1998 Clause 4.4.4.1 User Spec.	30 429#~458#	no	Test OCL @-40°C,25°C,125°C																					
21	Board Flex (SMD)	AEC-Q200-005-2010	30 459#~488#	no	60 sec minimum holding time.																					
22	Terminal Strength (SMD)	AEC-Q200-006-2010	30 489#~518#	no	Apply a 17.7 N (1.8 Kg) force and shall be applied for 60 +1 sec																					
23	Control samples		15 534#~548#		Baseline																					

Note 备注:

- Below items of AEC-Q200 are waived based on product construction and customer's application.
 - Resistance to solvents is waived due to Laser marking
 - ESD can be waived for transformer.
 - Flammability requires UL-94 or IEC 60695-11-5 for all plastic materials.
- Product Volume (cm³): 1.97cmx1.70cmx0.99cm=3.31 cm³.
- AEC-Q200 testing groups:
 - DMEGC was used as the first source core to construct 548pcs samples, and run a full AEC-Q200

testing, and FCRI was used as the second source core to construct 200pcs and run temperature cycling (601#~677#), high temperature operating life (678#~754#), and mechanical shock (755#~784#), test

(according to TABLE 5A).

Table 5A: Magnetics (Inductors/Transformers) Process Change Qualification Guidelines for the Selection of Tests

For a given change listed below, the Supplier should justify why a suggested test does not apply for the given components under consideration. Collaboration with their customer base is highly recommended.

- | | | |
|--|-----------------------------------|-----------------------------|
| 3. High Temperature Exposure (Storage) | 13. Mechanical Shock | 22. Terminal Strength (SMD) |
| 4. Temperature Cycling | 14. Vibration | |
| 7. Biased Humidity | 15. Resistance to Soldering Heat | |
| 8. Operational Life | 17. Electrostatic Discharge (ESD) | |
| 9. External Visual | 18. Solderability | |
| 10. Physical Dimension | 19. Electrical Characterization | |
| 11. Terminal Strength (THT) | 20. Flammability | |
| 12. Resistance to Solvents | 21. Board Flex | |

Note: A letter or "●" indicates that performance of that stress test should be considered (not necessarily required) for the appropriate process change

Test # From Table 5	3	4	7	8	9	10	11	12	13	14	15	17	18	19	20	21	22
MATERIAL																	
Bobbin material	●	●	●	●	●				●						●		
Core material		●		●	●				●					B	●		

5.0 INTERPRETATION

Interpretation of the plan is the responsibility of the Pulse Quality Manager

Prepared by:

Quality Engineer

Approved by:

Quality Manager

Report 1: High Temperature Exposure (Storage)

Sample quantity:	77 pcs		
Sample No. / Test No.:	# 1 ~ # 77		
External visual examination before test:	Yes ☒ No ☐		
Packing status:	Yes ☒ No ☐		
Test Equipment:			
<u>Type</u>	<u>Model</u>	<u>Serial No.</u>	<u>Calibration valid Date to</u>
Precision High Temperature Chamber	APO-120	CDC-TL-008	3/4/2026
OCL Tester	4284A	CDC-TL-016	7/4/2026
DCR tester	4150ATC	CDC-TL-017	3/4/2026
Hi-Pot Tester	TOS 5051A	CDC-TL-018	7/4/2026
Laboratory environment:			
<u>Type</u>	<u>Temperature range requirement</u>	<u>Relative humidity range requirement</u>	<u>Actual Reading</u>
Environmental testing laboratory	15.0 °C ~ 35.0 °C	20.0 % ~ 80.0 %	25.8 °C/60.5 %
Electrical testing laboratory	20.0 °C ~ 30.0 °C	30.0 % ~ 60.0 %	25.1 °C/55.9 %

Test Result:

No.	Test Item	Test Standard	Test Conclusion
1	High Temperature Exposure (Storage)	MIL-STD-202H-2015 method 108	Pass

Note:

Pass: meet testing requirement.

Failed: don't meet testing requirement.

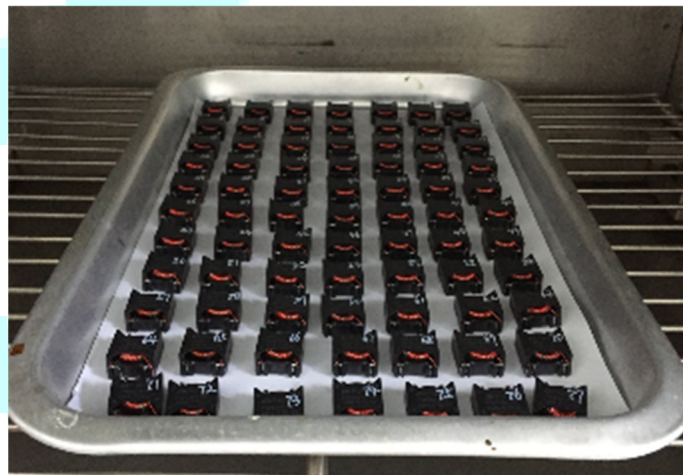
Test Item	High Temperature Exposure (Storage)
Test Procedure:	
1.0 Test preparation	1.1 Number the test specimens for identification
	1.2 Implement pre-measurement
	1.3 All pre-measurement for electrical characteristic and visual inspection shall be recorded for the specimens.
	1.4 Place the test specimen, uniformly distributed, into the basin.
2.0 Test set-up	2.1 Put the basin with the specimens into the chamber (test equipment).
	2.2 Set the temperature of chamber at the rated operating temperature: _____ 125 _____ °C
	2.3 When chamber ramp up to the rated operating temperature, then set dwell time with 1000 hours.
3.0 Test validation	3.1 Take the test specimens out from chamber after finished 1000 hours test.
	3.2 Put the test specimens at the room temperature and finalize final measurement at 24+/-4 hours.
	3.3 All final measurement for electrical characteristics and visual inspection shall be recorded for the specimens. The measurement results shall comply with all electrical requirements in its specification.
	3.4 Prepare the qualification report.
4.0 Measurement Criteria	4.1 Final electrical parameters measurement per the product specification;
	4.2 No crack and visual inspection is eligible;
5.0 Test Result	5.1 The electrical parameters and visual inspection Pass

6.0 Test figures

Fig. 1 Test equipment



Fig. 2 Samples in equipment



7.0 Test data

P/N	Initial test data	Final test data
PM53912NLT	OK	OK
Note: Detailed test data refer to tables below for initial and after		

High Temperature Exposure Test data: Initial Test Data

	PM53912NLT Initial test data					
DRAWING VERSION:	P2					
SAMPLE SIZE:	77					
DATE:	12/22/25					
REMARK:						
PARAMETER:	OCL	LL	CW	DCR	DCR	Hipot
CONDITION:	20KHz 30mV	100KHz 100mV	100KHz 100mV			1500VAC 1mA 60S
PIN NO.:	(1-2)	(1-2) with (3-4) shorted	(1,2-3,4)	(1-2)	(3-4)	(1,2) to (3,4)
UNIT:	mH	uH	pF	mohms	mohms	
MAX SPEC.:			11.00	80.00	80.00	
MIN SPEC.:	1.80	5.50				
AVERAGE =	2.5426	9.3722	5.9246	62.1578	62.1625	
STD DEV =	0.1060	0.2208	0.1669	0.2777	0.2521	
MAX =	2.818	9.883	6.378	62.886	62.894	
MIN =	2.347	8.512	5.572	61.599	61.633	
DATA	-	-	-	-	-	-
1	2.49	9.31	6.11	62.20	62.62	Pass
2	2.73	9.88	6.05	62.44	62.63	Pass
3	2.35	9.18	5.72	62.41	62.06	Pass
4	2.54	9.35	5.87	61.79	62.43	Pass
5	2.61	9.25	5.75	62.33	61.92	Pass
6	2.55	9.03	5.57	62.66	61.73	Pass
7	2.48	8.51	6.15	62.38	62.31	Pass
8	2.71	9.41	5.74	61.90	62.40	Pass
9	2.43	9.20	6.05	61.81	62.18	Pass
10	2.55	9.14	5.76	61.98	62.05	Pass
11	2.59	9.37	6.09	62.09	62.10	Pass
12	2.57	9.52	5.74	62.19	61.92	Pass
13	2.46	9.06	5.58	61.82	62.50	Pass
14	2.36	9.27	5.82	62.45	62.25	Pass
15	2.61	9.58	6.01	62.33	62.11	Pass
16	2.61	9.55	6.00	61.84	62.04	Pass
17	2.52	9.36	5.72	62.33	62.29	Pass
18	2.44	8.77	6.08	62.26	62.00	Pass
19	2.64	9.53	6.10	61.86	62.31	Pass
20	2.44	9.47	6.14	61.97	62.13	Pass
21	2.61	9.38	6.35	62.71	62.32	Pass
22	2.46	9.59	6.38	62.07	61.94	Pass
23	2.47	9.46	5.88	62.36	62.26	Pass
24	2.58	9.16	6.00	62.28	62.11	Pass
25	2.50	9.44	5.96	62.24	62.30	Pass
26	2.44	9.42	5.66	62.52	62.35	Pass
27	2.52	9.37	5.69	62.33	62.49	Pass
28	2.62	9.49	5.73	62.03	62.28	Pass
29	2.59	9.64	5.91	62.41	62.39	Pass
30	2.57	9.52	5.89	61.82	62.15	Pass
31	2.82	9.15	5.78	62.08	62.35	Pass
32	2.39	9.50	5.77	62.05	61.99	Pass
33	2.57	9.42	6.08	62.37	62.48	Pass
34	2.65	9.29	5.74	61.83	62.11	Pass

35	2.73	9.42	5.94	62.27	62.13	Pass
36	2.78	9.26	5.89	62.41	61.85	Pass
37	2.45	9.12	5.85	61.81	61.80	Pass
38	2.49	9.30	6.17	62.50	62.50	Pass
39	2.41	9.35	5.77	62.15	61.87	Pass
40	2.61	9.05	5.92	62.19	62.51	Pass
41	2.59	9.51	6.16	62.23	62.07	Pass
42	2.42	9.12	5.75	62.15	62.26	Pass
43	2.69	9.17	6.10	61.76	62.13	Pass
44	2.61	9.33	6.03	62.44	62.10	Pass
45	2.64	9.33	5.85	61.90	62.23	Pass
46	2.68	9.81	5.78	62.44	62.19	Pass
47	2.70	9.35	5.99	62.39	62.48	Pass
48	2.55	9.62	5.92	62.41	61.94	Pass
49	2.52	9.22	5.88	62.09	62.26	Pass
50	2.48	9.31	5.72	62.86	62.79	Pass
51	2.60	9.71	6.24	62.89	61.94	Pass
52	2.50	9.70	6.18	62.32	61.95	Pass
53	2.42	9.24	6.03	61.88	62.38	Pass
54	2.58	9.50	5.84	62.23	62.22	Pass
55	2.40	9.56	6.09	62.87	62.89	Pass
56	2.62	9.56	6.11	62.04	61.63	Pass
57	2.54	9.47	5.90	62.05	62.45	Pass
58	2.69	9.23	5.83	62.08	61.66	Pass
59	2.39	9.42	5.76	62.06	62.12	Pass
60	2.35	9.11	5.92	61.87	62.09	Pass
61	2.41	9.53	5.98	61.62	61.77	Pass
62	2.67	9.69	5.95	61.79	61.75	Pass
63	2.59	9.75	5.82	62.14	62.17	Pass
64	2.64	9.47	5.82	62.19	62.12	Pass
65	2.61	9.32	5.89	62.02	62.20	Pass
66	2.65	9.47	5.91	62.30	61.86	Pass
67	2.47	9.44	5.98	61.93	62.13	Pass
68	2.55	9.56	5.83	62.00	61.66	Pass
69	2.51	9.54	5.85	62.07	62.14	Pass
70	2.40	9.51	6.00	61.85	62.03	Pass
71	2.40	9.08	6.00	62.02	62.04	Pass
72	2.61	9.19	5.96	62.13	62.12	Pass
73	2.41	9.40	5.81	62.14	62.20	Pass
74	2.52	9.18	6.00	62.10	61.81	Pass
75	2.57	9.50	6.22	62.08	62.28	Pass
76	2.42	9.44	5.83	61.60	62.09	Pass
77	2.48	9.25	5.90	61.79	62.20	Pass

High Temperature Exposure Test data: After Test Data

	PM53912NLT after high temperature exposure test data					
DRAWING VERSION:	P2					
SAMPLE SIZE:	77					
DATE:	02/04/26					
REMARK:						
PARAMETER:	OCL	LL	CW	DCR	DCR	Hipot
CONDITION:	20KHz 30mV	100KHz 100mV	100KHz 100mV			1500VAC 1mA 60S
PIN NO.:	(1-2)	(1-2) with (3-4) shorted	(1,2-3,4)	(1-2)	(3-4)	(1,2) to (3,4)
UNIT:	mH	uH	pF	mohms	mohms	
MAX SPEC.:			11.00	80.00	80.00	
MIN SPEC.:	1.80	5.50				
AVERAGE =	2.4143	9.3098	6.0782	62.0694	62.0581	
STD DEV =	0.1168	0.2129	0.1947	0.1655	0.0932	
MAX =	2.691	9.859	6.598	62.963	62.305	
MIN =	2.215	8.521	5.709	61.828	61.859	
DATA	-	-	-	-	-	-
1	2.28	9.29	6.19	62.33	62.25	Pass
2	2.50	9.86	5.87	61.99	62.02	Pass
3	2.46	9.16	5.71	61.96	62.01	Pass
4	2.24	9.33	5.90	62.21	61.97	Pass
5	2.36	9.23	5.85	62.03	62.08	Pass
6	2.29	9.01	5.85	62.11	62.00	Pass
7	2.49	8.52	5.81	62.18	62.13	Pass
8	2.46	9.40	6.06	61.96	61.89	Pass
9	2.48	9.18	5.89	62.01	61.98	Pass
10	2.25	9.09	5.95	62.02	62.00	Pass
11	2.27	9.35	6.21	62.00	62.07	Pass
12	2.25	9.52	6.35	61.96	62.04	Pass
13	2.58	9.06	5.83	62.21	62.01	Pass
14	2.52	9.26	5.94	61.97	61.96	Pass
15	2.37	9.57	5.95	61.84	62.13	Pass
16	2.33	9.53	6.31	62.15	62.01	Pass
17	2.24	9.34	5.86	62.03	62.11	Pass
18	2.54	8.68	6.02	62.03	61.96	Pass
19	2.38	9.51	6.15	62.13	62.11	Pass
20	2.54	9.46	6.05	62.06	62.14	Pass
21	2.38	9.35	5.91	62.00	62.01	Pass
22	2.51	9.58	6.18	62.11	62.21	Pass
23	2.56	9.37	5.90	62.00	61.86	Pass
24	2.32	9.17	5.96	61.97	62.02	Pass
25	2.58	9.42	6.27	61.83	62.09	Pass
26	2.51	9.42	6.17	62.03	61.93	Pass
27	2.22	9.36	6.25	61.92	62.13	Pass
28	2.28	9.48	6.33	62.20	62.02	Pass
29	2.31	9.62	6.24	62.13	62.02	Pass
30	2.69	9.51	6.28	62.00	62.11	Pass
31	2.55	9.16	5.97	62.02	62.07	Pass
32	2.51	9.49	5.90	61.97	62.18	Pass
33	2.31	9.40	6.28	62.01	61.92	Pass

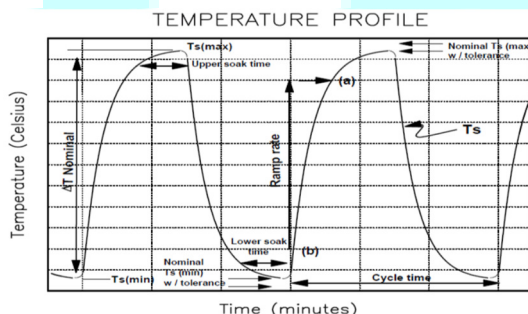
34	2.36	9.30	6.37	61.89	62.06	Pass
35	2.44	9.31	6.20	62.05	62.17	Pass
36	2.51	9.25	5.87	62.09	61.95	Pass
37	2.48	9.11	6.15	62.02	62.10	Pass
38	2.23	9.30	5.84	62.00	62.05	Pass
39	2.51	9.35	6.13	61.98	62.08	Pass
40	2.39	9.04	5.97	62.18	62.30	Pass
41	2.25	9.51	6.21	62.17	62.00	Pass
42	2.53	9.11	5.99	61.90	62.12	Pass
43	2.43	9.17	6.22	62.62	61.91	Pass
44	2.38	9.32	5.94	61.90	61.94	Pass
45	2.32	9.32	6.33	61.93	62.00	Pass
46	2.45	9.68	6.27	61.89	62.16	Pass
47	2.37	9.22	5.81	62.09	62.18	Pass
48	2.29	9.50	5.96	62.00	61.99	Pass
49	2.27	9.08	6.31	61.97	62.02	Pass
50	2.54	9.20	6.38	62.19	62.05	Pass
51	2.33	9.57	6.15	62.96	62.10	Pass
52	2.28	9.57	5.93	62.32	62.06	Pass
53	2.58	9.12	5.93	61.97	62.17	Pass
54	2.35	9.37	5.97	61.95	61.97	Pass
55	2.48	9.43	6.23	61.99	62.10	Pass
56	2.43	9.43	6.00	62.21	61.96	Pass
57	2.27	9.34	5.88	62.10	62.11	Pass
58	2.46	9.10	5.83	62.17	62.11	Pass
59	2.51	9.31	6.39	61.98	62.22	Pass
60	2.50	8.98	6.60	62.15	61.99	Pass
61	2.50	9.40	6.13	62.19	62.12	Pass
62	2.46	9.58	6.31	62.10	62.09	Pass
63	2.39	9.64	6.09	62.14	61.99	Pass
64	2.37	9.34	6.31	62.04	62.02	Pass
65	2.34	9.20	5.99	61.91	61.99	Pass
66	2.52	9.34	6.23	61.97	61.98	Pass
67	2.60	9.33	5.85	62.06	62.04	Pass
68	2.33	9.43	5.99	61.91	61.98	Pass
69	2.23	9.42	5.98	62.15	62.02	Pass
70	2.55	9.38	6.39	61.97	62.17	Pass
71	2.54	8.97	5.84	62.26	62.20	Pass
72	2.34	9.08	6.13	61.99	62.17	Pass
73	2.53	9.27	5.94	62.01	62.15	Pass
74	2.58	9.06	5.93	62.14	62.12	Pass
75	2.27	9.37	5.93	62.16	61.98	Pass
76	2.57	9.28	6.42	62.38	62.31	Pass
77	2.29	9.12	6.34	61.98	61.91	Pass

Report 2: Temperature cycling

Sample quantity:		77 pcs	
Sample No. / Test No.:		# 78 ~ # 154	
External visual examination before test:		Yes ☒ No ☐	
Packing status:		Yes ☒ No ☐	
Test Equipment:			
<u>Type</u>	<u>Model</u>	<u>Serial No.</u>	<u>Calibration valid Date to</u>
Temperature cycling chamber	ATST-50-50-W	CDC-TL-003	3/4/2026
OCL Tester	4284A	CDC-TL-016	7/4/2026
DCR tester	4150ATC	CDC-TL-017	3/4/2026
Hi-Pot Tester	TOS 5051A	CDC-TL-018	7/4/2026
Laboratory environment:			
<u>Type</u>	<u>Temperature range requirement</u>	<u>Relative humidity range requirement</u>	<u>Actual Reading</u>
Environmental testing laboratory	15.0 °C ~ 35.0 °C	20.0 % ~ 80.0 %	25.8 °C/60.5 %
Electrical testing laboratory	20.0 °C ~ 30.0 °C	30.0 % ~ 60.0 %	25.1 °C/55.9 %

Test Result:

No.	Test Item	Test Standard	Test Conclusion
1	Temperature cycling	JESD22-A104F-2023	Pass
Note: Pass: meet testing requirement. Failed: don't meet testing requirement;			

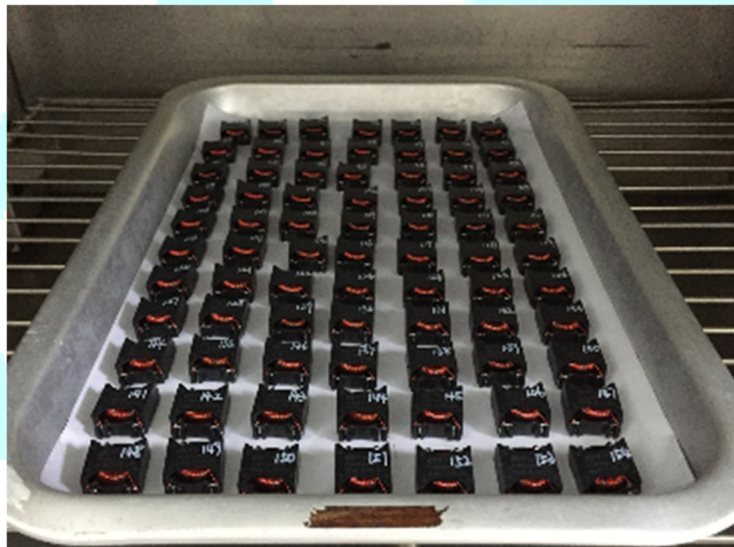
Test Item	Temperature Cycling
Test Procedure:	
1.0 Test preparation	1.1 Number the test specimens for identification
	1.2 Implement pre-measurement
	1.3 All pre-measurement for electrical characteristic and visual inspection shall be recorded for the specimens.
	1.4 Place the test specimen, uniformly distributed, into the basin.
2.0 Test set-up	2.1 Put the basin with the specimens into the chamber (test equipment).
	2.2 Set the chamber according to the following temperature cycle profile;
	2.2.1 Chamber temperature transition time: 1 Minute max.
	2.2.2 Chamber soaks time: 15 minutes Minimum.
	2.2.3 Set chamber temperature from -40°C to +125°C
	2.2.4 Set 1000 cycles.
	 TEMPERATURE PROFILE The graph shows a temperature cycle with the following parameters: Y-axis: Temperature (Celsius) X-axis: Time (minutes) Upper soak time: Time at $T_s(max)$ Lower soak time: Time at $T_s(min)$ Ramp rate: The slope of the transition between soak times. Nominal $T_s(max)$ w/ tolerance: The upper limit of the temperature cycle. Nominal $T_s(min)$ w/ tolerance: The lower limit of the temperature cycle. Cycle time: The total time for one complete cycle.
3.0 Test validation	3.1 Take the test specimens out from chamber after finished 1000 cycles test.
	3.2 Put the test specimens at the room temperature and finalize final measurement at least 24 hours after test conclusion.
	3.3 All final measurement for electrical characteristics and visual inspection shall be recorded for the specimens. The measurement results shall comply with all electrical requirements in its specification.
	3.4 Prepare the qualification report.
4.0 Measurement Criteria	4.1 Final electrical parameters measurement per the product specification;
	4.2 No crack and visual inspection is eligible;
5.0 Test Result	5.1 The electrical parameters and visual inspection pass

6.0 Test figures

Fig. 1 Test equipment



Fig. 2 Sample in equipment



7.0 Test Data

P/N	Initial test data	Final test data
PM53912NLT	OK	OK
Note: Detailed test data refer to tables below for initial and after		

Temperature Cycling Test data: Initial Test Data

	PM53912NLT Initial test data					
DRAWING VERSION:	P2					
SAMPLE SIZE:	77					
DATE:	12/22/25					
REMARK:						
PARAMETER:	OCL	LL	CW	DCR	DCR	Hipot
CONDITION:	20KHz 30mV	100KHz 100mV	100KHz 100mV			1500VAC 1mA 60S
PIN NO.:	(1-2)	(1-2) with (3-4) shorted	(1,2-3,4)	(1-2)	(3-4)	(1,2) to (3,4)
UNIT:	mH	uH	pF	mohms	mohms	
MAX SPEC.:			11.00	80.00	80.00	
MIN SPEC.:	1.80	5.50				
AVERAGE =	2.5230	9.3919	5.9477	62.0179	62.0917	
STD DEV =	0.0819	0.1607	0.1645	0.2586	0.2394	
MAX =	2.700	9.824	6.295	62.863	62.800	
MIN =	2.364	9.055	5.637	61.562	61.576	
DATA	-	-	-	-	-	-
78	2.50	9.27	5.75	62.01	62.08	Pass
79	2.52	9.43	5.82	61.98	62.30	Pass
80	2.55	9.82	6.16	61.76	61.98	Pass
81	2.63	9.50	6.08	61.81	62.27	Pass
82	2.46	9.51	5.73	62.13	62.29	Pass
83	2.62	9.17	6.11	62.07	61.95	Pass
84	2.39	9.52	6.30	62.08	62.08	Pass
85	2.59	9.29	5.85	61.56	61.67	Pass
86	2.48	9.08	5.99	62.05	61.93	Pass
87	2.44	9.36	5.84	62.01	61.93	Pass
88	2.61	9.75	5.77	61.71	61.87	Pass
89	2.50	9.62	5.93	62.05	62.24	Pass
90	2.54	9.40	6.17	61.83	62.20	Pass
91	2.48	9.39	5.79	62.02	61.93	Pass
92	2.62	9.39	5.88	61.74	62.29	Pass
93	2.60	9.53	5.94	62.05	61.77	Pass
94	2.49	9.59	6.18	62.09	62.07	Pass
95	2.55	9.52	5.83	61.95	62.06	Pass
96	2.43	9.22	6.24	62.47	62.09	Pass
97	2.55	9.32	6.08	62.06	62.24	Pass
98	2.43	9.24	5.79	61.66	62.02	Pass
99	2.47	9.25	5.92	62.01	62.03	Pass
100	2.51	9.49	6.04	61.70	61.66	Pass
101	2.51	9.46	6.03	61.77	62.12	Pass
102	2.62	9.54	6.13	61.63	62.49	Pass
103	2.47	9.31	5.73	62.26	61.63	Pass
104	2.69	9.06	5.86	61.72	62.32	Pass
105	2.63	9.23	6.05	62.30	62.32	Pass
106	2.59	9.41	6.01	62.27	62.32	Pass
107	2.60	9.51	6.12	61.94	62.06	Pass
108	2.45	9.40	6.05	62.06	62.17	Pass
109	2.49	9.39	5.82	61.87	62.08	Pass
110	2.44	9.29	5.86	62.60	61.82	Pass

111	2.36	9.38	6.20	61.78	62.16	Pass
112	2.50	9.14	5.99	62.45	62.11	Pass
113	2.45	9.44	5.90	62.06	61.65	Pass
114	2.51	9.33	5.79	62.15	62.17	Pass
115	2.70	9.33	5.98	61.98	62.45	Pass
116	2.45	9.69	5.64	61.98	62.80	Pass
117	2.46	9.39	5.92	62.38	62.29	Pass
118	2.42	9.42	5.72	62.07	61.76	Pass
119	2.60	9.39	5.88	61.85	62.32	Pass
120	2.69	9.20	5.76	62.17	62.21	Pass
121	2.56	9.44	6.00	61.61	61.64	Pass
122	2.56	9.65	5.88	61.91	61.70	Pass
123	2.56	9.43	6.05	61.87	62.26	Pass
124	2.46	9.63	6.16	62.39	62.28	Pass
125	2.63	9.56	5.81	61.70	61.95	Pass
126	2.47	9.46	6.21	61.87	62.32	Pass
127	2.48	9.36	6.12	62.18	62.03	Pass
128	2.67	9.45	6.27	62.86	62.08	Pass
129	2.56	9.50	5.85	62.40	62.46	Pass
130	2.49	9.53	5.93	61.66	62.27	Pass
131	2.69	9.42	5.81	62.35	62.37	Pass
132	2.47	9.16	6.06	61.68	61.90	Pass
133	2.57	9.32	5.74	61.91	61.93	Pass
134	2.39	9.29	5.79	62.30	62.21	Pass
135	2.69	9.20	5.76	62.37	62.12	Pass
136	2.42	9.65	5.79	61.88	62.15	Pass
137	2.42	9.16	6.02	62.05	61.74	Pass
138	2.45	9.16	6.02	62.09	62.33	Pass
139	2.58	9.32	5.89	62.39	62.19	Pass
140	2.43	9.45	5.87	62.27	61.86	Pass
141	2.56	9.47	5.78	62.33	62.24	Pass
142	2.49	9.52	6.21	61.73	61.97	Pass
143	2.48	9.22	6.29	61.80	61.83	Pass
144	2.48	9.63	6.16	61.80	61.63	Pass
145	2.44	9.31	6.28	61.81	62.18	Pass
146	2.57	9.30	5.85	62.05	61.58	Pass
147	2.50	9.24	5.86	61.77	62.07	Pass
148	2.53	9.38	5.83	62.07	62.38	Pass
149	2.64	9.39	5.91	61.88	62.27	Pass
150	2.59	9.55	5.78	62.02	62.25	Pass
151	2.51	9.57	5.81	62.13	62.32	Pass
152	2.52	9.12	6.03	62.36	62.18	Pass
153	2.51	9.14	5.72	62.18	62.27	Pass
154	2.36	9.26	5.85	61.67	61.96	Pass

Temperature Cycling Test data: Final Test Data

	PM53912NLT after temperature cycling test data					
DRAWING VERSION:	P2					
SAMPLE SIZE:	77					
DATE:	01/22/26					
REMARK:						
PARAMETER:	OCL	LL	CW	DCR	DCR	Hipot
CONDITION:	20KHz 30mV	100KHz 100mV	100KHz 100mV			1500VAC 1mA 60S
PIN NO.:	(1-2)	(1-2) with (3-4) shorted	(1,2-3,4)	(1-2)	(3-4)	(1,2) to (3,4)
UNIT:	mH	uH	pF	mohms	mohms	
MAX SPEC.:			11.00	80.00	80.00	
MIN SPEC.:	1.80	5.50				
AVERAGE =	2.4756	9.2913	6.0770	62.1181	62.1336	
STD DEV =	0.0920	0.1621	0.3152	0.1915	0.1936	
MAX =	2.663	9.722	6.860	62.874	62.831	
MIN =	2.305	8.953	5.501	61.824	61.633	
DATA	-	-	-	-	-	-
78	2.51	9.16	5.79	62.33	62.25	Pass
79	2.35	9.38	6.55	62.43	62.83	Pass
80	2.58	9.72	5.86	62.40	62.06	Pass
81	2.43	9.41	6.40	61.90	62.53	Pass
82	2.51	9.42	5.67	62.33	61.98	Pass
83	2.37	9.09	6.29	62.70	61.83	Pass
84	2.47	9.42	5.70	62.33	62.32	Pass
85	2.42	9.19	5.69	61.91	62.59	Pass
86	2.53	9.00	5.94	61.92	62.03	Pass
87	2.49	9.24	5.84	61.99	62.10	Pass
88	2.55	9.65	6.14	62.03	62.00	Pass
89	2.34	9.52	6.43	62.09	61.92	Pass
90	2.39	9.27	6.39	61.92	62.10	Pass
91	2.37	9.30	6.32	62.45	62.25	Pass
92	2.50	9.28	6.25	62.39	62.51	Pass
93	2.42	9.44	5.76	61.89	62.00	Pass
94	2.33	9.49	6.35	62.40	62.09	Pass
95	2.37	9.43	6.31	62.16	62.01	Pass
96	2.49	9.12	5.93	62.06	62.01	Pass
97	2.39	9.24	6.46	61.92	62.13	Pass
98	2.53	9.15	5.93	62.41	62.12	Pass
99	2.34	9.14	6.11	62.03	61.95	Pass
100	2.58	9.38	5.56	62.30	62.21	Pass
101	2.55	9.36	5.97	62.22	62.18	Pass
102	2.49	9.44	6.12	62.04	62.21	Pass
103	2.50	9.21	5.95	62.02	62.14	Pass
104	2.65	8.95	6.54	62.03	62.19	Pass
105	2.55	9.13	6.54	62.10	62.19	Pass
106	2.43	9.32	5.61	62.13	62.09	Pass
107	2.46	9.42	5.50	61.98	62.15	Pass
108	2.48	9.30	5.93	62.01	62.05	Pass
109	2.34	9.31	5.76	62.04	61.99	Pass
110	2.50	9.19	5.58	62.27	62.18	Pass

111	2.44	9.27	5.91	62.11	62.11	Pass
112	2.34	9.05	6.12	62.23	62.02	Pass
113	2.55	9.35	5.93	62.11	62.05	Pass
114	2.54	9.22	5.99	61.91	61.98	Pass
115	2.66	9.24	5.78	62.00	62.50	Pass
116	2.60	9.60	5.83	62.05	61.97	Pass
117	2.52	9.29	6.79	62.19	62.41	Pass
118	2.46	9.32	5.99	62.03	62.06	Pass
119	2.51	9.29	6.16	62.05	62.06	Pass
120	2.57	9.09	6.27	62.06	62.03	Pass
121	2.43	9.34	6.38	61.84	62.00	Pass
122	2.62	9.58	6.48	61.91	62.03	Pass
123	2.40	9.32	6.18	62.04	62.09	Pass
124	2.31	9.53	6.00	62.30	62.08	Pass
125	2.55	9.44	5.92	62.01	62.04	Pass
126	2.52	9.35	6.86	62.08	62.06	Pass
127	2.37	9.26	5.90	62.06	62.09	Pass
128	2.64	9.35	5.98	62.19	61.90	Pass
129	2.48	9.39	6.24	62.30	61.97	Pass
130	2.37	9.41	6.15	61.98	62.30	Pass
131	2.62	9.33	6.49	62.29	62.22	Pass
132	2.37	9.04	6.23	62.87	62.59	Pass
133	2.45	9.21	6.25	62.14	61.63	Pass
134	2.50	9.19	5.88	62.05	62.65	Pass
135	2.64	9.08	6.13	62.08	62.06	Pass
136	2.32	9.55	6.06	62.03	62.12	Pass
137	2.53	9.07	5.96	62.17	62.09	Pass
138	2.37	9.07	6.41	61.83	61.97	Pass
139	2.57	9.21	6.02	61.98	61.88	Pass
140	2.31	9.35	5.92	62.04	62.17	Pass
141	2.45	9.36	6.12	62.19	62.22	Pass
142	2.40	9.43	6.49	62.22	62.10	Pass
143	2.36	9.12	6.45	62.37	62.16	Pass
144	2.48	9.52	5.83	61.94	62.13	Pass
145	2.53	9.18	5.55	62.00	61.97	Pass
146	2.46	9.20	5.53	62.27	62.14	Pass
147	2.55	9.13	5.84	61.95	62.33	Pass
148	2.59	9.27	5.96	61.82	62.04	Pass
149	2.61	9.27	6.12	62.13	62.32	Pass
150	2.60	9.47	6.04	62.12	62.20	Pass
151	2.50	9.46	6.40	62.10	61.91	Pass
152	2.45	9.02	6.85	62.08	62.28	Pass
153	2.48	9.05	5.57	62.00	62.09	Pass
154	2.43	9.15	5.83	61.90	62.09	Pass

Report 3: Humidity Bias

Sample quantity:	77 pcs		
Sample No. / Test No.:	# 155 ~ # 231		
External visual examination before test:	Yes ☒ No ☐		
Packing status:	Yes ☒ No ☐		
Test Equipment:			
<u>Type</u>	<u>Model</u>	<u>Serial No.</u>	<u>Calibration valid Date to</u>
Temperature/Humidity Programmable Chamber	ATH-1500-CP	CDC-TL-037	3/4/2026
OCL Tester	4284A	CDC-TL-016	7/4/2026
DCR tester	4150ATC	CDC-TL-017	3/4/2026
Hi-Pot Tester	TOS 5051A	CDC-TL-018	7/4/2026
Laboratory environment:			
<u>Type</u>	<u>Temperature range requirement</u>	<u>Relative humidity range requirement</u>	<u>Actual Reading</u>
Environmental testing laboratory	15.0 °C ~ 35.0 °C	20.0 % ~ 80.0 %	25.8 °C/60.5 %
Electrical testing laboratory	20.0 °C ~ 30.0 °C	30.0 % ~ 60.0 %	25.1 °C/55.9 %

Test Result:

No.	Test Item	Test Standard	Test Conclusion
1	Humidity (Steady State)	MIL-STD-202H-2015 method 103	Pass

Note:

Pass: meet testing requirement.

Failed: don't meet testing requirement;

Test Item	Humidity (Steady State)
Test Procedure:	
1.0 Test preparation	1.1 Number the test specimens for identification
	1.2 Implement pre-measurement
	1.3 All pre-measurement for electrical characteristic and visual inspection shall be recorded for the specimens.
	1.4 Place the test specimen, uniformly distributed, into the basin.
2.0 Test set-up	2.1 Put the basin with the specimens into the chamber (test equipment).
	2.2 Set the chamber with the temperature of 85°C and the relative humidity of 85%.
	2.3 When chamber ramp up to 85°C and 85%, then set dwell time with 1000 hours.
3.0 Test validation	3.1 Take the test specimens out from chamber after finished 1000 hours test.
	3.2 Put the test specimens at the room temperature and finalize final measurement at 24+/-4 hours.
	3.3 All final measurement for electrical characteristics and visual inspection shall be recorded for the specimens. The measurement results shall comply with all electrical requirements in its specification.
	3.4 Prepare the qualification report.
4.0 Measurement Criteria	4.1 Final electrical parameters measurement per the product specification;
	4.2 No crack and visual inspection is eligible;
5.0 Test Result	5.1 The electrical parameters and visual inspection Pass

6.0 Test figures

Fig. 1 Test equipment



Fig. 2 Sample in equipment



7.0 Test data

P/N	Initial test data	Final test data
PM53912NLT	OK	OK
Note: Detailed test data refer to tables below for initial and after		

Humidity (Steady State) Test data: Initial Test Data

	PM53912NLT Initial test data					
DRAWING VERSION:	P2					
SAMPLE SIZE:	77					
DATE:	12/22/25					
REMARK:						
PARAMETER:	OCL	LL	CW	DCR	DCR	Hipot
CONDITION:	20KHz 30mV	100KHz 100mV	100KHz 100mV			1500VAC 1mA 60S
PIN NO.:	(1-2)	(1-2) with (3-4) shorted	(1,2-3,4)	(1-2)	(3-4)	(1,2) to (3,4)
UNIT:	mH	uH	pF	mohms	mohms	
MAX SPEC.:			11.00	80.00	80.00	
MIN SPEC.:	1.80	5.50				
AVERAGE =	2.5120	9.3545	5.9406	62.1093	62.0666	
STD DEV =	0.0860	0.2154	0.1907	0.2698	0.2507	
MAX =	2.720	9.983	6.971	62.959	62.777	
MIN =	2.328	8.805	5.722	61.516	61.581	
DATA	-	-	-	-	-	-
155	2.57	9.44	5.90	62.24	62.21	Pass
156	2.40	9.98	5.80	62.19	62.26	Pass
157	2.70	9.44	5.92	61.89	62.08	Pass
158	2.66	9.68	5.94	62.17	61.86	Pass
159	2.51	9.24	5.90	62.17	62.40	Pass
160	2.61	9.33	5.77	62.28	62.22	Pass
161	2.60	9.29	5.86	62.35	62.18	Pass
162	2.58	9.46	5.84	61.85	62.00	Pass
163	2.52	9.33	5.79	62.34	62.02	Pass
164	2.45	9.50	5.72	62.37	61.86	Pass
165	2.52	9.27	5.88	61.92	61.88	Pass
166	2.48	9.41	5.87	62.28	61.95	Pass
167	2.49	9.52	6.06	62.09	62.27	Pass
168	2.64	9.20	5.85	62.17	62.09	Pass
169	2.46	9.46	5.79	62.23	62.78	Pass
170	2.53	9.58	5.91	62.11	61.93	Pass
171	2.49	9.52	5.78	61.72	61.81	Pass
172	2.53	9.67	5.88	62.14	61.71	Pass
173	2.48	9.32	6.14	62.04	62.15	Pass
174	2.62	9.69	6.09	62.23	61.73	Pass
175	2.61	9.44	6.01	61.93	62.25	Pass
176	2.41	9.18	6.18	61.65	62.77	Pass
177	2.45	9.48	6.97	62.32	62.01	Pass
178	2.68	9.41	6.00	62.37	62.15	Pass
179	2.49	9.44	5.88	62.26	62.12	Pass
180	2.66	9.52	5.83	62.28	62.25	Pass
181	2.45	9.53	6.19	61.96	61.74	Pass
182	2.54	9.33	5.90	62.49	61.86	Pass
183	2.45	9.62	5.95	61.66	61.85	Pass
184	2.56	9.54	6.76	61.87	61.88	Pass
185	2.40	9.84	5.87	62.14	61.82	Pass
186	2.52	9.70	5.83	61.80	61.90	Pass
187	2.46	9.17	5.91	62.10	61.97	Pass

188	2.49	9.08	5.87	62.10	61.70	Pass
189	2.43	9.85	5.84	61.94	62.20	Pass
190	2.46	9.22	5.85	62.33	62.09	Pass
191	2.61	9.36	5.92	61.52	61.94	Pass
192	2.49	9.48	5.83	61.58	62.06	Pass
193	2.56	9.58	5.91	62.41	62.26	Pass
194	2.53	9.37	5.84	62.18	62.00	Pass
195	2.44	9.40	6.07	61.90	62.02	Pass
196	2.70	9.19	6.11	61.81	62.34	Pass
197	2.50	8.97	5.79	62.01	61.87	Pass
198	2.49	9.45	5.99	62.36	62.08	Pass
199	2.72	9.40	5.98	62.01	61.58	Pass
200	2.62	9.28	5.95	61.66	61.96	Pass
201	2.50	8.98	5.81	62.30	62.32	Pass
202	2.52	9.12	5.86	62.16	62.10	Pass
203	2.48	9.08	5.96	62.96	62.09	Pass
204	2.37	9.43	5.79	61.67	62.07	Pass
205	2.57	9.51	5.84	62.27	61.79	Pass
206	2.59	9.03	6.05	62.43	62.06	Pass
207	2.71	9.42	6.13	62.17	62.76	Pass
208	2.49	9.42	5.88	62.15	62.34	Pass
209	2.39	9.43	5.83	62.05	62.18	Pass
210	2.53	9.08	6.17	62.30	61.96	Pass
211	2.47	9.20	5.90	62.01	61.75	Pass
212	2.53	9.19	5.92	62.05	61.92	Pass
213	2.46	9.10	6.22	61.97	61.95	Pass
214	2.33	9.07	6.21	61.99	62.32	Pass
215	2.46	9.17	5.93	61.90	61.66	Pass
216	2.45	9.23	5.82	62.26	62.06	Pass
217	2.48	9.55	5.99	61.67	61.59	Pass
218	2.49	9.30	5.81	61.99	61.91	Pass
219	2.48	9.18	5.81	62.69	62.01	Pass
220	2.62	8.81	5.76	62.29	62.32	Pass
221	2.43	9.31	5.76	62.74	62.26	Pass
222	2.58	8.89	5.98	62.39	62.08	Pass
223	2.44	9.20	5.82	62.07	62.15	Pass
224	2.50	9.32	5.96	61.73	62.42	Pass
225	2.42	9.17	5.88	62.07	62.44	Pass
226	2.43	9.33	5.87	61.75	62.50	Pass
227	2.46	9.29	5.87	62.30	61.92	Pass
228	2.47	9.27	5.96	62.40	61.91	Pass
229	2.47	9.37	6.00	62.38	62.41	Pass
230	2.34	9.26	5.82	61.86	62.03	Pass
231	2.44	9.43	5.93	62.07	61.82	Pass

Humidity (Steady State) Test data: Final Test Data

	PM53912NLT after biased humidity test data					
DRAWING VERSION:	P2					
SAMPLE SIZE:	77					
DATE:	02/04/26					
REMARK:						
PARAMETER:	OCL	LL	CW	DCR	DCR	Hipot
CONDITION:	20KHz 30mV	100KHz 100mV	100KHz 100mV			1500VAC 1mA 60S
PIN NO.:	(1-2)	(1-2) with (3-4) shorted	(1,2-3,4)	(1-2)	(3-4)	(1,2) to (3,4)
UNIT:	mH	uH	pF	mohms	mohms	
MAX SPEC.:			11.00	80.00	80.00	
MIN SPEC.:	1.80	5.50				
AVERAGE =	2.2238	9.2736	6.1252	62.1110	62.1157	
STD DEV =	0.1666	0.1908	0.2048	0.2140	0.2065	
MAX =	2.646	9.854	6.585	62.975	62.997	
MIN =	2.026	8.787	5.845	61.798	61.852	
DATA	-	-	-	-	-	-
155	2.20	9.31	5.98	62.01	62.21	Pass
156	2.45	9.85	6.15	62.04	61.93	Pass
157	2.36	9.32	6.05	62.40	62.01	Pass
158	2.20	9.55	5.92	62.00	62.13	Pass
159	2.07	9.11	6.48	62.03	62.00	Pass
160	2.20	9.20	6.19	62.06	62.00	Pass
161	2.20	9.16	6.29	62.18	62.02	Pass
162	2.19	9.32	6.25	61.98	62.10	Pass
163	2.62	9.21	6.17	61.96	61.98	Pass
164	2.05	9.37	5.98	61.99	62.15	Pass
165	2.09	9.14	5.89	62.14	62.12	Pass
166	2.14	9.28	6.47	62.19	61.99	Pass
167	2.16	9.39	5.91	61.92	62.13	Pass
168	2.31	9.07	5.93	61.99	62.05	Pass
169	2.11	9.33	5.99	62.13	61.91	Pass
170	2.23	9.42	6.10	61.94	61.90	Pass
171	2.14	9.38	6.28	62.13	62.19	Pass
172	2.16	9.54	5.92	62.25	62.10	Pass
173	2.12	9.18	5.93	61.92	62.11	Pass
174	2.19	9.54	6.49	61.99	62.03	Pass
175	2.20	9.29	6.13	61.92	61.92	Pass
176	2.06	9.04	5.99	61.96	61.99	Pass
177	2.07	9.43	5.92	62.16	62.15	Pass
178	2.29	9.26	5.87	62.31	62.21	Pass
179	2.11	9.29	6.07	61.94	62.11	Pass
180	2.17	9.38	6.40	62.11	62.24	Pass
181	2.07	9.37	6.36	62.03	62.19	Pass
182	2.19	9.19	6.07	62.30	62.23	Pass
183	2.10	9.49	5.89	62.11	62.03	Pass
184	2.13	9.40	5.92	61.99	62.05	Pass
185	2.03	9.69	5.89	62.02	62.15	Pass
186	2.07	9.57	6.02	62.04	61.99	Pass
187	2.11	9.03	5.97	62.26	62.30	Pass

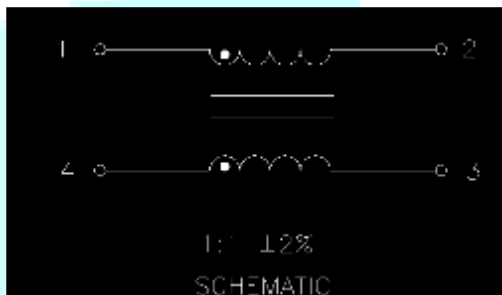
188	2.51	8.97	5.92	61.93	62.21	Pass
189	2.03	9.71	5.85	62.21	62.19	Pass
190	2.48	9.07	5.97	62.00	61.96	Pass
191	2.24	9.22	5.93	61.90	62.00	Pass
192	2.13	9.34	6.30	62.21	62.40	Pass
193	2.20	9.44	6.34	62.21	61.97	Pass
194	2.59	9.22	6.56	62.09	62.20	Pass
195	2.47	9.26	6.45	62.02	62.03	Pass
196	2.23	9.18	5.92	62.20	62.32	Pass
197	2.14	8.96	5.99	61.99	62.13	Pass
198	2.15	9.42	6.23	62.24	62.24	Pass
199	2.32	9.39	6.33	62.00	62.13	Pass
200	2.65	9.26	6.18	62.33	62.12	Pass
201	2.54	8.96	5.97	61.99	62.01	Pass
202	2.57	9.11	6.12	62.20	61.98	Pass
203	2.13	9.06	6.14	62.03	62.23	Pass
204	2.08	9.40	6.24	62.96	63.00	Pass
205	2.20	9.48	6.29	62.90	61.99	Pass
206	2.19	9.01	6.24	62.03	62.00	Pass
207	2.32	9.40	5.91	61.80	61.99	Pass
208	2.51	9.40	5.98	62.13	62.31	Pass
209	2.07	9.41	6.25	62.98	63.00	Pass
210	2.16	9.07	6.25	62.01	61.93	Pass
211	2.10	9.19	5.97	62.02	62.25	Pass
212	2.51	9.18	6.49	62.09	61.95	Pass
213	2.11	9.08	5.96	62.09	62.21	Pass
214	2.06	9.06	6.22	61.90	62.11	Pass
215	2.13	9.18	6.03	61.93	61.88	Pass
216	2.10	9.20	6.56	61.97	61.85	Pass
217	2.09	9.59	5.94	62.04	62.11	Pass
218	2.16	9.16	6.34	62.00	61.98	Pass
219	2.15	9.16	5.94	62.32	62.02	Pass
220	2.19	8.79	5.99	62.29	61.96	Pass
221	2.12	9.30	6.29	61.89	62.03	Pass
222	2.46	8.89	5.99	62.09	62.07	Pass
223	2.11	9.18	6.17	62.52	62.92	Pass
224	2.54	9.31	5.94	61.94	61.93	Pass
225	2.08	9.16	6.57	62.09	62.13	Pass
226	2.10	9.32	5.87	62.04	62.21	Pass
227	2.39	9.27	6.25	62.25	62.08	Pass
228	2.53	9.26	6.31	62.14	61.99	Pass
229	2.47	9.36	5.93	62.03	62.16	Pass
230	2.06	9.24	6.59	62.19	62.11	Pass
231	2.11	9.41	6.08	62.00	62.04	Pass

Report 4: Operational Life

Sample quantity:	77 pcs		
Sample No. / Test No.:	# 232 ~ # 308		
External visual examination before test:	Yes ☒ No ☐		
Packing status:	Yes ☒ No ☐		
Test Equipment:			
<u>Type</u>	<u>Model</u>	<u>Serial No.</u>	<u>Calibration valid Date to</u>
Precision High Temperature Chamber	APO-120	CDC-TL-009	3/4/2026
DC Power	2220-30-1	CDC-TL-022	3/4/2026
OCL Tester	4284A	CDC-TL-016	7/4/2026
DCR tester	4150ATC	CDC-TL-017	3/4/2026
Hi-Pot Tester	TOS 5051A	CDC-TL-018	7/4/2026
Laboratory environment:			
<u>Type</u>	<u>Temperature range requirement</u>	<u>Relative humidity range requirement</u>	<u>Actual Reading</u>
Environmental testing laboratory	15.0 °C ~ 35.0 °C	20.0 % ~ 80.0 %	25.8 °C/60.5 %
Electrical testing laboratory	20.0 °C ~ 30.0 °C	30.0 % ~ 60.0 %	25.1 °C/55.9 %

Test Result:

No.	Test Item	Test Standard	Test Conclusion
1	Operational Life	MIL-STD-202H-2015 method 108	Pass
Note: Pass: meet testing requirement. Failed: don't meet testing requirement;			

Test Item	Operation Life
Test Procedure:	
1.0 Test preparation	1.1 Number the test specimens for identification
	1.2 Implement pre-measurement
	1.3 All pre-measurement for electrical characteristic and visual inspection shall be recorded for the specimens.
	1.4 Solder the test specimens on the PCB board (1.6mm thick).
2.0 Test set-up	2.1 Put the PCB board with test specimens into chamber.
	2.2 1000 hours 125°C (Chamber Temp) with 2.5A DC Between Pin1 and Pin4 with Pin2 and Pin3 shorted under the following rating loading: 
	2.3 Set the temperature of chamber at operating temperature: 125°C
	2.4 When chamber ramp up to the rated operating temperature, then set dwell time with 1000 hours.
3.0 Test validation	3.1 Take the test specimens out from chamber after finished 1000 hours test.
	3.2 Put the test specimens at the room temperature and finalize final measurement at 24+/-4 hours.
	3.3 All final measurement for electrical characteristics and visual inspection shall be recorded for the specimens. The measurement results shall comply with all electrical requirements in its specification.
	3.4 Prepare the qualification report.
4.0 Measurement Criteria	4.1 Final electrical parameters measurement per the product specification;
	4.2 No crack and visual inspection is eligible;
5.0 Test Result	5.1 The electrical parameters and visual inspection Pass

6.0 Test figures

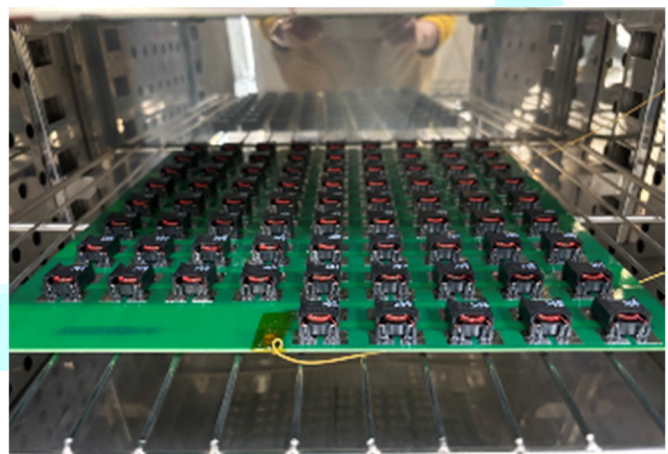
Fig. 1 Test equipment (@105°C)



Fig. 2 Testing in DC power



Fig. 3 Samples in equipment



7.0 Test data

P/N	Initial test data	Final test data
PM53912NLT	OK	OK

Note: Detailed test data refer to tables below for initial and after

Operational Life Test Data: Initial Test Data

	PM53912NLT Initial test data					
DRAWING VERSION:	P2					
SAMPLE SIZE:	77					
DATE:	12/22/25					
REMARK:						
PARAMETER:	OCL	LL	CW	DCR	DCR	Hipot
CONDITION:	20KHz 30mV	100KHz 100mV	100KHz 100mV			1500VAC 1mA 60S
PIN NO.:	(1-2)	(1-2) with (3-4) shorted	(1,2-3,4)	(1-2)	(3-4)	(1,2) to (3,4)
UNIT:	mH	uH	pF	mohms	mohms	
MAX SPEC.:			11.00	80.00	80.00	
MIN SPEC.:	1.80	5.50				
AVERAGE =	2.4780	9.3095	5.9192	61.9729	62.0206	
STD DEV =	0.0706	0.1925	0.1523	0.2823	0.2430	
MAX =	2.673	9.832	6.292	62.801	62.649	
MIN =	2.340	8.939	5.673	61.515	61.523	
DATA	-	-	-	-	-	-
232	2.47	9.46	5.83	61.92	62.36	Pass
233	2.42	9.16	5.79	62.46	61.88	Pass
234	2.53	9.09	5.97	62.06	62.37	Pass
235	2.46	9.20	5.92	61.74	61.96	Pass
236	2.49	9.44	5.94	61.79	62.10	Pass
237	2.41	9.54	6.12	61.86	62.15	Pass
238	2.54	9.48	5.83	62.00	61.61	Pass
239	2.56	9.07	5.70	61.88	61.66	Pass
240	2.57	9.22	5.97	61.86	62.03	Pass
241	2.63	9.24	5.74	61.67	62.48	Pass
242	2.41	9.27	5.82	61.67	62.04	Pass
243	2.53	9.51	5.77	62.09	61.85	Pass
244	2.43	9.08	5.70	61.57	61.62	Pass
245	2.50	9.18	5.85	62.50	62.01	Pass
246	2.49	9.20	6.04	62.41	62.28	Pass
247	2.51	9.38	6.16	61.61	62.13	Pass
248	2.51	9.83	6.28	62.22	62.03	Pass
249	2.53	9.08	5.90	62.02	62.04	Pass
250	2.53	9.49	5.72	61.52	61.52	Pass
251	2.55	9.67	5.82	61.85	62.16	Pass
252	2.38	9.33	5.85	61.86	62.13	Pass
253	2.51	8.99	5.94	62.09	62.10	Pass
254	2.61	9.20	5.76	61.94	61.61	Pass
255	2.53	9.39	5.83	61.62	61.63	Pass
256	2.44	9.04	5.89	62.31	62.18	Pass
257	2.47	9.51	5.67	62.19	61.88	Pass
258	2.42	9.25	6.05	61.70	61.66	Pass
259	2.45	9.31	6.00	62.20	61.66	Pass
260	2.49	9.41	5.86	62.12	61.72	Pass
261	2.45	9.41	6.18	62.30	62.00	Pass
262	2.42	9.41	6.14	61.82	62.26	Pass
263	2.45	9.44	5.77	62.03	61.98	Pass
264	2.46	9.27	5.83	61.73	62.01	Pass

265	2.43	9.30	5.70	62.20	62.41	Pass
266	2.34	9.04	5.81	62.05	62.47	Pass
267	2.40	9.44	5.90	62.09	62.06	Pass
268	2.56	9.43	5.91	62.34	61.81	Pass
269	2.37	9.37	5.82	61.68	62.10	Pass
270	2.37	9.13	5.84	62.15	62.24	Pass
271	2.42	9.46	6.15	62.49	61.74	Pass
272	2.49	9.52	6.19	62.22	62.01	Pass
273	2.64	9.28	6.04	61.60	62.03	Pass
274	2.50	9.22	6.10	61.56	62.02	Pass
275	2.45	9.24	5.88	61.71	61.57	Pass
276	2.59	9.01	5.80	62.16	61.62	Pass
277	2.46	9.58	5.98	62.21	62.27	Pass
278	2.36	9.71	5.87	62.11	62.06	Pass
279	2.36	9.54	5.97	62.18	62.04	Pass
280	2.38	9.60	5.81	61.64	62.24	Pass
281	2.57	9.09	5.79	62.32	61.65	Pass
282	2.55	8.99	5.74	62.39	61.68	Pass
283	2.67	9.43	6.00	61.81	62.65	Pass
284	2.49	9.30	5.89	61.63	61.71	Pass
285	2.42	9.18	6.17	61.75	62.06	Pass
286	2.52	9.57	5.86	62.15	62.44	Pass
287	2.37	9.48	6.02	62.09	62.18	Pass
288	2.45	9.47	6.20	62.26	62.05	Pass
289	2.48	9.13	5.69	61.54	61.96	Pass
290	2.38	9.00	6.07	62.09	62.24	Pass
291	2.43	9.27	6.29	62.09	61.85	Pass
292	2.47	9.25	6.01	62.15	62.06	Pass
293	2.44	8.99	5.84	61.54	61.91	Pass
294	2.42	9.48	5.86	62.04	62.16	Pass
295	2.44	9.62	5.76	62.19	62.16	Pass
296	2.49	9.17	5.85	62.20	62.19	Pass
297	2.47	9.40	5.79	62.13	62.08	Pass
298	2.41	9.34	5.75	61.72	62.18	Pass
299	2.58	9.11	5.82	61.72	62.26	Pass
300	2.53	9.14	5.96	61.66	61.87	Pass
301	2.53	9.30	5.87	61.54	62.13	Pass
302	2.47	9.31	6.07	62.21	62.06	Pass
303	2.53	9.43	5.88	62.80	62.11	Pass
304	2.46	9.39	6.14	61.78	62.02	Pass
305	2.54	9.26	5.76	61.91	62.26	Pass
306	2.57	9.34	6.03	61.76	62.22	Pass
307	2.42	8.94	6.17	61.60	61.82	Pass
308	2.51	9.03	6.10	61.90	61.88	Pass

Operational Life Test Data: Final Test Data

PM53912NLT after high temperature operating life test data						
DRAWING VERSION:	P2					
SAMPLE SIZE:	77					
DATE:	02/04/26					
REMARK:						
PARAMETER:	OCL	LL	CW	DCR	DCR	Hipot
CONDITION:	20KHz 30mV	100KHz 100mV	100KHz 100mV			1500VAC 1mA 60S
PIN NO.:	(1-2)	(1-2) with (3-4) shorted	(1,2-3,4)	(1-2)	(3-4)	(1,2) to (3,4)
UNIT:	mH	uH	pF	mohms	mohms	
MAX SPEC.:			11.00	80.00	80.00	
MIN SPEC.:	1.80	5.50				
AVERAGE =	2.3135	9.2981	6.2246	62.0893	62.0369	
STD DEV =	0.1394	0.1937	0.2275	0.1841	0.1040	
MAX =	2.603	9.827	6.596	62.909	62.261	
MIN =	2.075	8.928	5.735	61.893	61.859	
DATA	-	-	-	-	-	-
232	2.49	9.44	6.27	61.97	62.01	Pass
233	2.20	9.17	6.48	62.10	62.15	Pass
234	2.51	9.10	6.28	62.00	61.97	Pass
235	2.31	9.21	6.24	62.04	62.04	Pass
236	2.43	9.39	6.29	62.02	61.99	Pass
237	2.24	9.53	6.18	62.08	62.00	Pass
238	2.37	9.48	6.25	61.90	61.90	Pass
239	2.38	9.06	5.94	62.13	61.90	Pass
240	2.31	9.22	6.14	62.03	62.11	Pass
241	2.38	9.23	6.46	61.97	61.96	Pass
242	2.22	9.25	6.58	61.90	62.01	Pass
243	2.53	9.52	6.38	62.12	62.02	Pass
244	2.20	9.06	6.29	62.03	61.97	Pass
245	2.26	9.18	6.54	62.02	62.03	Pass
246	2.24	9.20	6.19	61.91	61.98	Pass
247	2.56	9.38	6.27	62.12	61.91	Pass
248	2.29	9.83	6.46	62.13	62.01	Pass
249	2.40	9.07	6.42	62.04	62.03	Pass
250	2.28	9.47	5.90	61.96	62.03	Pass
251	2.33	9.65	6.13	62.33	62.03	Pass
252	2.16	9.32	6.36	62.12	62.10	Pass
253	2.30	8.98	6.22	62.00	61.98	Pass
254	2.43	9.19	6.39	62.12	61.98	Pass
255	2.34	9.38	5.95	62.08	61.94	Pass
256	2.20	9.07	5.83	61.96	62.10	Pass
257	2.25	9.51	6.14	62.08	61.96	Pass
258	2.17	9.23	5.83	62.01	61.90	Pass
259	2.20	9.29	6.37	62.19	62.23	Pass
260	2.22	9.40	6.49	62.26	62.16	Pass
261	2.17	9.40	5.99	61.97	62.17	Pass
262	2.17	9.39	6.40	62.13	61.97	Pass
263	2.50	9.44	6.48	61.91	62.14	Pass
264	2.24	9.28	6.21	62.10	62.15	Pass

265	2.18	9.29	6.21	62.03	61.91	Pass
266	2.08	9.02	6.18	62.24	61.96	Pass
267	2.11	9.43	5.98	62.10	61.99	Pass
268	2.32	9.43	6.06	62.12	62.12	Pass
269	2.17	9.37	6.16	62.20	62.00	Pass
270	2.09	9.12	5.92	62.39	61.93	Pass
271	2.48	9.47	5.91	61.99	62.20	Pass
272	2.23	9.47	6.50	62.13	61.98	Pass
273	2.36	9.26	6.07	61.99	61.94	Pass
274	2.46	9.21	6.44	62.32	62.25	Pass
275	2.50	9.22	5.95	62.17	61.98	Pass
276	2.27	8.99	5.99	61.91	62.18	Pass
277	2.19	9.56	5.93	62.37	62.23	Pass
278	2.11	9.74	5.85	62.01	62.03	Pass
279	2.08	9.53	6.40	61.99	62.12	Pass
280	2.51	9.58	6.33	62.00	61.97	Pass
281	2.56	9.09	5.90	62.06	62.02	Pass
282	2.24	8.97	6.20	61.98	62.04	Pass
283	2.48	9.42	6.23	62.14	61.92	Pass
284	2.17	9.29	6.51	62.21	61.90	Pass
285	2.54	9.18	6.48	62.04	61.99	Pass
286	2.20	9.57	6.39	62.09	61.98	Pass
287	2.47	9.47	6.31	61.93	62.06	Pass
288	2.20	9.45	6.42	62.30	62.05	Pass
289	2.37	9.10	5.99	61.96	62.02	Pass
290	2.49	8.98	5.85	61.90	62.03	Pass
291	2.24	9.25	5.98	61.97	61.93	Pass
292	2.46	9.23	6.44	62.40	61.86	Pass
293	2.14	8.97	6.54	61.89	62.25	Pass
294	2.41	9.46	5.74	62.26	62.19	Pass
295	2.25	9.61	6.60	62.91	61.90	Pass
296	2.21	9.16	5.85	61.89	62.22	Pass
297	2.19	9.38	6.49	62.30	61.91	Pass
298	2.47	9.34	6.04	61.99	62.00	Pass
299	2.34	9.08	5.89	62.02	62.10	Pass
300	2.28	9.14	6.42	61.96	62.26	Pass
301	2.26	9.30	6.51	61.94	62.00	Pass
302	2.60	9.29	6.31	61.93	62.02	Pass
303	2.21	9.40	6.18	61.97	62.10	Pass
304	2.18	9.40	6.48	62.19	62.24	Pass
305	2.48	9.24	6.33	62.03	62.22	Pass
306	2.22	9.28	6.50	61.91	62.13	Pass
307	2.49	8.93	6.43	62.90	61.89	Pass
308	2.56	9.01	6.10	62.17	62.02	Pass

Report 5: Physical Dimension & External Visual

Sample quantity:	30 pcs		
Sample No. / Test No.:	# 309 ~ # 338		
External visual examination before test:	Yes ☒ No ☐		
Packing status:	Yes ☒ No ☐		
Test Equipment:			
<u>Type</u>	<u>Model</u>	<u>Serial No.</u>	<u>Calibration valid Date to</u>
Caliper	CD-6'CSX	CDC-TL-015	3/4/2026
High-Definition Microscope	OP-VM-AF	CDC-TL-041	N/A
Laboratory environment:			
<u>Type</u>	<u>Temperature range requirement</u>	<u>Relative humidity range requirement</u>	<u>Actual Reading</u>
Environmental testing laboratory	15.0 °C ~ 35.0 °C	20.0 % ~ 80.0 %	NA
Electrical testing laboratory	20.0 °C ~ 30.0 °C	30.0 % ~ 60.0 %	25.1 °C/55.9 %

Test Result:

No.	Test Item	Test Standard	Test Conclusion
1	Physical Dimension	JESD22-B100B-2003(R2016)	Pass
2	External Visual	MIL-STD-883L-2019 Method 2009.12	Pass
Note: Pass: meet testing requirement. Failed: don't meet testing requirement;			

Test Item	Physical Dimension & External Visual
Test Procedure:	
1.0 Test preparation	1.1 Number the test specimens for identification
2.0 Test set-up	2.1 Measure physical dimensions by utilizing appropriate measurement tools according to the related specification at the room temperature. Electrical Test is not required.
	2.2 All measurement should be recorded for the specimens.
	2.3 Inspect specimen marking, plastic, pin and soldering with related equipment according to the applicable specification and criteria listed in item 1 of this procedure, however, acceptable specimen must be capable of passing all criteria when examined at 10X magnification. Electrical Test is not required.
3.0 Test validation	3.1 Any specimen that exhibits a dimension or dimensions not in conformance with limits of the drawings or the requirements of the specification shall be considered to failure.
	3.2 Specimens shall be considered to fail if they exhibit any of the following:
	3.2.1 Specimen lead (identification and integrity), plastic, markings (contents, placement and legibility), and soldering are not in accordance with the applicable specification.
	3.2.2 Visible evidence of any nonconformance with the detailed drawing or applicable specification, absence of any required feature, or evidence of damage, corrosion and contamination which will interfere with the normal application of the specimen.
	3.3 Prepare the qualification report.
4.0 Measurement Criteria	4.1 Outline dimensional measurement per the product specification;
	4.2 No crack and visual inspection is eligible;
5.0 Test Result	5.1 The physical Dimension and visual inspection pass

6.0 Test figures

Fig. 1 Construction and Qualification

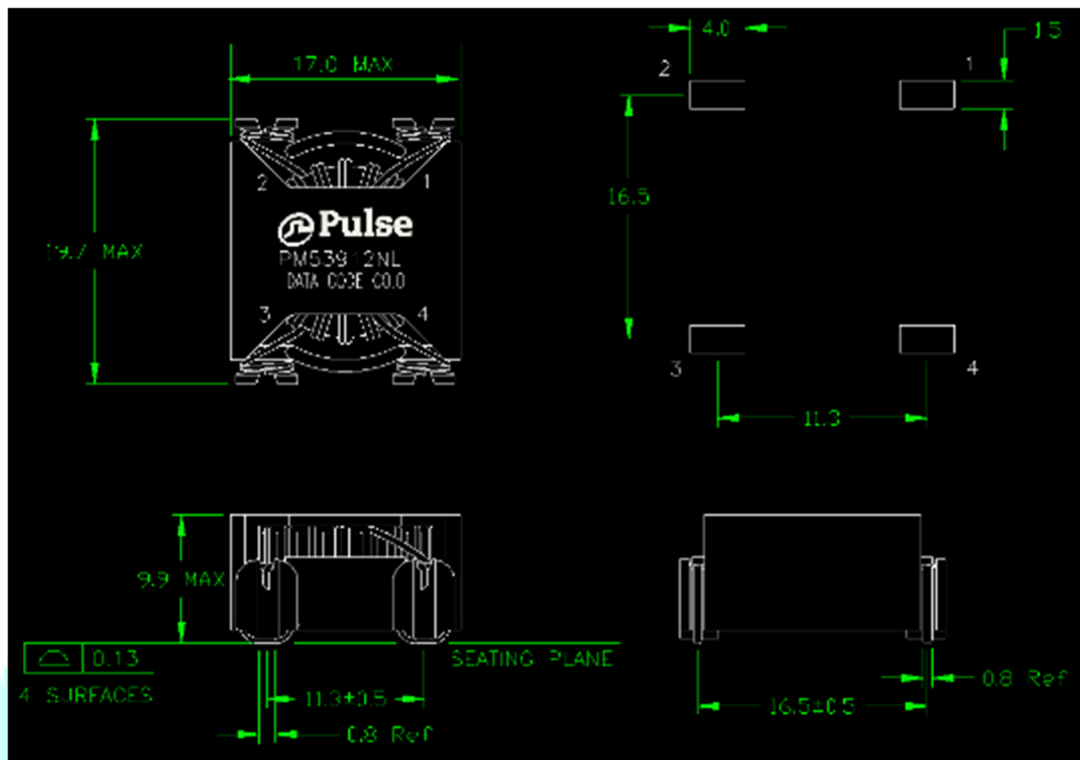
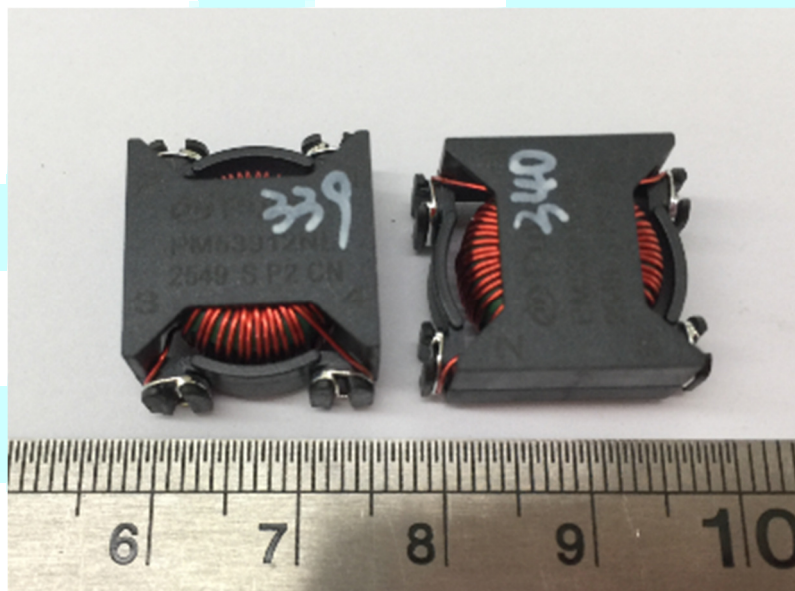


Fig. 2 Physical sample



7.0 Test data

P/N	Length	Width	Height	External Visual
PM53912NLT	OK	OK	OK	OK
Note: Detailed test data refer to tables below for outline dimensional				

Physical Dimension Test Data

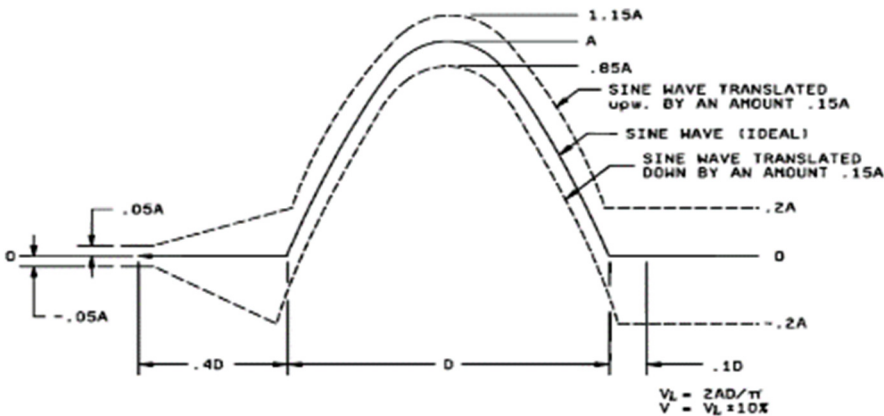
PM53912NLT physical dimension test data				
DRAWING VERSION:	P2			
SAMPLE SIZE:	30			
DATE:	01/21/26			
REMARK:				
PARAMETER:	A	B	C	E
UNIT:	mm	mm	mm	mm
MAX SPEC.:	17.00	19.70	9.90	0.13
MIN SPEC.:				
AVERAGE =	16.6717	19.1127	9.2517	
STD DEV =	0.0458	0.0129	0.0179	
MAX =	16.760	19.140	9.290	
MIN =	16.590	19.090	9.210	
DATA	-	-	-	-
309	16.72	19.12	9.23	Pass
310	16.66	19.12	9.27	Pass
311	16.64	19.11	9.25	Pass
312	16.65	19.10	9.24	Pass
313	16.67	19.12	9.25	Pass
314	16.63	19.09	9.25	Pass
315	16.64	19.11	9.23	Pass
316	16.76	19.13	9.29	Pass
317	16.69	19.12	9.25	Pass
318	16.66	19.14	9.25	Pass
319	16.73	19.11	9.24	Pass
320	16.61	19.12	9.26	Pass
321	16.66	19.12	9.24	Pass
322	16.75	19.12	9.27	Pass
323	16.71	19.12	9.26	Pass
324	16.72	19.10	9.23	Pass
325	16.76	19.11	9.25	Pass
326	16.63	19.10	9.26	Pass
327	16.67	19.11	9.24	Pass
328	16.69	19.10	9.28	Pass
329	16.60	19.10	9.21	Pass
330	16.62	19.12	9.27	Pass
331	16.59	19.10	9.27	Pass
332	16.70	19.11	9.26	Pass
333	16.64	19.12	9.26	Pass
334	16.66	19.14	9.28	Pass
335	16.65	19.09	9.24	Pass
336	16.71	19.10	9.22	Pass
337	16.63	19.13	9.25	Pass
338	16.70	19.10	9.25	Pass

Report 6: Mechanical Shock

Sample quantity:	30 pcs		
Sample No. / Test No.:	369# ~ 398#		
External visual examination before test:	Yes ☒ No ☐		
Packing status:	Yes ☒ No ☐		
Test Equipment:			
<u>Type</u>	<u>Model</u>	<u>Serial No.</u>	<u>Calibration valid Date to</u>
Mechanical Shock Machine	ASKT-10	CDC-TL-011	3/4/2026
OCL Tester	4284A	CDC-TL-016	7/4/2026
DCR tester	4150ATC	CDC-TL-017	3/4/2026
Hi-Pot Tester	TOS 5051A	CDC-TL-018	7/4/2026
High-Definition Microscope	OP-VM-AF	CDC-TL-041	N/A
Laboratory environment:			
<u>Type</u>	<u>Temperature range requirement</u>	<u>Relative humidity range requirement</u>	<u>Actual Reading</u>
Environmental testing laboratory	15.0 °C ~ 35.0 °C	20.0 % ~ 80.0 %	25.8 °C/60.5 %
Electrical testing laboratory	20.0 °C ~ 30.0 °C	30.0 % ~ 60.0 %	25.1 °C/55.9 %

Test Result:

No.	Test Item	Test Standard	Test Conclusion
1	Mechanical Shock	MIL-STD-202H-2015 Method 213	Pass
Note: Pass: meet testing requirement. Failed: don't meet testing requirement;			

Test Item	Mechanical Shock							
Test Procedure:								
1.0 Test preparation	1.1 Number the test specimens for identification							
	1.2 Implement pre-measurement							
	1.3 All pre-measurement for electrical characteristic and visual inspection shall be recorded for the specimens.							
	1.4 Solder the test specimen on the PCB board distributed uniformly.							
2.0 Test set-up	2.1 Fix the PCB to the test platform of the mechanical shock machine.							
	2.2 Set the machine according to the following value: Table 213-1 test condition C <table><tr><td>Peak value (g's)</td><td>Normal duration (D) (ms)</td><td>Waveform</td><td>Velocity change (Vi) ft/sec</td></tr><tr><td>100</td><td>6</td><td>Half-sine</td><td>12.3</td></tr></table> Three shocks in each direction shall be applied along the three mutually perpendicular axes of the test specimen (18 shocks). The shock machine utilized shall be capable of producing the specified input shock pulse as shown on figure 1. 	Peak value (g's)	Normal duration (D) (ms)	Waveform	Velocity change (Vi) ft/sec	100	6	Half-sine
Peak value (g's)	Normal duration (D) (ms)	Waveform	Velocity change (Vi) ft/sec					
100	6	Half-sine	12.3					
3.0 Test validation	3.1 Cracking or specimen being sheared off from the PCB is considered to be failed.							
	3.2 Check the specimens whether there is damage with a magnification of 10X or greater. Visible evidence of any nonconformance with the detailed drawing or applicable specification, absence of any required feature can be considered failure							
	3.3 All final measurement electrical characteristic and visual inspection shall be recorded for the specimens. The measurement results shall comply with all electrical requirements in its specification.							
	3.4 Prepare the qualification report.							
4.0 Measurement Criteria	4.1 Final electrical parameters measurement per the product specification;							
	4.2 No crack and visual inspection is eligible;							
5.0 Test Result	5.1 The electrical parameters and visual inspection pass							

6.0 Test figures

Fig. 1 Mechanical shock Machine



Fig. 2 Mechanical Shock Test (X axis)

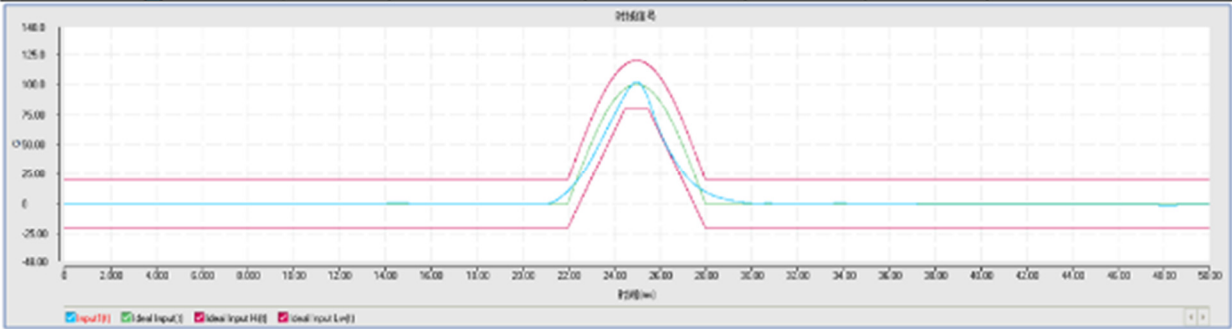


Fig. 3 Mechanical Shock Test Curve (X axis)

ECON

PM53912NL X Axis
时域分析

名称	加速度(G)	脉宽(ms)	速度变化量(Ft/s)	低通滤波(Hz)	最大值(G)	最小值(G)	状态描述
Ideal Input(t)	100.00	6.00	12.28	--	100.00	0.00	
Input1(t)	101.88	5.99	10.34	833.33	101.88	-1.63	速度变化量小于标准



总帧数:6 当前帧数:6

测试时间:2026-01-08 08:45:02 报告时间:2026-01-08 08:50:35

Fig. 4 Mechanical Shock Test (Y axis)



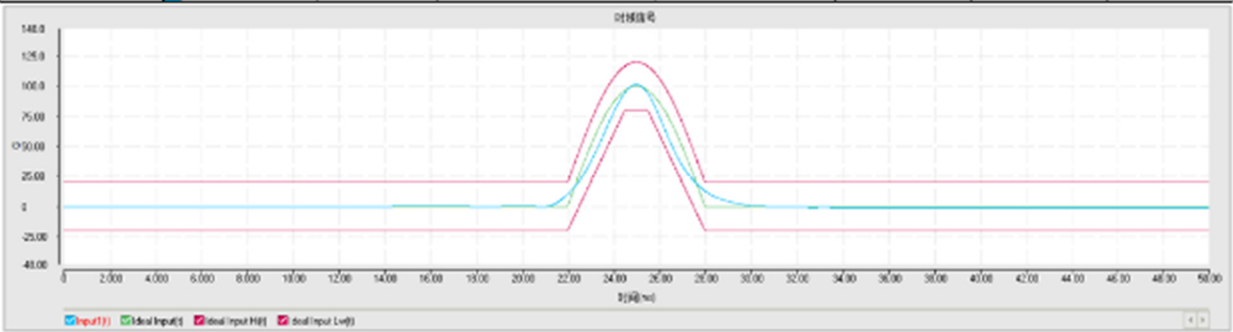
Fig. 5 Mechanical Shock Test Curve (Y axis)

ECON

PM53912NL Y Axis

时域分析

名称	加速度(G)	脉宽(ms)	速度变化量(Ft/s)	低通滤波(Hz)	最大值(G)	最小值(G)	状态描述
Ideal Input(t)	100.00	6.00	12.28	---	100.00	0.00	
Input1(t)	101.36	6.23	11.26	833.33	101.36	-1.17	



总帧数:6 当前帧数:6

测试时间:2026-01-08 09:33:16 报告时间:2026-01-08 09:38:12

Fig. 6 Mechanical Shock Test (Z axis)



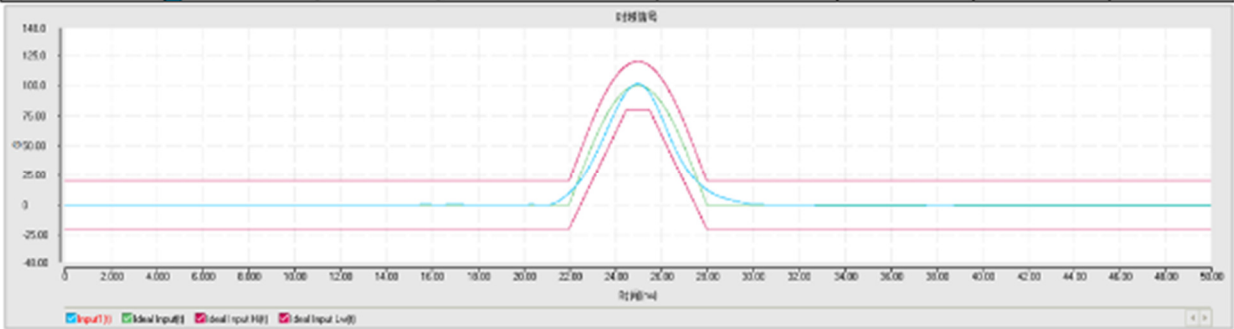
Fig. 7 Mechanical Shock Test Curve (Z axis)

ECON

PM53912NL Z Axis

时域分析

名称	加速度(G)	脉宽(ms)	速度变化量(Ft/s)	低通滤波(Hz)	最大值(G)	最小值(G)	状态描述
Ideal Input(t)	100.00	6.00	12.28	--	100.00	0.00	
Input1(t)	101.34	6.19	11.22	833.33	101.34	-1.24	



总帧数:6 当前帧数:6

测试时间:2026-01-08 09:28:19 报告时间:2026-01-08 09:32:51

7.0 Test data

P/N	Initial test data	Final test data
PM53912NLT	OK	OK
Note: Detailed test data refer to tables below for initial and after		

Mechanical Shock Test Data: Initial Test Data

	PM53912NLT Initial test data					
DRAWING VERSION:	P2					
SAMPLE SIZE:	30					
DATE:	12/22/25					
REMARK:						
PARAMETER:	OCL	LL	CW	DCR	DCR	Hipot
CONDITION:	20KHz 30mV	100KHz 100mV	100KHz 100mV			1500VAC 1mA 60S
PIN NO.:	(1-2)	(1-2) with (3-4) shorted	(1,2-3,4)	(1-2)	(3-4)	(1,2) to (3,4)
UNIT:	mH	uH	pF	mohms	mohms	
MAX SPEC.:			11.00	80.00	80.00	
MIN SPEC.:	1.80	5.50				
AVERAGE =	2.3748	9.4611	5.9913	62.0294	62.0300	
STD DEV =	0.0685	0.1449	0.2767	0.3174	0.2932	
MAX =	2.501	9.796	6.581	62.589	62.483	
MIN =	2.246	9.160	5.521	61.603	61.519	
DATA	-	-	-	-	-	-
369	2.25	9.66	6.16	62.46	61.56	Pass
370	2.38	9.55	5.59	61.84	62.18	Pass
371	2.25	9.23	5.82	62.49	61.70	Pass
372	2.41	9.42	6.07	61.86	61.53	Pass
373	2.44	9.60	5.52	61.60	62.26	Pass
374	2.31	9.45	5.63	61.86	61.60	Pass
375	2.48	9.42	6.07	61.79	62.38	Pass
376	2.46	9.60	6.49	61.98	62.11	Pass
377	2.38	9.54	5.92	61.73	62.48	Pass
378	2.42	9.46	6.17	61.68	61.72	Pass
379	2.44	9.37	6.10	61.94	62.04	Pass
380	2.39	9.43	6.58	62.55	61.90	Pass
381	2.34	9.35	6.26	61.86	62.45	Pass
382	2.34	9.45	6.22	61.74	61.89	Pass
383	2.42	9.20	5.52	62.18	62.06	Pass
384	2.39	9.55	5.96	62.44	62.29	Pass
385	2.32	9.35	6.16	62.40	62.18	Pass
386	2.35	9.34	6.39	61.79	62.24	Pass
387	2.50	9.32	6.20	61.75	61.83	Pass
388	2.40	9.51	5.69	62.00	62.36	Pass
389	2.39	9.56	6.09	62.30	61.81	Pass
390	2.25	9.68	5.55	62.27	61.76	Pass
391	2.38	9.16	5.60	62.59	62.45	Pass
392	2.27	9.80	5.94	61.64	62.08	Pass
393	2.36	9.50	6.17	61.73	62.47	Pass
394	2.47	9.45	5.91	61.78	61.52	Pass
395	2.45	9.60	5.94	61.72	61.82	Pass
396	2.38	9.25	6.02	62.42	62.02	Pass
397	2.30	9.53	6.02	62.01	62.08	Pass
398	2.35	9.53	5.96	62.52	62.13	Pass

Mechanical Shock Test Data: Final Test Data

	PM53912NLT after mechanical shock test data					
DRAWING VERSION:	P2					
SAMPLE SIZE:	30					
DATE:	01/22/26					
REMARK:						
PARAMETER:	OCL	LL	CW	DCR	DCR	Hipot
CONDITION:	20KHz 30mV	100KHz 100mV	100KHz 100mV			1500VAC 1mA 60S
PIN NO.:	(1-2)	(1-2) with (3-4) shorted	(1,2-3,4)	(1-2)	(3-4)	(1,2) to (3,4)
UNIT:	mH	uH	pF	mohms	mohms	
MAX SPEC.:			11.00	80.00	80.00	
MIN SPEC.:	1.80	5.50				
AVERAGE =	2.5092	9.3296	6.0157	62.1180	62.0926	
STD DEV =	0.0713	0.1456	0.1988	0.2452	0.2046	
MAX =	2.648	9.666	6.470	62.863	62.458	
MIN =	2.367	9.045	5.708	61.609	61.651	
DATA	-	-	-	-	-	-
369	2.40	9.52	5.92	61.87	62.08	Pass
370	2.57	9.44	6.10	62.12	61.92	Pass
371	2.37	9.10	6.28	62.08	62.16	Pass
372	2.54	9.28	5.81	62.45	62.22	Pass
373	2.54	9.46	5.86	62.36	61.65	Pass
374	2.43	9.31	5.78	62.15	62.27	Pass
375	2.57	9.30	5.85	61.96	62.45	Pass
376	2.57	9.44	6.03	61.98	62.08	Pass
377	2.55	9.40	5.78	62.38	62.29	Pass
378	2.47	9.32	6.12	62.17	61.96	Pass
379	2.47	9.23	5.80	61.98	62.32	Pass
380	2.43	9.30	6.17	62.02	62.21	Pass
381	2.46	9.21	6.38	61.61	61.85	Pass
382	2.52	9.32	6.09	61.91	61.70	Pass
383	2.60	9.06	6.12	61.97	62.26	Pass
384	2.53	9.41	5.84	62.39	62.12	Pass
385	2.47	9.21	5.71	61.90	61.95	Pass
386	2.48	9.19	6.00	61.97	62.32	Pass
387	2.65	9.18	6.14	62.18	62.03	Pass
388	2.58	9.41	6.47	62.86	62.12	Pass
389	2.57	9.41	6.33	62.32	62.46	Pass
390	2.38	9.55	5.72	61.94	62.17	Pass
391	2.55	9.05	5.81	62.35	62.07	Pass
392	2.42	9.67	6.21	61.88	61.90	Pass
393	2.50	9.36	6.00	61.91	61.93	Pass
394	2.60	9.37	6.15	62.33	62.01	Pass
395	2.62	9.48	6.15	62.37	62.01	Pass
396	2.51	9.12	5.92	61.88	62.22	Pass
397	2.46	9.42	5.93	62.05	61.74	Pass
398	2.48	9.39	6.02	62.19	62.33	Pass

Report 7: Vibration

Sample quantity:	30 pcs		
Sample No. / Test No.:	339# ~ 368#		
External visual examination before test:	Yes ☒ No ☐		
Packing status:	Yes ☒ No ☐		
Test Equipment:			
<u>Type</u>	<u>Model</u>	<u>Serial No.</u>	<u>Calibration valid Date to</u>
Vibration test system	AEV-203	CDC-TL-010	3/4/2026
OCL Tester	4284A	CDC-TL-016	7/4/2026
DCR tester	4150ATC	CDC-TL-017	3/4/2026
Hi-Pot Tester	TOS 5051A	CDC-TL-018	7/4/2026
High-Definition Microscope	OP-VM-AF	CDC-TL-041	N/A
Laboratory environment:			
<u>Type</u>	<u>Temperature range requirement</u>	<u>Relative humidity range requirement</u>	<u>Actual Reading</u>
Environmental testing laboratory	15.0 °C ~ 35.0 °C	20.0 % ~ 80.0 %	25.8 °C / 60.5 %
Electrical testing laboratory	20.0 °C ~ 30.0 °C	30.0 % ~ 60.0 %	25.1 °C / 55.9 %

Test Result:

No.	Test Item	Test Standard	Test Conclusion
1	Vibration	MIL-STD-202H-2015 Method 204	Pass
Note: Pass: meet testing requirement. Failed: don't meet testing requirement;			

Test Item	Vibration			
Test Procedure:				
1.0 Test preparation	1.1 Number the test specimens for identification			
	1.2 Implement pre-measurement			
	1.3 All pre-measurement for electrical characteristic and visual inspection shall be recorded for the specimens.			
	1.4 Solder the test specimen on the PCB board (8''×5'' PCB, 0.031'' thick, FR4) within 2'' from any secure point.7 secure points on one long side and 2 secure points at corners of opposite sides.			
2.0 Test set-up	2.1 Fix the PCB to the test platform of the vibration machine.			
	2.2 Set the machine according to the following value:			
	Peak value (g's)	Traverse time (minutes)	Frequency Range (Hz)	Amplitude
	5	20	10-2000	0.06 inch ±10% double amplitude
12 times in each direction shall be applied along the three mutually perpendicular directions (total of 36 times).				
3.0 Test validation	3.1 Cracking or specimen being sheared off from the PCB is considered to be failed.			
	3.2 Check the specimens whether there is damage with a magnification of 10X or greater. Visible evidence of any nonconformance with the detailed drawing or applicable specification, absence of any required feature can be considered failure			
	3.3 All final measurement electrical characteristic and visual inspection shall be recorded for the specimens. The measurement results shall comply with all electrical requirements in its specification.			
	3.4 Prepare the qualification report.			
4.0 Measurement Criteria	4.1 Final electrical parameters measurement per the product specification;			
	4.2 No crack and visual inspection is eligible;			
5.0 Test Result	5.1 The electrical parameters and visual inspection pass			

6.0 Test figures

Fig. 1 Vibration test system

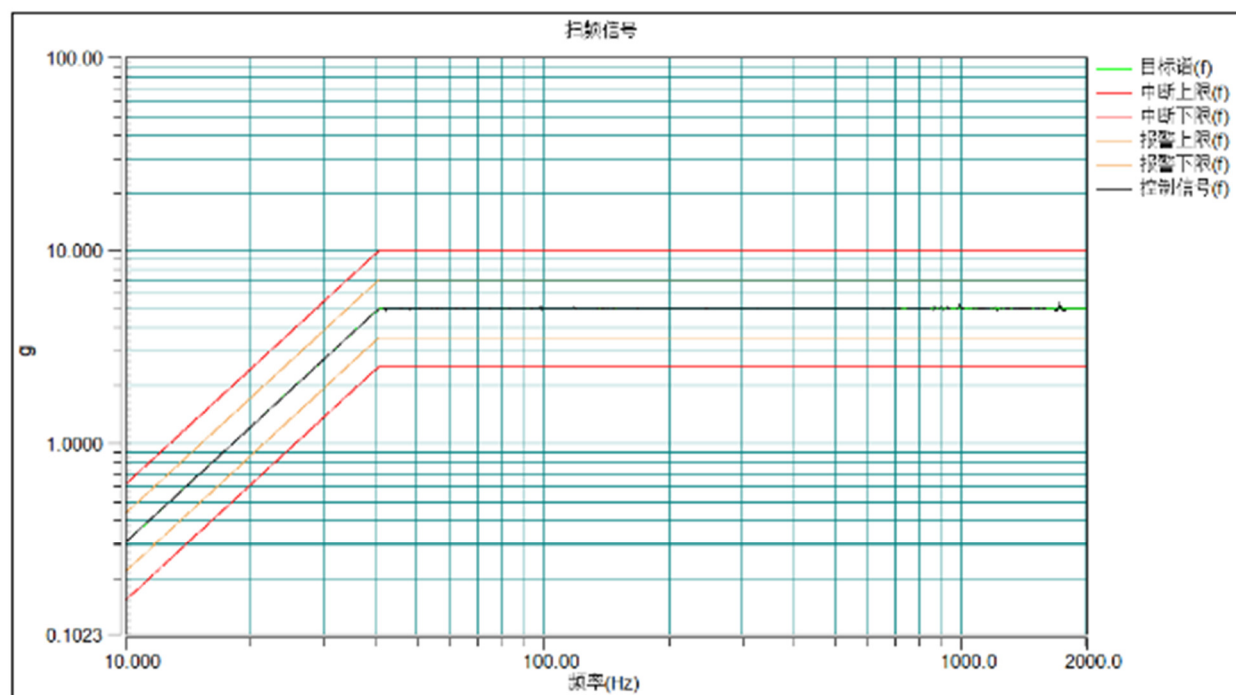


Fig. 2 Vibration Test (X axis)



Fig. 3 Vibration test curve (X axis)

试验名称: PM53912NL X Axis
试验类型: 正弦试验
谱图名:



量级: 100 %
频率: 10.23880 Hz
总运行时间: 04:00:05

目标峰值: 0.32076g
扫频率: 0.764 Oct/Min
剩余时间: 00:00:00

控制峰值: 0.32066g
扫频类型: 对数

数据文件保存时间: 2026-1-10 PM 01:45:06

产生报告的时间: 2026-1-10 PM 01:45:14

Fig. 4 Vibration Test (Y axis)

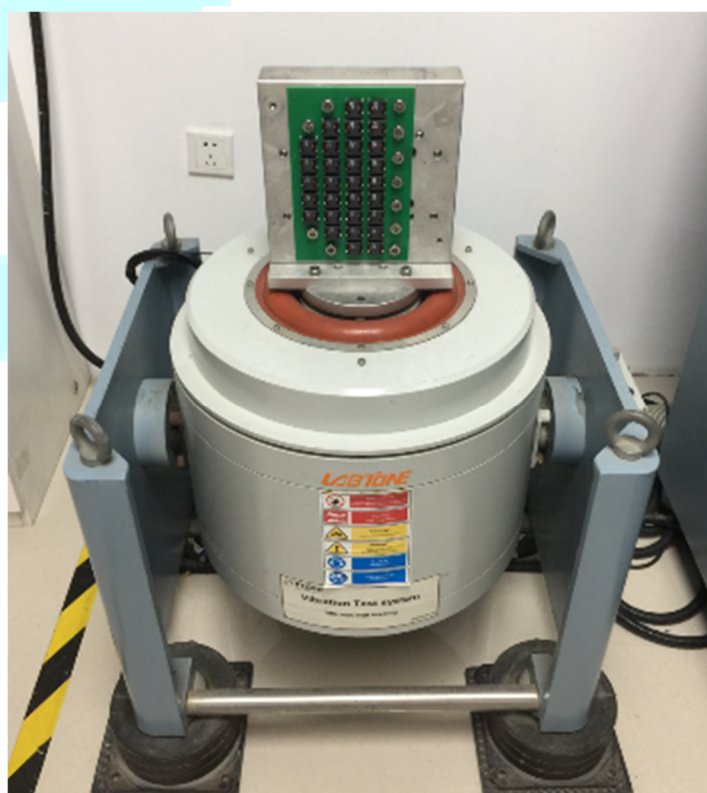
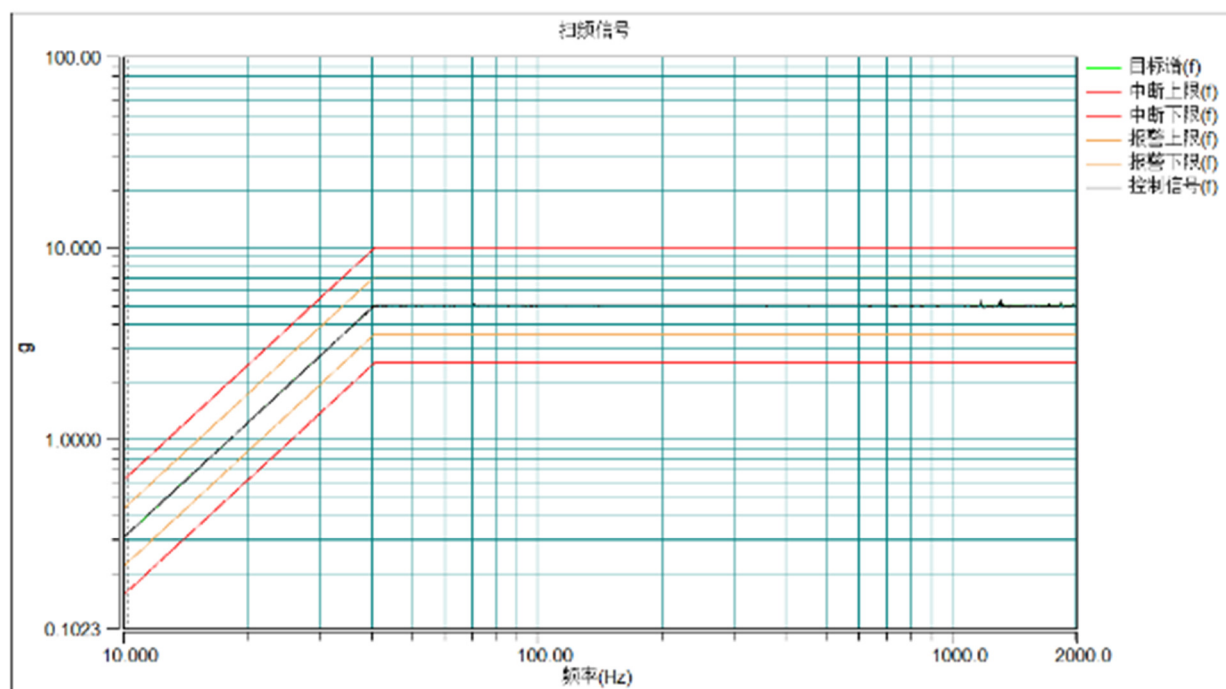


Fig. 5 Vibration test curve (Y axis)

试验名称: PMS3912NL Y Axis
试验类型: 正弦试验
谱图名:



量级: 100 %
频率: 10.23880 Hz
总运行时间: 04:00:05

目标峰值: 0.32076g
扫频率: 0.764 Oct/Min
剩余时间: 00:00:00

控制峰值: 0.32116g
扫频类型: 对数

数据文件保存时间: 2026-1-8 PM 01:51:11

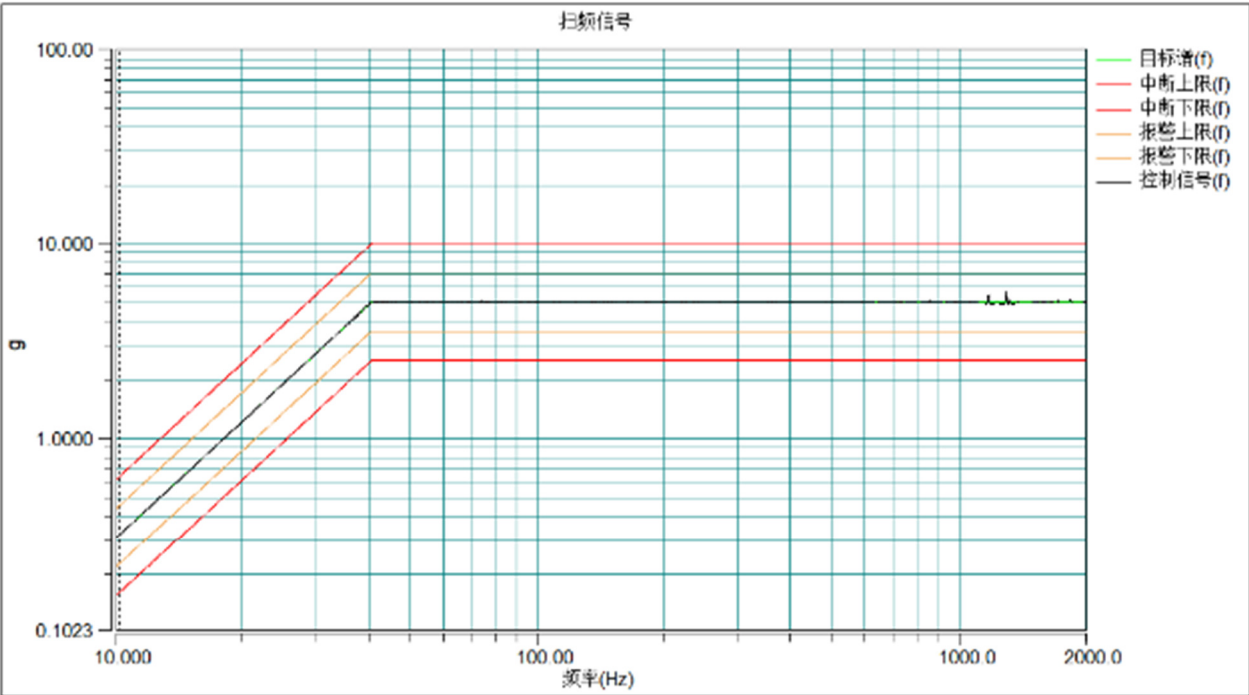
产生报告的时间: 2026-1-8 PM 01:51:19

Fig. 6 Vibration Test (Z axis)



Fig. 7 Vibration test curve (Z axis)

试验名称: PM53912NL Z Axis
试验类型: 正弦试验
谱图名



量级: 100 % 目标峰值: 0.32076g 控制峰值: 0.32030g
频率: 10.23880 Hz 扫频率: 0.764 Oct/Min 扫频类型: 对数
总运行时间: 04:00:05 剩余时间: 00:00:00

数据文件保存时间: 2026-1-8 PM 06:07:07

产生报告的时间: 2026-1-8 PM 06:07:15

7.0 Test data

P/N	Initial test data	Final test data
PM53912NLT	OK	OK
Note: Detailed test data refer to tables below for initial and after		

Vibration Test Data: Initial Test Data

	PM53912NLT Initial test data					
DRAWING VERSION:	P2					
SAMPLE SIZE:	30					
DATE:	12/22/25					
REMARK:						
PARAMETER:	OCL	LL	CW	DCR	DCR	Hipot
CONDITION:	20KHz 30mV	100KHz 100mV	100KHz 100mV			1500VAC 1mA 60S
PIN NO.:	(1-2)	(1-2) with (3-4) shorted	(1,2-3,4)	(1-2)	(3-4)	(1,2) to (3,4)
UNIT:	mH	uH	pF	mohms	mohms	
MAX SPEC.:			11.00	80.00	80.00	
MIN SPEC.:	1.80	5.50				
AVERAGE =	2.3639	9.4813	5.9823	61.9753	61.9534	
STD DEV =	0.0630	0.1620	0.3644	0.3031	0.2495	
MAX =	2.500	9.815	6.771	62.556	62.383	
MIN =	2.248	9.189	5.535	61.503	61.564	
DATA	-	-	-	-	-	-
339	2.38	9.54	5.73	62.00	62.09	Pass
340	2.25	9.44	5.68	62.53	62.37	Pass
341	2.37	9.57	5.54	61.97	61.87	Pass
342	2.30	9.70	5.54	61.80	61.68	Pass
343	2.30	9.66	5.81	61.87	62.38	Pass
344	2.46	9.42	5.63	62.07	61.79	Pass
345	2.36	9.82	5.66	61.83	62.11	Pass
346	2.27	9.23	5.79	62.42	62.19	Pass
347	2.34	9.60	6.07	61.68	61.70	Pass
348	2.33	9.50	5.58	61.59	61.56	Pass
349	2.35	9.58	6.10	61.80	62.02	Pass
350	2.41	9.19	5.83	62.45	62.36	Pass
351	2.50	9.74	5.97	61.65	61.80	Pass
352	2.38	9.47	6.35	61.62	61.71	Pass
353	2.37	9.25	5.69	62.17	61.71	Pass
354	2.30	9.59	6.60	61.83	62.22	Pass
355	2.42	9.42	5.55	62.47	61.65	Pass
356	2.30	9.78	6.36	61.69	61.82	Pass
357	2.34	9.45	6.00	61.97	62.10	Pass
358	2.44	9.52	6.12	61.50	61.87	Pass
359	2.38	9.52	6.51	61.80	61.58	Pass
360	2.29	9.35	5.63	61.86	62.16	Pass
361	2.44	9.59	6.38	61.63	61.56	Pass
362	2.33	9.27	5.83	61.95	62.21	Pass
363	2.45	9.36	6.77	62.38	62.17	Pass
364	2.29	9.32	6.40	61.88	62.22	Pass
365	2.39	9.52	6.10	62.28	62.10	Pass
366	2.45	9.26	5.85	62.56	61.91	Pass
367	2.31	9.36	6.70	62.22	61.79	Pass
368	2.41	9.45	5.71	61.81	61.92	Pass

Vibration Test data: Final Test Data

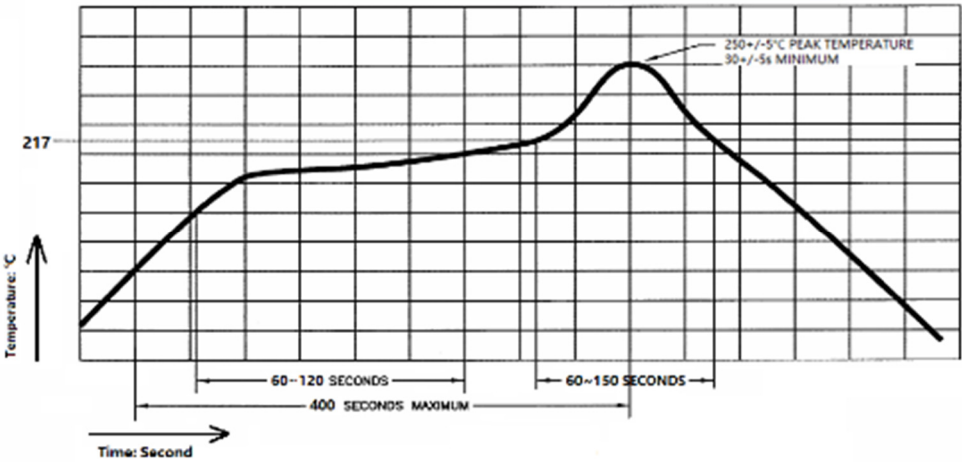
	PM53912NLT after vibration test data					
DRAWING VERSION:	P2					
SAMPLE SIZE:	30					
DATE:	01/22/26					
REMARK:						
PARAMETER:	OCL	LL	CW	DCR	DCR	Hipot
CONDITION:	20KHz 30mV	100KHz 100mV	100KHz 100mV			1500VAC 1mA 60S
PIN NO.:	(1-2)	(1-2) with (3-4) shorted	(1,2-3,4)	(1-2)	(3-4)	(1,2) to (3,4)
UNIT:	mH	uH	pF	mohms	mohms	
MAX SPEC.:			11.00	80.00	80.00	
MIN SPEC.:	1.80	5.50				
AVERAGE =	2.5022	9.3361	5.9770	62.0287	62.1239	
STD DEV =	0.0687	0.1595	0.2076	0.1821	0.1931	
MAX =	2.654	9.647	6.415	62.465	62.932	
MIN =	2.380	9.033	5.564	61.627	61.883	
DATA	-	-	-	-	-	-
339	2.46	9.40	5.97	62.08	62.30	Pass
340	2.38	9.31	6.42	61.86	61.88	Pass
341	2.56	9.42	6.06	61.81	62.27	Pass
342	2.43	9.55	6.12	62.13	62.19	Pass
343	2.42	9.52	5.90	62.07	62.00	Pass
344	2.55	9.28	5.71	62.28	62.08	Pass
345	2.44	9.65	6.10	61.88	61.97	Pass
346	2.40	9.07	6.05	62.05	62.00	Pass
347	2.45	9.44	5.98	62.08	61.93	Pass
348	2.52	9.33	5.94	62.01	62.18	Pass
349	2.51	9.50	6.40	62.35	62.24	Pass
350	2.53	9.03	5.70	61.93	62.10	Pass
351	2.62	9.59	6.02	62.02	61.93	Pass
352	2.49	9.27	5.81	61.84	62.29	Pass
353	2.51	9.16	5.83	62.05	61.97	Pass
354	2.43	9.43	6.05	62.12	62.07	Pass
355	2.58	9.27	5.95	61.95	62.16	Pass
356	2.44	9.63	6.22	62.47	62.11	Pass
357	2.48	9.29	5.86	62.16	62.24	Pass
358	2.51	9.37	5.93	61.66	62.22	Pass
359	2.58	9.37	5.56	62.08	62.03	Pass
360	2.46	9.21	5.82	61.90	61.95	Pass
361	2.56	9.45	5.95	61.87	62.12	Pass
362	2.49	9.13	5.99	61.63	62.09	Pass
363	2.61	9.22	5.86	62.03	61.93	Pass
364	2.44	9.18	6.33	62.00	62.93	Pass
365	2.54	9.38	5.65	62.30	62.12	Pass
366	2.65	9.12	5.92	62.13	62.32	Pass
367	2.45	9.22	6.35	62.00	62.06	Pass
368	2.58	9.30	5.87	62.16	62.07	Pass

Report 8: Resistance to Soldering Heat

Sample quantity:	30 pcs		
Sample No. / Test No.:	# 399 ~ # 428		
External visual examination before test:	Yes ☒ No ☐		
Packing status:	Yes ☒ No ☐		
Test Equipment:			
<u>Type</u>	<u>Model</u>	<u>Serial No.</u>	<u>Calibration valid Date to</u>
Reflow Oven	SM-PC-8810	CDC-TL-042	7/4/2026
OCL Tester	4284A	CDC-TL-016	7/4/2026
DCR tester	4150ATC	CDC-TL-017	3/4/2026
Hi-Pot Tester	TOS 5051A	CDC-TL-018	7/4/2026
High-Definition Microscope	OP-VM-AF	CDC-TL-041	N/A
Laboratory environment:			
<u>Type</u>	<u>Temperature range requirement</u>	<u>Relative humidity range requirement</u>	<u>Actual Reading</u>
Environmental testing laboratory	15.0 °C ~ 35.0 °C	20.0 % ~ 80.0 %	25.8 °C / 60.5 %
Electrical testing laboratory	20.0 °C ~ 30.0 °C	30.0 % ~ 60.0 %	25.1 °C / 55.9 %

Test Result:

No.	Test Item	Test Standard	Test Conclusion
1	Resistance to Soldering Heat	MIL-STD-202H-2015 method 210	Pass
Note: Pass: meet testing requirement. Failed: don't meet testing requirement;			

Test Item	Resistance to Soldering Heat												
Test Procedure:													
1.0 Test preparation	1.1 Number the test specimens for identification 1.2 Implement pre-measurement 1.3 All pre-measurement for electrical characteristic and visual inspection shall be recorded for the specimens.												
2.0 Test set-up	Test condition K (SMD-Reflow solder). 2.1 Mount units, uniformly distributed, on PC Board FR-4 materials with 1.6mm thickness. 2.2 Subject each sample of units to 3 cycles in total. Maximum component time/ temperature profile shall be per figure1 and Table1. figure1  Table I Test Conditions <table><tr><th><u>Solder technique simulation</u></th><th><u>Test Condition</u></th><th><u>Temperature</u></th><th><u>Time (s)</u></th><th><u>Temperature ramp/immersion and emersion rate</u></th><th><u>Number of heat cycles</u></th></tr><tr><td>IR/convection reflow</td><td>K</td><td>250°C±5°C Component temp</td><td>30±5</td><td>1°C/s-4°C/s above 217°C 60s-150s</td><td>3</td></tr></table>	<u>Solder technique simulation</u>	<u>Test Condition</u>	<u>Temperature</u>	<u>Time (s)</u>	<u>Temperature ramp/immersion and emersion rate</u>	<u>Number of heat cycles</u>	IR/convection reflow	K	250°C±5°C Component temp	30±5	1°C/s-4°C/s above 217°C 60s-150s	3
	<u>Solder technique simulation</u>	<u>Test Condition</u>	<u>Temperature</u>	<u>Time (s)</u>	<u>Temperature ramp/immersion and emersion rate</u>	<u>Number of heat cycles</u>							
	IR/convection reflow	K	250°C±5°C Component temp	30±5	1°C/s-4°C/s above 217°C 60s-150s	3							
	2.3 Allow adequate time (60 min. max.) for cooling off between each cycle.												
3.0 Test validation	3.1 All final measurements electrical characteristic and visual inspection shall be recorded for each specimen. The measurement results shall comply with all electrical requirements in its specification. 3.2 The units shall be visually examined under 10X magnification. Visible evidence of any nonconformance with the detailed drawing or applicable specification, absence of any required feature can be considered failure. 3.3 All final measurement for electrical characteristics and visual inspection shall be recorded for the specimens. The measurement results shall comply with all electrical requirements in its specification. 3.4 Prepare the qualification report.												
4.0 Measurement Criteria	4.1 Final electrical parameters measurement per the product specification; 4.2 No crack and visual inspection is eligible;												
5.0 Test Result	5.1 The electrical parameters and visual inspection pass												

6.0 Test figures

Fig.1 Test equipment



Fig.2 Test curve

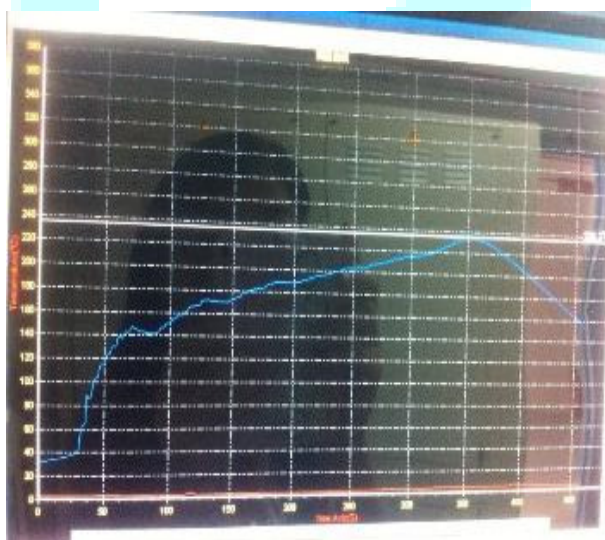


Fig.3 Samples in test



7.0 Test data

P/N	Initial test data	Final test data
PM53912NLT	OK	OK
Note: Detailed test data refer to tables below for initial and after		

Resistance to Soldering Heat Test Data: Initial Test Data

	PM53912NLT Initial test data					
DRAWING VERSION:	P2					
SAMPLE SIZE:	30					
DATE:	12/22/25					
REMARK:						
PARAMETER:	OCL	LL	CW	DCR	DCR	Hipot
CONDITION:	20KHz 30mV	100KHz 100mV	100KHz 100mV			1500VAC 1mA 60S
PIN NO.:	(1-2)	(1-2) with (3-4) shorted	(1,2-3,4)	(1-2)	(3-4)	(1,2) to (3,4)
UNIT:	mH	uH	pF	mohms	mohms	
MAX SPEC.:			11.00	80.00	80.00	
MIN SPEC.:	1.80	5.50				
AVERAGE =	2.3014	9.2950	5.9371	61.9958	61.9564	
STD DEV =	0.0883	0.2181	0.1544	0.2412	0.1937	
MAX =	2.510	9.691	6.184	62.395	62.301	
MIN =	2.120	8.682	5.577	61.559	61.607	
DATA	-	-	-	-	-	-
399	2.24	9.26	6.17	62.12	61.99	Pass
400	2.36	9.07	5.58	62.06	61.83	Pass
401	2.26	9.37	5.87	61.83	61.75	Pass
402	2.31	9.44	6.00	61.86	62.21	Pass
403	2.41	9.55	5.65	61.56	62.10	Pass
404	2.23	9.23	6.14	61.87	61.83	Pass
405	2.21	9.37	5.66	62.40	62.13	Pass
406	2.12	9.06	6.00	62.16	62.28	Pass
407	2.29	9.38	5.85	62.02	61.86	Pass
408	2.21	9.38	5.96	62.32	61.85	Pass
409	2.28	9.06	5.98	61.60	61.78	Pass
410	2.39	9.48	6.02	61.74	61.81	Pass
411	2.20	9.33	6.18	62.23	62.20	Pass
412	2.18	9.19	5.93	61.71	61.83	Pass
413	2.31	9.69	5.88	62.06	62.21	Pass
414	2.41	8.97	5.82	61.73	61.83	Pass
415	2.30	9.18	5.88	61.62	62.12	Pass
416	2.39	9.45	6.12	62.30	61.83	Pass
417	2.29	9.13	5.95	61.84	61.95	Pass
418	2.47	9.54	5.81	62.10	61.66	Pass
419	2.22	9.21	5.71	62.21	61.63	Pass
420	2.51	9.19	5.87	62.02	61.87	Pass
421	2.28	9.38	6.02	62.10	61.90	Pass
422	2.24	9.43	6.07	62.35	62.05	Pass
423	2.44	9.46	6.01	61.92	61.89	Pass
424	2.29	8.93	6.10	61.66	62.25	Pass
425	2.25	9.36	6.00	61.89	62.05	Pass
426	2.29	9.61	5.87	62.10	62.07	Pass
427	2.32	8.68	6.16	62.35	62.30	Pass
428	2.34	9.48	5.87	62.17	61.61	Pass

Resistance to Soldering Heat Test Data: Final Test Data

	PM53912NLT after resistance to soldering heat test data					
DRAWING VERSION:	P2					
SAMPLE SIZE:	30					
DATE:	01/22/26					
REMARK:						
PARAMETER:	OCL	LL	CW	DCR	DCR	Hipot
CONDITION:	20KHz 30mV	100KHz 100mV	100KHz 100mV			1500VAC 1mA 60S
PIN NO.:	(1-2)	(1-2) with (3-4) shorted	(1,2-3,4)	(1-2)	(3-4)	(1,2) to (3,4)
UNIT:	mH	uH	pF	mohms	mohms	
MAX SPEC.:			11.00	80.00	80.00	
MIN SPEC.:	1.80	5.50				
AVERAGE =	2.4798	9.3339	6.1140	62.1193	62.1434	
STD DEV =	0.0814	0.2158	0.2820	0.1866	0.2423	
MAX =	2.651	9.709	6.698	62.485	62.923	
MIN =	2.332	8.722	5.631	61.774	61.829	
DATA	-	-	-	-	-	-
399	2.42	9.27	6.69	62.39	62.29	Pass
400	2.52	9.12	5.92	62.27	61.86	Pass
401	2.44	9.41	6.18	62.09	62.24	Pass
402	2.48	9.49	5.65	62.09	62.01	Pass
403	2.62	9.60	5.95	61.90	61.83	Pass
404	2.39	9.28	6.07	62.00	61.83	Pass
405	2.40	9.41	5.98	61.81	62.11	Pass
406	2.33	9.10	6.24	62.03	61.88	Pass
407	2.50	9.40	5.88	61.77	62.07	Pass
408	2.42	9.41	6.62	62.02	62.02	Pass
409	2.48	9.10	6.24	61.89	62.27	Pass
410	2.55	9.51	5.93	62.02	62.15	Pass
411	2.40	9.37	6.29	62.13	62.32	Pass
412	2.37	9.23	6.07	62.31	62.28	Pass
413	2.53	9.71	6.30	62.19	62.27	Pass
414	2.61	9.00	6.45	61.96	61.99	Pass
415	2.50	9.24	6.10	62.21	62.11	Pass
416	2.51	9.49	6.02	62.04	62.26	Pass
417	2.46	9.18	5.64	61.89	62.22	Pass
418	2.65	9.59	6.16	62.17	61.90	Pass
419	2.40	9.25	5.86	62.27	62.40	Pass
420	2.64	9.23	5.63	62.28	62.22	Pass
421	2.46	9.43	6.09	62.35	62.62	Pass
422	2.43	9.47	6.42	61.95	62.00	Pass
423	2.57	9.49	6.23	62.34	62.92	Pass
424	2.51	8.97	6.31	62.37	61.86	Pass
425	2.37	9.39	6.16	61.92	61.98	Pass
426	2.48	9.64	5.75	62.28	61.85	Pass
427	2.47	8.72	6.70	62.49	62.27	Pass
428	2.51	9.52	5.93	62.17	62.29	Pass

Report 9: Solderability

Sample quantity:	15 pcs		
Sample No. / Test No.:	# 519 ~ # 533		
External visual examination before test:	Yes ☒ No ☐		
Packing status:	Yes ☒ No ☐		
Test Equipment:			
<u>Type</u>	<u>Model</u>	<u>Serial No.</u>	<u>Calibration valid Date to</u>
Precision High Temperature Chamber	APO-120	CDC-TL-006	3/4/2026
Solder pot	FX-301B	CDC-TL-020	3/4/2026
High-Definition Microscope	OP-VM-AF	CDC-TL-041	N/A
Laboratory environment:			
<u>Type</u>	<u>Temperature range requirement</u>	<u>Relative humidity range requirement</u>	<u>Actual Reading</u>
Environmental testing laboratory	15.0 °C ~ 35.0 °C	20.0 % ~ 80.0 %	25.8 °C/60.5 %
Electrical testing laboratory	20.0 °C ~ 30.0 °C	30.0 % ~ 60.0 %	NA

Test Result:

No.	Test Item	Test Standard	Test Conclusion
1	Solderability	J-STD-002E-2017	Pass

Note:

Pass: meet testing requirement.

Failed: don't meet testing requirement;

Test Item	Solderability																											
Test Procedure:																												
1.0 Test preparation	1.1 Number the test specimens for identification																											
	1.2 The SMD specimens should be subjected to aging by exposure to dry back in oven with 4hours ±5min. Perform preprocessing according to the following conditions. The default preprocessing mode is condition E																											
	Table 3-3 Preconditioning Parameters for Solderability Testing <table><tr><th>Condition Category</th><th>Precondition Type</th><th>Exposure Parameters</th><th>Use Recommendation</th><th>Applicability by Finish</th></tr><tr><td>A</td><td rowspan="4">Steam</td><td>1 Hour ± 5 min.</td><td>Optional Legacy</td><td>Non-Tin and Non-Tin Alloy Containing Finishes</td></tr><tr><td>B</td><td>4 Hours ± 10 min.</td><td>Optional Legacy</td><td>All Finishes</td></tr><tr><td>C</td><td>8 Hours ± 15 min.</td><td>Optional Legacy</td><td>All Finishes</td></tr><tr><td>D</td><td>16 Hours ± 30 min.</td><td>Optional Legacy</td><td>All Finishes</td></tr><tr><td>E</td><td>155 °C Dry Bake</td><td>4 Hours ± 15 min.</td><td>Default Condition</td><td>All Finishes</td></tr></table>	Condition Category	Precondition Type	Exposure Parameters	Use Recommendation	Applicability by Finish	A	Steam	1 Hour ± 5 min.	Optional Legacy	Non-Tin and Non-Tin Alloy Containing Finishes	B	4 Hours ± 10 min.	Optional Legacy	All Finishes	C	8 Hours ± 15 min.	Optional Legacy	All Finishes	D	16 Hours ± 30 min.	Optional Legacy	All Finishes	E	155 °C Dry Bake	4 Hours ± 15 min.	Default Condition	All Finishes
	Condition Category	Precondition Type	Exposure Parameters	Use Recommendation	Applicability by Finish																							
A	Steam	1 Hour ± 5 min.	Optional Legacy	Non-Tin and Non-Tin Alloy Containing Finishes																								
B		4 Hours ± 10 min.	Optional Legacy	All Finishes																								
C		8 Hours ± 15 min.	Optional Legacy	All Finishes																								
D		16 Hours ± 30 min.	Optional Legacy	All Finishes																								
E	155 °C Dry Bake	4 Hours ± 15 min.	Default Condition	All Finishes																								
1.3 Within 24 hours after precondition, terminations shall be immersed in room temperature type flux (flux type Kester 182 or similar) for a period of 5 to 10 seconds and allowed to drain for a period of 5 to 20 seconds. No preheat is allowed prior to solder dip.																												
2.0 Test set-up	2.1 SMD: Method B1 @ 245°C, Coating Durability category 2.																											
	Table 4-9 Test B1 Solderability Testing Parameters <table><tr><th>Solder Process</th><th>Reflow, Discrete Chip Components and Exposed Pad packages</th><th>Reflow, All Others</th></tr><tr><td>Solder Type</td><td colspan="2">SAC per 3.1.1</td></tr><tr><td>Flux Type</td><td colspan="2">Standard Flux #2 per 3.1.2</td></tr><tr><td>Flux Immersion Time</td><td colspan="2">5-10 seconds</td></tr><tr><td>Flux Immersion Angle</td><td>90° Nominal</td><td>20°-45°</td></tr><tr><td>Solder Temperature</td><td colspan="2">245 ± 5 °C [473 ± 9 °F]</td></tr><tr><td>Solder Immersion Time</td><td colspan="2">5 +0/-0.5 seconds</td></tr><tr><td>Solder Immersion / Emersion Rate</td><td colspan="2">25 ± 6 mm/sec [0.984 ± 0.24 in/sec]</td></tr></table>	Solder Process	Reflow, Discrete Chip Components and Exposed Pad packages	Reflow, All Others	Solder Type	SAC per 3.1.1		Flux Type	Standard Flux #2 per 3.1.2		Flux Immersion Time	5-10 seconds		Flux Immersion Angle	90° Nominal	20°-45°	Solder Temperature	245 ± 5 °C [473 ± 9 °F]		Solder Immersion Time	5 +0/-0.5 seconds		Solder Immersion / Emersion Rate	25 ± 6 mm/sec [0.984 ± 0.24 in/sec]				
	Solder Process	Reflow, Discrete Chip Components and Exposed Pad packages	Reflow, All Others																									
Solder Type	SAC per 3.1.1																											
Flux Type	Standard Flux #2 per 3.1.2																											
Flux Immersion Time	5-10 seconds																											
Flux Immersion Angle	90° Nominal	20°-45°																										
Solder Temperature	245 ± 5 °C [473 ± 9 °F]																											
Solder Immersion Time	5 +0/-0.5 seconds																											
Solder Immersion / Emersion Rate	25 ± 6 mm/sec [0.984 ± 0.24 in/sec]																											
2.2 Leaded unit is washed in clean isopropyl alcohol or distilled water to remove flux residues.																												
2.3 Inspect using Microscope in the 50X viewing position.																												
3.0 Test validation	3.1 At least 95% of the normal wetting area defined must be covered by a continuous, smooth and bright, new solder coat.																											
	3.2 Pin holes or voids may not be concentrated in one area and may not exceed 5% of area.																											
	3.3 All final measurement for electrical characteristics and visual inspection shall be recorded for the specimens. The measurement results shall comply with all electrical requirements in its specification.																											
	3.4 Prepare the qualification report.																											
4.0 Measurement Criteria	4.1 More than 95% of the normal wetting area is covered by a continuous, smooth and bright new solder coat. Pin holes or voids are concentrated in one area, and not exceed 5% of the area.																											
5.0 Test Result	5.1 The visual inspection pass																											

6.0 Test figures

Fig. 1 Steam Aging Oven (155°C)



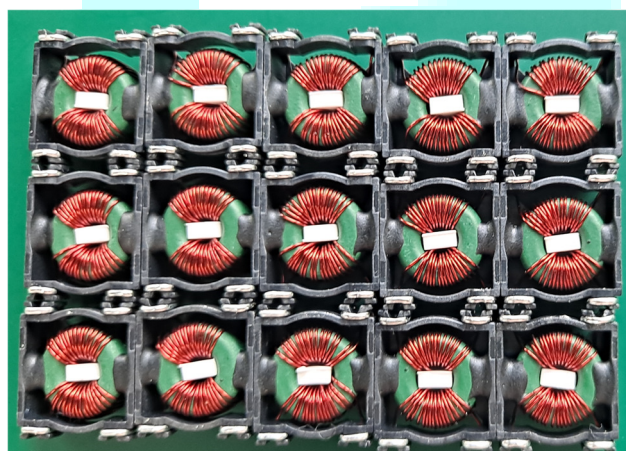
Fig. 2 Solder Bath (245°C)



Fig. 3 Before Test



Fig. 4 After Test



7.0 Test data:

No require electrical parameters test.

Report 10: Electrical Characterization

Sample quantity:	30 pcs		
Sample No. / Test No.:	# 429 ~ # 458		
External visual examination before test:	Yes ☒ No ☐		
Packing status:	Yes ☒ No ☐		
Test Equipment:			
<u>Type</u>	<u>Model</u>	<u>Serial No.</u>	<u>Calibration valid Date to</u>
High/Low Temperature Chamber	ACT-0806-CP	CDC-TL-025	3/4/2026
OCL Tester	4284A	CDC-TL-016	7/4/2026
Laboratory environment:			
<u>Type</u>	<u>Temperature range requirement</u>	<u>Relative humidity range requirement</u>	<u>Actual Reading</u>
Environmental testing laboratory	15.0 °C ~ 35.0 °C	20.0 % ~ 80.0 %	25.8 °C/60.5 %
Electrical testing laboratory	20.0 °C ~ 30.0 °C	30.0 % ~ 60.0 %	25.1 °C/55.9 %

Test Result:

No.	Test Item	Test Standard	Test Conclusion
1	Electrical Characterization	GB/T 8554-1998 Clause 4.4.4.1 User Spec.	Pass

Note:

Pass: meet testing requirement.

Failed: don't meet testing requirement;

Test Item	Electrical Characterization
Test Procedure:	
1.0 Test preparation	1.1 Number the test specimens for identification
	1.2 Implement pre-measurement
	1.3 All pre-measurement for electrical characteristic and visual inspection shall be recorded for the specimens.
2.0 Test set-up	2.1 Put the test samples into chamber.
	2.2 Set the temperature of chamber at the min and max operating temperature: -40°C and 125°C
	2.3 When chamber ramp up to the related operating temperature, keep the test samples for 3 minutes.
	2.4 Implement the measurement on inductance for the test sample in the chamber. The inductance shall be recorded and summarized to show Min, Max, Mean and standard deviation. The measurement results shall comply with all electrical requirements in its specification.
3.0 Test validation	3.1 All final measurement electrical characteristic and visual inspection shall be recorded for the specimens. The measurement results shall comply with all electrical requirements in its specification.
	3.2 Prepare the qualification report.
4.0 Measurement Criteria	4.1 Final electrical parameters measurement per the product specification;
	4.2 No crack and visual inspection is eligible;
5.0 Test Result	5.1 The electrical parameters and visual inspection pass

6.0 Test figures

Fig. 1 High/Low Temperature Chamber



Fig. 2 OCL Test Tester



7.0 Test data

P/N	Test temperature	Inductance test result
PM53912NLT	125°C	OK
	25°C	OK
	-40°C	OK
Note: Detailed test data refer to tables as below		

Electrical Characterization Test Data

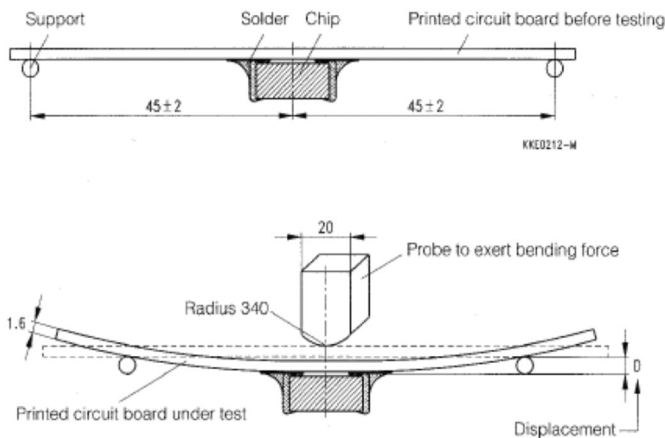
PM53912NLT Electrical characterization test data			
DRAWING VERSION:	P2		
SAMPLE SIZE:	30		
DATE:	01/21/26		
REMARK:	-40°C	25°C	125°C
PARAMETER:	OCL	OCL	OCL
CONDITION:	20KHz 30mV	20KHz 30mV	20KHz 30mV
PIN NO.:	(1-2)	(1-2)	(1-2)
UNIT:	uH	mH	mH
MAX SPEC.:			
MIN SPEC.:		1.80	
AVERAGE =	654.2257	2.2100	3.3220
STD DEV =	82.5550	0.0928	0.6220
MAX =	872.120	2.390	3.860
MIN =	578.820	2.080	2.270
DATA	-	-	-
429	592.88	2.19	3.78
430	583.56	2.12	3.84
431	590.25	2.13	3.85
432	613.29	2.18	3.64
433	604.20	2.16	3.66
434	620.57	2.17	3.30
435	593.41	2.08	3.78
436	609.15	2.15	3.80
437	622.29	2.25	3.55
438	611.59	2.16	3.32
439	589.56	2.09	3.81
440	600.97	2.19	3.86
441	578.82	2.08	3.77
442	729.45	2.37	2.45
443	582.13	2.13	3.81
444	767.52	2.37	2.56
445	593.32	2.13	3.77
446	610.25	2.14	3.67
447	609.96	2.17	3.71
448	763.51	2.39	2.42
449	604.52	2.13	3.74
450	777.68	2.38	2.37
451	872.12	2.28	2.27
452	795.67	2.31	2.39
453	761.48	2.31	2.37
454	598.46	2.17	3.86
455	638.45	2.24	3.81
456	767.51	2.29	2.34
457	607.84	2.23	3.78
458	736.36	2.31	2.38

Report 11: Board Flex

Sample quantity:	30 pcs		
Sample No. / Test No.:	# 459 ~ # 488		
External visual examination before test:	Yes ☒ No ☐		
Packing status:	Yes ☒ No ☐		
Test Equipment:			
<u>Type</u>	<u>Model</u>	<u>Serial No.</u>	<u>Calibration valid Date to</u>
Force test system	ATO-1220S	CDC-TL-012	3/4/2026
OCL Tester	4284A	CDC-TL-016	7/4/2026
DCR tester	4150ATC	CDC-TL-017	3/4/2026
Hi-Pot Tester	TOS 5051A	CDC-TL-018	7/4/2026
High-Definition Microscope	OP-VM-AF	CDC-TL-041	N/A
Laboratory environment:			
<u>Type</u>	<u>Temperature range requirement</u>	<u>Relative humidity range requirement</u>	<u>Actual Reading</u>
Environmental testing laboratory	15.0 °C ~ 35.0 °C	20.0 % ~ 80.0 %	25.8 °C/60.5 %
Electrical testing laboratory	20.0 °C ~ 30.0 °C	30.0 % ~ 60.0 %	25.1 °C/55.9 %

Test Result:

No.	Test Item	Test Standard	Test Conclusion
1	Board Flex	AEC-Q200-005-2010	Pass
Note: Pass: meet testing requirement. Failed: don't meet testing requirement;			

Test Item	Board Flex
Test Procedure:	
1.0 Test preparation	1.1 Number the test specimens for identification
	1.2 Implement pre-measurement
	1.3 All pre-measurement for electrical characteristic and visual inspection shall be recorded for the specimens.
	1.4 Solder the test specimen on the PCB (100mm X 40mm X1.6mm, FR4) using a soldering reflow with the following profile: Preheat temperature (125°C ± 25°C) max 120 sec. Time above 183°C, 60 sec. – 150 sec. Max. ramp up (183°C to peak) ≤ 3°C / sec. Peak temperature 235°C + 5°C Time in peak temperature 10 sec. – 20 sec. Ramp down rate ≤ 6°C / sec.
2.0 Test set-up	2.1 Place the 100mm X 40mm board into a fixture as below Figure with the component facing down.
	2.2 The apparatus shall consist of mechanical means to apply a force which will bend the board (D) x = 2 mm minimum. The duration of the applied forces shall be 60 (+ 5) Sec. The force is to be applied only once to the board. 
3.0 Test validation	3.1 Cracking or specimen being sheared off from the PCB is considered to be failed.
	3.2 Check the specimens whether there is damage with a magnification of 10X or greater. Visible evidence of any nonconformance with the detailed drawing or applicable specification, absence of any required feature can be considered failure
	3.3 All final measurement electrical characteristic and visual inspection shall be recorded for the specimens. The measurement results shall comply with all electrical requirements in its specification.
	3.4 Prepare the qualification report.
4.0 Measurement Criteria	4.1 Final electrical parameters measurement per the product specification;
	4.2 No crack and visual inspection is eligible;
5.0 Test Result	5.1 The electrical parameters and visual inspection pass

6.0 Test figure

Fig. 1 Force test system

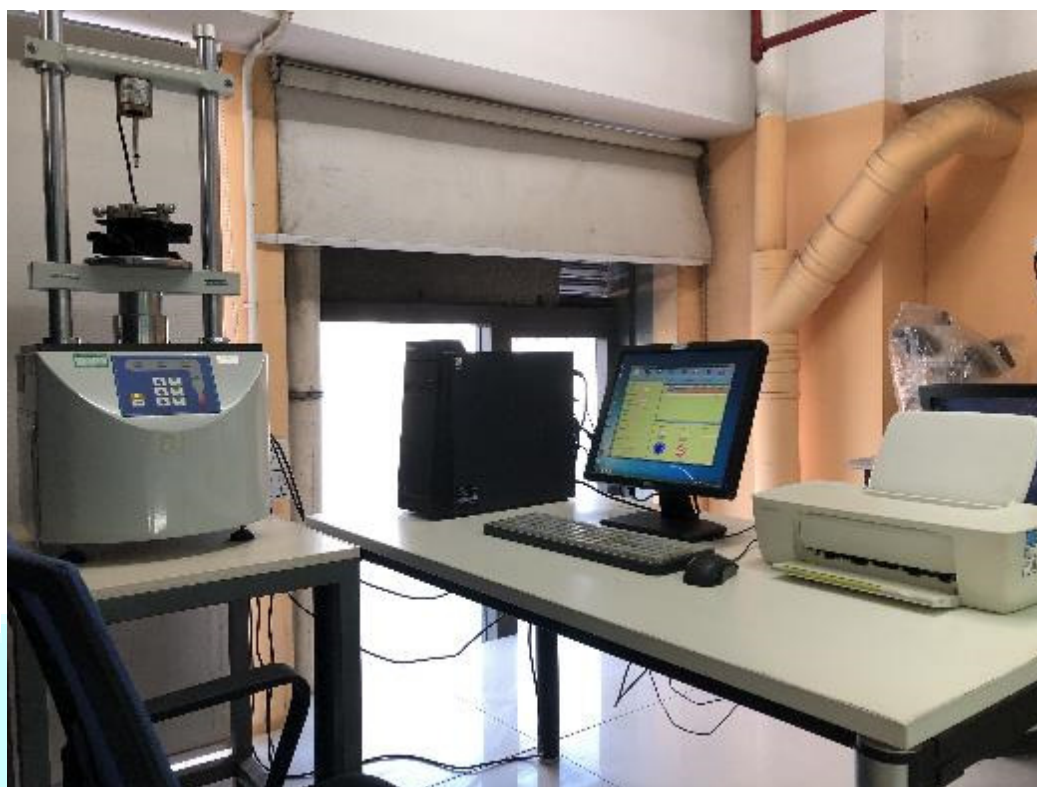


Fig. 2 Testing

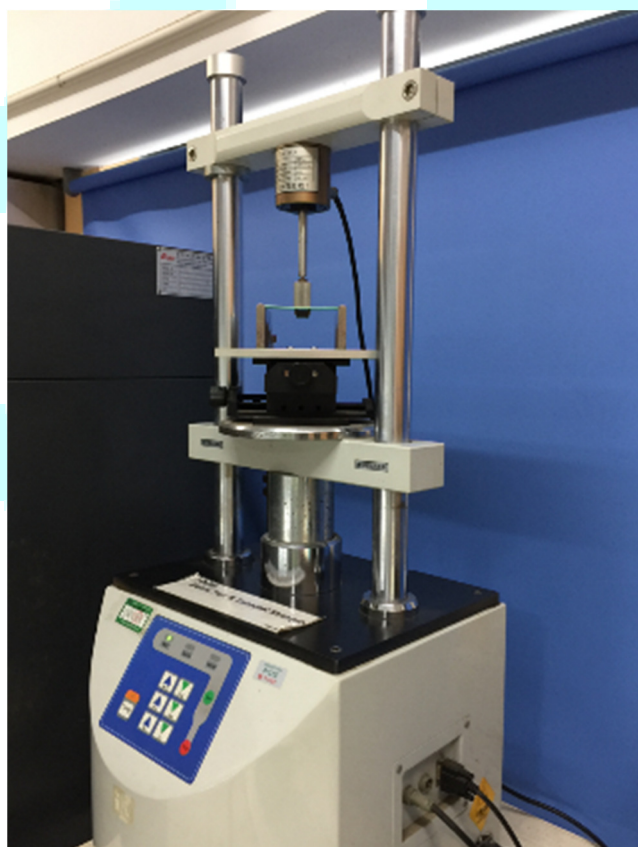
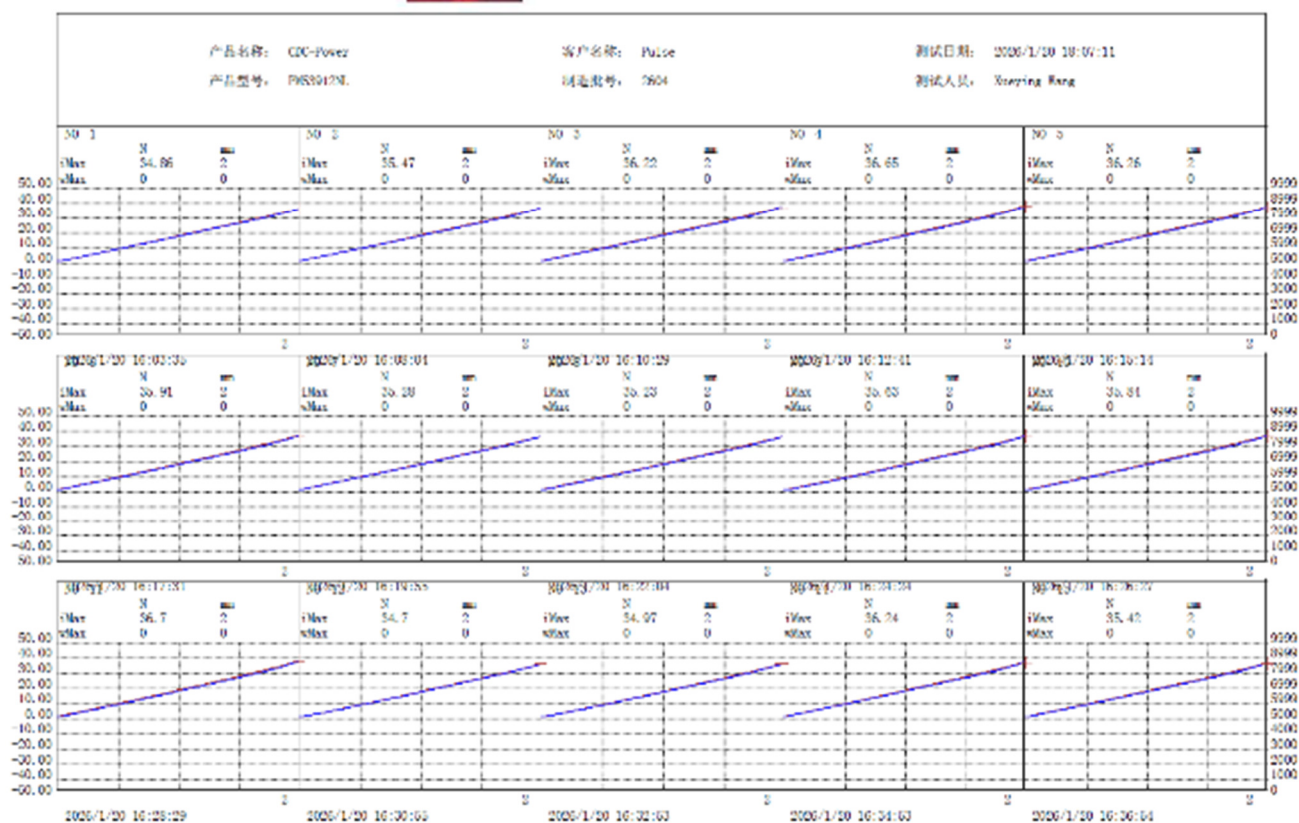


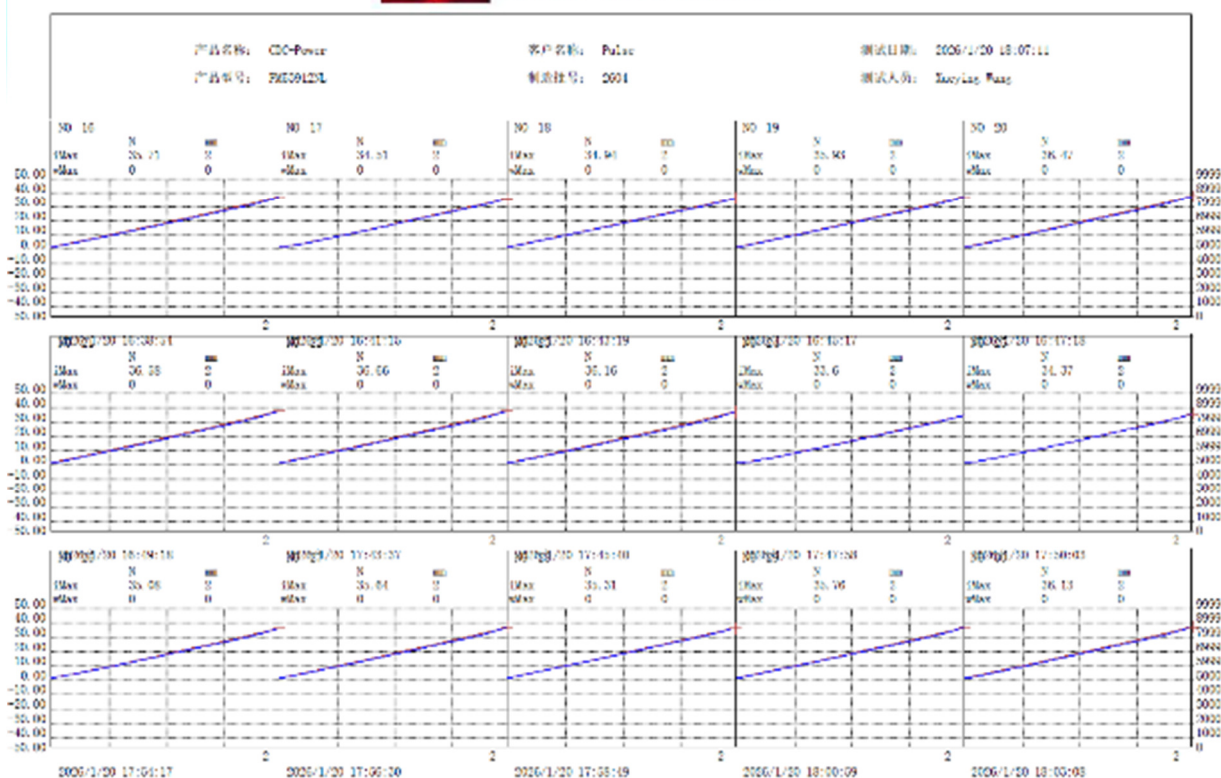
Fig. 3 Testing curve



普思电子
Pulse Electronics



普思电子
Pulse Electronics



7.0 Test data

P/N	Initial test data	Final test data
PM53912NLT	OK	OK
Note: Detailed test data refer to tables below for initial and after		



Board Flex Test Data: Initial Test Data

	PM53912NLT Initial test data					
DRAWING VERSION:	P2					
SAMPLE SIZE:	30					
DATE:	12/22/25					
REMARK:						
PARAMETER:	OCL	LL	CW	DCR	DCR	Hipot
CONDITION:	20KHz 30mV	100KHz 100mV	100KHz 100mV			1500VAC 1mA 60S
PIN NO.:	(1-2)	(1-2) with (3-4) shorted	(1,2-3,4)	(1-2)	(3-4)	(1,2) to (3,4)
UNIT:	mH	uH	pF	mohms	mohms	
MAX SPEC.:			11.00	80.00	80.00	
MIN SPEC.:	1.80	5.50				
AVERAGE =	2.3128	9.2405	5.8055	61.9537	61.9608	
STD DEV =	0.0807	0.1983	0.1304	0.3010	0.2015	
MAX =	2.483	9.572	6.127	62.532	62.378	
MIN =	2.180	8.849	5.617	61.521	61.581	
DATA	-	-	-	-	-	-
459	2.28	9.52	5.62	61.54	61.93	Pass
460	2.23	9.12	5.74	61.64	62.10	Pass
461	2.45	8.94	5.70	61.81	61.87	Pass
462	2.31	9.57	5.77	62.53	61.89	Pass
463	2.25	9.22	5.73	62.44	62.15	Pass
464	2.48	9.19	5.73	62.02	61.74	Pass
465	2.30	9.19	5.73	61.76	61.71	Pass
466	2.25	9.22	5.97	62.31	61.79	Pass
467	2.31	9.35	5.89	61.56	61.65	Pass
468	2.19	9.34	6.00	62.33	61.58	Pass
469	2.35	9.47	6.13	62.37	62.11	Pass
470	2.25	9.50	5.71	62.22	62.38	Pass
471	2.45	9.26	5.70	61.96	61.69	Pass
472	2.40	9.05	5.72	61.52	62.20	Pass
473	2.37	9.02	5.73	61.79	62.16	Pass
474	2.35	9.01	5.96	62.31	62.01	Pass
475	2.28	8.85	5.71	61.66	61.72	Pass
476	2.18	9.36	5.69	61.66	61.85	Pass
477	2.27	9.36	5.99	61.84	61.98	Pass
478	2.21	9.32	5.76	62.25	62.21	Pass
479	2.36	9.34	6.01	61.84	61.97	Pass
480	2.32	9.24	5.95	61.74	62.19	Pass
481	2.34	9.55	5.91	62.29	62.09	Pass
482	2.41	8.90	5.70	61.61	62.00	Pass
483	2.33	9.36	5.67	61.95	61.82	Pass
484	2.46	8.97	5.83	61.74	62.04	Pass
485	2.30	9.11	5.78	61.86	61.67	Pass
486	2.25	9.31	5.69	62.33	62.17	Pass
487	2.26	9.09	5.96	61.98	62.13	Pass
488	2.21	9.50	5.72	61.77	62.06	Pass

Board Flex Test Data: After Test Data

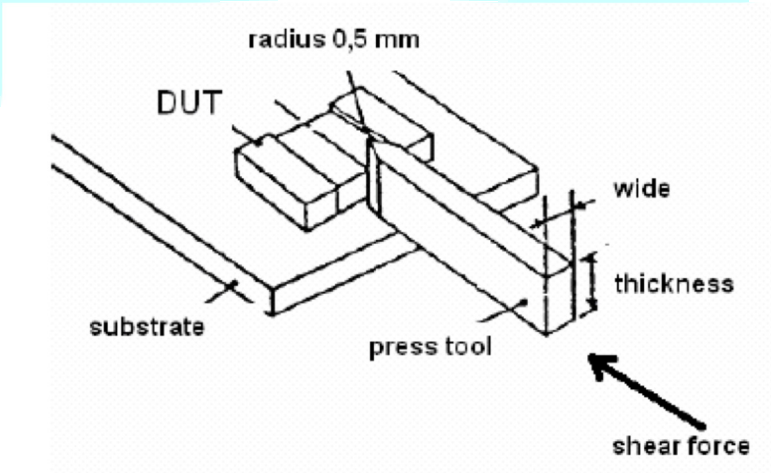
	PM53912NLT after board flex test data					
DRAWING VERSION:	P2					
SAMPLE SIZE:	30					
DATE:	01/22/26					
REMARK:						
PARAMETER:	OCL	LL	CW	DCR	DCR	Hipot
CONDITION:	20KHz 30mV	100KHz 100mV	100KHz 100mV			1500VAC 1mA 60S
PIN NO.:	(1-2)	(1-2) with (3-4) shorted	(1,2-3,4)	(1-2)	(3-4)	(1,2) to (3,4)
UNIT:	mH	uH	pF	mohms	mohms	
MAX SPEC.:			11.00	80.00	80.00	
MIN SPEC.:	1.80	5.50				
AVERAGE =	2.4944	9.2848	6.0179	62.0298	62.0154	
STD DEV =	0.0516	0.1985	0.2834	0.2006	0.1583	
MAX =	2.590	9.613	6.446	62.496	62.334	
MIN =	2.389	8.889	5.533	61.666	61.631	
DATA	-	-	-	-	-	-
459	2.51	9.56	5.78	62.06	62.23	Pass
460	2.44	9.16	6.31	61.67	61.92	Pass
461	2.54	8.98	5.83	61.95	62.16	Pass
462	2.51	9.61	6.15	62.47	61.98	Pass
463	2.42	9.26	5.77	62.06	62.14	Pass
464	2.59	9.24	5.53	61.84	61.97	Pass
465	2.52	9.22	5.75	61.99	62.10	Pass
466	2.45	9.26	5.64	61.86	62.25	Pass
467	2.55	9.39	6.09	62.10	61.81	Pass
468	2.41	9.37	6.25	61.90	61.86	Pass
469	2.50	9.54	6.15	61.96	62.09	Pass
470	2.43	9.54	6.17	61.87	62.18	Pass
471	2.54	9.30	5.96	62.21	62.04	Pass
472	2.49	9.09	6.02	62.08	61.95	Pass
473	2.53	9.06	6.39	61.88	61.96	Pass
474	2.56	9.07	6.45	62.50	62.06	Pass
475	2.50	8.89	6.14	62.11	62.33	Pass
476	2.46	9.43	5.53	61.89	62.03	Pass
477	2.48	9.39	6.15	62.34	62.03	Pass
478	2.39	9.35	6.23	62.02	62.12	Pass
479	2.49	9.39	6.00	61.89	61.82	Pass
480	2.53	9.28	6.07	61.92	62.06	Pass
481	2.56	9.59	6.32	61.86	62.03	Pass
482	2.50	8.94	5.57	62.01	62.10	Pass
483	2.57	9.39	5.68	61.94	62.01	Pass
484	2.54	9.01	5.53	62.31	61.63	Pass
485	2.51	9.23	6.07	62.31	62.15	Pass
486	2.47	9.35	6.25	62.15	61.88	Pass
487	2.47	9.13	6.38	61.70	61.92	Pass
488	2.40	9.54	6.38	62.08	61.66	Pass

Report 12: Terminal Strength (SMD)

Sample quantity:	30 pcs		
Sample No. / Test No.:	# 489 ~ # 518		
External visual examination before test:	Yes ☒ No ☐		
Packing status:	Yes ☒ No ☐		
Test Equipment:			
<u>Type</u>	<u>Model</u>	<u>Serial No.</u>	<u>Calibration valid Date to</u>
Force test system	ATO-1220S	CDC-TL-012	3/4/2026
OCL Tester	4284A	CDC-TL-016	7/4/2026
DCR tester	4150ATC	CDC-TL-017	3/4/2026
Hi-Pot Tester	TOS 5051A	CDC-TL-018	7/4/2026
High-Definition Microscope	OP-VM-AF	CDC-TL-041	N/A
Laboratory environment:			
<u>Type</u>	<u>Temperature range requirement</u>	<u>Relative humidity range requirement</u>	<u>Actual Reading</u>
Environmental testing laboratory	15.0 °C ~ 35.0 °C	20.0 % ~ 80.0 %	25.8 °C/60.5 %
Electrical testing laboratory	20.0 °C ~ 30.0 °C	30.0 % ~ 60.0 %	25.1 °C/55.9 %

Test Result:

No.	Test Item	Test Standard	Test Conclusion
1	Terminal Strength (SMD)/Shear Stress Test	AEC-Q200-006-2010	Pass
Note: Pass: meet testing requirement. Failed: don't meet testing requirement;			

Test Item	Terminal Strength (SMD)
Test Procedure:	
1.0 Test preparation	1.1 Number the test specimens for identification
	1.2 Implement pre-measurement
	1.3 All pre-measurement for electrical characteristic and visual inspection shall be recorded for the specimens.
	1.4 Solder the specimens on to a FR-4 PCB (1.6mm thick) using a soldering reflow.
	1.5 The interval between samples should be the width of one sample
	1.4 The test device as the below figure show.
	
2.0 Test set-up	2.1 Fix the PCB to the test platform of the vibration machine.
	2.2 Apply a 17.7N (1.8Kg) force to the side of a specimen being tested. This force shall be applied for 60+1 seconds. Also the force shall be applied gradually as not to apply a shock to the component being tested.
3.0 Test validation	3.1 Cracking or specimen being sheared off from the PCB is considered to be failed.
	3.2 Check the specimens whether there is damage with a magnification of 10X or greater. Visible evidence of any nonconformance with the detailed drawing or applicable specification, absence of any required feature can be considered failure
	3.3 All final measurement electrical characteristic and visual inspection shall be recorded for the specimens. The measurement results shall comply with all electrical requirements in its specification.
	3.4 Prepare the qualification report.
4.0 Measurement Criteria	4.1 Final electrical parameters measurement per the product specification;
	4.2 No crack and visual inspection is eligible;
5.0 Test Result	5.1 The electrical parameters and visual inspection pass

6.0 Test figures

Fig. 1 Force test system



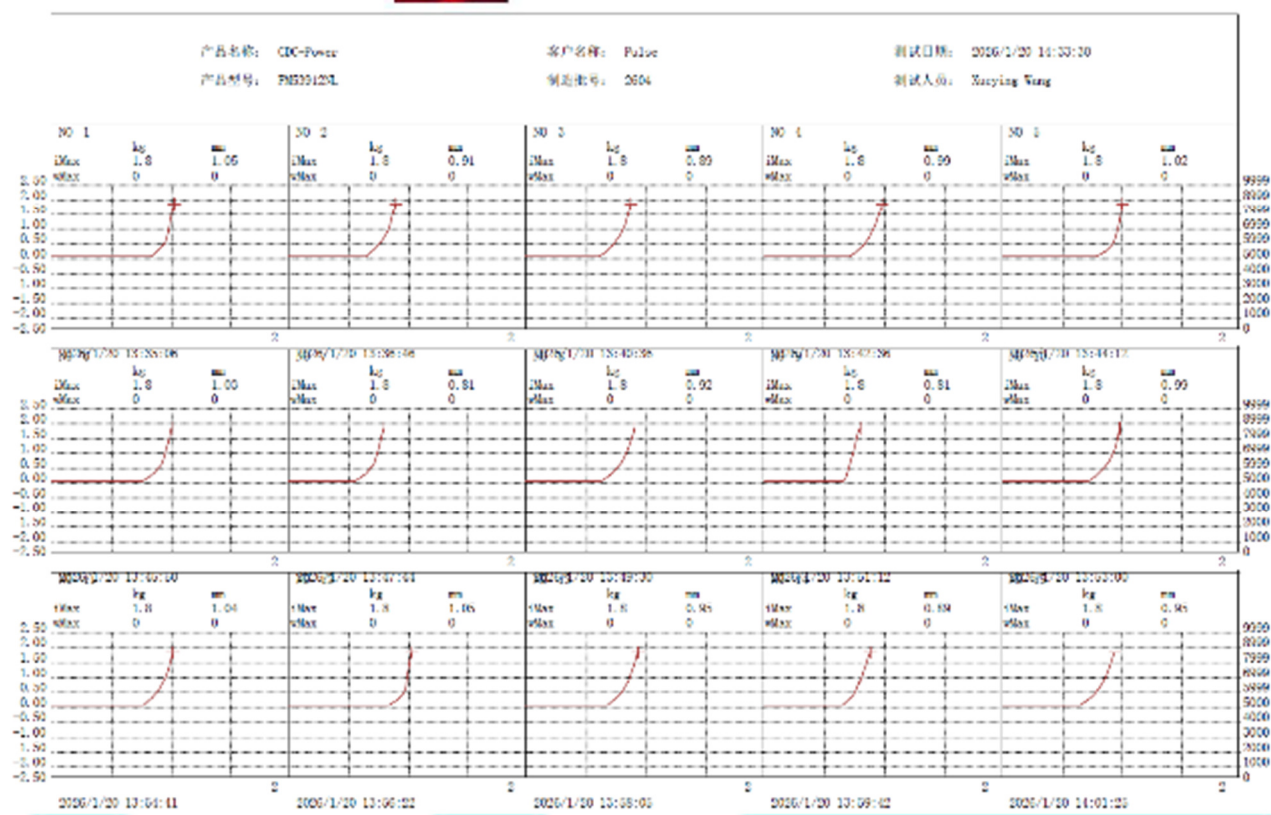
Fig. 2 Testing



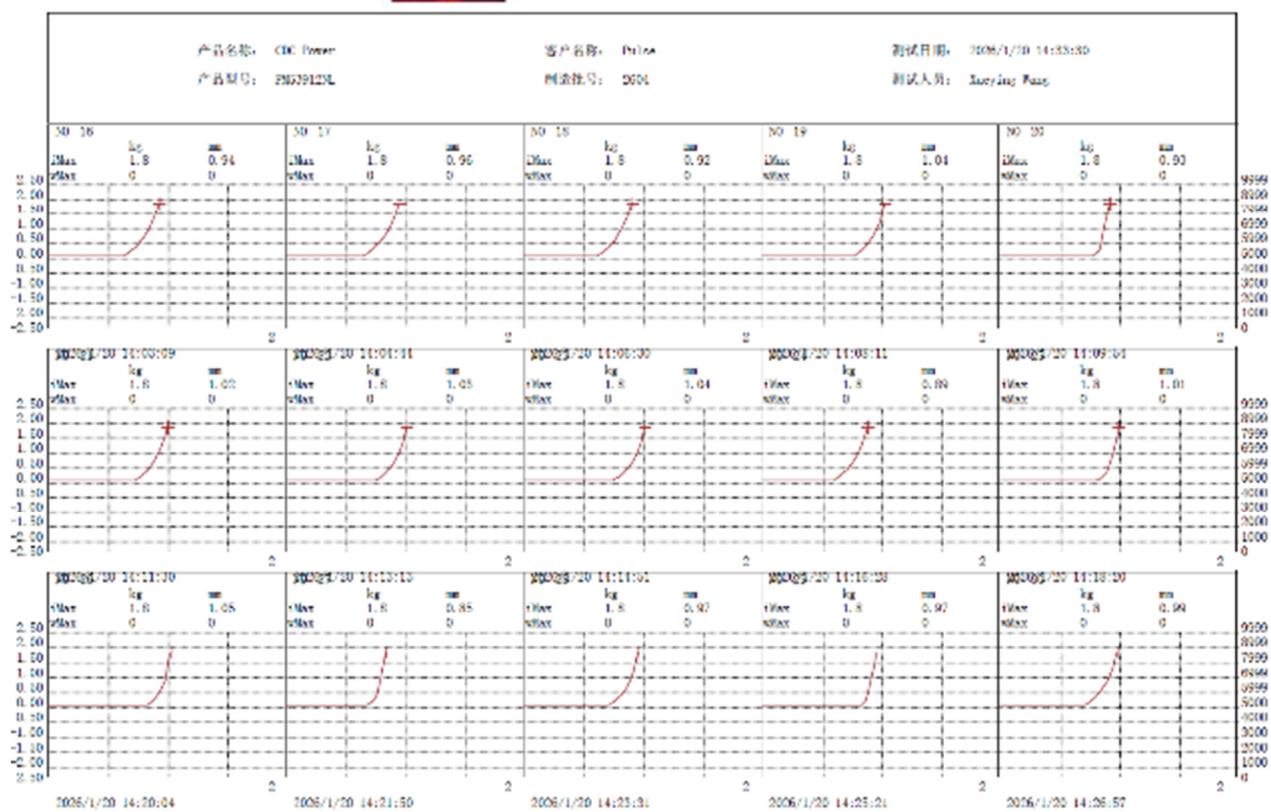
Fig. 3 Testing curve



普思电子
Pulse Electronics



普思电子
Pulse Electronics



7.0 Test data

P/N	Initial test data	Final test data
PM53912NLT	OK	OK
Note: Detailed test data refer to tables below for initial and after		



Terminal Strength (SMD)/Shear Stress Test data: Initial Test Data

	PM53912NLT Initial test data					
DRAWING VERSION:	P2					
SAMPLE SIZE:	30					
DATE:	12/22/25					
REMARK:						
PARAMETER:	OCL	LL	CW	DCR	DCR	Hipot
CONDITION:	20KHz 30mV	100KHz 100mV	100KHz 100mV			1500VAC 1mA 60S
PIN NO.:	(1-2)	(1-2) with (3-4) shorted	(1,2-3,4)	(1-2)	(3-4)	(1,2) to (3,4)
UNIT:	mH	uH	pF	mohms	mohms	
MAX SPEC.:			11.00	80.00	80.00	
MIN SPEC.:	1.80	5.50				
AVERAGE =	2.3349	9.2445	5.7779	62.1202	62.1179	
STD DEV =	0.0884	0.1783	0.1082	0.2987	0.3162	
MAX =	2.485	9.575	6.027	62.936	62.869	
MIN =	2.201	8.802	5.601	61.505	61.559	
DATA	-	-	-	-	-	-
489	2.25	9.33	5.85	61.92	62.19	Pass
490	2.38	9.06	5.61	62.12	62.73	Pass
491	2.28	9.21	5.77	62.35	62.04	Pass
492	2.34	9.17	5.97	62.04	62.03	Pass
493	2.40	8.89	5.75	62.43	62.31	Pass
494	2.38	9.26	5.95	62.01	62.17	Pass
495	2.32	8.94	5.83	61.56	61.76	Pass
496	2.22	8.80	5.82	62.14	62.20	Pass
497	2.49	9.32	5.63	62.20	62.48	Pass
498	2.29	9.36	5.95	62.14	62.26	Pass
499	2.22	9.38	5.67	62.94	62.03	Pass
500	2.43	9.12	5.72	62.12	62.15	Pass
501	2.23	9.08	5.72	62.08	62.19	Pass
502	2.31	9.13	5.69	62.79	61.94	Pass
503	2.46	9.35	5.86	62.32	61.96	Pass
504	2.46	9.23	5.69	61.51	61.69	Pass
505	2.47	9.36	5.75	61.95	62.01	Pass
506	2.38	9.13	5.78	61.93	62.87	Pass
507	2.40	9.13	5.81	61.98	62.28	Pass
508	2.20	9.43	6.03	62.01	61.56	Pass
509	2.47	9.37	5.85	62.18	62.21	Pass
510	2.28	9.37	5.67	62.00	61.94	Pass
511	2.25	9.34	5.66	62.24	62.36	Pass
512	2.30	9.46	5.60	62.10	62.19	Pass
513	2.46	9.49	5.71	62.35	61.65	Pass
514	2.21	9.31	5.86	61.56	61.92	Pass
515	2.28	9.24	5.78	62.15	62.29	Pass
516	2.33	9.09	5.83	62.44	61.63	Pass
517	2.23	9.42	5.87	62.07	62.73	Pass
518	2.34	9.58	5.67	61.96	61.79	Pass

Terminal Strength (SMD)/Shear Stress Test data: Final Test Data

	PM53912NLT after terminal strength test data					
DRAWING VERSION:	P2					
SAMPLE SIZE:	30					
DATE:	01/22/26					
REMARK:						
PARAMETER:	OCL	LL	CW	DCR	DCR	Hipot
CONDITION:	20KHz 30mV	100KHz 100mV	100KHz 100mV			1500VAC 1mA 60S
PIN NO.:	(1-2)	(1-2) with (3-4) shorted	(1,2-3,4)	(1-2)	(3-4)	(1,2) to (3,4)
UNIT:	mH	uH	pF	mohms	mohms	
MAX SPEC.:			11.00	80.00	80.00	
MIN SPEC.:	1.80	5.50				
AVERAGE =	2.5433	9.2855	6.0672	62.1256	62.0846	
STD DEV =	0.0748	0.1827	0.2921	0.2472	0.1724	
MAX =	2.722	9.622	6.565	62.741	62.496	
MIN =	2.417	8.831	5.515	61.672	61.748	
DATA	-	-	-	-	-	-
489	2.45	9.38	6.32	62.12	61.99	Pass
490	2.50	9.09	5.58	62.10	62.32	Pass
491	2.52	9.24	6.04	62.16	62.08	Pass
492	2.55	9.21	6.22	62.02	62.09	Pass
493	2.47	8.92	6.18	61.67	62.37	Pass
494	2.62	9.30	6.02	62.07	62.00	Pass
495	2.55	8.99	6.51	62.43	62.06	Pass
496	2.47	8.83	6.40	62.42	62.26	Pass
497	2.66	9.35	5.52	62.15	62.14	Pass
498	2.64	9.39	5.96	62.10	62.18	Pass
499	2.42	9.45	6.06	62.30	61.87	Pass
500	2.55	9.16	5.78	62.01	61.75	Pass
501	2.49	9.13	5.73	62.08	61.92	Pass
502	2.55	9.16	6.25	61.97	61.90	Pass
503	2.59	9.39	6.17	61.90	62.12	Pass
504	2.68	9.26	5.61	61.90	61.86	Pass
505	2.58	9.40	6.19	62.06	62.06	Pass
506	2.61	9.16	6.11	61.87	61.99	Pass
507	2.56	9.17	6.31	61.91	62.01	Pass
508	2.44	9.46	5.72	62.69	62.04	Pass
509	2.72	9.41	5.81	62.13	62.32	Pass
510	2.50	9.42	6.50	62.74	62.06	Pass
511	2.48	9.38	6.57	62.39	62.11	Pass
512	2.59	9.50	5.92	62.15	62.15	Pass
513	2.56	9.56	5.88	61.73	62.42	Pass
514	2.44	9.35	5.62	62.07	62.14	Pass
515	2.53	9.27	6.17	61.78	62.50	Pass
516	2.53	9.13	6.20	62.30	61.99	Pass
517	2.47	9.45	6.44	62.19	61.91	Pass
518	2.60	9.62	6.24	62.38	61.96	Pass

-----End of the Report-----



Hysol[®] AE4326NA/HD3421

September 2003

PRODUCT DESCRIPTION

HYSOL[®] AE4326/HD3421 is a resilient, thixotropic epoxy adhesive which is recommended for metals, plastics, glass wood, hard rubber and ceramics.

Typical Uncured Properties	AE4326	HD3421
Color	Black	Amber
Specific Gravity	1.55	1.10
Density @25°C, gm/cc	1.20	0.84
Viscosity @25°C, cps		
Brookfield RVT		
Spindle 7 Speed 10	60,000	---
Spindle 1 Speed 20	---	5
Shelf Life @25°C, months		
(min from date of shipment)	12	12

Typical Cured Properties

All measurements taken at 25°C unless otherwise noted.

Color	Black
Glass Transition (T _g), minimum	38°C
Hardness, Shore D	85
Tensile Strength, psi	2080
Compressive Strength, psi	14,970
Linear Shrinkage, %	0.95
Specific Gravity	1.21
Thermal Conductivity,	
cal x cm/sec x cm ² x °C	4.8 x 10 ⁻⁴
Moisture Absorption	
(24 hr. immersion), %	1.64
Tensile Shear Strength,	
Aluminum to Aluminum, psi	3900

Cured Electrical Properties

Dielectric Strength@ 10 mil thickness, volts/mil	1500
Arc Resistance, seconds	112
Dielectric Constant	25°C 105°C
100 Hz	3.9 7.8
1 kHz	4.0 6.6
10 kHz	3.9 5.9
100 kHz	3.9 5.3
Dissipation Factor	
100 Hz	.008 .494
1 kHz	.012 .107
10 kHz	.012 .072
100 kHz	.015 .069
Volume Resistivity, ohm-cm	2 x 10 ¹⁵ 4 x 10 ¹¹
Surface Resistivity, ohms	3 x 10 ¹⁵ 3 x 10 ¹¹

Handling

Mix Ratio, Part by Weight, Resin/Catalyst	100/6
Pot Life @ 25°C, (77°F),	>4 hours
Viscosity @25°C (77°F),	
Spindle 6, Speed 20, cps	25,000
Index	3.8

Cure Schedule

Recommended Cure	45 minutes @ 93°C
Alternate Cure	30 minutes @ 115°C

GENERAL INFORMATION

For safe handling information on this product, consult the Material Safety Data Sheet, (MSDS).

This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be selected as a sealant for chlorine or their strong oxidizing materials.

STORAGE

Liquid Storage – Liquids should be stored at 23°C or below, in closed containers. If stored below 23°C, the material MUST be allowed to come to room temperature, in the sealed container, to avoid moisture contamination.

DATA RANGES

The data contained herein may be reported as a typical value and/or range values based on actual test data and are verified on a periodic basis.

Note

The data contained herein are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof. In light of the foregoing, **Henkel Loctite Corporation specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Henkel Loctite Corporation's products. Henkel Loctite Corporation specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits.** The discussion herein of various processes or compositions is not to be interpreted as representation that they are free from domination of patents owned by others or as a license under any Henkel Loctite Corporation patents that may cover such processes or compositions. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide. This product may be covered by one or more United States or foreign patents or patent applications.

NOT FOR PRODUCT SPECIFICATIONS
THE TECHNICAL DATA CONTAINED HEREIN ARE INTENDED AS REFERENCE ONLY.
PLEASE CONTACT LOCTITE CORPORATION QUALITY DEPARTMENT FOR ASSISTANCE AND RECOMMENDATIONS ON SPECIFICATIONS FOR THIS PRODUCT.

Loctite Electronics

Henkel Loctite Corporation, 211 Franklin Street, Olean, NY 14760, U.S.A.

716.372.6300 www.loctite.com

Loctite is a Trademark of Loctite Corporation U.S.A.



6020H-PS4 环氧胶黏剂

6020H-PS4 系低氯含量环氧树脂粘接剂，在 120° C 完全固化。固化后，粘着性和机械强度优秀，韧性好，适用于金属、线圈及电子零件的粘着、填缝。

一、基本参数

性能	数值	参考标准
颜色	黑色	目视
粘度@25°C/cps	60000~100000	Brookfield DVNext
胶化时间@150°C/s	360"~610'	N/A
固化条件 ⁽¹⁾	120°C×180min	N/A
	130°C×120min	
	145°C×30min	
保存期限@25°C	30 天	N/A
@10°C	60 天	N/A
@5°C	90 天	N/A

(1) 固化条件：本条件仅供参考，请客户依产品的具体需求确定固化条件

二、固化后特性

项目	单位	数值	参考标准
体积电阻@25°C	$\Omega \cdot \text{cm}$	$>1.0 \times 10^{15}$	GB/T 1410-1989
耐电压	kV/mm	>18	GB/T 1408-1989
比重@25°C	N/A	1.2~1.3	GB/T 1033.1-2008
硬度	SHORE D	58~65	GB/T 2411-2008

拉伸强度	kg/mm ²	>10	GB/T 1040-2006
抗压强度	kg/mm ²	>10	GB/T 1041-2008
冲击强度	kJ/m ²	>9.0×10 ⁻³	GB/T 1043-1993
吸水率@25°C	%	<0.3	(24 小时浸泡后)

三、注意事项

- 1、本品需储存于低温、干燥处所。
- 2、当材料从冷藏状态下取出，不可以马上上生产线，必须保持密闭放置在常温解冻最少 6~8 小时后，再开盖使用。
- 3、工作场所应尽量保持清洁，空气流通，必要时须安装抽风设备。
- 4、本品需密封良好并储存于干燥处所，有效期会因存储条件有所改变
- 5、使用前请穿戴相关防护装备，应尽量减少与人体直接接触，使用前请详细阅读物质安全资料表(SDS) 。

以上性能数据是在特定条件下所测得的典型数据，仅供客户使用时参考，并不能保证于某个特定环境下能达到的全部数据，敬请客户于使用时，以实测数据为准，产品的适用性由客户的认证程序所决定。