



Report No. A221031773710101

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Company Name SHENZHEN JDB TECH. CO. LTD.  
Shown on Report  
Address ROOM 1105-1108, NO.2 BUILDING, EST MALL BUSINESS CENTER,  
NO.698 CHANGBANG ROAD, XIACHENG DISTRICT, 310004,  
HANGZHOU, CHINA

**The following sample(s) and sample information was/were submitted and identified by/on the behalf of the client**

Sample Name 样品 1  
Material pcb  
Sample Received Date Aug. 9, 2021  
Testing Period Aug. 9, 2021-Aug. 17, 2021

**Test Requested**

No.	Test Item
1	Coefficient of Linear Thermal Expansion

**Test Result(s):** Please see the following pages.Approved by Annie LangDate Aug. 17, 2021Annie Lang  
Approved Signatory

No. RF33A28FD6

Centre Testing International Group Co., Ltd. Hongwei Industrial Zone, Bao'an 70 District, Shenzhen, Guangdong, China

# Test Report

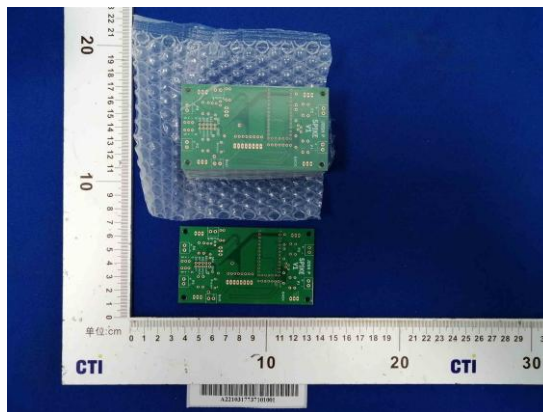
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## Tested Sample(s)

Sample No.	Sample Name	Material
A2210317737101001	样品 1	pcb

## Sample Photo(s)



A2210317737101001



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**Test Item: Coefficient of Linear Thermal Expansion****1. Test Equipment**

Equipment Name	Model
Thermal Mechanical Analysis(TMA)	Q400EM

**2. Environmental Conditions**

Temperature: 22.5°C; Humidity: 49%RH

**3. Test Standard: IPC-TM-650 2.4.24C****4. Test Condition**

(1) Preconditioning: Sample(s) is(are) preconditioned by baking for 2h at 105°C, then cooled to room temperature in a desiccator.

(2) Test condition: Heat from 30°C to 270°C at a rate of 10°C/ min in N<sub>2</sub>.

**5. Test Result(s)**

Test Sample	Coefficient of Linear Thermal Expansion (ppm/°C)	
A2210317737101001	50°C~120°C	45.76
	170°C~260°C	248.3

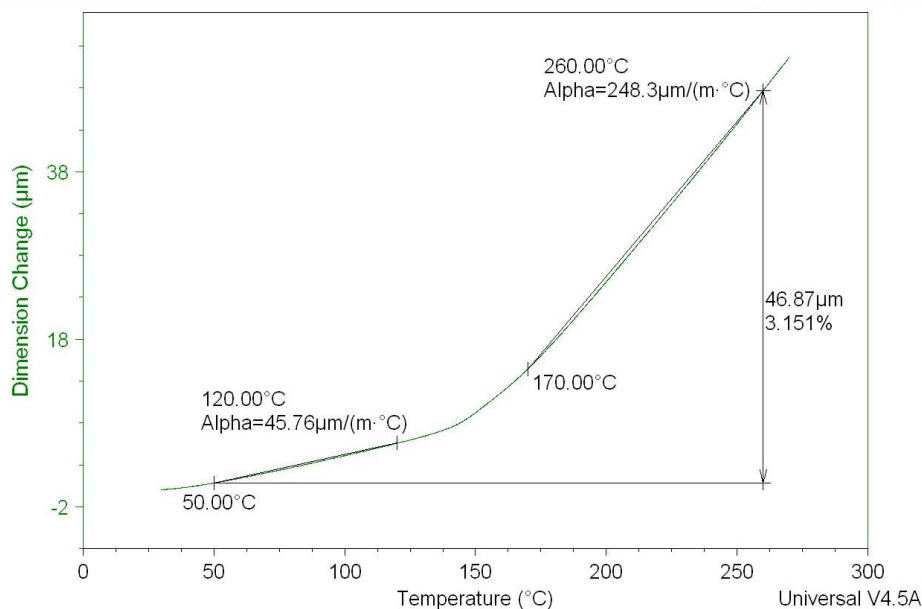


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Test curve



Remark: The testing data and result(s) in this report is(are) just for scientific research, education, internal quality control and product development etc.

Statement:

- 1.This report is considered invalid without approved signature, special seal and the seal on the perforation;
- 2.Company Name and Address shown on Report, the sample(s) and sample Information was/were provided by the applicant who should be responsible for the authenticity which CTI hasn't verified;
- 3.The result(s) shown in this report refer(s) only to the sample(s) tested;
- 4.Without written approval of CTI, this report can't be reproduced except in full;
- 5.In case of any discrepancy between the English version and Chinese version of the testing reports(if generated), the Chinese version shall prevail.

\*\*\* End of Report \*\*\*

