

Antenna data sheet

DESCRIPTION: Chip Antenna

MODEL NO: LTC-3216MLT

Peak Gain 2.67dBi

Manufacturer : Shenzhen Litongchuang Technology Co., LTD

Add : Room 603, Huashenghui Commercial Building, Jinhai Road, Yantian Community, Xixiang Sub-district, Bao 'an District, Shenzhen City

UNLESS OTHER SPECIFIED TOLERANCES ON: $X=\pm$ $X.X=\pm$ $X.XX=\pm$ ANGLES = \pm HOLE DIA = \pm				
SCALE: N/A	UNIT: mm	These drawings and specifications are the property of Litongchuang Technology Limited and shall not be reproduced or used as a basis for the manufacture or sale of instruments or equipment without permission		
DRAWN BY : Sera	CHECKED BY: XD			
DESIGNED BY: Sera	APPROVED BY: XD			
TITLE: LTC2-2405-3216 Specification		DOCUMENT NO.	3216	SPEC REV. P1

LTC-3216MLT Specification

Operating Temp. : -40°C~+85°C



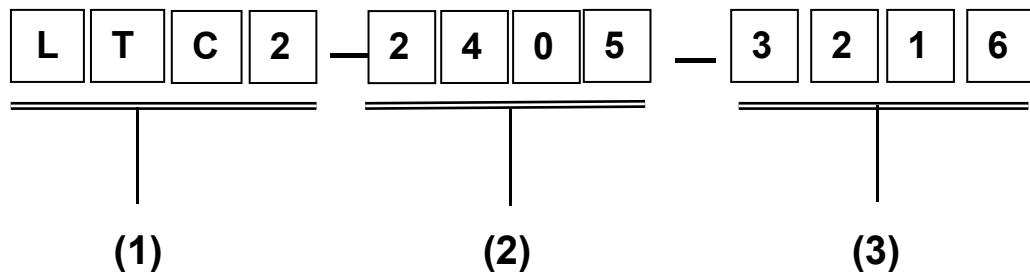
1. FEATURES:

- Light weight, compact
- Wide bandwidth, low cost
- Built-in antenna with high gain

2. APPLICATIONS:

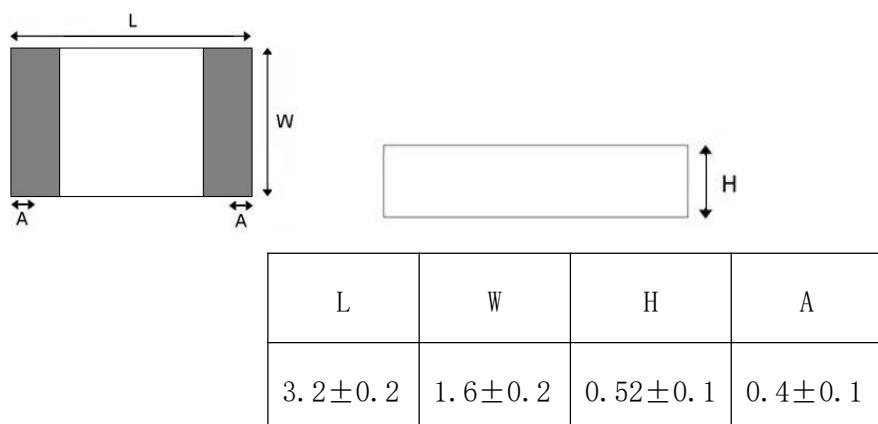
- Bluetooth, Wireless LAN, Mobile TV
- Home RF System, etc

3. PRODUCT IDENTIFICATION



- (1) Product type: Chip Antenna
- (2) Center Frequency: 2450MHz
- (3) External Dimensions (L×W) (mm): 3.2*1.6

4. SHAPE AND DIMENSIONS:



UNLESS OTHER SPECIFIED TOLERANCES ON:

X=± X.X=± X.XX=

ANGLES = ± HOLEDIA = ±

SCALE: N/A

DRAWN BY : Sera

DESIGNED BY: Sera

UNIT: mm

CHECKED BY: XD

APPROVED BY: XD

TITLE: LTC2-2405-3216 Specification

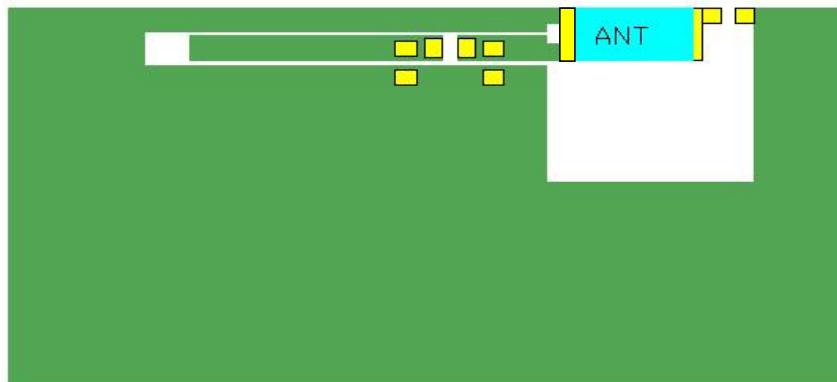
These drawings and specifications are the property of Litongchuang Technology Limited and shall not be reproduced or used as a basis for the manufacture or sale of instruments or equipment without permission

DOCUMENT NO.

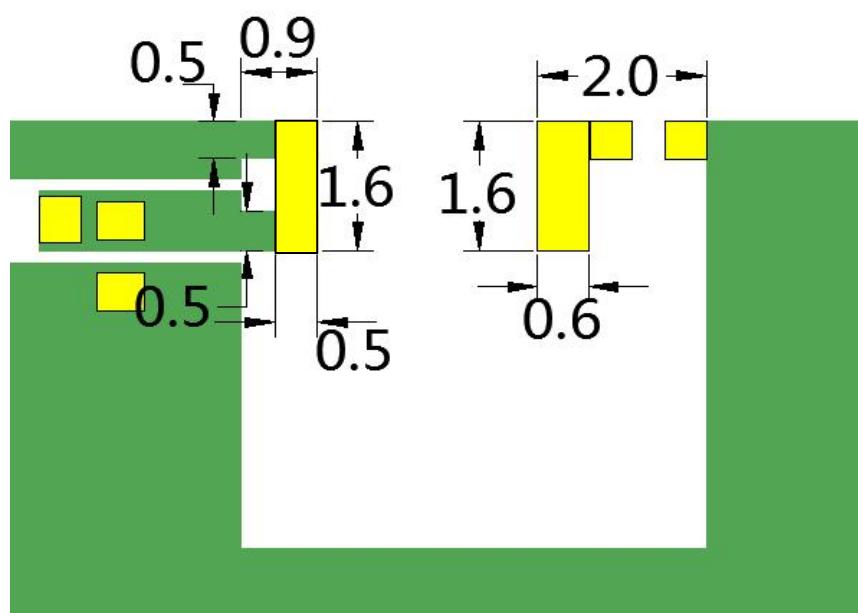
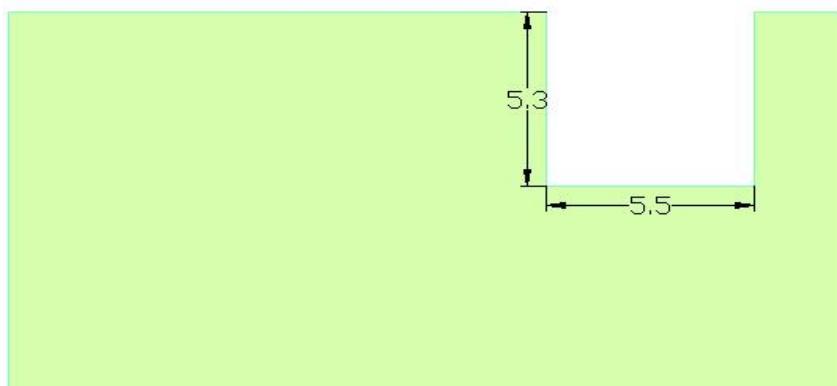
3216

SPEC REV.

P1



天线
 PAD
 底层铺铜
 顶层铺铜



UNLESS OTHER SPECIFIED TOLERANCES ON:

$X = \pm$ $X.X = \pm$ $X.XX =$

ANGLES = \pm **HOLE DIA** = \pm

SCALE: N/A

DRAWN BY : Sera

DESIGNED BY: Sera

UNIT: mm

CHECKED BY: XD

APPROVED BY: XD

TITLE: LTC2-2405-3216 Specification

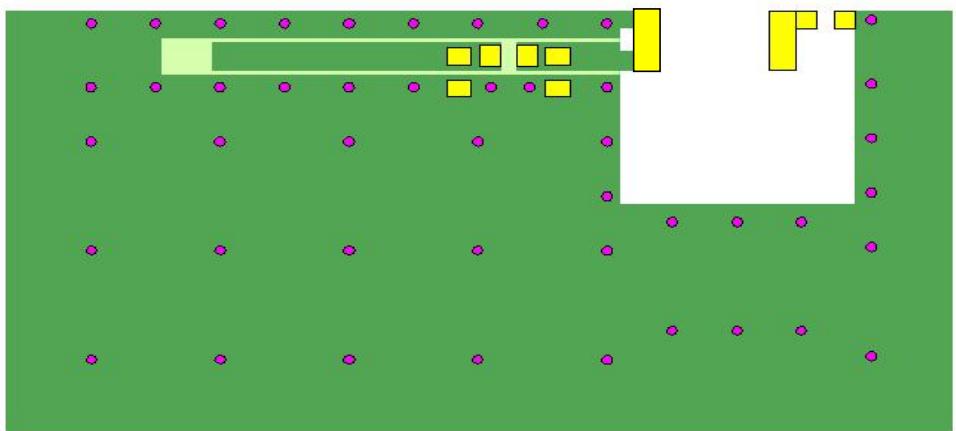
These drawings and specifications are the property of Litongchuang Technology Limited and shall not be reproduced or used as a basis for the manufacture or sale of instruments or equipment without permission

DOCUMENT NO.

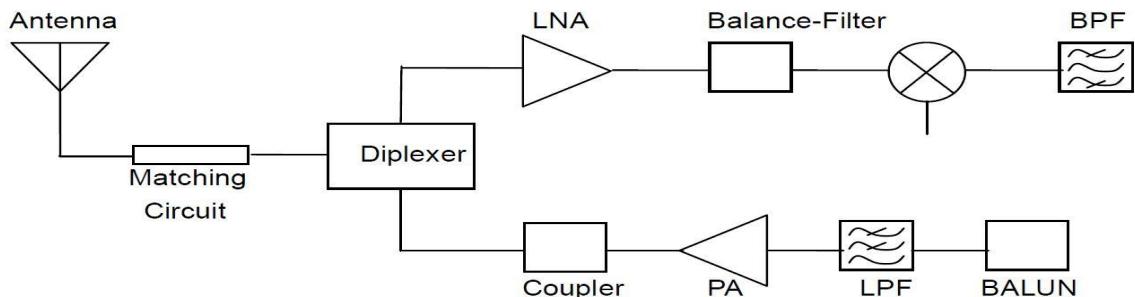
3216

SPEC REV.

P1



APPLICATION GUIDE



5. SPECIFICATIONS:

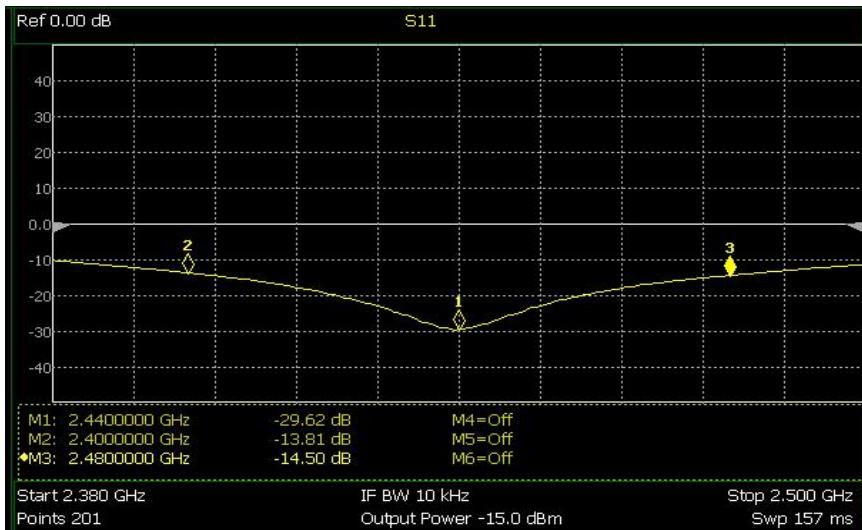
测试项	规格

* Test condition: Test board size 90*40 mm

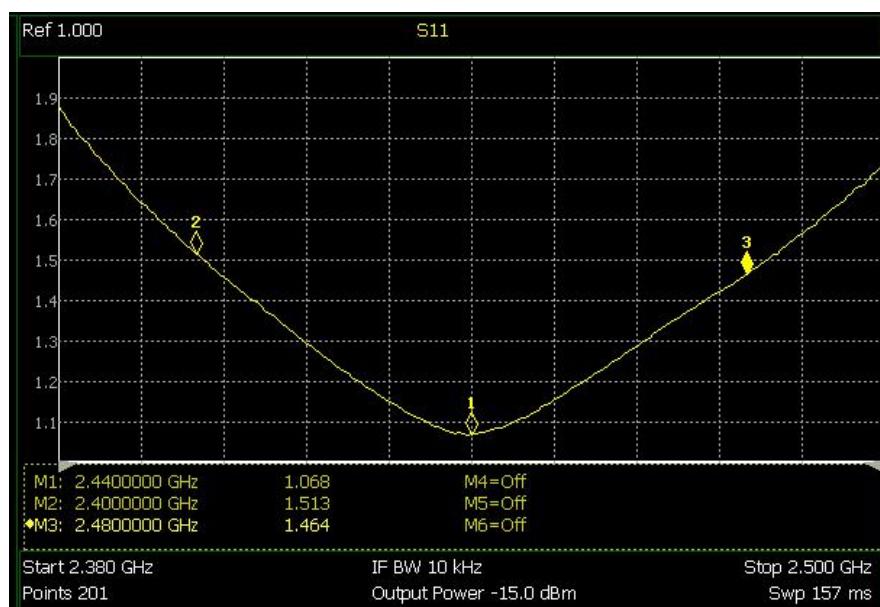
Matching circuit: Pi matching circuit will be required

UNLESS OTHER SPECIFIED TOLERANCES ON: X=± X.X=± X.XX=± ANGLES = ± HOLEDIA = ±				
SCALE: N/A	UNIT: mm	These drawings and specifications are the property of Litongchuang Technology Limited and shall not be reproduced or used as a basis for the manufacture or sale of instruments or equipment without permission		
DRAWN BY : Sera	CHECKED BY: XD			
DESIGNED BY: Sera	APPROVED BY: XD			
TITLE: LTC2-2405-3216 Specification		DOCUMENT NO.	3216	SPEC REV.
				P1

6. Electrical Characteristics :



VSWR



Mark	Frequency	VSWR
1	2400 MHz	1.513
2	2440 MHz	1.068
3	2480 MHz	1.464

UNLESS OTHER SPECIFIED TOLERANCES ON:

X=± X.X=± X.XX=

ANGLES = ± HOLEDIA = ±

SCALE: N/A

DRAWN BY : Sera

DESIGNED BY: Sera

UNIT: mm

CHECKED BY: XD

APPROVED BY: XD

These drawings and specifications are the property of Litongchuang Technology Limited and shall not be reproduced or used as a basis for the manufacture or sale of instruments or equipment without permission

TITLE: LTC2-2405-3216 Specification

DOCUMENT NO.

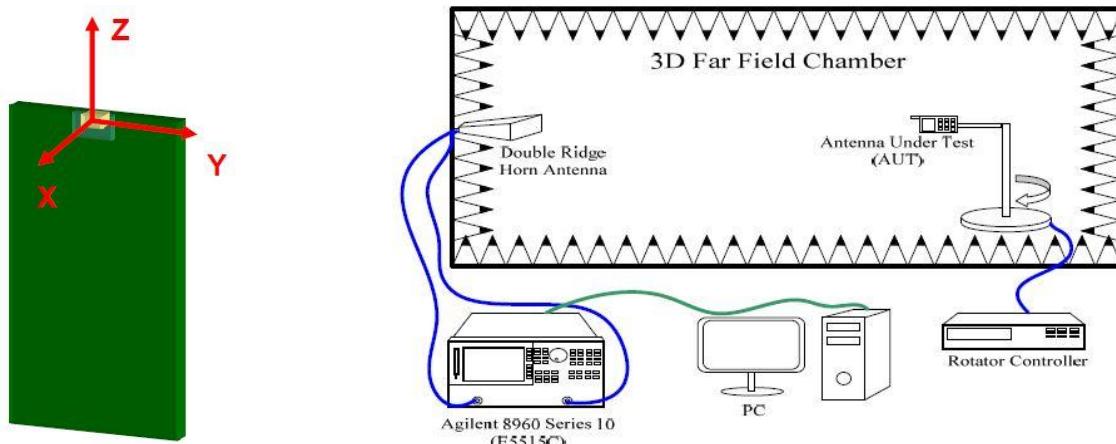
3216

SPEC REV.

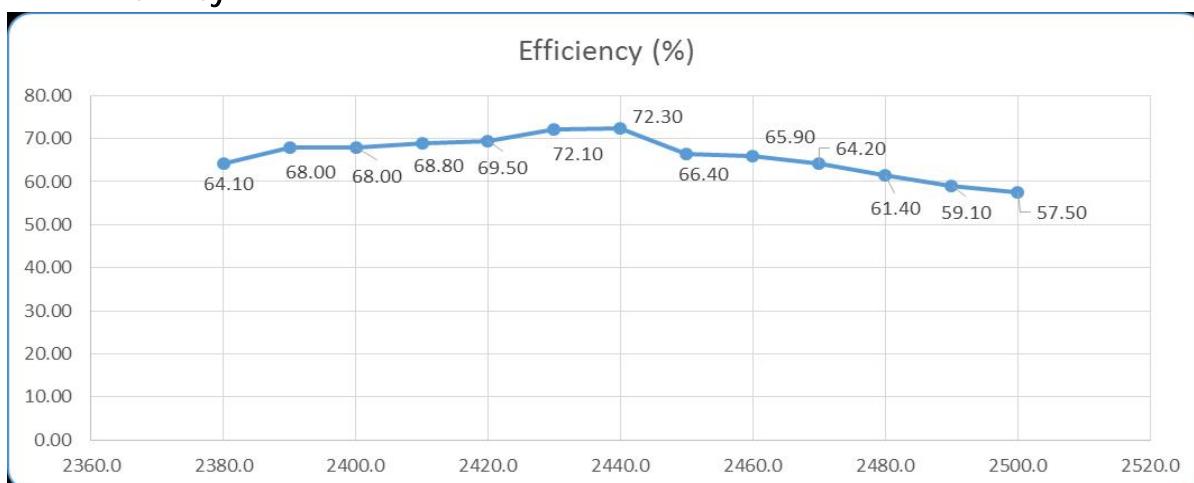
P1

Radiation Pattern

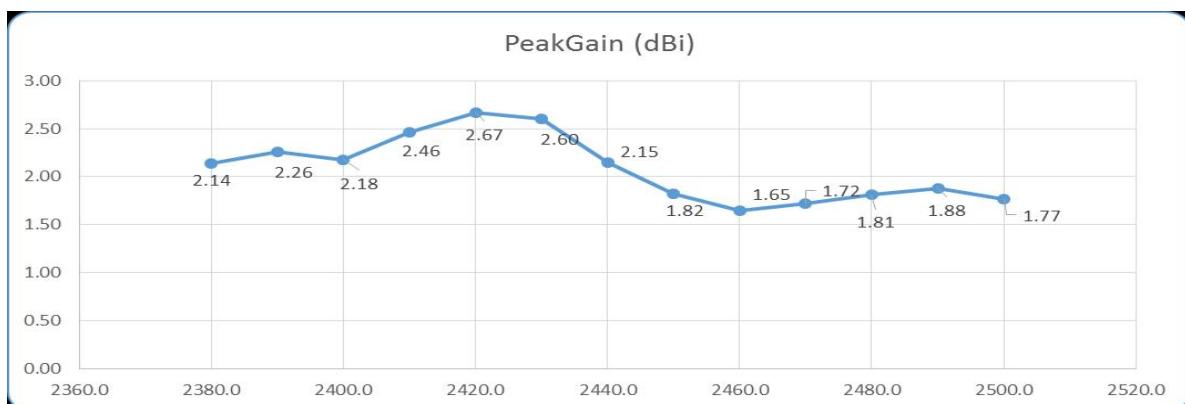
The Gain pattern is measured in FAR-field chamber. DUT is placed on the table of rotator, a standard horn antenna and Vector Network Analyzer is used to collect data.



Efficiency



Peak Gain



UNLESS OTHER SPECIFIED TOLERANCES ON:

X=± X.X=± X.XX=

ANGLES = ± HOLEDIA = ±

SCALE: N/A

UNIT: mm

DRAWN BY : Sera

CHECKED BY: XD

DESIGNED BY: Sera

APPROVED BY: XD

These drawings and specifications are the property of Litongchuang Technology Limited and shall not be reproduced or used as a basis for the manufacture or sale of instruments or equipment without permission

TITLE: LTC2-2405-3216 Specification

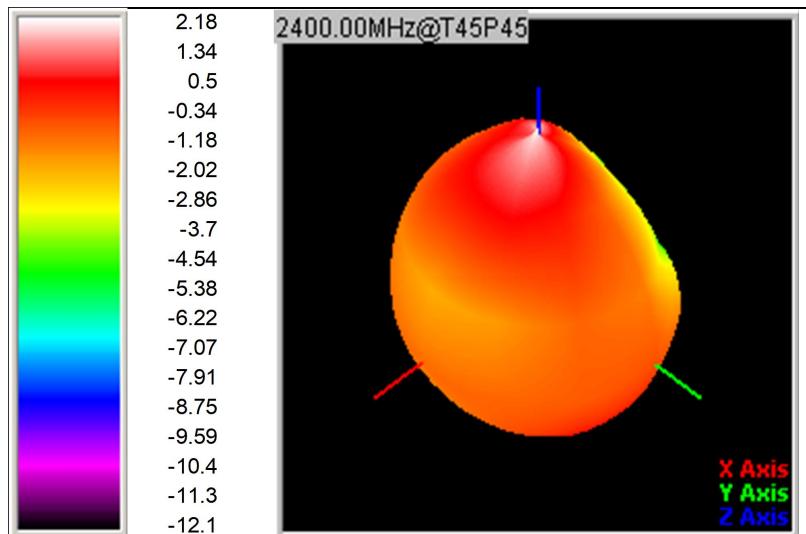
DOCUMENT NO.

3216

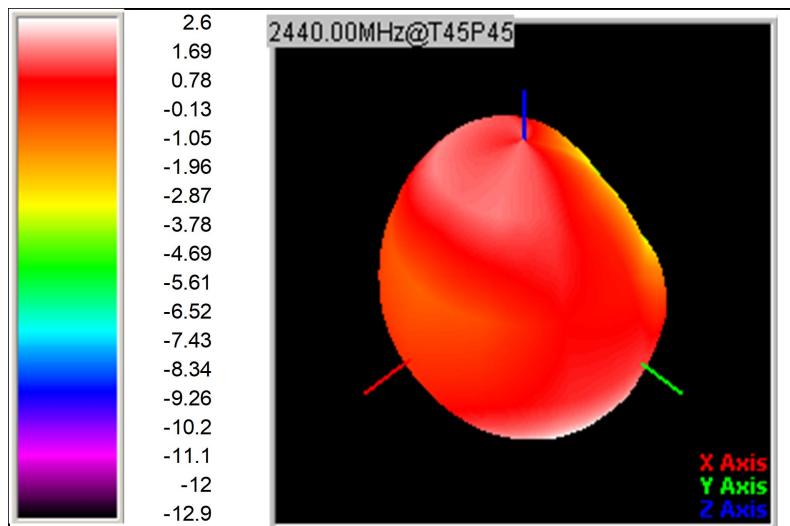
SPEC REV.

P1

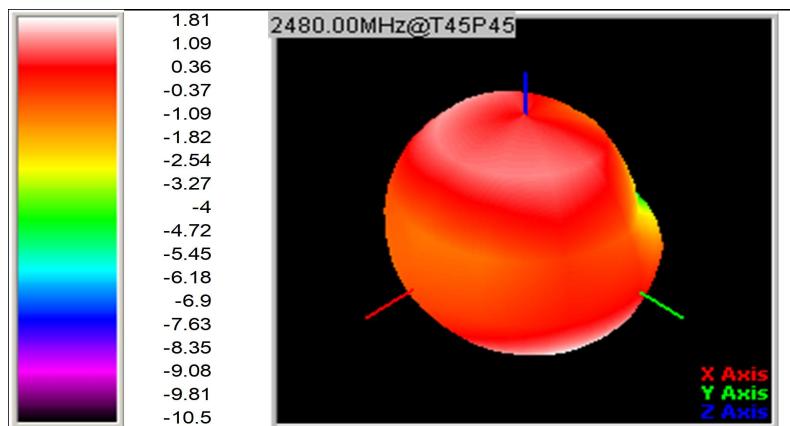
◎ 3D Gain Pattern (2400 MHz)



◎ 3D Gain Pattern (2440 MHz)



◎ 3D Gain Pattern (2480 MHz)



UNLESS OTHER SPECIFIED TOLERANCES ON:

X=± X.X=± X.XX=

ANGLES = ± HOLEDIA = ±

SCALE: N/A

DRAWN BY : Sera

DESIGNED BY: Sera

UNIT: mm

CHECKED BY: XD

APPROVED BY: XD

TITLE: LTC2-2405-3216 Specification

These drawings and specifications are the property of Litongchuang Technology Limited and shall not be reproduced or used as a basis for the manufacture or sale of instruments or equipment without permission

DOCUMENT NO.

3216

SPEC REV.

P1

7. Environmental Characteristics

(1) Reliability Test

Item	Condition	Specification
Thermal shock		
Humidity resistance		
High temperature resistance		
Low temperature resistance		
Soldering heat resistance		
Solderability		

(2) Storage Condition

(a) At warehouse:

The temperature should be within 0 ~ 30°C and humidity should be less than 60% RH.

The product should be used within 1 year from the time of delivery.

(b) On board:

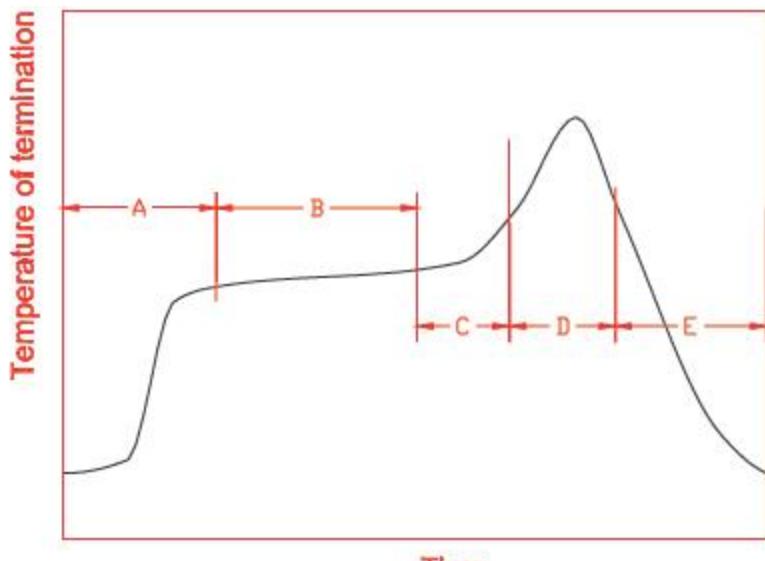
The temperature should be within -40~85°C and humidity should be less than 85% RH.

(3) Operating Temperature Range

Operating temperature range : -40°C to +105°C.

UNLESS OTHER SPECIFIED TOLERANCES ON: X=± X.X=± X.XX=± ANGLES = ± HOLES/DIA = ±				
SCALE: N/A	UNIT: mm	These drawings and specifications are the property of Litongchuang Technology Limited and shall not be reproduced or used as a basis for the manufacture or sale of instruments or equipment without permission		
DRAWN BY : Sera	CHECKED BY: XD			
DESIGNED BY: Sera	APPROVED BY: XD			
TITLE: LTC2-2405-3216 Specification		DOCUMENT NO.	3216	SPEC REV.
				P1

8. Recommended Reflow Soldering



A	1 st rising temperature	The normal to Preheating temperature	30s to 60s
B	Preheating	140°C to 160°C	60s to 120s
C	2 nd rising temperature	Preheating to 200°C	20s to 40s
		if 220°C	50s~60s
		if 230°C	40s~50s
D	Main heating	if 240°C	30s~40s
		if 250°C	20s~40s
		if 260°C	20s~40s
E	Regular cooling	200°C to 100°C	1°C/s ~ 4°C/s

*reference: J-STD-020C

(1) Soldering Gun Procedure

Note the follows, in case of using solder gun for replacement.

- (a) The tip temperature must be less than 350° C for the period within 3 seconds by using soldering gun under 30 W.
- (b) The soldering gun tip shall not touch this product directly.

(2) Soldering Volume

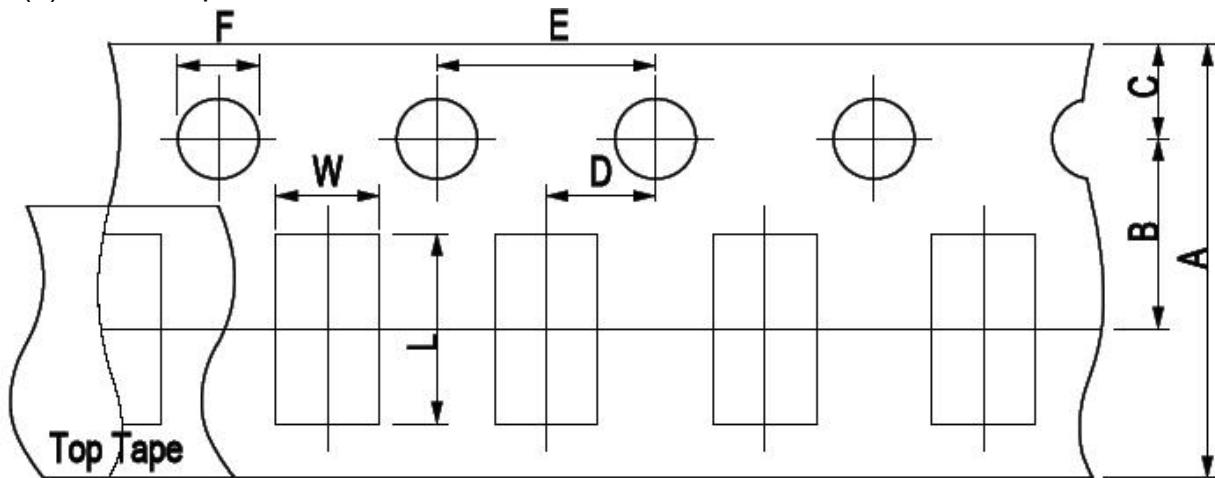
Note that excess of soldering volume will easily get crack the body of this product.

UNLESS OTHER SPECIFIED TOLERANCES ON: X=± X.X=± X.XX=± ANGLES = ± HOLEDIA = ±				
SCALE: N/A	UNIT: mm	These drawings and specifications are the property of Litongchuang Technology Limited and shall not be reproduced or used as a basis for the manufacture or sale of instruments or equipment without permission		
DRAWN BY : Sera	CHECKED BY: XD			
DESIGNED BY: Sera	APPROVED BY: XD			
TITLE: LTC2-2405-3216 Specification		DOCUMENT NO.	3216	
			SPEC REV.	P1

9. Taping Package and Label Marking: (unit: mm)

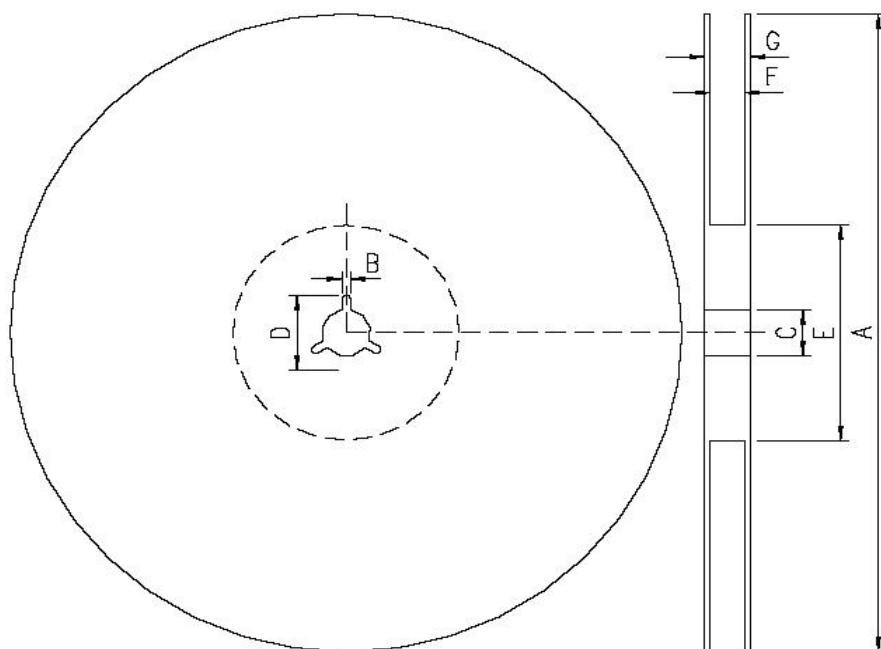
(1) Quantity/Reel: 5000pcs/Reel

(2) Carrier tape dimensions



Type	A	B	C	D	E	F	L	W
2450-21	8.00 ± 0.3	3.50 ± 0.05	1.75 ± 0.1	2.00 ± 0.05	4.00 ± 0.1	1.50 ± 0.1	2.30 ± 0.1	1.55 ± 0.1

(3) Taping reel dimensions



A	178.0 ± 2.0
B	2.0 ± 0.5
C	13.0 ± 0.5
D	21.0 ± 0.8
E	62.0 ± 1.5
F	9.0 ± 0.5
G	13.0 ± 1.0

UNLESS OTHER SPECIFIED TOLERANCES ON:

$X = \pm$ $X.X = \pm$ $X.XX =$

ANGLES = \pm **HOLE DIA** = \pm

SCALE: N/A

DRAWN BY: Sera

DESIGNED BY: Sera

mm

CHECKED BY: XD

APPROVED BY: XD

TITLE: LTC2-2405-3216 Specification

These drawings and specifications are the property of Litongchuang Technology Limited and shall not be reproduced or used as a basis for the manufacture or sale of instruments or equipment without permission

DOCUMENT NO.

3216

SPEC REV.

P1