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检测
TESTING
CNAS L4892

TEST REPORT

REPORT NO.:	**UK220107086**
PRODUCT NAME:	**Multilayer ceramic capacitors**
PRODUCT MODEL:	**H X7R 1206 1000V 10nF**
APPLICANT:	**Shanghai Yongming Electronic Co. Ltd**
APPLICANT ADDRESS:	**No.258 Guangcun Rd. Yangwang Industrial Park, Nanqiao Town, Fengxian District, Shanghai, China**
DATE OF ISSUE:	**2022-11-18**
TESTING INSTITUTE:	**Guangdong U.K Standard Testing Co. Ltd**

U.K STANDARD TESTING CO., LTD UK APPROVED

U.K Standard Testing

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TEST REPORT

Product Name:	Stacked solid polymer aluminum electrolytic capacitor	Applicant:	Shanghai Yongming Electronic Co. Ltd
Product Model and Parameter:	H X7R 1206 1000V 10nF	Address of Applicant:	No.258 Guangcun Rd. Yangwang Industrial Park, Nanqiao Town, Fengxian District, Shanghai, China
Sample Source:	Customer	Manufacturer:	Shanghai Yongming Electronic Co. Ltd
Sample Qty:	563pcs	Address of Manufacturer:	No.258 Guangcun Rd. Yangwang Industrial Park, Nanqiao Town, Fengxian District, Shanghai, China
Sample Date Received:	2022-09-14	Factory:	Shanghai Yongming Electronic Co. Ltd
Test Date:	From 2022-09-20 to 2022-11-02	Address of Factory:	No.258 Guangcun Rd. Yangwang Industrial Park, Nanqiao Town, Fengxian District, Shanghai, China

Test Standard:

AEC-Q200 REV D June 1, 2010: STRESS TEST QUALIFICATION FOR PASSIVE COMPONENTS TABLE 2 - Table of Methods Referenced Tantalum & Ceramic Capacitors.
* The tests according to customer requirements.

Test Result: Pass.

Test Description:

H X7R 1206 1000V 10nF was subjected to test of: TABLE 2 of AEC-Q200 REV D June 1, 2010.

Test Engineer: Fenghua Linn Signature: fenghua.linn.

Date: 2022-11-08

Project Engineer: Peter Wang Signature: Peter Wang

Date: 2022-11-18

Authorized Signatory: Eddie Ma Signature: Eddie Ma

Date: 2022-11-18

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Note: the standards marked with "*" are normative requirements or qualified technical parameter standards, and do not involve test methods. This standard is not within the scope of CNAS approval and authorization.

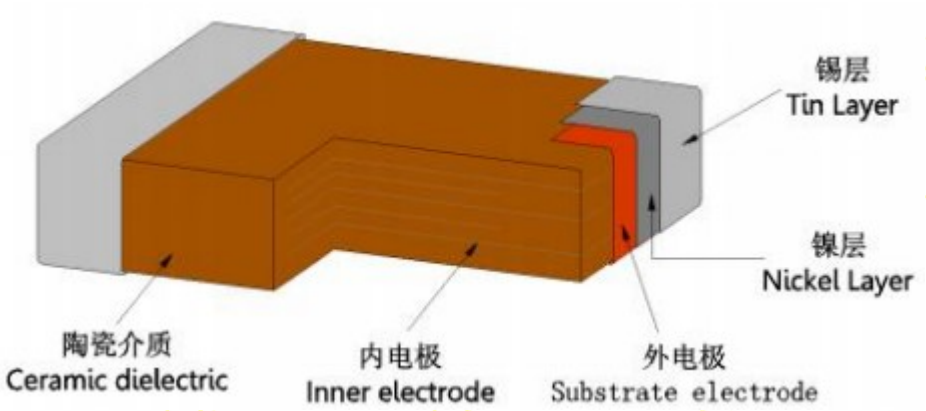
Test Description

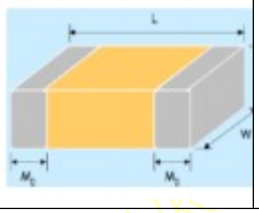
1. Model No. and parameter list

Model: H X7R 1206 1000V 10nF				
No.	Test items	Rate of capacitance change (compared to the Initial value)	Rate of dissipation factor change (compared to the specification value)	Rate of insulation resistance change (compared to the specification value)
1	Pre-and Post-Stress Electrical Test	<±10%	≦2.5%	≧10000MΩ
2	Operational Life	<±20%	<200%	≧2000MΩ
3	High Temperature Exposure (Storage)	<±10%	<200%	≧2000MΩ
4	Biased Humidity	<±10%	<200%	≧1000MΩ
5	Temperature Cycling	<±10%	<200%	≧1000MΩ
6	Destructive physical analysis	/		
7	External Visual	/		
8	Physical Dimension	/		
9	Resistance to Solvents	<±10%	≦2.5%	≧10000MΩ
10	Mechanical Shock	<±5%	≦2.5%	≧10000MΩ
11	Vibration			
12	Resistance to Soldering Heat	-5%~+10%	≦2.5%	≧10000MΩ
13	ESD	<±10%	≦2.5%	≧10000MΩ
14	Solderability	-5%~+10%	≦2.5%	≧10000MΩ
15	Electrical Characterization (-55°C/+25°C/+125°C)	<±10%	≦2.5%	≧10000MΩ
16	Board Flex	<±10%	≦2.5%	≧10000MΩ
17	Terminal Strength (SMD)	<±10%	≦2.5%	≧10000MΩ
18	Beam load test	<±10%	≦2.5%	≧10000MΩ

Test Description

2. Configuration and dimensions



Outline	Size(mm)	L(mm)	W(mm)	T(mm)
	1206(3216)	3.00~3.40	1.40~1.80	1.05~1.45

3.Test items

No.	Stress	Reference	Test Condition	Sample Size	Number failed
1	Pre- and Post-Stress Electrical Test	User Spec.	/	563	0
2	Operational Life	MIL-STD- 202 Method 108	1000 hours at 125°C Rated Voltage1000V	77	0
3	High Temperature Exposure (Storage)	MIL-STD-202 Method108	1000 hours at 125°C	77	0
4	Biased Humidity	MIL-STD-202 Method103	1000 hours at 85°C /85%RH Rated Voltage1.40V	77	0
5	Temperature Cycling	JESD22 Method JA-104	1000 cycles (-55°C to 125°C)	77	0
6	Destructive Physical Analysis	EIA-469	Electrical test not required.	10	0

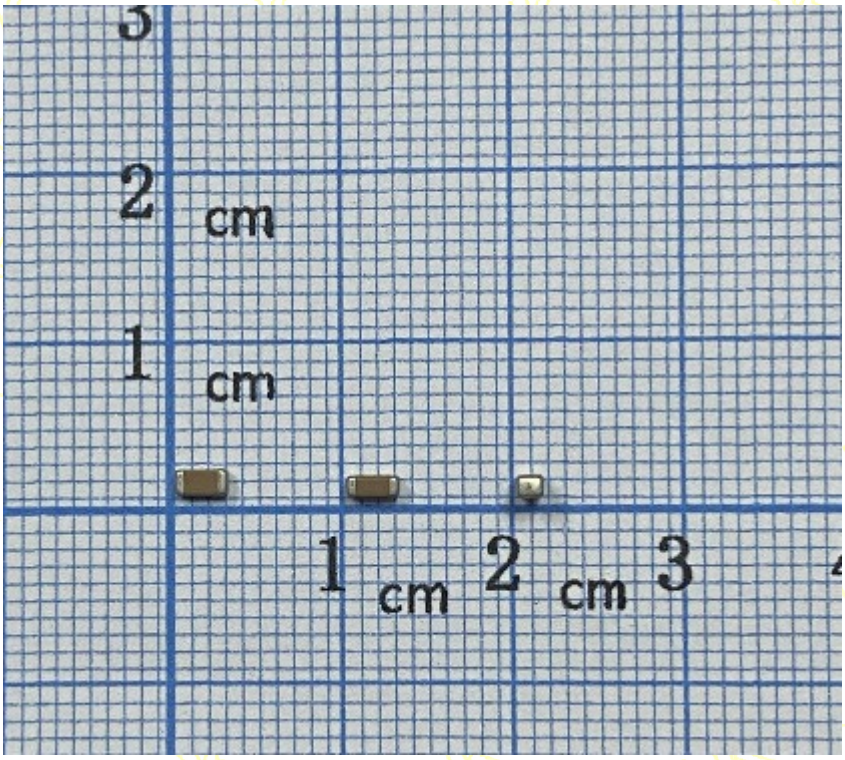
Test Description

No.	Stress	Reference	Test Condition	Sample Size	Number failed
7	External Visual	MIL-STD-883 Method 2009	Inspect device construction, marking and workmanship.	563	0
8	Physical Dimension	JESD22 Method JB-100	Verify the physical dimensions to the applicable user spec.	30	0
9	Resistance to Solvents	MIL-STD-202 Method 215	Immersion 3+0.5/-0 minutes in terpene defluxer. Brush 10 strokes(wet bristle)2 to 3 oz. Rinse in water. Air blow dry.	5	0
10	Mechanical Shock	MIL-STD-202 Method 213	Units are non-operating. Peak value (g's): 1500 Normal duration (D) (ms):0.5 Velocity change (Vi) ft/sec:15.4 18 shocks.	30	0
11	Vibration	MIL-STD-202 Method 204	10-2000 Hz. 12 cycles each of 3 orientations.		
12	Resistance to Soldering Heat	MIL-STD-202 Method 210	Condition B: Component Temperature: 260±5°C, Time: 10±1s, Temperature ramp/immersion and emersion rate: 25mm/s±6mm/s	30	0
13	ESD	AEC-Q200-002 or ISO/DIS10605	Test environment temperature and Relative humidity: 22.3℃, 47%RH.	15	0
14	Solderability	J-STD-002	Electrical test not required. Test Method B @215℃, category 3	15	0

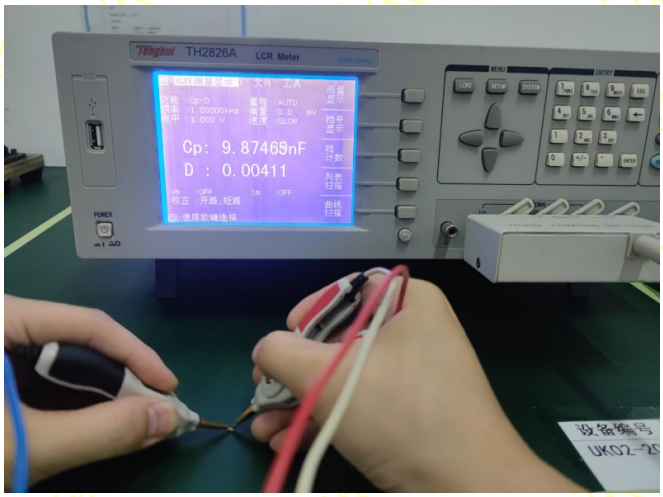
Test Description

No.	Stress	Reference	Test Condition	Sample Size	Number failed
15	Electrical Characterization	User Spec.	-55℃,25℃,125℃	30	0
16	Board Flex	AEC-Q200-005	>60s	30	0
17	Terminal Strength (SMD)	AEC-Q200-006	Apply force 17.7 N (1.8 Kg) time: 60 +1 s.	30	0
18	Beam Load Test	AEC-Q200-003	Force:17.7N Speed:2.5±0.25mm/sec	30	0

Photo



User Spec.			Verdict
Pre- and Post-Stress Electrical Test			**P**
1	The Pre- and Post- Stress Electrical Test below were conducted in their respective order on each test sample prior to and following the applicable Stress Tests. Results for each Pre- and Post- Stress Electrical Test are recorded.	563pcs samples.	P
2	Before, the capacitance Initial test should not exceed ±10% deviation, the dissipation factor less than or equal 2.5%. and the insulation resistance Initial test should not lower than 10000MΩ.	The test results are recorded in the data sheet of the conditional stress test.	P
3	After the test, the appearance inspection should be carried out, the sample should have no cracking, peeling, bulging, damage phenomenon, the product appearance should be normal.	No any damage on the component.	P
4	After the test the capacitance should not exceed of the specification.	The test results are recorded in the data sheet of the conditional stress test.	P
5	After the test the dissipation factor and the insulation resistance should not exceed of the specification.	The test results are recorded in the data sheet of the conditional stress test.	P



MIL-STD-202 Method 108			Verdict
Operational Life			**P**
1	Test Temperatures at 125°C, the voltage 1000V was placed for 1000 h, and the rate of change of capacitance and resistance was measured 24±4 hours after the test. beginning; end .....:	77pcs samples. 2022-09-20 to 2022-10-31	P
2	After the test, the appearance inspection should be carried out, the sample should have no cracking, peeling, bulging, damage phenomenon, the product appearance should be normal.		P
3	After the test the capacitance should not exceed ±20% of the Initial value.	See below table.	P
4	After the test the dissipation factor should not exceed 200% of the specification.	See below table.	P
5	After the test the insulation resistance should not lower than 2000MΩ.	See below table.	P

Spec. / No.	Capacitance (@1KHz,1.0Vrms,nF):				Mechanical damage
	Initial Measured	Deviation (<±10%)	After Measured	Change (<±20%)	
1	9.7697	-2.30%	9.0985	-6.87%	No
2	9.6557	-3.44%	8.7731	-9.14%	No
3	10.2129	2.13%	9.2019	-9.90%	No
4	9.9460	-0.54%	9.1189	-8.32%	No

Spec. / No.	Capacitance (@1KHz,1.0Vrms,nF):				Mechanical damage
	Initial Measured	Deviation (<±10%)	After Measured	Change (<±20%)	
5	9.9270	-0.73%	9.1236	-8.09%	No
6	10.1088	1.09%	9.0974	-10.01%	No
7	9.6964	-3.04%	8.6512	-10.78%	No
8	10.2325	2.33%	9.4643	-7.51%	No
9	9.9016	-0.98%	8.8598	-10.52%	No
10	9.9193	-0.81%	8.9594	-9.68%	No
11	10.1774	1.77%	9.1722	-9.88%	No
12	9.9657	-0.34%	9.2216	-7.47%	No
13	10.0834	0.83%	9.1778	-8.98%	No
14	9.7360	-2.64%	9.0484	-7.06%	No
15	9.8741	-1.26%	8.8953	-9.91%	No
16	10.1067	1.07%	9.3589	-7.40%	No
17	9.6421	-3.58%	8.8408	-8.31%	No
18	10.0884	0.88%	9.3434	-7.38%	No
19	9.9866	-0.13%	9.2491	-7.38%	No
20	9.6639	-3.36%	8.9016	-7.89%	No
21	9.7136	-2.86%	9.0401	-6.93%	No
22	9.7266	-2.73%	8.7994	-9.53%	No
23	10.1526	1.53%	9.3437	-7.97%	No
24	10.2744	2.74%	9.364	-8.86%	No
25	9.7517	-2.48%	9.0676	-7.02%	No
26	9.9650	-0.35%	8.9471	-10.21%	No
27	9.6615	-3.39%	8.9631	-7.23%	No
28	9.8027	-1.97%	9.0379	-7.80%	No
29	9.6408	-3.59%	8.7615	-9.12%	No
30	10.0847	0.85%	9.2595	-8.18%	No
31	9.8907	-1.09%	9.0851	-8.15%	No
32	10.2054	2.05%	9.3338	-8.54%	No
33	9.8821	-1.18%	8.8416	-10.53%	No
34	9.7281	-2.72%	8.8173	-9.36%	No
35	9.8841	-1.16%	9.0864	-8.07%	No
36	9.6453	-3.55%	8.8313	-8.44%	No
37	9.8048	-1.95%	8.8702	-9.53%	No

Spec. / No.	Capacitance (@1KHz,1.0Vrms,nF):				Mechanical damage
	Initial Measured	Deviation (<±10%)	After Measured	Change (<±20%)	
38	9.8509	-1.49%	8.989	-8.75%	No
39	10.0282	0.28%	9.0352	-9.90%	No
40	9.9573	-0.43%	9.0363	-9.25%	No
41	10.0207	0.21%	9.2487	-7.70%	No
42	10.0258	0.26%	8.9698	-10.53%	No
43	10.0145	0.15%	9.3358	-6.78%	No
44	9.6731	-3.27%	8.6476	-10.60%	No
45	9.7644	-2.36%	9.0969	-6.84%	No
46	10.1690	1.69%	9.2331	-9.20%	No
47	9.7213	-2.79%	8.6966	-10.54%	No
48	10.1104	1.10%	9.1349	-9.65%	No
49	9.8820	-1.18%	9.1829	-7.07%	No
50	10.0807	0.81%	9.2549	-8.19%	No
51	10.2076	2.08%	9.3779	-8.13%	No
52	9.9050	-0.95%	9.2037	-7.08%	No
53	9.7493	-2.51%	8.6804	-10.96%	No
54	9.9418	-0.58%	8.9324	-10.15%	No
55	9.7747	-2.25%	9.0817	-7.09%	No
56	10.0632	0.63%	9.0893	-9.68%	No
57	10.1655	1.66%	9.4755	-6.79%	No
58	10.1498	1.50%	9.3557	-7.82%	No
59	9.8244	-1.76%	8.7547	-10.89%	No
60	10.2384	2.38%	9.3202	-8.97%	No
61	9.8010	-1.99%	8.713	-11.10%	No
62	10.1738	1.74%	9.1724	-9.84%	No
63	10.1410	1.41%	9.3115	-8.18%	No
64	9.8461	-1.54%	8.9281	-9.32%	No
65	10.0458	0.46%	9.1678	-8.74%	No
66	10.0574	0.57%	9.193	-8.59%	No
67	10.2230	2.23%	9.1286	-10.71%	No
68	10.0364	0.36%	9.3078	-7.26%	No
69	10.0534	0.53%	9.2682	-7.81%	No
70	9.8760	-1.24%	8.8531	-10.36%	No

Spec. / No.	Capacitance (@1KHz,1.0Vrms,nF):				Mechanical damage
	Initial Measured	Deviation (<±10%)	After Measured	Change (<±20%)	
71	10.2662	2.66%	9.3226	-9.19%	No
72	9.8873	-1.13%	9.055	-8.42%	No
73	10.1431	1.43%	9.4044	-7.28%	No
74	10.0456	0.46%	9.0473	-9.94%	No
75	10.1289	1.29%	9.1971	-9.20%	No
76	9.9805	-0.20%	9.0977	-8.85%	No
77	9.7804	-2.20%	8.9086	-8.91%	No

Spec. / No.	Dissipation Factor(@1KHz,1.0Vrms):				Mechanical damage
	Initial Measured	≦ 2.5%	After Measured	Change (<200%)	
1	0.568%	Yes	1.094%	92.61%	No
2	0.516%	Yes	1.037%	100.97%	No
3	0.492%	Yes	0.974%	97.97%	No
4	0.579%	Yes	1.207%	108.46%	No
5	0.520%	Yes	0.991%	90.58%	No
6	0.588%	Yes	1.209%	105.61%	No
7	0.574%	Yes	1.145%	99.48%	No
8	0.544%	Yes	1.049%	92.83%	No
9	0.473%	Yes	0.987%	108.67%	No
10	0.574%	Yes	1.203%	109.58%	No
11	0.501%	Yes	1.055%	110.58%	No
12	0.539%	Yes	1.098%	103.71%	No
13	0.512%	Yes	0.967%	88.87%	No
14	0.551%	Yes	1.109%	101.27%	No
15	0.571%	Yes	1.112%	94.75%	No
16	0.550%	Yes	1.115%	102.73%	No
17	0.503%	Yes	0.965%	91.85%	No
18	0.485%	Yes	0.929%	91.55%	No
19	0.560%	Yes	1.067%	90.54%	No
20	0.542%	Yes	1.121%	106.83%	No
21	0.509%	Yes	1.001%	96.66%	No
22	0.507%	Yes	1.053%	107.69%	No
23	0.470%	Yes	0.947%	101.49%	No

Spec. / No.	Dissipation Factor(@1KHz,1.0Vrms):				Mechanical damage
	Initial Measured	≦ 2.5%	After Measured	Change (<200%)	
24	0.556%	Yes	1.048%	88.49%	No
25	0.542%	Yes	1.150%	112.18%	No
26	0.521%	Yes	0.985%	89.06%	No
27	0.483%	Yes	0.907%	87.78%	No
28	0.470%	Yes	0.974%	107.23%	No
29	0.540%	Yes	1.146%	112.22%	No
30	0.556%	Yes	1.077%	93.71%	No
31	0.572%	Yes	1.171%	104.72%	No
32	0.574%	Yes	1.068%	86.06%	No
33	0.566%	Yes	1.184%	109.19%	No
34	0.496%	Yes	0.923%	86.09%	No
35	0.473%	Yes	1.002%	111.84%	No
36	0.520%	Yes	1.045%	100.96%	No
37	0.566%	Yes	1.139%	101.24%	No
38	0.531%	Yes	1.057%	99.06%	No
39	0.520%	Yes	1.002%	92.69%	No
40	0.529%	Yes	1.109%	109.64%	No
41	0.557%	Yes	1.162%	108.62%	No
42	0.493%	Yes	1.019%	106.69%	No
43	0.550%	Yes	1.058%	92.36%	No
44	0.507%	Yes	1.014%	100.00%	No
45	0.482%	Yes	0.936%	94.19%	No
46	0.507%	Yes	0.977%	92.70%	No
47	0.516%	Yes	1.044%	102.33%	No
48	0.583%	Yes	1.138%	95.20%	No
49	0.515%	Yes	1.004%	94.95%	No
50	0.555%	Yes	1.103%	98.74%	No
51	0.587%	Yes	1.221%	108.01%	No
52	0.498%	Yes	0.964%	93.57%	No
53	0.568%	Yes	1.166%	105.28%	No
54	0.490%	Yes	0.945%	92.86%	No
55	0.527%	Yes	1.027%	94.88%	No
56	0.499%	Yes	1.059%	112.22%	No

Spec. / No.	Dissipation Factor(@1KHz,1.0Vrms):				Mechanical damage
	Initial Measured	≦ 2.5%	After Measured	Change (<200%)	
57	0.565%	Yes	1.132%	100.35%	No
58	0.590%	Yes	1.114%	88.81%	No
59	0.558%	Yes	1.169%	109.50%	No
60	0.546%	Yes	1.157%	111.90%	No
61	0.538%	Yes	1.019%	89.41%	No
62	0.561%	Yes	1.083%	93.05%	No
63	0.480%	Yes	0.917%	91.04%	No
64	0.599%	Yes	1.130%	88.65%	No
65	0.505%	Yes	1.033%	104.55%	No
66	0.589%	Yes	1.229%	108.66%	No
67	0.498%	Yes	0.932%	87.15%	No
68	0.551%	Yes	1.085%	96.91%	No
69	0.478%	Yes	0.903%	88.91%	No
70	0.496%	Yes	0.958%	93.15%	No
71	0.505%	Yes	1.063%	110.50%	No
72	0.598%	Yes	1.266%	111.71%	No
73	0.598%	Yes	1.148%	91.97%	No
74	0.552%	Yes	1.030%	86.59%	No
75	0.586%	Yes	1.228%	109.56%	No
76	0.511%	Yes	0.961%	88.06%	No
77	0.479%	Yes	1.000%	108.77%	No

Spec. / No.	Insulation Resistance(@Max500V,60s,≦50mA):		Mechanical damage
	Initial Measured (≧10000MΩ)	After Measured (≧2000MΩ)	
1	>10000MΩ	>2000MΩ	No
2	>10000MΩ	>2000MΩ	No
3	>10000MΩ	>2000MΩ	No
4	>10000MΩ	>2000MΩ	No
5	>10000MΩ	>2000MΩ	No
6	>10000MΩ	>2000MΩ	No
7	>10000MΩ	>2000MΩ	No
8	>10000MΩ	>2000MΩ	No
9	>10000MΩ	>2000MΩ	No

Spec. / No.	Insulation Resistance(@Max500V,60s,≦50mA):		Mechanical damage
	Initial Measured (≧10000MΩ)	After Measured (≧2000MΩ)	
10	>10000MΩ	>2000MΩ	No
11	>10000MΩ	>2000MΩ	No
12	>10000MΩ	>2000MΩ	No
13	>10000MΩ	>2000MΩ	No
14	>10000MΩ	>2000MΩ	No
15	>10000MΩ	>2000MΩ	No
16	>10000MΩ	>2000MΩ	No
17	>10000MΩ	>2000MΩ	No
18	>10000MΩ	>2000MΩ	No
19	>10000MΩ	>2000MΩ	No
20	>10000MΩ	>2000MΩ	No
21	>10000MΩ	>2000MΩ	No
22	>10000MΩ	>2000MΩ	No
23	>10000MΩ	>2000MΩ	No
24	>10000MΩ	>2000MΩ	No
25	>10000MΩ	>2000MΩ	No
26	>10000MΩ	>2000MΩ	No
27	>10000MΩ	>2000MΩ	No
28	>10000MΩ	>2000MΩ	No
29	>10000MΩ	>2000MΩ	No
30	>10000MΩ	>2000MΩ	No
31	>10000MΩ	>2000MΩ	No
32	>10000MΩ	>2000MΩ	No
33	>10000MΩ	>2000MΩ	No
34	>10000MΩ	>2000MΩ	No
35	>10000MΩ	>2000MΩ	No
36	>10000MΩ	>2000MΩ	No
37	>10000MΩ	>2000MΩ	No
38	>10000MΩ	>2000MΩ	No
39	>10000MΩ	>2000MΩ	No
40	>10000MΩ	>2000MΩ	No
41	>10000MΩ	>2000MΩ	No
42	>10000MΩ	>2000MΩ	No

Spec. / No.	Insulation Resistance(@Max500V,60s,≦50mA):		Mechanical damage
	Initial Measured (≧10000MΩ)	After Measured (≧2000MΩ)	
43	>10000MΩ	>2000MΩ	No
44	>10000MΩ	>2000MΩ	No
45	>10000MΩ	>2000MΩ	No
46	>10000MΩ	>2000MΩ	No
47	>10000MΩ	>2000MΩ	No
48	>10000MΩ	>2000MΩ	No
49	>10000MΩ	>2000MΩ	No
50	>10000MΩ	>2000MΩ	No
51	>10000MΩ	>2000MΩ	No
52	>10000MΩ	>2000MΩ	No
53	>10000MΩ	>2000MΩ	No
54	>10000MΩ	>2000MΩ	No
55	>10000MΩ	>2000MΩ	No
56	>10000MΩ	>2000MΩ	No
57	>10000MΩ	>2000MΩ	No
58	>10000MΩ	>2000MΩ	No
59	>10000MΩ	>2000MΩ	No
60	>10000MΩ	>2000MΩ	No
61	>10000MΩ	>2000MΩ	No
62	>10000MΩ	>2000MΩ	No
63	>10000MΩ	>2000MΩ	No
64	>10000MΩ	>2000MΩ	No
65	>10000MΩ	>2000MΩ	No
66	>10000MΩ	>2000MΩ	No
67	>10000MΩ	>2000MΩ	No
68	>10000MΩ	>2000MΩ	No
69	>10000MΩ	>2000MΩ	No
70	>10000MΩ	>2000MΩ	No
71	>10000MΩ	>2000MΩ	No
72	>10000MΩ	>2000MΩ	No
73	>10000MΩ	>2000MΩ	No
74	>10000MΩ	>2000MΩ	No
75	>10000MΩ	>2000MΩ	No

Spec. / No.	Insulation Resistance(@Max500V,60s,≦50mA):		Mechanical damage
	Initial Measured (≧10000MΩ)	After Measured (≧2000MΩ)	
76	>10000MΩ	>2000MΩ	No
77	>10000MΩ	>2000MΩ	No

MIL-STD-202 Method 108			Verdict
High Temperature Exposure (Storage)			**P**
1	1000 hrs. @ T=125°C. Unpowered. Measurement at 24±4 hours after test conclusion. beginning; end .....:	77pcs samples. 2022-09-20 to 2022-10-31	P
2	After the test, the appearance inspection should be carried out, the sample should have no cracking, peeling, bulging, damage phenomenon, the product appearance should be normal.	No any damage on the component.	P
3	After the test the capacitance should not exceed ±10% of the Initial value.	See below table.	P
4	After the test the dissipation factor should not exceed 200% of the specification.	See below table.	P
5	After the test the insulation resistance should not lower than 2000MΩ.	See below table.	P

Spec. / No.	Capacitance (@1KHz,1.0Vrms,nF):				Mechanical damage
	Initial Measured	Deviation (<±10%)	After Measured	Change (<±10%)	
78	9.72078	-2.79%	9.5533	-1.72%	No
79	9.96452	-0.35%	9.8709	-0.94%	No

Spec. / No.	Capacitance (@1KHz,1.0Vrms,nF):				Mechanical damage
	Initial Measured	Deviation (<±10%)	After Measured	Change (<±10%)	
80	9.89243	-1.08%	9.7615	-1.32%	No
81	9.85053	-1.49%	9.6555	-1.98%	No
82	9.96357	-0.36%	9.8692	-0.95%	No
83	9.74826	-2.52%	9.6740	-0.76%	No
84	9.72653	-2.73%	9.5811	-1.50%	No
85	10.0857	0.86%	9.7905	-2.93%	No
86	9.63342	-3.67%	9.3758	-2.67%	No
87	9.95056	-0.49%	9.8388	-1.12%	No
88	10.0125	0.12%	9.8067	-2.06%	No
89	9.96251	-0.37%	9.8641	-0.99%	No
90	10.0283	0.28%	9.7482	-2.79%	No
91	10.03657	0.37%	9.9298	-1.06%	No
92	10.0464	0.46%	9.7993	-2.46%	No
93	9.97216	-0.28%	9.6926	-2.80%	No
94	10.1374	1.37%	10.0499	-0.86%	No
95	10.0785	0.79%	9.8167	-2.60%	No
96	9.85863	-1.41%	9.7872	-0.72%	No
97	9.95458	-0.45%	9.8730	-0.82%	No
98	9.69521	-3.05%	9.6153	-0.82%	No
99	10.1864	1.86%	9.9284	-2.53%	No
100	10.1025	1.02%	9.8198	-2.80%	No
101	9.95713	-0.43%	9.8741	-0.83%	No
102	10.1512	1.51%	9.9659	-1.83%	No
103	10.0836	0.84%	9.8344	-2.47%	No
104	9.91537	-0.85%	9.6874	-2.30%	No
105	10.0163	0.16%	9.7645	-2.51%	No
106	9.92351	-0.76%	9.7005	-2.25%	No
107	9.85343	-1.47%	9.7307	-1.25%	No
108	9.96324	-0.37%	9.8096	-1.54%	No
109	9.73544	-2.65%	9.6612	-0.76%	No
110	9.88942	-1.11%	9.8118	-0.78%	No
111	10.0827	0.83%	9.9056	-1.76%	No
112	10.1665	1.66%	9.9418	-2.21%	No

Spec. / No.	Capacitance (@1KHz,1.0Vrms,nF):				Mechanical damage
	Initial Measured	Deviation (<±10%)	After Measured	Change (<±10%)	
113	9.92053	-0.79%	9.6638	-2.59%	No
114	9.82149	-1.79%	9.5374	-2.89%	No
115	9.97352	-0.26%	9.8870	-0.87%	No
116	10.0194	0.19%	9.7917	-2.27%	No
117	10.0859	0.86%	9.8941	-1.90%	No
118	9.9704	-0.30%	9.8292	-1.42%	No
119	10.0547	0.55%	9.9806	-0.74%	No
120	10.0945	0.95%	9.9992	-0.94%	No
121	9.96232	-0.38%	9.7594	-2.04%	No
122	10.1584	1.58%	10.0670	-0.90%	No
123	10.1307	1.31%	9.9630	-1.66%	No
124	10.0542	0.54%	9.9153	-1.38%	No
125	9.86657	-1.33%	9.6534	-2.16%	No
126	10.0647	0.65%	9.9961	-0.68%	No
127	10.0238	0.24%	9.7330	-2.90%	No
128	9.67558	-3.24%	9.4276	-2.56%	No
129	10.0814	0.81%	9.9637	-1.17%	No
130	9.92256	-0.77%	9.6546	-2.70%	No
131	10.1267	1.27%	9.8876	-2.36%	No
132	9.91353	-0.86%	9.7036	-2.12%	No
133	10.2787	2.79%	10.1075	-1.67%	No
134	10.0161	0.16%	9.7829	-2.33%	No
135	10.0163	0.16%	9.7667	-2.49%	No
136	10.0352	0.35%	9.8803	-1.54%	No
137	10.195	1.95%	9.9327	-2.57%	No
138	10.047	0.47%	9.8831	-1.63%	No
139	10.0493	0.49%	9.9822	-0.67%	No
140	10.0025	0.02%	9.8305	-1.72%	No
141	9.94653	-0.53%	9.6968	-2.51%	No
142	9.90739	-0.93%	9.6433	-2.67%	No
143	9.90322	-0.97%	9.7868	-1.18%	No
144	10.0921	0.92%	9.9183	-1.72%	No
145	9.96935	-0.31%	9.7704	-2.00%	No

Spec. / No.	Capacitance (@1KHz,1.0Vrms,nF):				Mechanical damage
	Initial Measured	Deviation (<±10%)	After Measured	Change (<±10%)	
146	10.0912	0.91%	9.8899	-1.99%	No
147	9.99354	-0.06%	9.8036	-1.90%	No
148	10.0382	0.38%	9.8270	-2.10%	No
149	10.0054	0.05%	9.7526	-2.53%	No
150	10.192	1.92%	10.0471	-1.42%	No
151	10.1205	1.21%	9.9338	-1.84%	No
152	10.0172	0.17%	9.8138	-2.03%	No
153	10.0642	0.64%	9.9136	-1.50%	No
154	10.0947	0.95%	9.8784	-2.14%	No

Spec. / No.	Dissipation Factor(@1KHz,1.0Vrms):				Mechanical damage
	Initial Measured	Within spec. (≦2.5%)	After Measured	Change (<200%)	
78	0.487%	Yes	0.534%	9.65%	No
79	0.498%	Yes	0.558%	12.05%	No
80	0.502%	Yes	0.563%	12.15%	No
81	0.558%	Yes	0.579%	3.76%	No
82	0.496%	Yes	0.557%	12.30%	No
83	0.572%	Yes	0.576%	0.70%	No
84	0.507%	Yes	0.536%	5.72%	No
85	0.497%	Yes	0.531%	6.84%	No
86	0.490%	Yes	0.522%	6.53%	No
87	0.482%	Yes	0.533%	10.58%	No
88	0.483%	Yes	0.553%	14.49%	No
89	0.506%	Yes	0.522%	3.16%	No
90	0.434%	Yes	0.483%	11.29%	No
91	0.481%	Yes	0.542%	12.68%	No
92	0.450%	Yes	0.473%	5.11%	No
93	0.508%	Yes	0.555%	9.25%	No
94	0.520%	Yes	0.556%	6.92%	No
95	0.495%	Yes	0.542%	9.49%	No
96	0.494%	Yes	0.532%	7.69%	No
97	0.484%	Yes	0.536%	10.74%	No
98	0.519%	Yes	0.567%	9.25%	No

Spec. / No.	Dissipation Factor(@1KHz,1.0Vrms):				Mechanical damage
	Initial Measured	Within spec. (≦2.5%)	After Measured	Change (<200%)	
99	0.520%	Yes	0.571%	9.81%	No
100	0.521%	Yes	0.572%	9.79%	No
101	0.565%	Yes	0.583%	3.19%	No
102	0.499%	Yes	0.576%	15.43%	No
103	0.527%	Yes	0.579%	9.87%	No
104	0.518%	Yes	0.573%	10.62%	No
105	0.549%	Yes	0.589%	7.29%	No
106	0.488%	Yes	0.577%	18.24%	No
107	0.491%	Yes	0.552%	12.42%	No
108	0.539%	Yes	0.586%	8.72%	No
109	0.546%	Yes	0.596%	9.16%	No
110	0.513%	Yes	0.587%	14.42%	No
111	0.563%	Yes	0.603%	7.10%	No
112	0.525%	Yes	0.580%	10.48%	No
113	0.525%	Yes	0.588%	12.00%	No
114	0.478%	Yes	0.505%	5.65%	No
115	0.514%	Yes	0.559%	8.75%	No
116	0.520%	Yes	0.549%	5.58%	No
117	0.492%	Yes	0.561%	14.02%	No
118	0.511%	Yes	0.560%	9.59%	No
119	0.527%	Yes	0.546%	3.61%	No
120	0.503%	Yes	0.553%	9.94%	No
121	0.528%	Yes	0.579%	9.66%	No
122	0.558%	Yes	0.589%	5.56%	No
123	0.490%	Yes	0.526%	7.35%	No
124	0.514%	Yes	0.554%	7.78%	No
125	0.525%	Yes	0.577%	9.90%	No
126	0.529%	Yes	0.580%	9.64%	No
127	0.514%	Yes	0.573%	11.48%	No
128	0.526%	Yes	0.560%	6.46%	No
129	0.488%	Yes	0.529%	8.40%	No
130	0.507%	Yes	0.550%	8.48%	No
131	0.562%	Yes	0.587%	4.45%	No

Spec. / No.	Dissipation Factor(@1KHz,1.0Vrms):				Mechanical damage
	Initial Measured	Within spec. (≦2.5%)	After Measured	Change (<200%)	
132	0.526%	Yes	0.571%	8.56%	No
133	0.544%	Yes	0.575%	5.70%	No
134	0.547%	Yes	0.574%	4.94%	No
135	0.546%	Yes	0.574%	5.13%	No
136	0.502%	Yes	0.549%	9.36%	No
137	0.482%	Yes	0.535%	11.00%	No
138	0.493%	Yes	0.551%	11.76%	No
139	0.520%	Yes	0.569%	9.42%	No
140	0.524%	Yes	0.585%	11.64%	No
141	0.495%	Yes	0.568%	14.75%	No
142	0.487%	Yes	0.545%	11.91%	No
143	0.530%	Yes	0.578%	9.06%	No
144	0.494%	Yes	0.564%	14.17%	No
145	0.501%	Yes	0.548%	9.38%	No
146	0.483%	Yes	0.557%	15.32%	No
147	0.555%	Yes	0.580%	4.50%	No
148	0.504%	Yes	0.549%	8.93%	No
149	0.513%	Yes	0.547%	6.63%	No
150	0.495%	Yes	0.532%	7.47%	No
151	0.501%	Yes	0.555%	10.78%	No
152	0.507%	Yes	0.556%	9.66%	No
153	0.497%	Yes	0.558%	12.27%	No
154	0.502%	Yes	0.552%	9.96%	No

Spec. / No.	Insulation Resistance(@Max500V,60s,≦50mA):		Mechanical damage
	Initial Measured (≧10000MΩ)	After Measured (≧2000MΩ)	
78	>10000MΩ	>2000MΩ	No
79	>10000MΩ	>2000MΩ	No
80	>10000MΩ	>2000MΩ	No
81	>10000MΩ	>2000MΩ	No
82	>10000MΩ	>2000MΩ	No
83	>10000MΩ	>2000MΩ	No
84	>10000MΩ	>2000MΩ	No

Spec. / No.	Insulation Resistance(@Max500V,60s,≦50mA):		Mechanical damage
	Initial Measured (≧10000MΩ)	After Measured (≧2000MΩ)	
85	>10000MΩ	>2000MΩ	No
86	>10000MΩ	>2000MΩ	No
87	>10000MΩ	>2000MΩ	No
88	>10000MΩ	>2000MΩ	No
89	>10000MΩ	>2000MΩ	No
90	>10000MΩ	>2000MΩ	No
91	>10000MΩ	>2000MΩ	No
92	>10000MΩ	>2000MΩ	No
93	>10000MΩ	>2000MΩ	No
94	>10000MΩ	>2000MΩ	No
95	>10000MΩ	>2000MΩ	No
96	>10000MΩ	>2000MΩ	No
97	>10000MΩ	>2000MΩ	No
98	>10000MΩ	>2000MΩ	No
99	>10000MΩ	>2000MΩ	No
100	>10000MΩ	>2000MΩ	No
101	>10000MΩ	>2000MΩ	No
102	>10000MΩ	>2000MΩ	No
103	>10000MΩ	>2000MΩ	No
104	>10000MΩ	>2000MΩ	No
105	>10000MΩ	>2000MΩ	No
106	>10000MΩ	>2000MΩ	No
107	>10000MΩ	>2000MΩ	No
108	>10000MΩ	>2000MΩ	No
109	>10000MΩ	>2000MΩ	No
110	>10000MΩ	>2000MΩ	No
111	>10000MΩ	>2000MΩ	No
112	>10000MΩ	>2000MΩ	No
113	>10000MΩ	>2000MΩ	No
114	>10000MΩ	>2000MΩ	No
115	>10000MΩ	>2000MΩ	No
116	>10000MΩ	>2000MΩ	No
117	>10000MΩ	>2000MΩ	No

Spec. / No.	Insulation Resistance(@Max500V,60s,≦50mA):		Mechanical damage
	Initial Measured (≧10000MΩ)	After Measured (≧2000MΩ)	
118	>10000MΩ	>2000MΩ	No
119	>10000MΩ	>2000MΩ	No
120	>10000MΩ	>2000MΩ	No
121	>10000MΩ	>2000MΩ	No
122	>10000MΩ	>2000MΩ	No
123	>10000MΩ	>2000MΩ	No
124	>10000MΩ	>2000MΩ	No
125	>10000MΩ	>2000MΩ	No
126	>10000MΩ	>2000MΩ	No
127	>10000MΩ	>2000MΩ	No
128	>10000MΩ	>2000MΩ	No
129	>10000MΩ	>2000MΩ	No
130	>10000MΩ	>2000MΩ	No
131	>10000MΩ	>2000MΩ	No
132	>10000MΩ	>2000MΩ	No
133	>10000MΩ	>2000MΩ	No
134	>10000MΩ	>2000MΩ	No
135	>10000MΩ	>2000MΩ	No
136	>10000MΩ	>2000MΩ	No
137	>10000MΩ	>2000MΩ	No
138	>10000MΩ	>2000MΩ	No
139	>10000MΩ	>2000MΩ	No
140	>10000MΩ	>2000MΩ	No
141	>10000MΩ	>2000MΩ	No
142	>10000MΩ	>2000MΩ	No
143	>10000MΩ	>2000MΩ	No
144	>10000MΩ	>2000MΩ	No
145	>10000MΩ	>2000MΩ	No
146	>10000MΩ	>2000MΩ	No
147	>10000MΩ	>2000MΩ	No
148	>10000MΩ	>2000MΩ	No
149	>10000MΩ	>2000MΩ	No
150	>10000MΩ	>2000MΩ	No

Spec. / No.	Insulation Resistance(@Max500V,60s,≦50mA):		Mechanical damage
	Initial Measured (≧10000MΩ)	After Measured (≧2000MΩ)	
151	>10000MΩ	>2000MΩ	No
152	>10000MΩ	>2000MΩ	No
153	>10000MΩ	>2000MΩ	No
154	>10000MΩ	>2000MΩ	No

MIL-STD- 202 Method 103			Verdict
Biased Humidity			**P**
1	At 85°C and 85%RH, the voltage 1.40V was placed for 1000 h, and the rate of change of capacitance and resistance was measured 24±4 hours after the test. beginning; end .....:	77pcs samples. 2022-09-20 to 2022-10-31	P
2	After the test, the appearance inspection should be carried out, the sample should have no cracking, peeling, bulging, damage phenomenon, the product appearance should be normal.	No any damage on the component.	P
3	After the test the capacitance should not exceed ±10% of the Initial value.	See below table.	P
4	After the test the dissipation factor should not exceed 200% of the specification.	See below table.	P
5	After the test the insulation resistance should not lower than 1000MΩ.	See below table.	P

Spec. / No.	Capacitance (@1KHz,1.0Vrms,nF):				Mechanical damage
	Initial Measured	Deviation (<±10%)	After Measured	Change (<±10%)	
155	9.9550	-0.45%	9.659	-2.97%	No
156	10.1334	1.33%	9.883	-2.48%	No
157	9.8533	-1.47%	9.422	-4.38%	No
158	10.0276	0.28%	9.588	-4.38%	No
159	9.7609	-2.39%	9.278	-4.94%	No
160	10.1803	1.80%	9.830	-3.45%	No
161	9.8990	-1.01%	9.522	-3.80%	No
162	9.7263	-2.74%	9.375	-3.61%	No
163	10.0942	0.94%	9.687	-4.04%	No
164	9.6600	-3.40%	9.415	-2.53%	No
165	9.8871	-1.13%	9.520	-3.71%	No
166	9.6366	-3.63%	9.304	-3.45%	No
167	9.8927	-1.07%	9.428	-4.69%	No
168	9.7726	-2.27%	9.459	-3.21%	No
169	9.7010	-2.99%	9.259	-4.56%	No
170	10.2598	2.60%	9.736	-5.10%	No
171	9.9972	-0.03%	9.765	-2.32%	No
172	10.0192	0.19%	9.526	-4.92%	No
173	10.0056	0.06%	9.721	-2.85%	No
174	10.2276	2.28%	9.729	-4.88%	No
175	9.7787	-2.21%	9.390	-3.97%	No
176	10.0439	0.44%	9.565	-4.77%	No
177	9.8196	-1.80%	9.473	-3.53%	No
178	9.6524	-3.48%	9.275	-3.91%	No
179	9.8446	-1.55%	9.548	-3.02%	No
180	9.7431	-2.57%	9.323	-4.31%	No
181	10.2787	2.79%	9.797	-4.68%	No
182	10.0395	0.40%	9.701	-3.37%	No
183	9.8080	-1.92%	9.544	-2.69%	No
184	10.2767	2.77%	9.916	-3.51%	No
185	10.1938	1.94%	9.768	-4.18%	No
186	9.8641	-1.36%	9.385	-4.86%	No
187	9.9623	-0.38%	9.695	-2.69%	No

Spec. / No.	Capacitance (@1KHz,1.0Vrms,nF):				Mechanical damage
	Initial Measured	Deviation (<±10%)	After Measured	Change (<±10%)	
188	10.1116	1.12%	9.750	-3.58%	No
189	9.9801	-0.20%	9.667	-3.14%	No
190	10.0585	0.59%	9.809	-2.49%	No
191	9.7177	-2.82%	9.450	-2.76%	No
192	10.0332	0.33%	9.798	-2.35%	No
193	10.1372	1.37%	9.754	-3.78%	No
194	10.0828	0.83%	9.702	-3.78%	No
195	9.8871	-1.13%	9.466	-4.26%	No
196	10.1864	1.86%	9.858	-3.22%	No
197	10.0996	1.00%	9.763	-3.34%	No
198	9.9856	-0.14%	9.749	-2.37%	No
199	10.1682	1.68%	9.713	-4.48%	No
200	10.2156	2.16%	9.934	-2.76%	No
201	9.8747	-1.25%	9.534	-3.45%	No
202	10.1152	1.15%	9.731	-3.80%	No
203	9.8449	-1.55%	9.409	-4.43%	No
204	10.0666	0.67%	9.611	-4.53%	No
205	9.7236	-2.76%	9.259	-4.78%	No
206	10.0571	0.57%	9.731	-3.24%	No
207	10.2039	2.04%	9.756	-4.39%	No
208	9.7409	-2.59%	9.488	-2.59%	No
209	9.8780	-1.22%	9.369	-5.15%	No
210	9.6589	-3.41%	9.311	-3.60%	No
211	9.7087	-2.91%	9.282	-4.39%	No
212	10.1388	1.39%	9.752	-3.82%	No
213	9.8643	-1.36%	9.378	-4.93%	No
214	10.1467	1.47%	9.663	-4.76%	No
215	9.9205	-0.79%	9.596	-3.27%	No
216	10.1192	1.19%	9.816	-3.00%	No
217	9.8964	-1.04%	9.558	-3.42%	No
218	9.9590	-0.41%	9.665	-2.96%	No
219	9.9572	-0.43%	9.462	-4.97%	No
220	9.7941	-2.06%	9.429	-3.73%	No

Spec. / No.	Capacitance (@1KHz,1.0Vrms,nF):				Mechanical damage
	Initial Measured	Deviation (<±10%)	After Measured	Change (<±10%)	
221	10.0723	0.72%	9.768	-3.02%	No
222	10.0950	0.95%	9.707	-3.84%	No
223	10.0073	0.07%	9.622	-3.85%	No
224	10.0728	0.73%	9.733	-3.37%	No
225	10.2632	2.63%	9.821	-4.31%	No
226	9.7160	-2.84%	9.348	-3.79%	No
227	10.1294	1.29%	9.745	-3.79%	No
228	10.2357	2.36%	9.833	-3.94%	No
229	10.1533	1.53%	9.820	-3.28%	No
230	9.7269	-2.73%	9.486	-2.48%	No
231	10.1811	1.81%	9.859	-3.16%	No

Spec. / No.	Dissipation Factor(@1KHz,1.0Vrms):				Mechanical damage
	Initial Measured	Within spec. (≦2.5%)	After Measured	Change (<200%)	
155	0.494%	Yes	0.510%	3.24%	No
156	0.591%	Yes	0.618%	4.57%	No
157	0.498%	Yes	0.520%	4.42%	No
158	0.475%	Yes	0.489%	2.95%	No
159	0.534%	Yes	0.554%	3.75%	No
160	0.532%	Yes	0.551%	3.57%	No
161	0.496%	Yes	0.521%	5.04%	No
162	0.480%	Yes	0.495%	3.13%	No
163	0.507%	Yes	0.522%	2.96%	No
164	0.567%	Yes	0.591%	4.23%	No
165	0.591%	Yes	0.618%	4.57%	No
166	0.585%	Yes	0.607%	3.76%	No
167	0.529%	Yes	0.554%	4.73%	No
168	0.477%	Yes	0.491%	2.94%	No
169	0.590%	Yes	0.618%	4.75%	No
170	0.568%	Yes	0.595%	4.75%	No
171	0.478%	Yes	0.498%	4.18%	No
172	0.532%	Yes	0.553%	3.95%	No
173	0.519%	Yes	0.544%	4.82%	No

Spec. / No.	Dissipation Factor(@1KHz,1.0Vrms):				Mechanical damage
	Initial Measured	Within spec. (≦2.5%)	After Measured	Change (<200%)	
174	0.470%	Yes	0.491%	4.47%	No
175	0.592%	Yes	0.621%	4.90%	No
176	0.522%	Yes	0.544%	4.21%	No
177	0.569%	Yes	0.588%	3.34%	No
178	0.563%	Yes	0.589%	4.62%	No
179	0.525%	Yes	0.542%	3.24%	No
180	0.598%	Yes	0.624%	4.35%	No
181	0.503%	Yes	0.523%	3.98%	No
182	0.582%	Yes	0.601%	3.26%	No
183	0.596%	Yes	0.619%	3.86%	No
184	0.534%	Yes	0.556%	4.12%	No
185	0.509%	Yes	0.527%	3.54%	No
186	0.536%	Yes	0.558%	4.10%	No
187	0.596%	Yes	0.624%	4.70%	No
188	0.544%	Yes	0.561%	3.13%	No
189	0.477%	Yes	0.497%	4.19%	No
190	0.495%	Yes	0.511%	3.23%	No
191	0.509%	Yes	0.525%	3.14%	No
192	0.533%	Yes	0.560%	5.07%	No
193	0.490%	Yes	0.509%	3.88%	No
194	0.594%	Yes	0.620%	4.38%	No
195	0.577%	Yes	0.595%	3.12%	No
196	0.497%	Yes	0.515%	3.62%	No
197	0.549%	Yes	0.568%	3.46%	No
198	0.572%	Yes	0.596%	4.20%	No
199	0.477%	Yes	0.497%	4.19%	No
200	0.519%	Yes	0.542%	4.43%	No
201	0.590%	Yes	0.619%	4.92%	No
202	0.494%	Yes	0.514%	4.05%	No
203	0.576%	Yes	0.597%	3.65%	No
204	0.498%	Yes	0.519%	4.22%	No
205	0.571%	Yes	0.598%	4.73%	No
206	0.524%	Yes	0.546%	4.20%	No

Spec. / No.	Dissipation Factor(@1KHz,1.0Vrms):				Mechanical damage
	Initial Measured	Within spec. (≦2.5%)	After Measured	Change (<200%)	
207	0.590%	Yes	0.616%	4.41%	No
208	0.555%	Yes	0.578%	4.14%	No
209	0.495%	Yes	0.516%	4.24%	No
210	0.556%	Yes	0.579%	4.14%	No
211	0.498%	Yes	0.519%	4.22%	No
212	0.513%	Yes	0.530%	3.31%	No
213	0.580%	Yes	0.598%	3.10%	No
214	0.550%	Yes	0.575%	4.55%	No
215	0.547%	Yes	0.564%	3.11%	No
216	0.568%	Yes	0.591%	4.05%	No
217	0.580%	Yes	0.599%	3.28%	No
218	0.514%	Yes	0.536%	4.28%	No
219	0.598%	Yes	0.621%	3.85%	No
220	0.574%	Yes	0.602%	4.88%	No
221	0.540%	Yes	0.561%	3.89%	No
222	0.494%	Yes	0.514%	4.05%	No
223	0.507%	Yes	0.529%	4.34%	No
224	0.521%	Yes	0.536%	2.88%	No
225	0.555%	Yes	0.577%	3.96%	No
226	0.546%	Yes	0.564%	3.30%	No
227	0.595%	Yes	0.613%	3.03%	No
228	0.533%	Yes	0.556%	4.32%	No
229	0.539%	Yes	0.565%	4.82%	No
230	0.473%	Yes	0.490%	3.59%	No
231	0.598%	Yes	0.626%	4.68%	No

Spec. / No.	Insulation Resistance(@Max500V,60s,≦50mA):		Mechanical damage
	Initial Measured (≧10000MΩ)	After Measured (≧1000MΩ)	
155	>10000MΩ	>1000MΩ	No
156	>10000MΩ	>1000MΩ	No
157	>10000MΩ	>1000MΩ	No
158	>10000MΩ	>1000MΩ	No
159	>10000MΩ	>1000MΩ	No

Spec. / No.	Insulation Resistance(@Max500V,60s,≦50mA):		Mechanical damage
	Initial Measured (≧10000MΩ)	After Measured (≧1000MΩ)	
160	>10000MΩ	>1000MΩ	No
161	>10000MΩ	>1000MΩ	No
162	>10000MΩ	>1000MΩ	No
163	>10000MΩ	>1000MΩ	No
164	>10000MΩ	>1000MΩ	No
165	>10000MΩ	>1000MΩ	No
166	>10000MΩ	>1000MΩ	No
167	>10000MΩ	>1000MΩ	No
168	>10000MΩ	>1000MΩ	No
169	>10000MΩ	>1000MΩ	No
170	>10000MΩ	>1000MΩ	No
171	>10000MΩ	>1000MΩ	No
172	>10000MΩ	>1000MΩ	No
173	>10000MΩ	>1000MΩ	No
174	>10000MΩ	>1000MΩ	No
175	>10000MΩ	>1000MΩ	No
176	>10000MΩ	>1000MΩ	No
177	>10000MΩ	>1000MΩ	No
178	>10000MΩ	>1000MΩ	No
179	>10000MΩ	>1000MΩ	No
180	>10000MΩ	>1000MΩ	No
181	>10000MΩ	>1000MΩ	No
182	>10000MΩ	>1000MΩ	No
183	>10000MΩ	>1000MΩ	No
184	>10000MΩ	>1000MΩ	No
185	>10000MΩ	>1000MΩ	No
186	>10000MΩ	>1000MΩ	No
187	>10000MΩ	>1000MΩ	No
188	>10000MΩ	>1000MΩ	No
189	>10000MΩ	>1000MΩ	No
190	>10000MΩ	>1000MΩ	No
191	>10000MΩ	>1000MΩ	No
192	>10000MΩ	>1000MΩ	No

Spec. / No.	Insulation Resistance(@Max500V,60s,≦50mA):		Mechanical damage
	Initial Measured (≧10000MΩ)	After Measured (≧1000MΩ)	
193	>10000MΩ	>1000MΩ	No
194	>10000MΩ	>1000MΩ	No
195	>10000MΩ	>1000MΩ	No
196	>10000MΩ	>1000MΩ	No
197	>10000MΩ	>1000MΩ	No
198	>10000MΩ	>1000MΩ	No
199	>10000MΩ	>1000MΩ	No
200	>10000MΩ	>1000MΩ	No
201	>10000MΩ	>1000MΩ	No
202	>10000MΩ	>1000MΩ	No
203	>10000MΩ	>1000MΩ	No
204	>10000MΩ	>1000MΩ	No
205	>10000MΩ	>1000MΩ	No
206	>10000MΩ	>1000MΩ	No
207	>10000MΩ	>1000MΩ	No
208	>10000MΩ	>1000MΩ	No
209	>10000MΩ	>1000MΩ	No
210	>10000MΩ	>1000MΩ	No
211	>10000MΩ	>1000MΩ	No
212	>10000MΩ	>1000MΩ	No
213	>10000MΩ	>1000MΩ	No
214	>10000MΩ	>1000MΩ	No
215	>10000MΩ	>1000MΩ	No
216	>10000MΩ	>1000MΩ	No
217	>10000MΩ	>1000MΩ	No
218	>10000MΩ	>1000MΩ	No
219	>10000MΩ	>1000MΩ	No
220	>10000MΩ	>1000MΩ	No
221	>10000MΩ	>1000MΩ	No
222	>10000MΩ	>1000MΩ	No
223	>10000MΩ	>1000MΩ	No
224	>10000MΩ	>1000MΩ	No
225	>10000MΩ	>1000MΩ	No

Spec. / No.	Insulation Resistance(@Max500V,60s,≦50mA):		Mechanical damage
	Initial Measured (≧10000MΩ)	After Measured (≧1000MΩ)	
226	>10000MΩ	>1000MΩ	No
227	>10000MΩ	>1000MΩ	No
228	>10000MΩ	>1000MΩ	No
229	>10000MΩ	>1000MΩ	No
230	>10000MΩ	>1000MΩ	No
231	>10000MΩ	>1000MΩ	No

JESD22 Method JA-104			Verdict
Temperature Cycling			**P**
1	1000 Cycles (-55°C to 125°C) , 1000 Cycles will be at that temperature rating. Tri-temperature Pre and post stress required. Post-stress measurements to start 1 to 24 hours after test conclusion. 30min maximum dwell time at each temperature extreme. 1 min. maximum transition time. beginning; end .....:	77pcs samples. -40°C: 30min 105°C: 30min 2022-09-20 to 2022-11-01	P
2	After the test, the appearance inspection should be carried out, the sample should have no cracking, peeling, bulging, damage phenomenon, the product appearance should be normal.	No any damage on the component.	P
3	After the test the capacitance should not exceed ±10% of the Initial value.	See below table.	P
4	After the test the dissipation factor should not exceed 200% of the specification.	See below table.	P
5	After the test the insulation resistance should not lower than 1000MΩ.	See below table.	P

Spec. / No.	Capacitance (@1KHz,1.0Vrms,nF):				Mechanical damage
	Initial Measured	Deviation (<±10%)	After Measured	Change (<±10%)	
232	9.9964	-0.04%	9.8139	-1.83%	No
233	9.7941	-2.06%	9.5262	-2.74%	No
234	9.7808	-2.19%	9.6267	-1.58%	No
235	10.0685	0.69%	9.9360	-1.32%	No
236	9.7051	-2.95%	9.4487	-2.64%	No
237	9.9126	-0.87%	9.7970	-1.17%	No
238	9.8062	-1.94%	9.7016	-1.07%	No
239	10.0254	0.25%	9.7419	-2.83%	No
240	9.8420	-1.58%	9.7004	-1.44%	No
241	9.6482	-3.52%	9.4081	-2.49%	No
242	9.9758	-0.24%	9.7488	-2.28%	No
243	9.9976	-0.02%	9.8433	-1.54%	No
244	9.7362	-2.64%	9.6214	-1.18%	No
245	9.6890	-3.11%	9.3819	-3.17%	No
246	9.6556	-3.44%	9.5125	-1.48%	No
247	10.0513	0.51%	9.7722	-2.78%	No
248	9.8611	-1.39%	9.7125	-1.51%	No
249	9.6461	-3.54%	9.5479	-1.02%	No
250	10.1880	1.88%	10.0858	-1.00%	No
251	10.2302	2.30%	10.0759	-1.51%	No
252	9.8292	-1.71%	9.6541	-1.78%	No
253	9.6869	-3.13%	9.4334	-2.62%	No
254	9.8305	-1.69%	9.5679	-2.67%	No
255	9.6955	-3.05%	9.5773	-1.22%	No
256	9.6480	-3.52%	9.5385	-1.13%	No
257	10.2483	2.48%	10.1269	-1.18%	No
258	10.1589	1.59%	9.9280	-2.27%	No
259	10.2313	2.31%	10.0675	-1.60%	No
260	9.7004	-3.00%	9.5567	-1.48%	No
261	10.1868	1.87%	10.0577	-1.27%	No
262	10.2635	2.64%	10.1056	-1.54%	No
263	10.0247	0.25%	9.7224	-3.02%	No
264	9.7606	-2.39%	9.5042	-2.63%	No

Spec. / No.	Capacitance (@1KHz,1.0Vrms,nF):				Mechanical damage
	Initial Measured	Deviation (<±10%)	After Measured	Change (<±10%)	
265	10.0704	0.70%	9.9590	-1.11%	No
266	10.1211	1.21%	9.9586	-1.61%	No
267	9.8836	-1.16%	9.7777	-1.07%	No
268	9.6458	-3.54%	9.3981	-2.57%	No
269	9.9049	-0.95%	9.7316	-1.75%	No
270	9.6888	-3.11%	9.5467	-1.47%	No
271	9.7092	-2.91%	9.4668	-2.50%	No
272	10.0730	0.73%	9.9437	-1.28%	No
273	10.2705	2.71%	10.1635	-1.04%	No
274	9.8005	-2.00%	9.6328	-1.71%	No
275	9.8484	-1.52%	9.7406	-1.09%	No
276	10.1543	1.54%	10.0089	-1.43%	No
277	9.6929	-3.07%	9.5535	-1.44%	No
278	9.8347	-1.65%	9.6019	-2.37%	No
279	9.6914	-3.09%	9.4058	-2.95%	No
280	9.9703	-0.30%	9.8163	-1.54%	No
281	9.9588	-0.41%	9.8311	-1.28%	No
282	9.7792	-2.21%	9.5059	-2.79%	No
283	10.0010	0.01%	9.8493	-1.52%	No
284	9.9518	-0.48%	9.7896	-1.63%	No
285	9.9109	-0.89%	9.7971	-1.15%	No
286	10.2195	2.20%	9.9673	-2.47%	No
287	9.7512	-2.49%	9.5738	-1.82%	No
288	9.9080	-0.92%	9.7497	-1.60%	No
289	10.0525	0.53%	9.7451	-3.06%	No
290	9.8298	-1.70%	9.6375	-1.96%	No
291	9.6727	-3.27%	9.3729	-3.10%	No
292	10.1145	1.15%	10.0115	-1.02%	No
293	10.1391	1.39%	10.0247	-1.13%	No
294	9.7989	-2.01%	9.6158	-1.87%	No
295	10.1585	1.59%	10.0313	-1.25%	No
296	9.9963	-0.04%	9.8932	-1.03%	No
297	10.1315	1.32%	9.9790	-1.51%	No

Spec. / No.	Capacitance (@1KHz,1.0Vrms,nF):				Mechanical damage
	Initial Measured	Deviation (<±10%)	After Measured	Change (<±10%)	
298	10.0207	0.21%	9.7466	-2.74%	No
299	9.7164	-2.84%	9.6106	-1.09%	No
300	10.2329	2.33%	9.9952	-2.32%	No
301	9.6666	-3.33%	9.4390	-2.35%	No
302	9.9177	-0.82%	9.7232	-1.96%	No
303	9.7357	-2.64%	9.5057	-2.36%	No
304	10.0191	0.19%	9.8518	-1.67%	No
305	10.0647	0.65%	9.8700	-1.93%	No
306	9.8601	-1.40%	9.5768	-2.87%	No
307	10.1789	1.79%	9.9823	-1.93%	No
308	9.6415	-3.58%	9.4917	-1.55%	No

Spec. / No.	Dissipation Factor(@1KHz,1.0Vrms):				Mechanical damage
	Initial Measured	Within spec. (≦2.5%)	After Measured	Change (<200%)	
232	0.507%	Yes	0.520%	2.56%	No
233	0.561%	Yes	0.588%	4.81%	No
234	0.487%	Yes	0.493%	1.23%	No
235	0.504%	Yes	0.517%	2.58%	No
236	0.475%	Yes	0.487%	2.53%	No
237	0.491%	Yes	0.508%	3.46%	No
238	0.528%	Yes	0.549%	3.98%	No
239	0.576%	Yes	0.590%	2.43%	No
240	0.509%	Yes	0.519%	1.96%	No
241	0.492%	Yes	0.504%	2.44%	No
242	0.530%	Yes	0.552%	4.15%	No
243	0.541%	Yes	0.553%	2.22%	No
244	0.490%	Yes	0.495%	1.02%	No
245	0.521%	Yes	0.538%	3.26%	No
246	0.545%	Yes	0.561%	2.94%	No
247	0.598%	Yes	0.613%	2.51%	No
248	0.592%	Yes	0.603%	1.86%	No
249	0.479%	Yes	0.496%	3.55%	No
250	0.591%	Yes	0.600%	1.52%	No

Spec. / No.	Dissipation Factor(@1KHz,1.0Vrms):				Mechanical damage
	Initial Measured	Within spec. (≦2.5%)	After Measured	Change (<200%)	
251	0.545%	Yes	0.557%	2.20%	No
252	0.502%	Yes	0.525%	4.58%	No
253	0.551%	Yes	0.561%	1.81%	No
254	0.561%	Yes	0.585%	4.28%	No
255	0.492%	Yes	0.497%	1.02%	No
256	0.536%	Yes	0.563%	5.04%	No
257	0.491%	Yes	0.510%	3.87%	No
258	0.502%	Yes	0.517%	2.99%	No
259	0.519%	Yes	0.539%	3.85%	No
260	0.525%	Yes	0.535%	1.90%	No
261	0.499%	Yes	0.512%	2.61%	No
262	0.567%	Yes	0.584%	3.00%	No
263	0.488%	Yes	0.501%	2.66%	No
264	0.591%	Yes	0.621%	5.08%	No
265	0.479%	Yes	0.487%	1.67%	No
266	0.587%	Yes	0.616%	4.94%	No
267	0.495%	Yes	0.508%	2.63%	No
268	0.485%	Yes	0.498%	2.68%	No
269	0.470%	Yes	0.475%	1.06%	No
270	0.547%	Yes	0.569%	4.02%	No
271	0.596%	Yes	0.625%	4.87%	No
272	0.590%	Yes	0.615%	4.24%	No
273	0.504%	Yes	0.516%	2.38%	No
274	0.520%	Yes	0.528%	1.54%	No
275	0.519%	Yes	0.540%	4.05%	No
276	0.584%	Yes	0.609%	4.28%	No
277	0.573%	Yes	0.597%	4.19%	No
278	0.549%	Yes	0.576%	4.92%	No
279	0.576%	Yes	0.588%	2.08%	No
280	0.475%	Yes	0.487%	2.53%	No
281	0.483%	Yes	0.496%	2.69%	No
282	0.491%	Yes	0.512%	4.28%	No
283	0.559%	Yes	0.567%	1.43%	No

Spec. / No.	Dissipation Factor(@1KHz,1.0Vrms):				Mechanical damage
	Initial Measured	Within spec. (≦2.5%)	After Measured	Change (<200%)	
284	0.484%	Yes	0.503%	3.93%	No
285	0.483%	Yes	0.503%	4.14%	No
286	0.595%	Yes	0.624%	4.87%	No
287	0.536%	Yes	0.554%	3.36%	No
288	0.542%	Yes	0.548%	1.11%	No
289	0.510%	Yes	0.534%	4.71%	No
290	0.572%	Yes	0.581%	1.57%	No
291	0.497%	Yes	0.509%	2.41%	No
292	0.492%	Yes	0.505%	2.64%	No
293	0.558%	Yes	0.570%	2.15%	No
294	0.550%	Yes	0.564%	2.55%	No
295	0.565%	Yes	0.593%	4.96%	No
296	0.495%	Yes	0.518%	4.65%	No
297	0.544%	Yes	0.552%	1.47%	No
298	0.472%	Yes	0.477%	1.06%	No
299	0.526%	Yes	0.533%	1.33%	No
300	0.518%	Yes	0.542%	4.63%	No
301	0.500%	Yes	0.521%	4.20%	No
302	0.566%	Yes	0.590%	4.24%	No
303	0.474%	Yes	0.490%	3.38%	No
304	0.505%	Yes	0.520%	2.97%	No
305	0.555%	Yes	0.569%	2.52%	No
306	0.595%	Yes	0.608%	2.18%	No
307	0.575%	Yes	0.596%	3.65%	No
308	0.475%	Yes	0.488%	2.74%	No

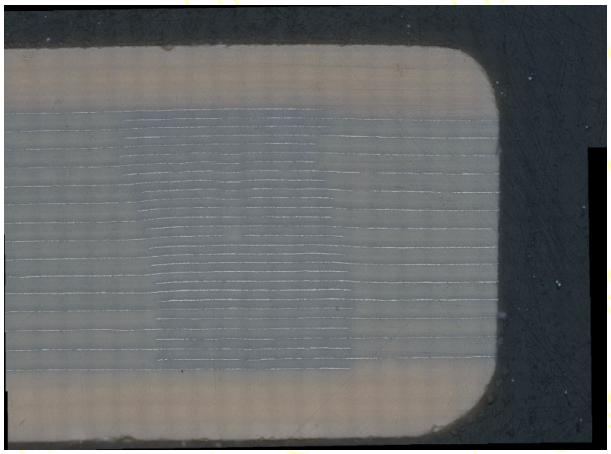
Spec. / No.	Insulation Resistance(@Max500V,60s,≦50mA):		Mechanical damage
	Initial Measured (≧10000MΩ)	After Measured (≧1000MΩ)	
232	>10000MΩ	>1000MΩ	No
233	>10000MΩ	>1000MΩ	No
234	>10000MΩ	>1000MΩ	No
235	>10000MΩ	>1000MΩ	No
236	>10000MΩ	>1000MΩ	No

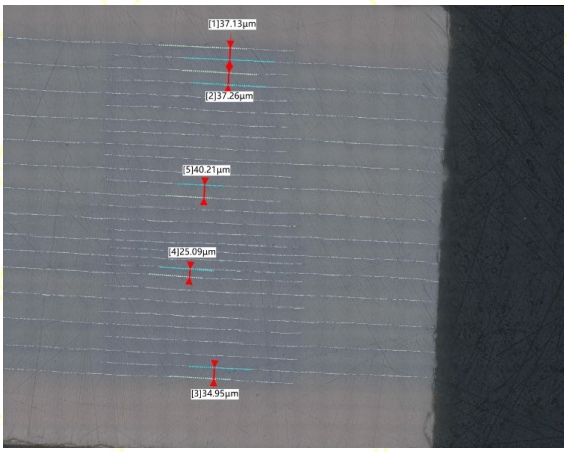
Spec. / No.	Insulation Resistance(@Max500V,60s,≦50mA):		Mechanical damage
	Initial Measured (≧10000MΩ)	After Measured (≧1000MΩ)	
237	>10000MΩ	>1000MΩ	No
238	>10000MΩ	>1000MΩ	No
239	>10000MΩ	>1000MΩ	No
240	>10000MΩ	>1000MΩ	No
241	>10000MΩ	>1000MΩ	No
242	>10000MΩ	>1000MΩ	No
243	>10000MΩ	>1000MΩ	No
244	>10000MΩ	>1000MΩ	No
245	>10000MΩ	>1000MΩ	No
246	>10000MΩ	>1000MΩ	No
247	>10000MΩ	>1000MΩ	No
248	>10000MΩ	>1000MΩ	No
249	>10000MΩ	>1000MΩ	No
250	>10000MΩ	>1000MΩ	No
251	>10000MΩ	>1000MΩ	No
252	>10000MΩ	>1000MΩ	No
253	>10000MΩ	>1000MΩ	No
254	>10000MΩ	>1000MΩ	No
255	>10000MΩ	>1000MΩ	No
256	>10000MΩ	>1000MΩ	No
257	>10000MΩ	>1000MΩ	No
258	>10000MΩ	>1000MΩ	No
259	>10000MΩ	>1000MΩ	No
260	>10000MΩ	>1000MΩ	No
261	>10000MΩ	>1000MΩ	No
262	>10000MΩ	>1000MΩ	No
263	>10000MΩ	>1000MΩ	No
264	>10000MΩ	>1000MΩ	No
265	>10000MΩ	>1000MΩ	No
266	>10000MΩ	>1000MΩ	No
267	>10000MΩ	>1000MΩ	No
268	>10000MΩ	>1000MΩ	No
269	>10000MΩ	>1000MΩ	No

Spec. / No.	Insulation Resistance(@Max500V,60s,≦50mA):		Mechanical damage
	Initial Measured (≧10000MΩ)	After Measured (≧1000MΩ)	
270	>10000MΩ	>1000MΩ	No
271	>10000MΩ	>1000MΩ	No
272	>10000MΩ	>1000MΩ	No
273	>10000MΩ	>1000MΩ	No
274	>10000MΩ	>1000MΩ	No
275	>10000MΩ	>1000MΩ	No
276	>10000MΩ	>1000MΩ	No
277	>10000MΩ	>1000MΩ	No
278	>10000MΩ	>1000MΩ	No
279	>10000MΩ	>1000MΩ	No
280	>10000MΩ	>1000MΩ	No
281	>10000MΩ	>1000MΩ	No
282	>10000MΩ	>1000MΩ	No
283	>10000MΩ	>1000MΩ	No
284	>10000MΩ	>1000MΩ	No
285	>10000MΩ	>1000MΩ	No
286	>10000MΩ	>1000MΩ	No
287	>10000MΩ	>1000MΩ	No
288	>10000MΩ	>1000MΩ	No
289	>10000MΩ	>1000MΩ	No
290	>10000MΩ	>1000MΩ	No
291	>10000MΩ	>1000MΩ	No
292	>10000MΩ	>1000MΩ	No
293	>10000MΩ	>1000MΩ	No
294	>10000MΩ	>1000MΩ	No
295	>10000MΩ	>1000MΩ	No
296	>10000MΩ	>1000MΩ	No
297	>10000MΩ	>1000MΩ	No
298	>10000MΩ	>1000MΩ	No
299	>10000MΩ	>1000MΩ	No
300	>10000MΩ	>1000MΩ	No
301	>10000MΩ	>1000MΩ	No
302	>10000MΩ	>1000MΩ	No

Spec. / No.	Insulation Resistance(@Max500V,60s,≦50mA):		Mechanical damage
	Initial Measured (≧10000MΩ)	After Measured (≧1000MΩ)	
303	>10000MΩ	>1000MΩ	No
304	>10000MΩ	>1000MΩ	No
305	>10000MΩ	>1000MΩ	No
306	>10000MΩ	>1000MΩ	No
307	>10000MΩ	>1000MΩ	No
308	>10000MΩ	>1000MΩ	No

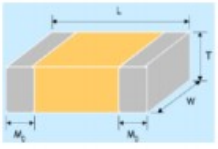
EIA-469			Verdict
Destructive physical analysis			**P**
1	It is necessary to clean and dry the capacitors prior to mounting.	10pcs samples. (No.309~No.318)	P
2	Use optical measurement device to check.	See below figure.	P





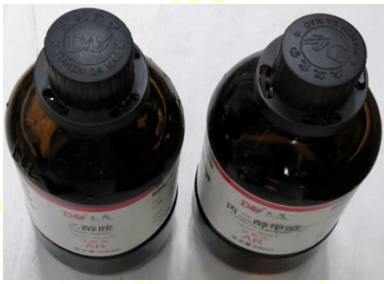
MIL-STD-883 Method 2009			Verdict
External Visual			**P**
1	Inspect device construction, marking and workmanship. Electrical test not required.	all samples.	P
2	After the test, the appearance inspection should be carried out, the sample should have no cracking, peeling, bulging, damage phenomenon, the product appearance should be normal.	No any damage on the component.	P

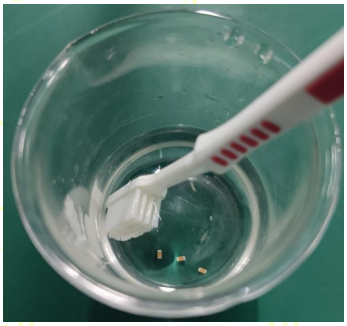
JESD22 Method JB-100			Verdict
Physical Dimension			**P**
1	Inspect device construction, marking and workmanship. Electrical test not required.	30pcs samples.	P
2	After the test, the appearance inspection should be carried out, the sample should have no cracking, peeling, bulging, damage phenomenon, the product appearance should be normal.	No any damage on the component.	P

Outline	Size(mm)	L(mm)	W(mm)	T(mm)
	1206(3216)	3.00~3.40	1.40~1.80	1.05~1.45

Spec. / No.	Physical Dimension (mm):			Mechanical damage
	3.00~3.40	1.40~1.80	1.05~1.45	
319	3.21	1.55	1.19	No
320	3.19	1.54	1.17	No
321	3.22	1.54	1.17	No
322	3.21	1.54	1.18	No
323	3.21	1.56	1.17	No
324	3.19	1.55	1.18	No
325	3.21	1.56	1.19	No
326	3.20	1.54	1.18	No
327	3.21	1.54	1.18	No
328	3.21	1.57	1.18	No
329	3.20	1.53	1.18	No
330	3.21	1.56	1.17	No
331	3.21	1.56	1.18	No
332	3.21	1.55	1.17	No
333	3.19	1.53	1.17	No
334	3.21	1.53	1.17	No
335	3.19	1.56	1.17	No
336	3.20	1.54	1.18	No
337	3.21	1.54	1.18	No
338	3.21	1.57	1.19	No
339	3.20	1.54	1.19	No
340	3.20	1.55	1.19	No
341	3.21	1.54	1.19	No
342	3.19	1.57	1.17	No
343	3.22	1.54	1.19	No
344	3.22	1.56	1.18	No
345	3.22	1.53	1.17	No
346	3.21	1.57	1.18	No
347	3.21	1.55	1.17	No
348	3.20	1.53	1.19	No

MIL-STD-202 Method 215			Verdict
Resistance to Solvents			**P**
1	Also aqueous wash chemical - OKEM Clean or equivalent. Do not use banned solvents.	5pcs samples.	P
2	Marking resistance to solvents.		N
3	After subjection to the test, any specified markings which are missing in whole or in part, faded, smeared, blurred, or shifted (dislodged) to the extent that they cannot be readily identified from a distance of at least 6 inches with normal room lighting without the aid of magnification or with a viewer having a magnification no greater than 3X shall constitute failure.	Immersion 3+0.5/-0 minutes in Terpene defluxer. Brush 10 strokes (wet bristle) 2 to 3 oz. Rinse in water. Air blow dry.	N
4	Component protective coating, encapsulation material and sleeve material resistance.		P
5	After subjection to the test, the specimen shall be examined for cracks, separations, crazing, swelling, softening, and degradation of body material, end caps and seals if present, or any other damage or degradation that has occurred due to solvent exposure and which effects the mechanical integrity or reliability shall constitute a failure. The examination shall be made with a viewer having a magnification of 10X maximum.	Immersion 3+0.5/-0 minutes in Terpene defluxer. Brush 10 strokes (wet bristle) 2 to 3 oz. Rinse in water. Air blow dry. No any damage on the component.	P
6	Check the sample with 10X magnifying glass for damage, and then check the sample label with 3X magnifying glass for tolerance.	No damage on the component and marking still identify.	P
7	After the test the capacitance should not exceed ±10% of the Initial value.	See below table.	P
8	After the test the dissipation factor less than or equal 2.5%.	See below table.	P
9	After the test the insulation resistance should not lower than 10000MΩ.	See below table.	P

Solvent a)	Solvent c)	Solvent d)
		



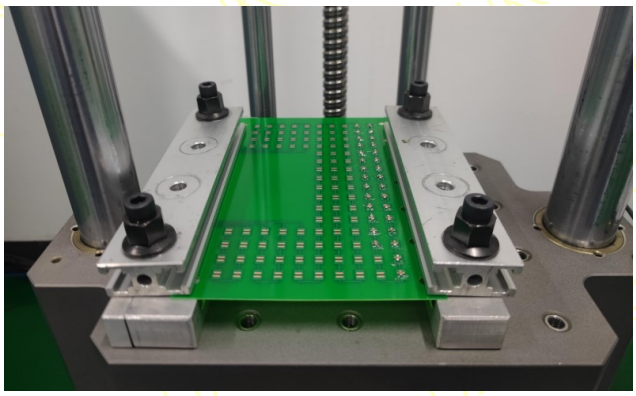
Spec. / No.	Capacitance (@1KHz,1.0Vrms,nF):				Mechanical damage
	Initial Measured	Deviation (<±10%)	After Measured	Change (<±10%)	
349	10.2259	2.26%	10.2477	0.21%	No
350	10.2750	2.75%	10.3359	0.59%	No
351	10.1547	1.55%	9.9981	-1.54%	No
352	9.9821	-0.18%	9.8997	-0.83%	No
353	10.1740	1.74%	10.1773	0.03%	No

Spec. / No.	Dissipation Factor(@1KHz,1.0Vrms):				Mechanical damage
	Initial Measured	Within spec. (≦2.5%)	After Measured	Within spec. (≦2.5%)	
349	0.584%	Yes	0.583%	-0.17%	No
350	0.573%	Yes	0.575%	0.35%	No
351	0.578%	Yes	0.578%	0.00%	No
352	0.573%	Yes	0.575%	0.35%	No
353	0.598%	Yes	0.601%	0.50%	No

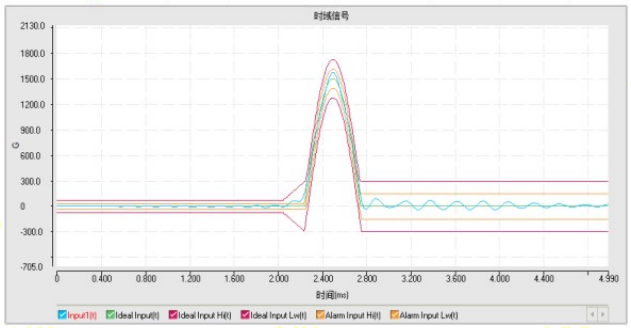
Spec. / No.	Insulation Resistance(@Max500V,60s,≦50mA):		Mechanical damage
	Initial Measured (≧10000MΩ)	After Measured (≧10000MΩ)	
349	>10000MΩ	>10000MΩ	No
350	>10000MΩ	>10000MΩ	No
351	>10000MΩ	>10000MΩ	No
352	>10000MΩ	>10000MΩ	No
353	>10000MΩ	>10000MΩ	No

MIL-STD-202 Method 213			Verdict
Mechanical Shock			**P**
1	Figure 1 of Method 213 Unit are non-operating Half-sine shock pulse.	30pcs samples.	P
2	Condition C	Peak value (g's): 100 Normal duration (D) (ms):6 Velocity change (Vi) ft/sec:12.3 18 shocks	N
3	Condition F	Peak value (g's): 1500 Normal duration (D) (ms):0.5 Velocity change (Vi) ft/sec:15.4 18 shocks	P
4	Measurements are to be made before and after the required number of shocks unless otherwise specified, and during the test if specified.		P
5	After the test, the appearance inspection should be carried out, the sample should have no cracking, peeling, bulging, damage phenomenon, the product appearance should be normal.	No any damage on the component.	P
6	After the test the capacitance should not exceed ±5% of the Initial value.	See below table.	P
7	After the test the dissipation factor less than or equal 2.5%.	See below table.	P
8	After the test the insulation resistance should not lower than 10000MΩ.	See below table.	P

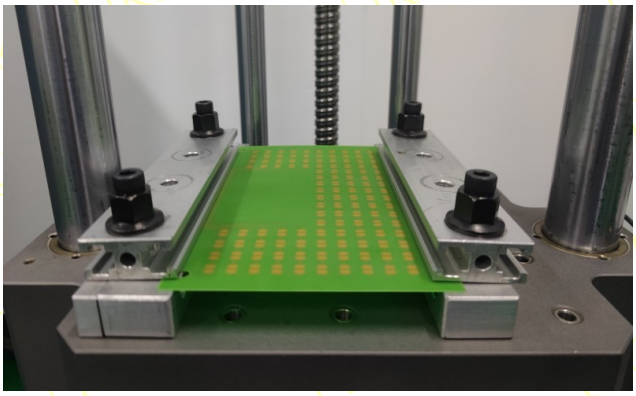
+Z



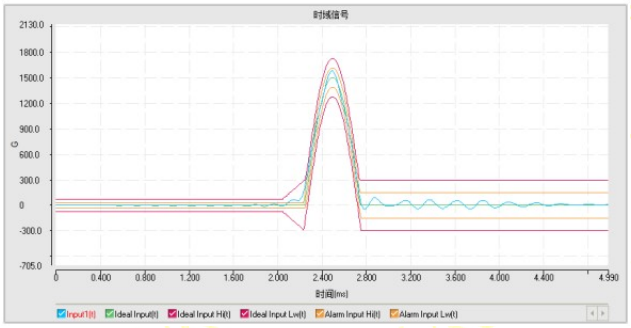
名称	加速度(G)	脉宽(ms)	速度变化量(m/s)	低通滤波(Hz)	最大值(G)	最小值(G)	状态描述
Ideal Input(t)	1500.00	0.50	4.68	--	1500.00	0.00	
Input1(t)	1577.93	0.50	4.98	6000.00	1577.93	-40.65	



-Z



名称	加速度(G)	脉宽(ms)	速度变化量(m/s)	低通滤波(Hz)	最大值(G)	最小值(G)	状态描述
Ideal Input(t)	1500.00	0.50	4.68	--	1500.00	0.00	
Input1(t)	1581.47	0.50	4.97	6000.00	1581.47	-46.54	



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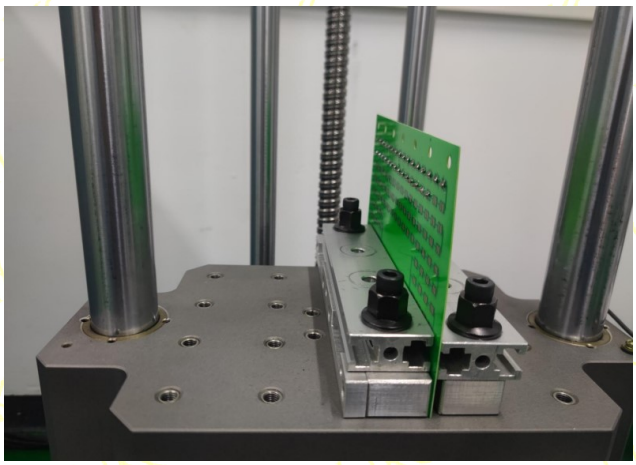
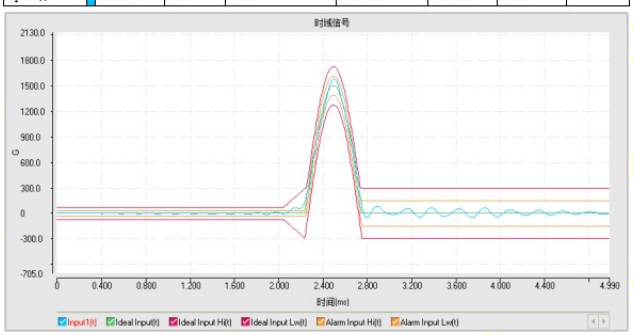


名称	加速度(G)	脉宽(ms)	速度变化量(m/s)	低通滤波(Hz)	最大值(G)	最小值(G)	状态描述
Ideal Input(t)	1500.00	0.50	4.68	--	1500.00	0.00	
Input1(t)	1583.90	0.50	4.97	6000.00	1583.90	-50.26	



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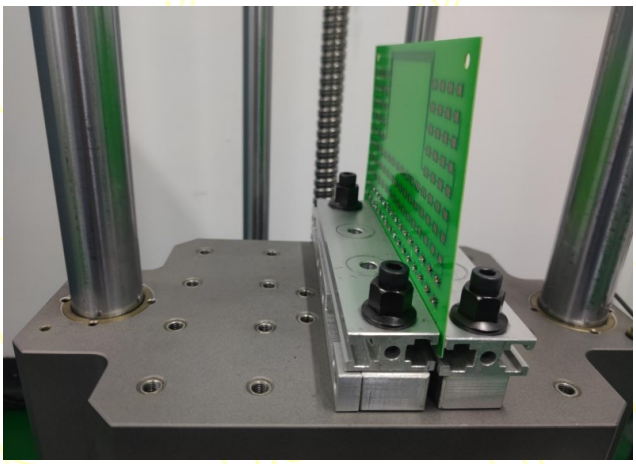
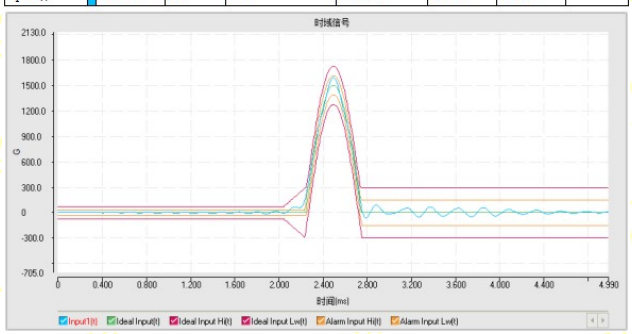
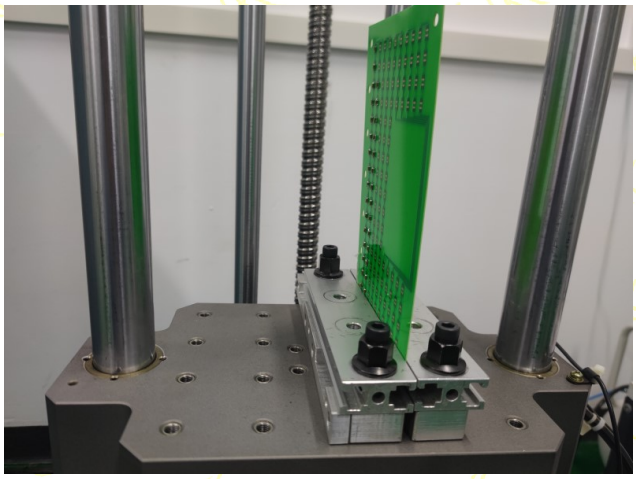
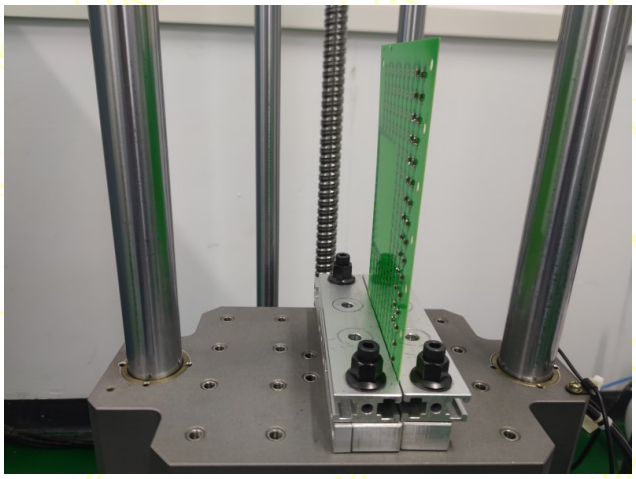
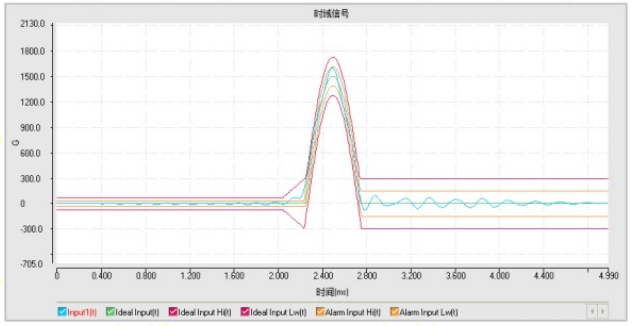


名称	加速度(G)	脉宽(ms)	速度变化量(m/s)	低通滤波(Hz)	最大值(G)	最小值(G)	状态描述
Ideal Input(t)	1500.00	0.50	4.68	--	1500.00	0.00	
Input1(t)	1593.10	0.50	4.98	6000.00	1593.10	-62.45	

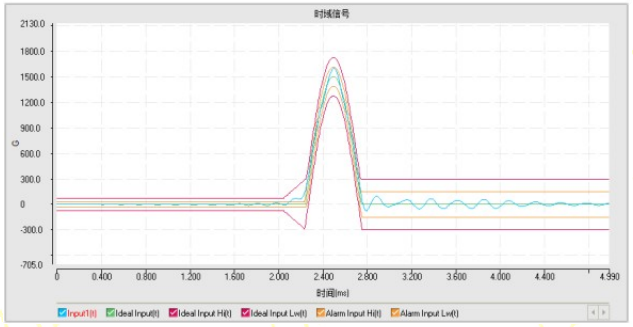


+Y	-Y
	

名称	加速度(G)	脉宽(ms)	速度变化量(m/s)	低通滤波(Hz)	最大值(G)	最小值(G)	状态描述
Ideal Input(t)	1500.00	0.50	4.68	--	1500.00	0.00	
Input1(t)	1603.11	0.50	5.00	6000.00	1603.11	-76.48	

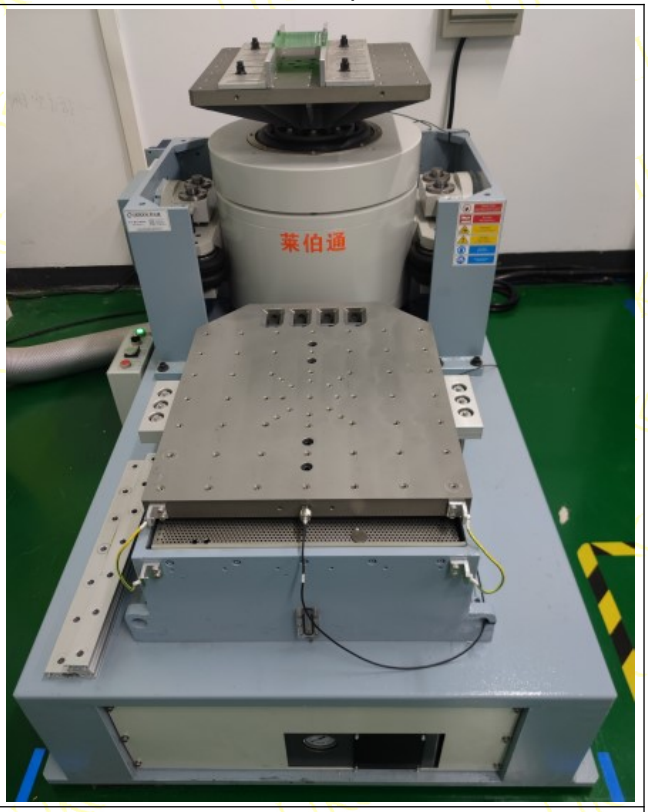


名称	加速度(G)	脉宽(ms)	速度变化量(m/s)	低通滤波(Hz)	最大值(G)	最小值(G)	状态描述
Ideal Input(t)	1500.00	0.50	4.68	--	1500.00	0.00	
Input1(t)	1600.16	0.50	5.00	6000.00	1600.16	-71.30	



MIL-STD-202 Method 204			**Verdict**
Vibration			**P**
1	5 g's for 20 minutes, 12 cycles each of 3 orientations.	30pcs samples.	P
2	Test from 10-2000 Hz.	-	P
3	Measurements are to be made before and after the required number of shocks unless otherwise specified, and during the test if specified.		P
4	After the test, the appearance inspection should be carried out, the sample should have no cracking, peeling, bulging, damage phenomenon, the product appearance should be normal.	No any damage on the component.	P
6	After the test the capacitance should not exceed ±5% of the Initial value.	See below table.	P
7	After the test the dissipation factor less than or equal 2.5%.	See below table.	P
8	After the test the insulation resistance should not lower than 10000MΩ.	See below table.	P

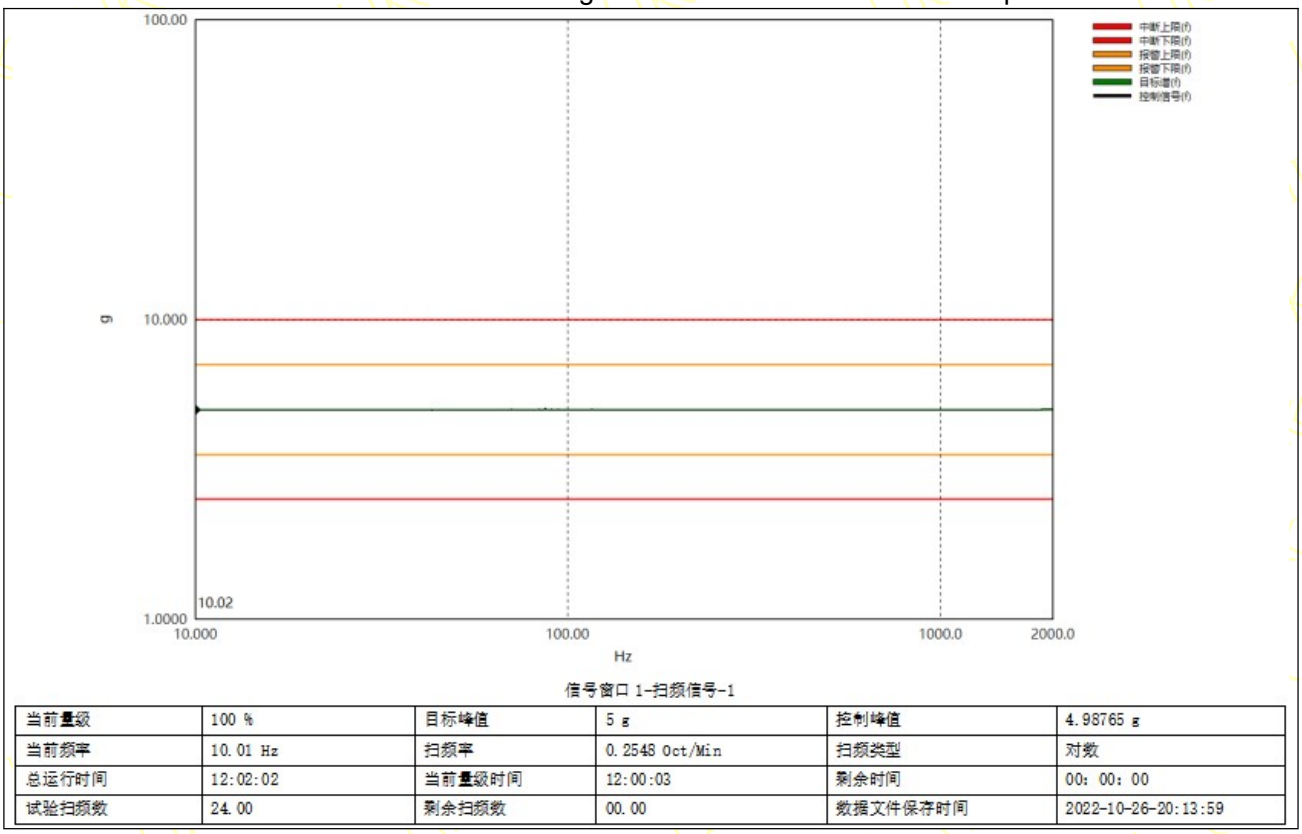
Vibration testing



Z-axis

X-axis

Y-axis



信号窗口 1-扫频信号-1

当前量级	100 %	目标峰值	5 g	控制峰值	4.98765 g
当前频率	10.01 Hz	扫频率	0.2548 Oct/Min	扫频类型	对数
总运行时间	12:02:02	当前量级时间	12:00:03	剩余时间	00：00：00
试验扫频数	24.00	剩余扫频数	00.00	数据文件保存时间	2022-10-26-20:13:59

Spec. / No.	Capacitance (@120Hz,μF):				Mechanical damage
	Initial Measured	Deviation (<±10%)	After Measured	Change (<±5%)	
354	9.6535	-3.47%	9.7463	0.96%	No
355	9.9157	-0.84%	10.0217	1.07%	No
356	10.2617	2.62%	10.1724	-0.87%	No
357	10.1661	1.66%	10.0749	-0.90%	No
358	9.8435	-1.56%	9.9397	0.98%	No
359	9.9485	-0.52%	10.0448	0.97%	No
360	10.0584	0.58%	9.9809	-0.77%	No
361	9.6623	-3.38%	9.5985	-0.66%	No
362	9.7887	-2.11%	9.7592	-0.30%	No
363	10.2285	2.29%	10.1569	-0.70%	No
364	9.8364	-1.64%	9.7324	-1.06%	No
365	10.0302	0.30%	10.0540	0.24%	No
366	10.2611	2.61%	10.1726	-0.86%	No
367	9.7327	-2.67%	9.6492	-0.86%	No
368	9.9291	-0.71%	9.9636	0.35%	No
369	10.2221	2.22%	10.3039	0.80%	No

Spec. / No.	Capacitance (@120Hz,μF):				Mechanical damage
	Initial Measured	Deviation (<±10%)	After Measured	Change (<±5%)	
370	10.0401	0.40%	9.9068	-1.33%	No
371	10.0535	0.53%	9.9965	-0.57%	No
372	9.9524	-0.48%	9.9532	0.01%	No
373	9.8092	-1.91%	9.8710	0.63%	No
374	9.6981	-3.02%	9.5471	-1.56%	No
375	10.1826	1.83%	10.0446	-1.36%	No
376	9.6634	-3.37%	9.7668	1.07%	No
377	10.1745	1.75%	10.2631	0.87%	No
378	10.0856	0.86%	10.0674	-0.18%	No
379	10.2185	2.19%	10.1718	-0.46%	No
380	10.1834	1.83%	10.2811	0.96%	No
381	9.6822	-3.18%	9.7579	0.78%	No
382	9.8928	-1.07%	9.8994	0.07%	No
383	9.9393	-0.61%	9.9482	0.09%	No

Spec. / No.	Dissipation Factor(@1KHz,1.0Vrms):				Mechanical damage
	Initial Measured	Within spec. (≦2.5%)	After Measured	Within spec. (≦2.5%)	
354	0.522%	Yes	0.522%	0.00%	No
355	0.473%	Yes	0.475%	0.42%	No
356	0.507%	Yes	0.510%	0.59%	No
357	0.556%	Yes	0.557%	0.18%	No
358	0.507%	Yes	0.510%	0.59%	No
359	0.564%	Yes	0.567%	0.53%	No
360	0.520%	Yes	0.519%	-0.19%	No
361	0.583%	Yes	0.585%	0.34%	No
362	0.526%	Yes	0.527%	0.19%	No
363	0.477%	Yes	0.479%	0.42%	No
364	0.478%	Yes	0.479%	0.21%	No
365	0.575%	Yes	0.577%	0.35%	No
366	0.474%	Yes	0.472%	-0.42%	No
367	0.476%	Yes	0.478%	0.42%	No
368	0.549%	Yes	0.550%	0.18%	No
369	0.551%	Yes	0.555%	0.73%	No

Spec. / No.	Dissipation Factor(@1KHz,1.0Vrms):				Mechanical damage
	Initial Measured	Within spec. (≦2.5%)	After Measured	Within spec. (≦2.5%)	
370	0.520%	Yes	0.521%	0.19%	No
371	0.589%	Yes	0.587%	-0.34%	No
372	0.489%	Yes	0.489%	0.00%	No
373	0.551%	Yes	0.553%	0.36%	No
374	0.526%	Yes	0.525%	-0.19%	No
375	0.492%	Yes	0.492%	0.00%	No
376	0.546%	Yes	0.548%	0.37%	No
377	0.574%	Yes	0.574%	0.00%	No
378	0.517%	Yes	0.518%	0.19%	No
379	0.478%	Yes	0.476%	-0.42%	No
380	0.514%	Yes	0.516%	0.39%	No
381	0.557%	Yes	0.558%	0.18%	No
382	0.475%	Yes	0.476%	0.21%	No
383	0.490%	Yes	0.492%	0.41%	No

Spec. / No.	Insulation Resistance(@Max500V,60s,≦50mA):		Mechanical damage
	Initial Measured (≧10000MΩ)	After Measured (≧10000MΩ)	
354	>10000MΩ	>10000MΩ	No
355	>10000MΩ	>10000MΩ	No
356	>10000MΩ	>10000MΩ	No
357	>10000MΩ	>10000MΩ	No
358	>10000MΩ	>10000MΩ	No
359	>10000MΩ	>10000MΩ	No
360	>10000MΩ	>10000MΩ	No
361	>10000MΩ	>10000MΩ	No
362	>10000MΩ	>10000MΩ	No
363	>10000MΩ	>10000MΩ	No
364	>10000MΩ	>10000MΩ	No
365	>10000MΩ	>10000MΩ	No
366	>10000MΩ	>10000MΩ	No
367	>10000MΩ	>10000MΩ	No
368	>10000MΩ	>10000MΩ	No
369	>10000MΩ	>10000MΩ	No

Spec. / No.	Insulation Resistance(@Max500V,60s,≦50mA):		Mechanical damage
	Initial Measured (≧10000MΩ)	After Measured (≧10000MΩ)	
370	>10000MΩ	>10000MΩ	No
371	>10000MΩ	>10000MΩ	No
372	>10000MΩ	>10000MΩ	No
373	>10000MΩ	>10000MΩ	No
374	>10000MΩ	>10000MΩ	No
375	>10000MΩ	>10000MΩ	No
376	>10000MΩ	>10000MΩ	No
377	>10000MΩ	>10000MΩ	No
378	>10000MΩ	>10000MΩ	No
379	>10000MΩ	>10000MΩ	No
380	>10000MΩ	>10000MΩ	No
381	>10000MΩ	>10000MΩ	No
382	>10000MΩ	>10000MΩ	No
383	>10000MΩ	>10000MΩ	No

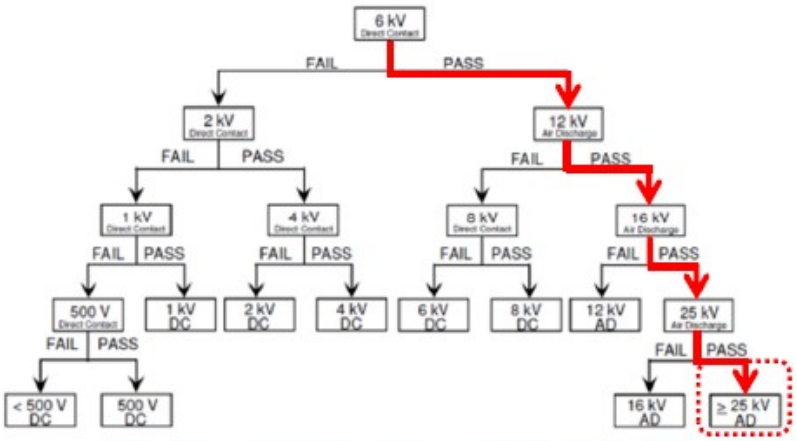
MIL-STD-202 Method 210			Verdict
Resistance to Soldering Heat			**P**
1	No pre-heat of samples.	30pcs samples.	P
2	Solder dip	Temperature: 260±5°C, Time: 10±1s, Temperature ramp/immersion and emersion rate: 25mm/s±6mm/s	P
3	Note: Single Wave solder - Procedure 2 for SMD.	-	P
4	Procedure 1 with solder within 1.5 mm of device body for Leaded.	-	N
5	Examinations and measurements to be made before and after the test, as applicable, shall be as specified in the individual specification. After the procedure, the specimens shall be allowed to cool and stabilize at room ambient conditions, for the time specified in the individual specification.		P
6	After the test, the appearance inspection should be carried out, the sample should have no cracking, peeling, bulging, damage phenomenon, the product appearance should be normal.	No any damage on the component.	P
7	After the test the capacitance should between -5%~+10% of the Initial value.	See below table.	P
8	After the test the dissipation factor less than or equal 2.5%.	See below table.	P
9	After the test the insulation resistance should not lower than 10000MΩ.	See below table.	P

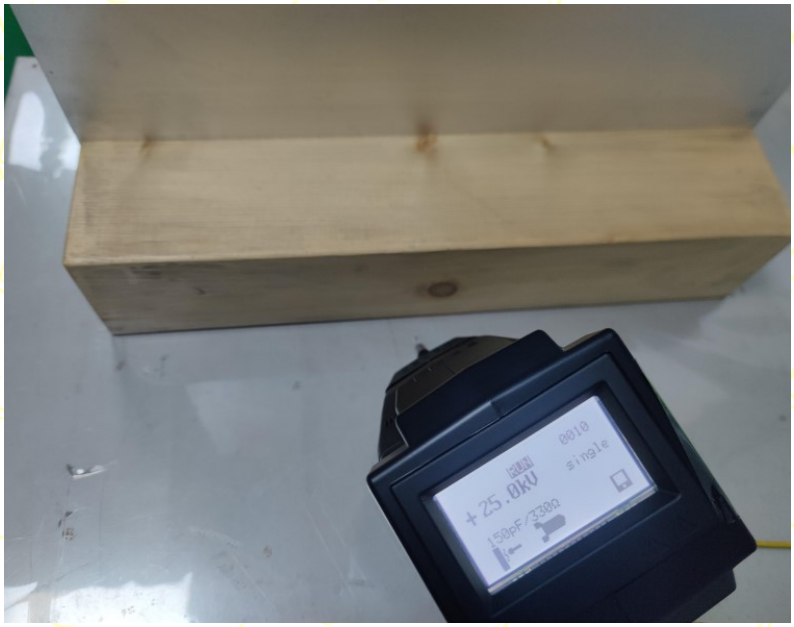
Spec. / No.	Capacitance (@120Hz,μF):				Mechanical damage
	Initial Measured	Deviation (<±10%)	After Measured	Change (-5%~+10%)	
384	10.2537	2.54%	10.2650	0.11%	No
385	9.7424	-2.58%	9.5956	-1.51%	No
386	10.1521	1.52%	10.0150	-1.35%	No
387	9.9690	-0.31%	9.8852	-0.84%	No
388	10.2003	2.00%	10.0531	-1.44%	No
389	10.0035	0.04%	9.8746	-1.29%	No
390	9.7699	-2.30%	9.6717	-1.01%	No
391	9.9216	-0.78%	9.7868	-1.36%	No
392	10.2220	2.22%	10.2615	0.39%	No
393	9.8128	-1.87%	9.6695	-1.46%	No
394	9.8365	-1.64%	9.7028	-1.36%	No
395	10.1457	1.46%	9.9968	-1.47%	No
396	9.8482	-1.52%	9.8495	0.01%	No
397	9.9980	-0.02%	9.8441	-1.54%	No
398	10.0472	0.47%	9.9746	-0.72%	No
399	10.1574	1.57%	10.0879	-0.68%	No
400	9.9060	-0.94%	9.9393	0.34%	No
401	10.2688	2.69%	10.1085	-1.56%	No
402	10.2498	2.50%	10.3135	0.62%	No
403	10.0895	0.89%	10.2153	1.25%	No
404	10.0423	0.42%	10.0921	0.50%	No
405	10.1363	1.36%	9.9916	-1.43%	No
406	10.1012	1.01%	10.0893	-0.12%	No
407	9.7314	-2.69%	9.8090	0.80%	No
408	10.1673	1.67%	10.0648	-1.01%	No
409	10.1979	1.98%	10.1780	-0.20%	No
410	9.9893	-0.11%	9.8685	-1.21%	No
411	10.2290	2.29%	10.2212	-0.08%	No
412	10.2738	2.74%	10.1393	-1.31%	No
413	10.0396	0.40%	10.1614	1.21%	No

Spec. / No.	Dissipation Factor(@1KHz,1.0Vrms):				Mechanical damage
	Initial Measured	Within spec. (≦2.5%)	After Measured	Within spec. (≦2.5%)	
384	0.515%	Yes	0.515%	0.00%	No
385	0.492%	Yes	0.492%	0.00%	No
386	0.497%	Yes	0.500%	0.60%	No
387	0.584%	Yes	0.584%	0.00%	No
388	0.470%	Yes	0.469%	-0.21%	No
389	0.549%	Yes	0.548%	-0.18%	No
390	0.509%	Yes	0.512%	0.59%	No
391	0.530%	Yes	0.529%	-0.19%	No
392	0.559%	Yes	0.562%	0.54%	No
393	0.540%	Yes	0.538%	-0.37%	No
394	0.492%	Yes	0.491%	-0.20%	No
395	0.561%	Yes	0.562%	0.18%	No
396	0.542%	Yes	0.540%	-0.37%	No
397	0.496%	Yes	0.494%	-0.40%	No
398	0.527%	Yes	0.526%	-0.19%	No
399	0.492%	Yes	0.494%	0.41%	No
400	0.486%	Yes	0.484%	-0.41%	No
401	0.514%	Yes	0.513%	-0.19%	No
402	0.523%	Yes	0.524%	0.19%	No
403	0.480%	Yes	0.483%	0.63%	No
404	0.578%	Yes	0.577%	-0.17%	No
405	0.557%	Yes	0.561%	0.72%	No
406	0.550%	Yes	0.552%	0.36%	No
407	0.596%	Yes	0.599%	0.50%	No
408	0.569%	Yes	0.569%	0.00%	No
409	0.498%	Yes	0.501%	0.60%	No
410	0.589%	Yes	0.592%	0.51%	No
411	0.563%	Yes	0.563%	0.00%	No
412	0.563%	Yes	0.563%	0.00%	No
413	0.515%	Yes	0.515%	0.00%	No

Spec. / No.	Insulation Resistance(@Max500V,60s,≦50mA):		Mechanical damage
	Initial Measured (≧10000MΩ)	After Measured (≧10000MΩ)	
384	>10000MΩ	>10000MΩ	No
385	>10000MΩ	>10000MΩ	No
386	>10000MΩ	>10000MΩ	No
387	>10000MΩ	>10000MΩ	No
388	>10000MΩ	>10000MΩ	No
389	>10000MΩ	>10000MΩ	No
390	>10000MΩ	>10000MΩ	No
391	>10000MΩ	>10000MΩ	No
392	>10000MΩ	>10000MΩ	No
393	>10000MΩ	>10000MΩ	No
394	>10000MΩ	>10000MΩ	No
395	>10000MΩ	>10000MΩ	No
396	>10000MΩ	>10000MΩ	No
397	>10000MΩ	>10000MΩ	No
398	>10000MΩ	>10000MΩ	No
399	>10000MΩ	>10000MΩ	No
400	>10000MΩ	>10000MΩ	No
401	>10000MΩ	>10000MΩ	No
402	>10000MΩ	>10000MΩ	No
403	>10000MΩ	>10000MΩ	No
404	>10000MΩ	>10000MΩ	No
405	>10000MΩ	>10000MΩ	No
406	>10000MΩ	>10000MΩ	No
407	>10000MΩ	>10000MΩ	No
408	>10000MΩ	>10000MΩ	No
409	>10000MΩ	>10000MΩ	No
410	>10000MΩ	>10000MΩ	No
411	>10000MΩ	>10000MΩ	No
412	>10000MΩ	>10000MΩ	No
413	>10000MΩ	>10000MΩ	No

AEC-Q200-002			Verdict
ESD			**P**
1	Each pair of pins and/or terminals and all combinations of pin and/or terminal pairs for each component shall be subjected to one (1) pulse at each stress voltage polarity following the ESD levels stated in Figure.	15pcs samples.	P
2	Any pin and/or terminal not under test shall be in an electrically open (floating) state.		P
3	Each component shall be subjected to ESD pulses at 22°C ± 5°C. For all Air Discharge testing, the relative humidity shall be 30% to 60%.	Test environment temperature and Relative humidity: 22.3℃, 47%RH.	P
4	A sufficient number of ESD levels must be tested to either:		P
5	a) The verification range of the ESD simulator contained direct contact discharge and air discharge, positive and negative in 500V, 1KV,2KV,4KV,8KV,12KV, 16KV and 25KV each voltage rang, or		P
6	b) determine the pass/fail transition region between two (2) consecutive ESD test levels. If an expected failure level cannot be estimated, the test flow diagram of Figure 4 may be used to minimize the amount of testing required.		P
7	After the test, the appearance inspection should be carried out, the sample should have no cracking, peeling, bulging, damage phenomenon, the product appearance should be normal.	No any damage on the component.	P
8	After the test the capacitance should not exceed ±10% of the Initial value.	See below table.	P
9	After the test the dissipation factor less than or equal 2.5%.	See below table.	P
10	After the test the insulation resistance should not lower than 10000MΩ.	See below table.	P



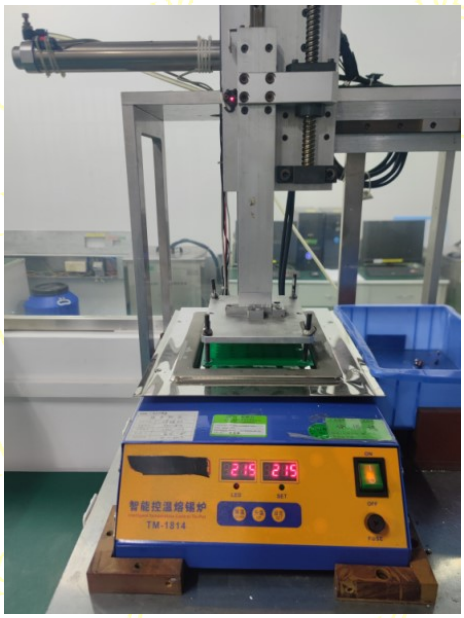


Spec. / No.	Capacitance (@1KHz,1.0Vrms,nF):				Mechanical damage
	Initial Measured	Deviation (<±10%)	After Measured	Change (<±10%)	
414	9.7623	-2.38%	9.6325	-1.33%	No
415	9.7717	-2.28%	9.7983	0.27%	No
416	9.8017	-1.98%	9.8133	0.12%	No
417	10.2180	2.18%	10.3246	1.04%	No
418	9.8230	-1.77%	9.9302	1.09%	No
419	10.2498	2.50%	10.3022	0.51%	No
420	10.1954	1.95%	10.1944	-0.01%	No
421	10.0858	0.86%	9.9848	-1.00%	No
422	10.0194	0.19%	10.1304	1.11%	No
423	9.9456	-0.54%	9.8580	-0.88%	No
424	9.8205	-1.80%	9.7112	-1.11%	No
425	10.1817	1.82%	10.2129	0.31%	No
426	10.1841	1.84%	10.1155	-0.67%	No
427	9.7998	-2.00%	9.7416	-0.59%	No
428	9.7490	-2.51%	9.6306	-1.21%	No

Spec. / No.	Dissipation Factor(@1KHz,1.0Vrms):				Mechanical damage
	Initial Measured	Within spec. (≦2.5%)	After Measured	Within spec. (≦2.5%)	
414	0.586%	Yes	0.583%	-0.51%	No
415	0.554%	Yes	0.551%	-0.54%	No
416	0.521%	Yes	0.524%	0.58%	No
417	0.496%	Yes	0.494%	-0.40%	No
418	0.526%	Yes	0.526%	0.00%	No
419	0.535%	Yes	0.535%	0.00%	No
420	0.540%	Yes	0.538%	-0.37%	No
421	0.516%	Yes	0.519%	0.58%	No
422	0.550%	Yes	0.554%	0.73%	No
423	0.534%	Yes	0.535%	0.19%	No
424	0.508%	Yes	0.507%	-0.20%	No
425	0.593%	Yes	0.596%	0.51%	No
426	0.535%	Yes	0.534%	-0.19%	No
427	0.559%	Yes	0.562%	0.54%	No
428	0.539%	Yes	0.539%	0.00%	No

Spec. / No.	Insulation Resistance(@Max500V,60s,≦50mA):		Mechanical damage
	Initial Measured (≧10000MΩ)	After Measured (≧10000MΩ)	
414	>10000MΩ	>10000MΩ	No
415	>10000MΩ	>10000MΩ	No
416	>10000MΩ	>10000MΩ	No
417	>10000MΩ	>10000MΩ	No
418	>10000MΩ	>10000MΩ	No
419	>10000MΩ	>10000MΩ	No
420	>10000MΩ	>10000MΩ	No
421	>10000MΩ	>10000MΩ	No
422	>10000MΩ	>10000MΩ	No
423	>10000MΩ	>10000MΩ	No
424	>10000MΩ	>10000MΩ	No
425	>10000MΩ	>10000MΩ	No
426	>10000MΩ	>10000MΩ	No
427	>10000MΩ	>10000MΩ	No
428	>10000MΩ	>10000MΩ	No

J-STD-002			Verdict
Solderability			**P**
1	For both Leaded & SMD. Electrical test not required.	15pcs samples.	P
2	Leaded: Method A @ 235°C, category 3. The two pins are tested separately.	Per-condition: Steam 8hr±15min@93±3℃.	N
3	SMD: a) Method B, 4 hrs @ 155°C dry heat @ 235°C.	-	N
4	b) Method B @ 215°C category 3.	215°C	P
5	c) Method D category 3 @ 260°C.	-	N
6	Check whether the solder coverage of pins is over 95% with a 10X magnifying glass (use a 50X magnifying glass when the spacing between pins is less than 0.5mm).	More than 95%.	P
7	After the test the capacitance should between -5%~+10% of the Initial value.	See below table.	P
8	After the test the dissipation factor less than or equal 2.5%.	See below table.	P
9	After the test the insulation resistance should not lower than 10000MΩ.	See below table.	P



Spec. / No.	Capacitance (@1KHz,1.0Vrms,nF):				Mechanical damage
	Initial Measured	Deviation (<±10%)	After Measured	Change (-5%~+10%)	
429	9.7398	-2.60%	9.6269	-1.16%	No
430	9.9172	-0.83%	9.9222	0.05%	No
431	9.6575	-3.42%	9.6288	-0.30%	No
432	10.1021	1.02%	10.0092	-0.92%	No
433	9.6863	-3.14%	9.6927	0.07%	No
434	10.1791	1.79%	10.0830	-0.94%	No

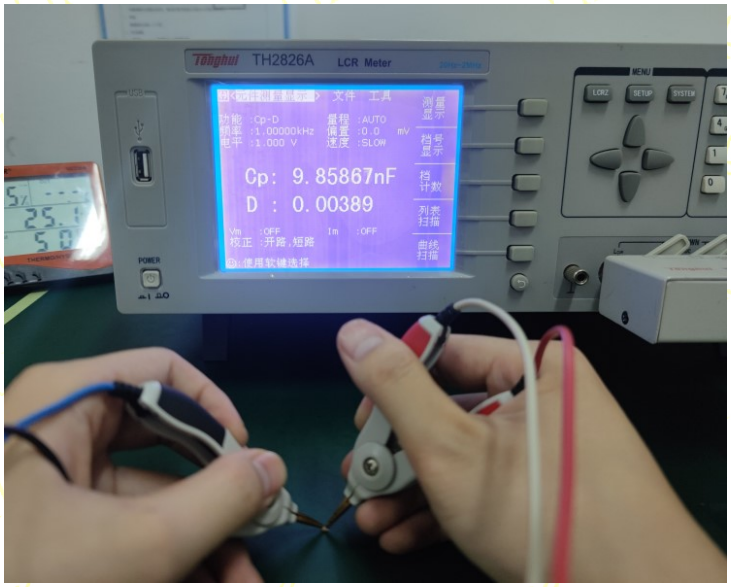
Spec. / No.	Capacitance (@1KHz,1.0Vrms,nF):				Mechanical damage
	Initial Measured	Deviation (<±10%)	After Measured	Change (-5%~+10%)	
435	9.8019	-1.98%	9.9018	1.02%	No
436	9.6591	-3.41%	9.7248	0.68%	No
437	9.9636	-0.36%	9.9439	-0.20%	No
438	9.9984	-0.02%	9.9966	-0.02%	No
439	9.9368	-0.63%	9.8573	-0.80%	No
440	9.6660	-3.34%	9.7880	1.26%	No
441	9.7195	-2.81%	9.7665	0.48%	No
442	10.0245	0.24%	10.1196	0.95%	No
443	9.9755	-0.24%	9.8541	-1.22%	No

Spec. / No.	Dissipation Factor(@1KHz,1.0Vrms):				Mechanical damage
	Initial Measured	Within spec. (≦2.5%)	After Measured	Within spec. (≦2.5%)	
429	0.476%	Yes	0.476%	0.00%	No
430	0.483%	Yes	0.482%	-0.21%	No
431	0.477%	Yes	0.480%	0.63%	No
432	0.576%	Yes	0.574%	-0.35%	No
433	0.490%	Yes	0.491%	0.20%	No
434	0.532%	Yes	0.534%	0.38%	No
435	0.582%	Yes	0.585%	0.52%	No
436	0.488%	Yes	0.486%	-0.41%	No
437	0.518%	Yes	0.521%	0.58%	No
438	0.558%	Yes	0.555%	-0.54%	No
439	0.519%	Yes	0.519%	0.00%	No
440	0.542%	Yes	0.543%	0.18%	No
441	0.534%	Yes	0.533%	-0.19%	No
442	0.518%	Yes	0.516%	-0.39%	No
443	0.572%	Yes	0.573%	0.17%	No

Spec. / No.	Insulation Resistance(@Max500V,60s,≦50mA):		Mechanical damage
	Initial Measured (≧10000MΩ)	After Measured (≧10000MΩ)	
429	>10000MΩ	>10000MΩ	No
430	>10000MΩ	>10000MΩ	No
431	>10000MΩ	>10000MΩ	No

Spec. / No.	Insulation Resistance(@Max500V,60s,≦50mA):		Mechanical damage
	Initial Measured (≧10000MΩ)	After Measured (≧10000MΩ)	
432	>10000MΩ	>10000MΩ	No
433	>10000MΩ	>10000MΩ	No
434	>10000MΩ	>10000MΩ	No
435	>10000MΩ	>10000MΩ	No
436	>10000MΩ	>10000MΩ	No
437	>10000MΩ	>10000MΩ	No
438	>10000MΩ	>10000MΩ	No
439	>10000MΩ	>10000MΩ	No
440	>10000MΩ	>10000MΩ	No
441	>10000MΩ	>10000MΩ	No
442	>10000MΩ	>10000MΩ	No
443	>10000MΩ	>10000MΩ	No

User Spec.			Verdict
Electrical Characterization			**P**
1	Parametrically test per lot and sample size requirements, summary to show Min, Max, Mean and Standard deviation at room as well as Min and Max operating temperatures.	30pcs samples.	P
2	After the test, the appearance inspection should be carried out, the sample should have no cracking, peeling, bulging, damage phenomenon, the product appearance should be normal.	No any damage on the component.	P
3	After the test the capacitance, dissipation factor and the insulation resistance should not exceed of the specification.	See below table.	P



Test environment temperature: -55℃ ; Storage time:2h					
Spec. / No.	Capacitance (@1KHz,1.0Vrms,nF):				Mechanical damage
	Initial Measured	Deviation (<±10%)	After Measured	Change (<±15%)	
444	10.0845	0.85%	10.1620	0.77%	No
445	9.7164	-2.84%	9.8462	1.34%	No
446	10.2090	2.09%	10.2954	0.85%	No
447	9.6335	-3.67%	9.7034	0.73%	No
448	10.1166	1.17%	10.2306	1.13%	No
449	9.9811	-0.19%	10.1100	1.29%	No
450	9.6682	-3.32%	9.7559	0.91%	No
451	9.6981	-3.02%	9.8027	1.08%	No
452	9.6735	-3.26%	9.7706	1.00%	No

Test environment temperature: -55℃ ; Storage time:2h					
Spec. / No.	Capacitance (@1KHz,1.0Vrms,nF):				Mechanical damage
	Initial Measured	Deviation (<±10%)	After Measured	Change (<±15%)	
453	9.8124	-1.88%	9.9348	1.25%	No
454	9.7227	-2.77%	9.8638	1.45%	No
455	9.7257	-2.74%	9.8179	0.95%	No
456	9.8308	-1.69%	9.9340	1.05%	No
457	10.2434	2.43%	10.3947	1.48%	No
458	10.1916	1.92%	10.3248	1.31%	No
459	9.7953	-2.05%	9.9462	1.54%	No
460	10.1711	1.71%	10.2730	1.00%	No
461	10.1066	1.07%	10.2842	1.76%	No
462	10.2665	2.67%	10.4342	1.63%	No
463	9.7782	-2.22%	9.9030	1.28%	No
464	9.6998	-3.00%	9.8623	1.68%	No
465	9.8330	-1.67%	9.9029	0.71%	No
466	9.8433	-1.57%	9.9582	1.17%	No
467	9.8447	-1.55%	9.9662	1.23%	No
468	9.7046	-2.95%	9.8406	1.40%	No
469	10.1688	1.69%	10.2874	1.17%	No
470	10.2235	2.24%	10.3813	1.54%	No
471	9.7383	-2.62%	9.9071	1.73%	No
472	10.0894	0.89%	10.2322	1.42%	No
473	10.0332	0.33%	10.1772	1.44%	No

Test environment temperature: -55℃ ; Storage time:2h					
Spec. / No.	Dissipation Factor (@1KHz,1.0Vrms):		Insulation Resistance (@Max500V,60s,≦50mA):		Mechanical damage
	Initial Measured	After Measured	Initial Measured	After Measured	
444	0.518%	1.278%	>10000MΩ	>10000MΩ	No
445	0.487%	1.115%	>10000MΩ	>10000MΩ	No
446	0.477%	1.179%	>10000MΩ	>10000MΩ	No
447	0.475%	1.234%	>10000MΩ	>10000MΩ	No
448	0.588%	1.390%	>10000MΩ	>10000MΩ	No
449	0.552%	1.306%	>10000MΩ	>10000MΩ	No

Test environment temperature: -55℃ ; Storage time:2h					
Spec. No.	Dissipation Factor (@1KHz,1.0Vrms):		Insulation Resistance (@Max500V,60s,≦50mA):		Mechanical damage
	Initial Measured	After Measured	Initial Measured	After Measured	
450	0.474%	1.137%	>10000MΩ	>10000MΩ	No
451	0.488%	1.214%	>10000MΩ	>10000MΩ	No
452	0.485%	1.084%	>10000MΩ	>10000MΩ	No
453	0.561%	1.375%	>10000MΩ	>10000MΩ	No
454	0.591%	1.446%	>10000MΩ	>10000MΩ	No
455	0.535%	1.191%	>10000MΩ	>10000MΩ	No
456	0.577%	1.332%	>10000MΩ	>10000MΩ	No
457	0.519%	1.313%	>10000MΩ	>10000MΩ	No
458	0.527%	1.341%	>10000MΩ	>10000MΩ	No
459	0.486%	1.086%	>10000MΩ	>10000MΩ	No
460	0.587%	1.343%	>10000MΩ	>10000MΩ	No
461	0.568%	1.393%	>10000MΩ	>10000MΩ	No
462	0.500%	1.242%	>10000MΩ	>10000MΩ	No
463	0.536%	1.208%	>10000MΩ	>10000MΩ	No
464	0.508%	1.215%	>10000MΩ	>10000MΩ	No
465	0.534%	1.243%	>10000MΩ	>10000MΩ	No
466	0.480%	1.068%	>10000MΩ	>10000MΩ	No
467	0.487%	1.121%	>10000MΩ	>10000MΩ	No
468	0.566%	1.316%	>10000MΩ	>10000MΩ	No
469	0.482%	1.169%	>10000MΩ	>10000MΩ	No
470	0.594%	1.342%	>10000MΩ	>10000MΩ	No
471	0.553%	1.428%	>10000MΩ	>10000MΩ	No
472	0.596%	1.502%	>10000MΩ	>10000MΩ	No
473	0.488%	1.196%	>10000MΩ	>10000MΩ	No

Test environment temperature: 25℃ ; Storage time:2h					
Spec. No.	Capacitance (@1KHz,1.0Vrms,nF):				Mechanical damage
	Initial Measured	Deviation (<±10%)	After Measured	Change (<±10%)	
444	10.0845	0.85%	10.1125	0.28%	No
445	9.7164	-2.84%	9.7334	0.17%	No
446	10.2090	2.09%	10.2525	0.43%	No

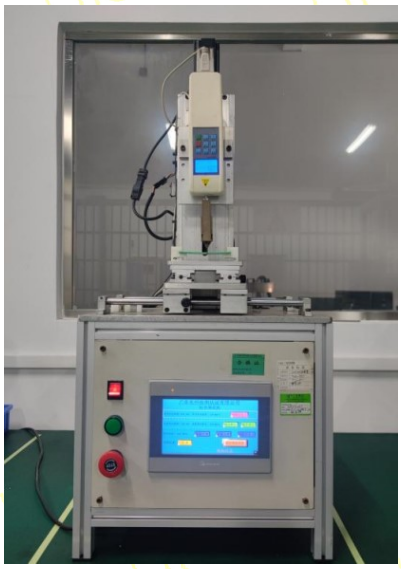
Test environment temperature: 25℃ ; Storage time:2h					
Spec. / No.	Capacitance (@1KHz,1.0Vrms,nF):				Mechanical damage
	Initial Measured	Deviation (<±10%)	After Measured	Change (<±10%)	
447	9.6335	-3.67%	9.5924	-0.43%	No
448	10.1166	1.17%	10.1117	-0.05%	No
449	9.9811	-0.19%	9.9507	-0.30%	No
450	9.6682	-3.32%	9.6616	-0.07%	No
451	9.6981	-3.02%	9.6796	-0.19%	No
452	9.6735	-3.26%	9.697	0.24%	No
453	9.8124	-1.88%	9.8374	0.25%	No
454	9.7227	-2.77%	9.6937	-0.30%	No
455	9.7257	-2.74%	9.7032	-0.23%	No
456	9.8308	-1.69%	9.8535	0.23%	No
457	10.2434	2.43%	10.2058	-0.37%	No
458	10.1916	1.92%	10.148	-0.43%	No
459	9.7953	-2.05%	9.7487	-0.48%	No
460	10.1711	1.71%	10.1927	0.21%	No
461	10.1066	1.07%	10.1011	-0.05%	No
462	10.2665	2.67%	10.279	0.12%	No
463	9.7782	-2.22%	9.8017	0.24%	No
464	9.6998	-3.00%	9.6707	-0.30%	No
465	9.8330	-1.67%	9.8244	-0.09%	No
466	9.8433	-1.57%	9.8142	-0.30%	No
467	9.8447	-1.55%	9.7974	-0.48%	No
468	9.7046	-2.95%	9.6734	-0.32%	No
469	10.1688	1.69%	10.1943	0.25%	No
470	10.2235	2.24%	10.2095	-0.14%	No
471	9.7383	-2.62%	9.7824	0.45%	No
472	10.0894	0.89%	10.0378	-0.51%	No
473	10.0332	0.33%	10.0693	0.36%	No

Test environment temperature: 25℃ ; Storage time:2h					
Spec. No.	Dissipation Factor (@1KHz,1.0Vrms):		Insulation Resistance (@Max500V,60s, ≦50mA):		Mechanical damage
	Initial Measured	After Measured	Initial Measured	After Measured	
444	0.518%	0.520%	>10000MΩ	>10000MΩ	No
445	0.487%	0.486%	>10000MΩ	>10000MΩ	No
446	0.477%	0.476%	>10000MΩ	>10000MΩ	No
447	0.475%	0.477%	>10000MΩ	>10000MΩ	No
448	0.588%	0.588%	>10000MΩ	>10000MΩ	No
449	0.552%	0.554%	>10000MΩ	>10000MΩ	No
450	0.474%	0.475%	>10000MΩ	>10000MΩ	No
451	0.488%	0.489%	>10000MΩ	>10000MΩ	No
452	0.485%	0.485%	>10000MΩ	>10000MΩ	No
453	0.561%	0.562%	>10000MΩ	>10000MΩ	No
454	0.591%	0.593%	>10000MΩ	>10000MΩ	No
455	0.535%	0.534%	>10000MΩ	>10000MΩ	No
456	0.577%	0.577%	>10000MΩ	>10000MΩ	No
457	0.519%	0.520%	>10000MΩ	>10000MΩ	No
458	0.527%	0.530%	>10000MΩ	>10000MΩ	No
459	0.486%	0.485%	>10000MΩ	>10000MΩ	No
460	0.587%	0.585%	>10000MΩ	>10000MΩ	No
461	0.568%	0.569%	>10000MΩ	>10000MΩ	No
462	0.500%	0.500%	>10000MΩ	>10000MΩ	No
463	0.536%	0.537%	>10000MΩ	>10000MΩ	No
464	0.508%	0.509%	>10000MΩ	>10000MΩ	No
465	0.534%	0.535%	>10000MΩ	>10000MΩ	No
466	0.480%	0.482%	>10000MΩ	>10000MΩ	No
467	0.487%	0.486%	>10000MΩ	>10000MΩ	No
468	0.566%	0.566%	>10000MΩ	>10000MΩ	No
469	0.482%	0.483%	>10000MΩ	>10000MΩ	No
470	0.594%	0.597%	>10000MΩ	>10000MΩ	No
471	0.553%	0.554%	>10000MΩ	>10000MΩ	No
472	0.596%	0.596%	>10000MΩ	>10000MΩ	No
473	0.488%	0.486%	>10000MΩ	>10000MΩ	No

Test environment temperature: 125℃ ; Storage time:2h					
Spec. No.	Capacitance (@1KHz,1.0Vrms,nF):				Mechanical damage
	Initial Measured	Deviation (<±10%)	After Measured	Change (<±15%)	
444	10.0845	0.85%	9.0002	-10.75%	No
445	9.7164	-2.84%	8.8486	-8.93%	No
446	10.2090	2.09%	9.0219	-11.63%	No
447	9.6335	-3.67%	8.5855	-10.88%	No
448	10.1166	1.17%	8.9941	-11.10%	No
449	9.9811	-0.19%	9.0860	-8.97%	No
450	9.6682	-3.32%	8.6439	-10.59%	No
451	9.6981	-3.02%	8.4170	-13.21%	No
452	9.6735	-3.26%	8.7856	-9.18%	No
453	9.8124	-1.88%	8.6703	-11.64%	No
454	9.7227	-2.77%	8.6286	-11.25%	No
455	9.7257	-2.74%	8.5995	-11.58%	No
456	9.8308	-1.69%	8.4801	-13.74%	No
457	10.2434	2.43%	9.3104	-9.11%	No
458	10.1916	1.92%	8.9539	-12.14%	No
459	9.7953	-2.05%	8.7513	-10.66%	No
460	10.1711	1.71%	8.9727	-11.78%	No
461	10.1066	1.07%	8.8938	-12.00%	No
462	10.2665	2.67%	9.0041	-12.30%	No
463	9.7782	-2.22%	8.4976	-13.10%	No
464	9.6998	-3.00%	8.5686	-11.66%	No
465	9.8330	-1.67%	8.6856	-11.67%	No
466	9.8433	-1.57%	8.8302	-10.29%	No
467	9.8447	-1.55%	9.0217	-8.36%	No
468	9.7046	-2.95%	8.8893	-8.40%	No
469	10.1688	1.69%	9.0567	-10.94%	No
470	10.2235	2.24%	9.2355	-9.66%	No
471	9.7383	-2.62%	8.8434	-9.19%	No
472	10.0894	0.89%	9.0672	-10.13%	No
473	10.0332	0.33%	8.7902	-12.39%	No

Test environment temperature: 125℃ ; Storage time:2h					
Spec. / No.	Dissipation Factor (@1KHz,1.0Vrms):		Insulation Resistance (@Max500V,60s, ≦50mA):		Mechanical damage
	Initial Measured	After Measured	Initial Measured	After Measured	
444	0.518%	0.281%	>10000MΩ	>10000MΩ	No
445	0.487%	0.262%	>10000MΩ	>10000MΩ	No
446	0.477%	0.258%	>10000MΩ	>10000MΩ	No
447	0.475%	0.250%	>10000MΩ	>10000MΩ	No
448	0.588%	0.298%	>10000MΩ	>10000MΩ	No
449	0.552%	0.256%	>10000MΩ	>10000MΩ	No
450	0.474%	0.203%	>10000MΩ	>10000MΩ	No
451	0.488%	0.248%	>10000MΩ	>10000MΩ	No
452	0.485%	0.208%	>10000MΩ	>10000MΩ	No
453	0.561%	0.273%	>10000MΩ	>10000MΩ	No
454	0.591%	0.258%	>10000MΩ	>10000MΩ	No
455	0.535%	0.273%	>10000MΩ	>10000MΩ	No
456	0.577%	0.282%	>10000MΩ	>10000MΩ	No
457	0.519%	0.258%	>10000MΩ	>10000MΩ	No
458	0.527%	0.219%	>10000MΩ	>10000MΩ	No
459	0.486%	0.258%	>10000MΩ	>10000MΩ	No
460	0.587%	0.288%	>10000MΩ	>10000MΩ	No
461	0.568%	0.235%	>10000MΩ	>10000MΩ	No
462	0.500%	0.270%	>10000MΩ	>10000MΩ	No
463	0.536%	0.278%	>10000MΩ	>10000MΩ	No
464	0.508%	0.264%	>10000MΩ	>10000MΩ	No
465	0.534%	0.235%	>10000MΩ	>10000MΩ	No
466	0.480%	0.228%	>10000MΩ	>10000MΩ	No
467	0.487%	0.233%	>10000MΩ	>10000MΩ	No
468	0.566%	0.266%	>10000MΩ	>10000MΩ	No
469	0.482%	0.203%	>10000MΩ	>10000MΩ	No
470	0.594%	0.258%	>10000MΩ	>10000MΩ	No
471	0.553%	0.240%	>10000MΩ	>10000MΩ	No
472	0.596%	0.294%	>10000MΩ	>10000MΩ	No
473	0.488%	0.244%	>10000MΩ	>10000MΩ	No

AEC Q200-005			Verdict
Board Flex			**P**
1	60 sec minimum holding time.	30pcs samples.	P
2	Part mounted on an FR4 board provided by the Supplier for the part being tested with the following requirements.	Preheat temperature：(100~150°C) max 120s. Time above 183°C, 60~150s. Max. ramp up (183°C to peak) :3°C / s. Peak temperature: 230~240°C Time in peak temperature: 10~20s. Ramp down rate:6°C / s.	P
3	Place the 100mm X 40mm board into a fixture with the component facing down.		P
4	The apparatus shall consist of mechanical means to apply a force which will bend the board (D) x = 2 mm minimum (or as defined in the customer specification or Q200).	2mm	P
5	The duration of the applied forces shall be 60 (+ 5) Sec. The force is to be applied only once to the board.	60s	P
6	A failure is when a part cracks or causes a change in the parametric being monitored.		P
7	Under 20 X magnifying glass observation or monitoring, no rupture or peeling phenomenon.	No any damage on the component.	P
8	After the test the capacitance should not exceed ±10% of the Initial value.	See below table.	P
9	After the test the dissipation factor less than or equal 2.5%.	See below table.	P
10	After the test the insulation resistance should not lower than 10000MΩ.	See below table.	P



Spec. / No.	Capacitance (@1KHz,1.0Vrms,nF):				Mechanical damage
	Initial Measured	Deviation (<10%)	After Measured	Change (<10%)	
474	10.0319	0.32%	10.0872	0.55%	No
475	10.0268	0.27%	9.8712	-1.55%	No
476	9.7504	-2.50%	9.6235	-1.30%	No
477	9.9698	-0.30%	9.8706	-1.00%	No
478	9.8730	-1.27%	9.9883	1.17%	No
479	10.0846	0.85%	10.1997	1.14%	No
480	10.2449	2.45%	10.0956	-1.46%	No
481	9.8470	-1.53%	9.8440	-0.03%	No
482	10.1168	1.17%	10.0585	-0.58%	No
483	10.2763	2.76%	10.2916	0.15%	No
484	9.7307	-2.69%	9.7271	-0.04%	No
485	10.2439	2.44%	10.2990	0.54%	No
486	9.8519	-1.48%	9.7945	-0.58%	No
487	10.0379	0.38%	10.0636	0.26%	No
488	10.1043	1.04%	10.0558	-0.48%	No
489	9.6617	-3.38%	9.7225	0.63%	No
490	9.6839	-3.16%	9.6513	-0.34%	No
491	9.8566	-1.43%	9.9137	0.58%	No
492	9.6891	-3.11%	9.7658	0.79%	No
493	10.0720	0.72%	9.9989	-0.73%	No
494	10.2178	2.18%	10.1917	-0.26%	No
495	9.9702	-0.30%	9.9996	0.29%	No
496	10.1574	1.57%	10.1649	0.07%	No
497	9.6862	-3.14%	9.7118	0.26%	No
498	9.9992	-0.01%	9.9315	-0.68%	No
499	10.0714	0.71%	10.0778	0.06%	No
500	9.7935	-2.07%	9.9123	1.21%	No
501	9.9804	-0.20%	10.0788	0.99%	No
502	10.1281	1.28%	10.2142	0.85%	No
503	10.1892	1.89%	10.2646	0.74%	No

Spec. / No.	Dissipation Factor(@1KHz,1.0Vrms):				Mechanical damage
	Initial Measured	Within spec. (≦2.5%)	After Measured	Within spec. (≦2.5%)	
474	0.597%	Yes	0.599%	0.34%	No
475	0.565%	Yes	0.563%	-0.35%	No
476	0.589%	Yes	0.588%	-0.17%	No
477	0.481%	Yes	0.483%	0.42%	No
478	0.568%	Yes	0.565%	-0.53%	No
479	0.524%	Yes	0.523%	-0.19%	No
480	0.558%	Yes	0.557%	-0.18%	No
481	0.590%	Yes	0.589%	-0.17%	No
482	0.524%	Yes	0.525%	0.19%	No
483	0.519%	Yes	0.519%	0.00%	No
484	0.532%	Yes	0.535%	0.56%	No
485	0.580%	Yes	0.581%	0.17%	No
486	0.583%	Yes	0.584%	0.17%	No
487	0.578%	Yes	0.578%	0.00%	No
488	0.541%	Yes	0.544%	0.55%	No
489	0.583%	Yes	0.580%	-0.51%	No
490	0.569%	Yes	0.572%	0.53%	No
491	0.590%	Yes	0.591%	0.17%	No
492	0.496%	Yes	0.497%	0.20%	No
493	0.590%	Yes	0.588%	-0.34%	No
494	0.493%	Yes	0.491%	-0.41%	No
495	0.544%	Yes	0.546%	0.37%	No
496	0.568%	Yes	0.571%	0.53%	No
497	0.483%	Yes	0.483%	0.00%	No
498	0.561%	Yes	0.560%	-0.18%	No
499	0.482%	Yes	0.481%	-0.21%	No
500	0.482%	Yes	0.480%	-0.41%	No
501	0.486%	Yes	0.486%	0.00%	No
502	0.592%	Yes	0.592%	0.00%	No
503	0.523%	Yes	0.521%	-0.38%	No

Spec. / No.	Insulation Resistance(@Max500V,60s,≦50mA):		Mechanical damage
	Initial Measured (≧10000MΩ)	After Measured (≧10000MΩ)	
474	>10000MΩ	>10000MΩ	No
475	>10000MΩ	>10000MΩ	No
476	>10000MΩ	>10000MΩ	No
477	>10000MΩ	>10000MΩ	No
478	>10000MΩ	>10000MΩ	No
479	>10000MΩ	>10000MΩ	No
480	>10000MΩ	>10000MΩ	No
481	>10000MΩ	>10000MΩ	No
482	>10000MΩ	>10000MΩ	No
483	>10000MΩ	>10000MΩ	No
484	>10000MΩ	>10000MΩ	No
485	>10000MΩ	>10000MΩ	No
486	>10000MΩ	>10000MΩ	No
487	>10000MΩ	>10000MΩ	No
488	>10000MΩ	>10000MΩ	No
489	>10000MΩ	>10000MΩ	No
490	>10000MΩ	>10000MΩ	No
491	>10000MΩ	>10000MΩ	No
492	>10000MΩ	>10000MΩ	No
493	>10000MΩ	>10000MΩ	No
494	>10000MΩ	>10000MΩ	No
495	>10000MΩ	>10000MΩ	No
496	>10000MΩ	>10000MΩ	No
497	>10000MΩ	>10000MΩ	No
498	>10000MΩ	>10000MΩ	No
499	>10000MΩ	>10000MΩ	No
500	>10000MΩ	>10000MΩ	No
501	>10000MΩ	>10000MΩ	No
502	>10000MΩ	>10000MΩ	No
503	>10000MΩ	>10000MΩ	No

AEC Q200-006			Verdict
Terminal Strength (SMD)			**P**
1	With the component mounted on a PCB obtained from the Supplier with the device to be tested, apply a 17.7 N (1.8 Kg) force to the side of a device being tested. This force shall be applied for 60 +1 seconds.	30pcs samples. Force:17.7N	P
2	Also the force shall be applied gradually as not to apply a shock to the component being tested.		P
3	Magnification of 20X or greater may be employed for inspection of the mechanical integrity of the device body, terminals and body/terminal junction.	No any damage on the component.	P
4	After the test the capacitance should not exceed ±10% of the Initial value.	See below table.	P
5	After the test the dissipation factor less than or equal 2.5%.	See below table.	P
6	After the test the insulation resistance should not lower than 10000MΩ.	See below table.	P

Spec. / No.	Capacitance (@1KHz,1.0Vrms,nF):				Mechanical damage
	Initial Measured	Deviation (<±10%)	After Measured	Change (<±10%)	
504	10.0832	0.83%	10.0437	-0.39%	No
505	9.8414	-1.59%	9.8006	-0.41%	No
506	10.0303	0.30%	9.8811	-1.49%	No

Spec. / No.	Capacitance (@1KHz,1.0Vrms,nF):				Mechanical damage
	Initial Measured	Deviation (<±10%)	After Measured	Change (<±10%)	
507	9.6346	-3.65%	9.6838	0.51%	No
508	10.2271	2.27%	10.3350	1.06%	No
509	9.8858	-1.14%	9.7664	-1.21%	No
510	9.8220	-1.78%	9.6678	-1.57%	No
511	10.0933	0.93%	10.1807	0.87%	No
512	10.1367	1.37%	10.0048	-1.30%	No
513	9.9305	-0.69%	9.8220	-1.09%	No
514	10.1627	1.63%	10.0523	-1.09%	No
515	9.6642	-3.36%	9.5284	-1.41%	No
516	10.2765	2.77%	10.4040	1.24%	No
517	9.7354	-2.65%	9.6036	-1.35%	No
518	9.6835	-3.17%	9.6028	-0.83%	No
519	10.0760	0.76%	10.1513	0.75%	No
520	10.2080	2.08%	10.1484	-0.58%	No
521	9.8175	-1.82%	9.9122	0.96%	No
522	10.1798	1.80%	10.0540	-1.24%	No
523	10.1690	1.69%	10.1647	-0.04%	No
524	9.6419	-3.58%	9.5131	-1.34%	No
525	10.0863	0.86%	10.0826	-0.04%	No
526	9.8513	-1.49%	9.9322	0.82%	No
527	9.8387	-1.61%	9.9488	1.12%	No
528	9.9576	-0.42%	10.0230	0.66%	No
529	10.2491	2.49%	10.3237	0.73%	No
530	9.6376	-3.62%	9.7070	0.72%	No
531	10.1475	1.48%	10.2476	0.99%	No
532	10.0008	0.01%	9.9589	-0.42%	No
533	9.7010	-2.99%	9.6641	-0.38%	No

Spec. / No.	Dissipation Factor(@1KHz,1.0Vrms):				Mechanical damage
	Initial Measured	Within spec. (≦2.5%)	After Measured	Within spec. (≦2.5%)	
504	0.490%	Yes	0.490%	0.00%	No
505	0.543%	Yes	0.546%	0.55%	No
506	0.599%	Yes	0.603%	0.67%	No

Spec. / No.	Dissipation Factor(@1KHz,1.0Vrms):				Mechanical damage
	Initial Measured	Within spec. (≦2.5%)	After Measured	Within spec. (≦2.5%)	
507	0.487%	Yes	0.489%	0.41%	No
508	0.560%	Yes	0.559%	-0.18%	No
509	0.489%	Yes	0.492%	0.61%	No
510	0.511%	Yes	0.513%	0.39%	No
511	0.482%	Yes	0.481%	-0.21%	No
512	0.492%	Yes	0.493%	0.20%	No
513	0.568%	Yes	0.569%	0.18%	No
514	0.540%	Yes	0.543%	0.56%	No
515	0.567%	Yes	0.570%	0.53%	No
516	0.525%	Yes	0.524%	-0.19%	No
517	0.585%	Yes	0.587%	0.34%	No
518	0.543%	Yes	0.543%	0.00%	No
519	0.549%	Yes	0.550%	0.18%	No
520	0.599%	Yes	0.599%	0.00%	No
521	0.508%	Yes	0.510%	0.39%	No
522	0.540%	Yes	0.542%	0.37%	No
523	0.545%	Yes	0.542%	-0.55%	No
524	0.557%	Yes	0.557%	0.00%	No
525	0.501%	Yes	0.503%	0.40%	No
526	0.543%	Yes	0.541%	-0.37%	No
527	0.584%	Yes	0.581%	-0.51%	No
528	0.493%	Yes	0.492%	-0.20%	No
529	0.589%	Yes	0.586%	-0.51%	No
530	0.575%	Yes	0.579%	0.70%	No
531	0.575%	Yes	0.574%	-0.17%	No
532	0.472%	Yes	0.473%	0.21%	No
533	0.543%	Yes	0.542%	-0.18%	No

Spec. / No.	Insulation Resistance(@Max500V,60s,≦50mA):		Mechanical damage
	Initial Measured (≧10000MΩ)	After Measured (≧10000MΩ)	
504	>10000MΩ	>10000MΩ	No
505	>10000MΩ	>10000MΩ	No
506	>10000MΩ	>10000MΩ	No

Spec. / No.	Insulation Resistance(@Max500V,60s,≦50mA):		Mechanical damage
	Initial Measured (≧10000MΩ)	After Measured (≧10000MΩ)	
507	>10000MΩ	>10000MΩ	No
508	>10000MΩ	>10000MΩ	No
509	>10000MΩ	>10000MΩ	No
510	>10000MΩ	>10000MΩ	No
511	>10000MΩ	>10000MΩ	No
512	>10000MΩ	>10000MΩ	No
513	>10000MΩ	>10000MΩ	No
514	>10000MΩ	>10000MΩ	No
515	>10000MΩ	>10000MΩ	No
516	>10000MΩ	>10000MΩ	No
517	>10000MΩ	>10000MΩ	No
518	>10000MΩ	>10000MΩ	No
519	>10000MΩ	>10000MΩ	No
520	>10000MΩ	>10000MΩ	No
521	>10000MΩ	>10000MΩ	No
522	>10000MΩ	>10000MΩ	No
523	>10000MΩ	>10000MΩ	No
524	>10000MΩ	>10000MΩ	No
525	>10000MΩ	>10000MΩ	No
526	>10000MΩ	>10000MΩ	No
527	>10000MΩ	>10000MΩ	No
528	>10000MΩ	>10000MΩ	No
529	>10000MΩ	>10000MΩ	No
530	>10000MΩ	>10000MΩ	No
531	>10000MΩ	>10000MΩ	No
532	>10000MΩ	>10000MΩ	No
533	>10000MΩ	>10000MΩ	No

AEC-Q200-003			Verdict
Beam Load Test			**P**
1	Prior to beam load testing,complete the external visual test.	30pcs samples.	P
2	During(if applicable) and after subjection to test, part rupture prior to any minimum user force requirement shall be considered a failure.	Force:17.7N Speed:2.5±0.25mm/sec	P
3	After the test, the appearance inspection should be carried out, the sample should have no cracking, peeling, bulging, damage phenomenon, the product appearance should be normal.	No any damage on the component.	P
4	After the test the capacitance should not exceed ±10% of the Initial value.	See below table.	P
5	After the test the dissipation factor less than or equal 2.5%.	See below table.	P
6	After the test the insulation resistance should not lower than 10000MΩ.	See below table.	P

Spec. / No.	Capacitance (@1KHz,1.0Vrms,nF):				Mechanical damage
	Initial Measured	Deviation (<±10%)	After Measured	Change (<±10%)	
534	9.7560	-2.44%	9.6838	-0.74%	No
535	9.6724	-3.28%	9.5786	-0.97%	No
536	10.0713	0.71%	9.9688	-1.02%	No
537	9.9858	-0.14%	10.0139	0.28%	No
538	9.7982	-2.02%	9.9084	1.12%	No

Spec. / No.	Capacitance (@1KHz,1.0Vrms,nF):				Mechanical damage
	Initial Measured	Deviation (<±10%)	After Measured	Change (<±10%)	
539	10.1898	1.90%	10.2531	0.62%	No
540	9.9903	-0.10%	9.9480	-0.42%	No
541	9.6347	-3.65%	9.6216	-0.14%	No
542	10.1812	1.81%	10.1905	0.09%	No
543	9.6829	-3.17%	9.6998	0.17%	No
544	10.0880	0.88%	10.0234	-0.64%	No
545	9.9717	-0.28%	9.8870	-0.85%	No
546	9.7871	-2.13%	9.7687	-0.19%	No
547	10.2673	2.67%	10.3466	0.77%	No
548	10.1995	2.00%	10.3157	1.14%	No
549	9.9212	-0.79%	9.9894	0.69%	No
550	9.7387	-2.61%	9.8386	1.03%	No
551	9.6347	-3.65%	9.5799	-0.57%	No
552	9.9949	-0.05%	9.8828	-1.12%	No
553	9.7799	-2.20%	9.7299	-0.51%	No
554	9.9263	-0.74%	9.9476	0.21%	No
555	9.8051	-1.95%	9.7875	-0.18%	No
556	9.8008	-1.99%	9.8056	0.05%	No
557	10.1689	1.69%	10.0871	-0.80%	No
558	10.0219	0.22%	10.0231	0.01%	No
559	10.0882	0.88%	10.1284	0.40%	No
560	9.9121	-0.88%	9.9261	0.14%	No
561	10.1595	1.60%	10.2404	0.80%	No
562	9.6647	-3.35%	9.5309	-1.38%	No
563	10.0869	0.87%	10.1605	0.73%	No

Spec. / No.	Dissipation Factor(@1KHz,1.0Vrms):				Mechanical damage
	Initial Measured	Within spec. (≦2.5%)	After Measured	Within spec. (≦2.5%)	
534	0.539%	Yes	0.539%	0.00%	No
535	0.583%	Yes	0.581%	-0.34%	No
536	0.537%	Yes	0.538%	0.19%	No
537	0.535%	Yes	0.532%	-0.56%	No
538	0.526%	Yes	0.529%	0.57%	No

Spec. / No.	Dissipation Factor(@1KHz,1.0Vrms):				Mechanical damage
	Initial Measured	Within spec. (≦2.5%)	After Measured	Within spec. (≦2.5%)	
539	0.487%	Yes	0.487%	0.00%	No
540	0.477%	Yes	0.474%	-0.63%	No
541	0.578%	Yes	0.579%	0.17%	No
542	0.507%	Yes	0.505%	-0.39%	No
543	0.515%	Yes	0.516%	0.19%	No
544	0.524%	Yes	0.527%	0.57%	No
545	0.587%	Yes	0.585%	-0.34%	No
546	0.530%	Yes	0.530%	0.00%	No
547	0.488%	Yes	0.489%	0.20%	No
548	0.551%	Yes	0.548%	-0.54%	No
549	0.588%	Yes	0.585%	-0.51%	No
550	0.499%	Yes	0.500%	0.20%	No
551	0.522%	Yes	0.522%	0.00%	No
552	0.497%	Yes	0.496%	-0.20%	No
553	0.592%	Yes	0.593%	0.17%	No
554	0.571%	Yes	0.573%	0.35%	No
555	0.595%	Yes	0.593%	-0.34%	No
556	0.576%	Yes	0.576%	0.00%	No
557	0.527%	Yes	0.524%	-0.57%	No
558	0.516%	Yes	0.513%	-0.58%	No
559	0.580%	Yes	0.578%	-0.34%	No
560	0.484%	Yes	0.487%	0.62%	No
561	0.553%	Yes	0.554%	0.18%	No
562	0.521%	Yes	0.522%	0.19%	No
563	0.575%	Yes	0.574%	-0.17%	No

Spec. / No.	Insulation Resistance(@Max500V,60s,≦50mA):		Mechanical damage
	Initial Measured (≧10000MΩ)	After Measured (≧10000MΩ)	
534	>10000MΩ	>10000MΩ	No
535	>10000MΩ	>10000MΩ	No
536	>10000MΩ	>10000MΩ	No
537	>10000MΩ	>10000MΩ	No
538	>10000MΩ	>10000MΩ	No

Spec. / No.	Insulation Resistance(@Max500V,60s,≦50mA):		Mechanical damage
	Initial Measured (≧10000MΩ)	After Measured (≧10000MΩ)	
539	>10000MΩ	>10000MΩ	No
540	>10000MΩ	>10000MΩ	No
541	>10000MΩ	>10000MΩ	No
542	>10000MΩ	>10000MΩ	No
543	>10000MΩ	>10000MΩ	No
544	>10000MΩ	>10000MΩ	No
545	>10000MΩ	>10000MΩ	No
546	>10000MΩ	>10000MΩ	No
547	>10000MΩ	>10000MΩ	No
548	>10000MΩ	>10000MΩ	No
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559	>10000MΩ	>10000MΩ	No
560	>10000MΩ	>10000MΩ	No
561	>10000MΩ	>10000MΩ	No
562	>10000MΩ	>10000MΩ	No
563	>10000MΩ	>10000MΩ	No

List of Measurement Equipment:

Number	Equipment	Equipment No.	Model	Calibration due date	Use(√)
1	Ambient meter	UK07-014	VC230A	2023/9/1	√
2	LCR Tester	UK02-204	TH2829C	2023/3/16	√
3	IR Tester	UK05-078	RK2683A	2023/9/1	√
4	Oven	UK08-033	GX-3020-S	2023/5/10	√
5	DC Power supply	UK04-076	DPS1040	2023/3/16	√
6	Digital multimeter	UK05-102	UT890C+	2023/3/16	√
7	Oven	UK08-030	GX-3020-M	2023/5/10	√
8	Ambient meter	UK05-142	VC230A	2023/5/10	√
9	Constant temperature chamber	UK08-008	GX-3000-80L70	2023/7/4	√
10	DC Power supply	UK04-094	TDC2020	2023/9/5	√
11	Thermal shock chamber	UK05-134	GX-3000-100CH	2023/9/1	√
12	Mechanical Shock apparatus	UK08-011	HSKT10	2023/5/10	√
13	Vibration tester	UK08-010	EV206H0505	2023/5/10	√
14	Solder Bath	UK02-103	YH-1814	2023/3/15	√
15	Stop watch	UK01-009	PC396	2023/3/15	√
16	Clock	UK04-005	QUARTZ	2023/9/1	√
17	Steam conditioning equipment	UK08-017	BX-Z-4	2023/5/10	√
18	Soldering test device	UK07-056	KHX-TEST	2023/5/10	√
19	Ambient meter	UK05-125	VC230A	2023/3/15	√
20	ESD Simulator	UK08-001	ESD-30V	2023/5/10	√
21	Metalloscope	UK06-044	M330-HD228S	2023/8/17	√
22	Image measurement tester	UK01-008	YVM-2010CSPC	2023/3/15	√
23	Constant temperature chamber	UK04-042	CZ-A-80G	2023/1/3	√
24	Terminal Strength tester	UK07-057	SMD-TEST	2023/5/10	√

====== END OF REPORT ======