



中国认可
检测
TESTING
CNAS L0462

Ref. No.	ETB160122
Total pages	5

TEST REPORT

(No part of the Report can be duplicated without permission)

Sample Description: Low permittivity
supporting material

Style / Item No.: LF125/LF225/LF525

Test Category: Commission Test

Manufacturer: Guangzhou CHANGEN Electronic
Technology Co., Ltd.

Client: Guangzhou CHANGEN Electronic
Technology Co., Ltd.



中国赛宝实验室
元器件检测中心
CHINA CEPREI LABORATORIES
The Electronic Component Testing Center



POINTS FOR ATTENTION

1. The Test Report is invalid without Special Seal for Testing or the official seal of Test Center.
2. The duplicated report is invalid without Special Seal for Testing or the official seal of Test Center again.
3. The Test Report is invalid without signature of the final approval.
4. The Test Report is invalid if being altered.
5. Any objections must be raised against to Test Center within 15 days since the date the report is received. It will not be taken into consideration beyond this limit.
6. Generally, for commission test we are only responsible for the submitted samples.

Address: No.110, Dongguanzhuang Road, Tianhe District, Guangzhou, Guangdong Province,
P.R. China

Post Address: P.O.Box 1501 Guangzhou P.R. China

Post Code: 510610

Tel: 0086-20-87237292、87236657

Complain Tel: 0086-20-87237255, 87236789

Fax: 0086-20-87237149、87237181

Website:<http://www.test.ceprei.com>

E-mail:component@ceprei.com

宝
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正书报

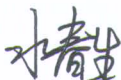
Sample Description	Low permittivity supporting material	Style / Item No.	LF125/LF225/LF525
Manufacturer	Guangzhou CHANGEN Electronic Technology Co., Ltd.		
Manufacturer Address	Rm 318,Bldg G5,NO.31,KeFeng Rd, Guangzhou Hi-tech Industrial Development Zone,Guangdong,P.R.China		
Client	Guangzhou CHANGEN Electronic Technology Co., Ltd.		
Client Address	Rm 318,Bldg G5,NO.31,KeFeng Rd, Guangzhou Hi-tech Industrial Development Zone,Guangdong,P.R.China		


Place of sampling: / Production Date / Lot: 201608
 Sample Quantity: 1Pcs Sample No.: 1#
 Sampling method: Submitted by Guangzhou CHANGEN Electronic Technology Co., Ltd.
 Date of Submitting Samples: 2016.08.19 Date of Testing: 2016.08.26~2016.08.26


- Qualification in accordance with:
1. GB/T 1409-2006 Recommended methods for the determination of the permittivity and dielectric dissipation factor of electrical insulating materials at power, audio and radio frequencies including meter wavelengths
 2. Requirements of the Client

Test Item	Relative permittivity
Conclusion	The test result that the samples submitted by Guangzhou CHANGEN Electronic Technology Co., Ltd. refers to the test logbook.

Signature:

Responsible Engineer:  Date: 2016.08.30

Author:  Date: 2016.08.30

Approver:  Date: 2016.08.31
 (Director/Vice Director)



(2) 告

TABLE WITH TEST RESULTS

No.	Test Item	Description	Requirements	Samples/ No.	Accept criterion	Failure	Result
1	Relative permittivity	In accordance with GB/T 1409-2006 and the requirements of the client Oscillator Level:100mV, Frequency:10MHz~300MHz Measure the thickness(t) of sample. Record the measured values at 10MHz, 30MHz, 50MHz, 100MHz,300MHz.	Record the measured values	1pcs/1#	/	/	/

Remark:

密用

Main instruments used for this test

No.	Description	Model	Cal. Date~Cal. due date
1	RF Impedance/Material Analyzer	E4991A	2016.07.04~2017.07.03
2	Vernier Calliper	0~200mm	2015.12.18~2016.12.17
/	/	/	/

Environmental conditions	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 25%;">Field</th> <th style="width: 25%;">Temperature(°C)</th> <th style="width: 25%;">RH(%)</th> <th style="width: 25%;">Atm. (kPa)</th> </tr> </thead> <tbody> <tr> <td>For testing</td> <td style="text-align: center;">15~35</td> <td style="text-align: center;">45~75</td> <td style="text-align: center;">86~106</td> </tr> <tr> <td>For measurement</td> <td style="text-align: center;">23±2</td> <td style="text-align: center;">50±5</td> <td style="text-align: center;">86~106</td> </tr> </tbody> </table>	Field	Temperature(°C)	RH(%)	Atm. (kPa)	For testing	15~35	45~75	86~106	For measurement	23±2	50±5	86~106
Field	Temperature(°C)	RH(%)	Atm. (kPa)										
For testing	15~35	45~75	86~106										
For measurement	23±2	50±5	86~106										

Remark: All the tests are operated before the due date of calibration.

---END OF THE TEST REPORT---



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TEST LOGBOOK

Sample Description: Low permittivity supporting material

Style / Item No.: LF125/LF225/LF525

Test Category: Commission Test

Manufacturer: Guangzhou CHANGEN Electronic Technology Co., Ltd.

Client: Guangzhou CHANGEN Electronic Technology Co., Ltd.



中国赛宝实验室
元器件(02)检测中心
CHINA CEPREI LABORATORIES
The Electronic Component Testing Center





NO.:ETB160122

TEST RECORD

Manufacturer: Guangzhou CHANGEN Electronic Technology Co., Ltd.

Quantity : 1 pcs

Product name and type	Low permittivity supporting material LF125/LF225/LF525	Group	/
Test Instrument	E4991A RF Impedance/Material Analyzer	Cal. Date~ Cal. due date	2016.07.04~2017.07.03
	0~200mm Vernier Calliper		2015.12.18~2016.12.17
Test Item	Relative Permittivity ϵ_r		
Test Conditions	In accordance with GB/T 1409-2006 and the requirements of the client Oscillator Level:100mV. Frequency:10MHz~300MHz. Measure the thickness(t) of sample. Record the measured values at 10MHz, 30MHz, 50MHz, 100MHz, 300MHz.		
Requirement	Record the measured values		
Sample No.	Test Result		
1#	See attached figure		

宝实
(02)
报告专

Tested by: 邓春生 Date : 2016.08.26 Checked by: 曾裕强 Date : 2016.08.26

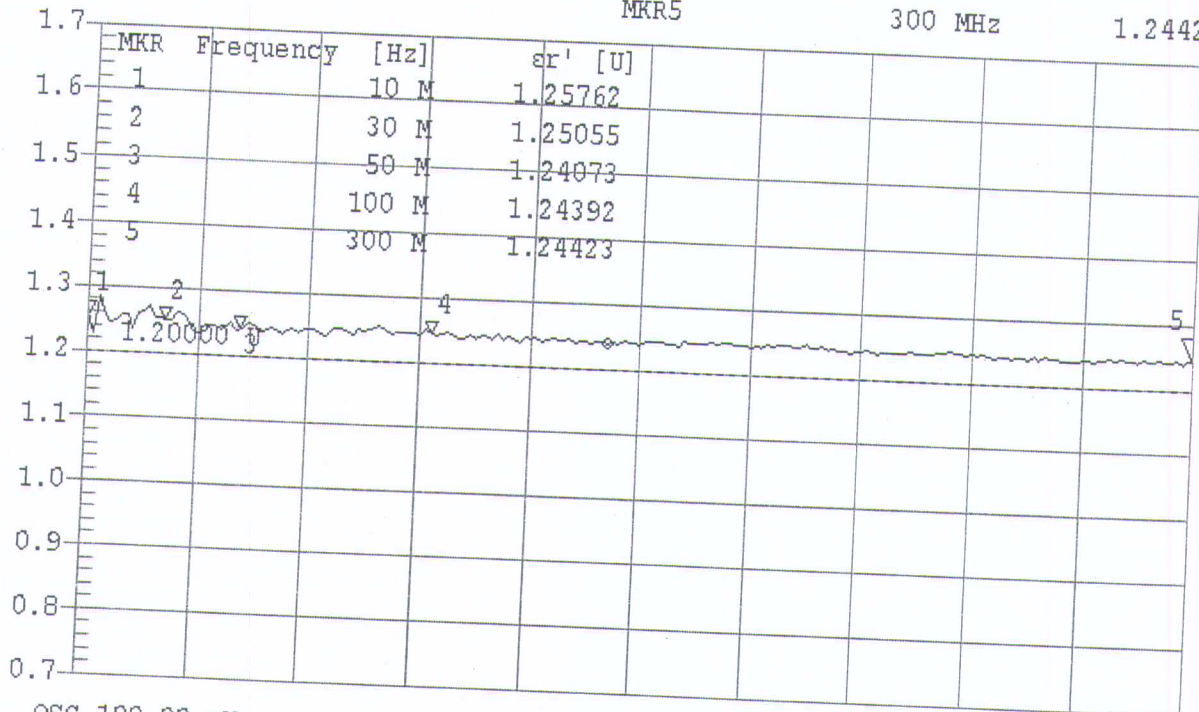


*1: ϵ_r' [U]

MKR5

300 MHz

1.24423 U



OSC 100.00 mV

START 10 MHz

SAvg OFF

BIAS OFF

STOP 300 MHz

1# (t=1.85mm)

Tested by: 水春生 Date: 2016.08.26 Checked by: 李书军 Date: 2016.08.26

