产品规格承认书

SPECIFICATIONSA

客户:

产品名称: DESCRIPTION: Chip Antenna 名户型号: CUSTOMER PART No: 产品型号: OUR MODEL NO: PBX3216MC02 日期: DATE: Mix	CUSTOMER:					
客户型号: CUSTOMER PART No: 产品型号: OUR MODEL NO:	产品名称:					
CUSTOMER PART No: 产品型号: OUR MODEL NO: PBX3216MC02 日期: DATE: 确认签字, 盖章后请返回承认书一份 PLEASE RETURN TO US ONE COPY OF "SPECIFICATION FOR APPROVAL" WITH YOUR APPROVED SIGNATURES WITH YOUR APPROVED SIGNATURES DNLESS OTHER SPECIFIED TOLERANCES ON: (=t X,X=t X,XX= X,XX= Y,XX=t X,XX=t X,XX	DESCRIPTION:			Chip Antenna		
CUSTOMER PART No: 产品型号: OUR MODEL NO: PBX3216MC02 日期: DATE: 确认签字, 盖章后请返回承认书一份 PLEASE RETURN TO US ONE COPY OF "SPECIFICATION FOR APPROVAL" WITH YOUR APPROVED SIGNATURES WITH YOUR APPROVED SIGNATURES DNLESS OTHER SPECIFIED TOLERANCES ON: (=t X,X=t X,XX= X,XX= Y,XX=t X,XX=t X,XX	客户型号:	3				
PBX3216MC02 日期: DATE: 确认签字, 盖章后请返回承认书一份 PLEASE RETURN TO US ONE COPY OF "SPECIFICATION FOR APPROVAL" WITH YOUR APPROVED SIGNATURES PHy Date Specification for approval for the specific for a speci	THE STATE OF	T No:				
OUR MODEL NO:		1 110				
日期: DATE: 确认签字,盖章后请返回承认书一份 PLEASE RETURN TO US ONE COPY OF "SPECIFICATION FOR APPROVAL" WITH YOUR APPROVED SIGNATURES APPROVED SIGNATURES SPECIFICATION FOR APPROVAL" WITH YOUR APPROVED SIGNATURES APPROVED SIGNATURES SPECIFICATION FOR APPROVAL" WITH YOUR APPROVED SIGNATURES APPROVED SIGNATURES SPECIFICATION FOR APPROVAL" WITH YOUR APPROVED SIGNATURES APPROVAL" WITH YOUR APPROVED SIGNATURES SPECIFICATION FOR APPROVAL" THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF PBXY IECHNOLOGY Limited AND SHALL NOT BE REPRODUCED OR USED AS RAWN BY: Sera CHECKED BY: XD THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF PBXY IECHNOLOGY Limited AND SHALL NOT BE REPRODUCED OR SALE OF APPARATUS OR SALE OF APPA	(F) (F) (F)			BV2046MA	.00	
TANGLES OTHER SPECIFIED TOLERANCES ON: (= ± XX=± XXX=	OUR MODEL NO	•	P	BX3216MC	<u>UZ</u>	ř.
确认签字, 盖章后请返回承认书一份 PLEASE RETURN TO US ONE COPY OF "SPECIFICATION FOR APPROVAL" WITH YOUR APPROVED SIGNATURES AND CLESS OTHER SPECIFIED TOLERANCES ON: (= ± X,X=± X,XX=	日期:					
PLEASE RETURN TO US ONE COPY OF "SPECIFICATION FOR APPROVAL" WITH YOUR APPROVED SIGNATURES AND BY SET AND CUSTOMER REPORT OF PROVIDED TO LERANCES ON: (=± X.X=± X.XX= X.XX= X.XX= Y.XX=	DATE:					
PLEASE RETURN TO US ONE COPY OF "SPECIFICATION FOR APPROVAL" WITH YOUR APPROVED SIGNATURES						
PLEASE RETURN TO US ONE COPY OF "SPECIFICATION FOR APPROVAL" WITH YOUR APPROVED SIGNATURES	确认签字,盖章后	·请返回;	承认书—	-份		
WITH YOUR APPROVED SIGNATURES			and the same of		IFICATION FOR	APPROVAT "
客户承认签印 Customer recognition 日期 Date UNLESS OTHER SPECIFIED TOLERANCES ON: (=± X.X=± X.XX= A N G L E S = ± H O L E D I A = ± CALE: N/A UNIT: mm RAWN BY: Sera CHECKED BY: XD RAWN BY: Sera CHECKED BY: XD RAWN BY: Sera CHECKED BY: XD	TEDROD RETOR	10 00	ONE COL	or or or bridge	ir formion for a	an i kovill
客户承认签印 Customer recognition 日期 Date JNLESS OTHER SPECIFIED TOLERANCES ON: (=± X.X=± X.XX= ANGLES = ± HOLEDIA = ± CALE: N/A UNIT: mm RAWN BY: Sera CHECKED BY: XD THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF PBXY TECHNOLOGY Limited AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR	WITH YOUR AP	PROVED S	SIGNATUI	RES		
客户承认签印 Customer recognition 日期 Date JNLESS OTHER SPECIFIED TOLERANCES ON: (=± X.X=± X.XX= ANGLES = ± HOLEDIA = ± CALE: N/A UNIT: mm RAWN BY: Sera CHECKED BY: XD THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF PBXY TECHNOLOGY Limited AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR						
DINLESS OTHER SPECIFIED TOLERANCES ON: (=± X.X=± X.XX= A N G L E S = ± H O L E D I A = ± CALE: N/A UNIT: mm THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF PBXY TECHNOLOGY Limited AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR	3					
DINLESS OTHER SPECIFIED TOLERANCES ON: (=± X.X=± X.XX= A N G L E S = ± H O L E D I A = ± CALE: N/A UNIT: mm THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF PBXY TECHNOLOGY Limited AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR						
DINLESS OTHER SPECIFIED TOLERANCES ON: (=± X.X=± X.XX= A N G L E S = ± H O L E D I A = ± CALE: N/A UNIT: mm THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF PBXY TECHNOLOGY Limited AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR						
DINLESS OTHER SPECIFIED TOLERANCES ON: (=± X.X=± X.XX= A N G L E S = ± H O L E D I A = ± CALE: N/A UNIT: mm THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF PBXY TECHNOLOGY Limited AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR	-			Ţ.		
DINLESS OTHER SPECIFIED TOLERANCES ON: (=± X.X=± X.XX= A N G L E S = ± H O L E D I A = ± CALE: N/A UNIT: mm THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF PBXY TECHNOLOGY Limited AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR	客户承认签	学的 Custon	mer recogniti	on		
UNLESS OTHER SPECIFIED TOLERANCES ON: (=± X.X=± X.XX= A N G L E S = ± H O L E D I A = ± CALE: N/A RAWN BY: Sera CHECKED BY: XD CALE: N/A CHECKED BY: XD	H / /41913	Z- T Guston	mer recogniti			
		日期 Da	te			
PengBanXingYe ShenZhen Technology Co. , Ltd CALE: N/A UNIT: mm THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF PBXY TECHNOLOGY Limited AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR			NCES ON:	ob	深圳市田伴坐小	科技有限公司
RAWN BY : Sera CHECKED BY: XD TECHNOLOGY Limited AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR			= ±			
THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR	The state of the s	AND ADDRESS OF THE PARTY OF THE	/- VD			
The state of the s				THE BASIS FOR	THE MANUFACTURE OR	
TLE: CHIP2450-3216 Specification DOCUMENT NO 3216 SPEC REV.	TLE: CHIP2450-3216 Spe	cification			3216	THE PERSON OF TH
NO. 5210 P1				NO.	5210	P1

PBX3216MC02 Specification

Operating Temp. : -40 ℃~+85 ℃

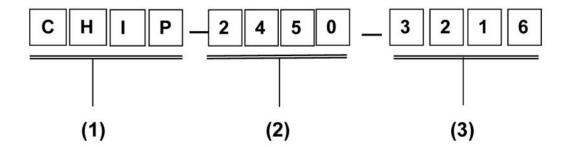
1. FEATURES:

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

2. APPLICATIONS:

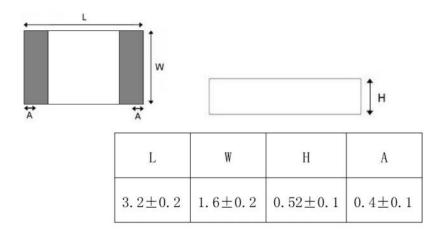
- Bluetooth, Wireless LAN, Mobile TV
- Home RF System, etc

3. PRODUCT IDENTIFICATION



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

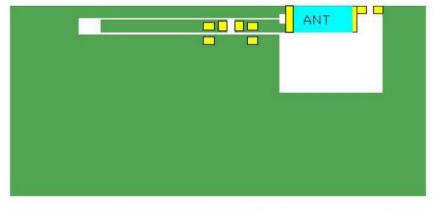
4. SHAPE AND DIMENSIONS:

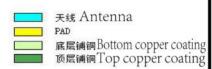


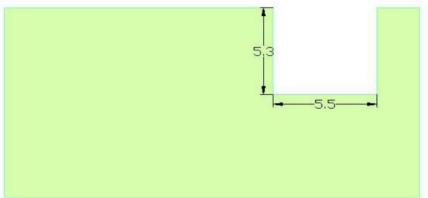
UNLESS OTHER SPEC X=± X.X=± ANGLES = ±	CIFIED TOLERANCES ON: X.XX= HOLEDIA = ±	PENGBANXING PE	深圳市朋伴兴业科技有 ngBanXingYe ShenZhen Technolog		
SCALE: N/A	UNIT: mm THESE DRAWINGS AND SPECIFICATIONS ARE THE P				
DRAWN BY : Sera	CHECKED BY: XD	TECHNOLOGY Limited AND SHALL NOT BE REPRODUCED OF THE BASIS FOR THE MANUFACTURE OR SALE OF APPLICATION			
DESIGNED BY: Sera	APPROVED BY: XD			100	
TITLE: CHIP2450-3216 Specification		DOCUMENT	3216	SPEC REV.	
		NO.	3210	P1	

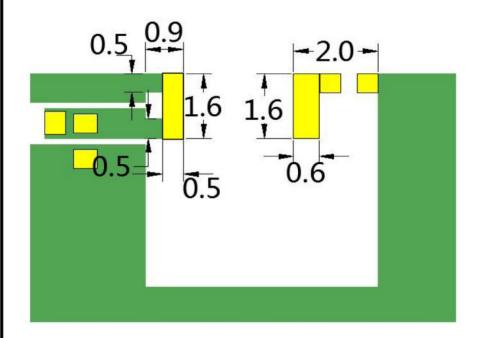


单位unit: mm







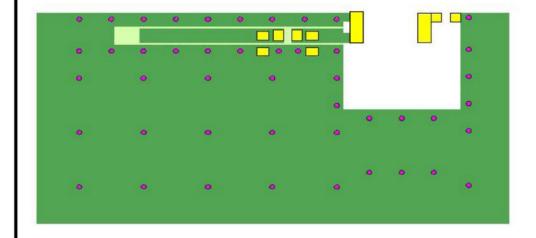


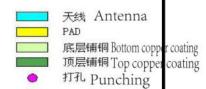
UNLESS OTHER SPECIFIED TOLERANCES ON:		№ 深圳市朋伴兴业科技有限公司		
$X=\pm$ $X.X=\pm$	x.xx =	SEAST NAMED OF		7 15 H
$ANGLES = \pm HOLEDIA = \pm$		PengBanXingYe ShenZhen Technology C		
SCALE: N/A	UNIT: mm	THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY O		
DRAWN BY : Sera CHECKED BY: XD		TECHNOLOGY Limited and Shall not be reproduced or used as		
DESIGNED BY: Sera	APPROVED BY: XD	DEVICES WITHOUT PERMISSION		10
TITLE: CHIP2450-3216 Specification		DOCUMENT	3216	SPEC REV.
111EE: CHIP 2450-3210 S	pecification	NO.	3210	P1

PengBanXingYe ShenZhen Technology Co., Ltd

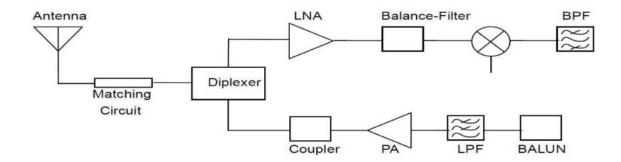
Address: Room 608, Building 4,1970 Science and Technology Town, Minzhi Street, Longhua District, Shenzhen.

打孔参考示意图 Punching diagram





APPLICATION GUIDE



5. SPECIFICATIONS:

测试项 Test item	规格 Specification
带宽 Bandwidth	2400~2483MHz
极化方式 Polarization mode	线极化Linear polarization
*最大增益Maximum gain	2.67dBi
*效率 Efficiency	72. 30%
输入阻抗 Input impedance	50 Ω

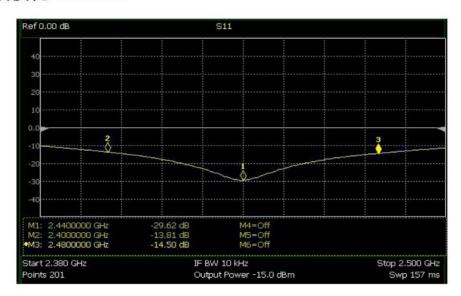
* Test condition: Test board size 90*40 mm

Matching circuit: Pi matching circuit will be required

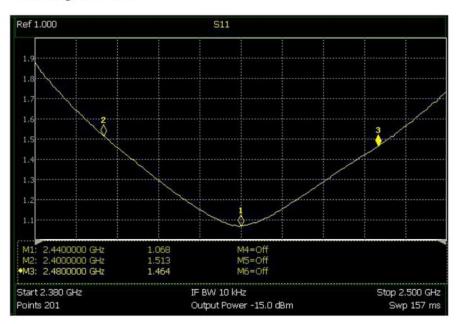
UNLESS OTHER SPEC	NLESS OTHER SPECIFIED TOLERANCES ON: =± X.X=± X.XX=		深圳市朋伴兴业科技有	
$ANGLES = \pm$	$HOLEDIA = \pm$	PengBanXingYe ShenZhen Technology Co. , L		
SCALE: N/A	UNIT: mm	THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF TECHNOLOGY Limited AND SHALL NOT BE REPRODUCED OR US THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUDEVICES WITHOUT PERMISSION		
DRAWN BY : Sera	CHECKED BY: XD			
DESIGNED BY: Sera	APPROVED BY: XD			201
TITLE: CHIP2450-3216 Specification		DOCUMENT	3216	SPEC REV.
111 LL: 0111F2450-3210	Specification	NO.	3210	P1

6. Electrical Characteristics:

回波损耗 Return loss



驻波比 Standing-wave ratio

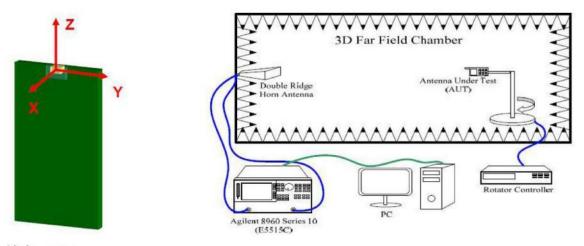


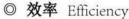
Mark	Frequency	VSWR
1	2400 MHz	1. 513
2	2440 MHz	1. 068
3	2480 MHz	1. 464

UNLESS OTHER SPECIFIED TOLERANCES ON:		Pb 深圳市朋伴兴业科技有限公司		
$X=\pm$ $X.X=\pm$	X.XX =	冷 深圳市朋件兴业科技有		
$ANGLES = \pm$	$HOLEDIA = \pm$	Pe	engBanXingYe ShenZhen Technolo	gy Co. , Ltd
SCALE: N/A	UNIT: mm	THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF TECHNOLOGY Limited AND SHALL NOT BE REPRODUCED OR US THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATE DEVICES WITHOUT PERMISSION		
DRAWN BY : Sera	CHECKED BY: XD			
DESIGNED BY: Sera	APPROVED BY: XD			
TITLE: CHIP2450-3216 Specification		DOCUMENT	3216	SPEC REV.
111LL: Offir 2450-5210 5	ecilication	NO.	3210	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.

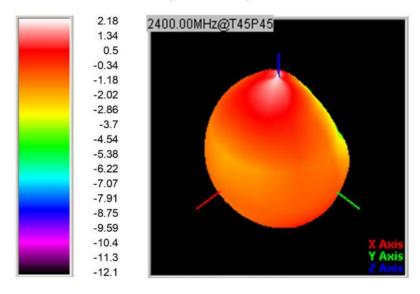




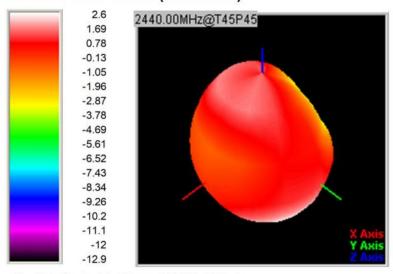


UNLESS OTHER SPECIFIED TOLERANCES ON:		pb 深圳市朋伴兴业科技有限公司		
$X=\pm$ $X.X=\pm$	X.XX =	深圳市朋件兴业科技会		对例形公司
$ANGLES = \pm$	$HOLEDIA = \pm$	Pe	ngBanXingYe ShenZhen Tech	nology Co. , Ltd
SCALE: N/A	UNIT: mm	THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF TECHNOLOGY Limited AND SHALL NOT BE REPRODUCED OR USE THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATE DEVICES WITHOUT PERMISSION		
DRAWN BY : Sera	CHECKED BY: XD			
DESIGNED BY: Sera	APPROVED BY: XD			
TITLE: CHIP2450-3216 Specification		DOCUMENT	3216	SPEC REV.
TITLE: CHIP2430-321	o Specification	NO.	3210	P1

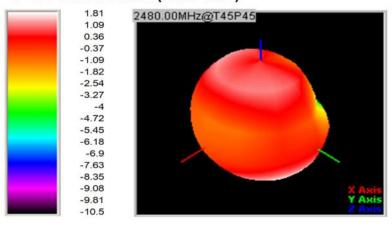
O 3D Gain Pattern (2400 MHz)



3D Gain Pattern (2440 MHz)



3D Gain Pattern (2480 MHz)



UNLESS OTHER SPECIFIED TOLERANCES ON:		a b	マルコー ローハハハルギリナー	
$X=\pm$ $X.X=\pm$	x.xx =	PENGBANKING	深圳市朋伴兴业科技获	SHANNING FOUR TANK
$ANGLES = \pm$	$HOLEDIA = \pm$	Pe	engBanXingYe ShenZhen Techno	ogy Co. , Ltd
SCALE: N/A	UNIT: mm			
DRAWN BY : Sera	CHECKED BY: XD	TECHNOLOGY Limited AND SHALL NOT BE REPRODUCED OF THE BASIS FOR THE MANUFACTURE OR SALE OF APPAR		
DESIGNED BY: Sera	APPROVED BY: XD	DEVICES WITHOU	JT PERMISSION	252
TITLE: CHIP2450-3216 Specification		DOCUMENT	3216	SPEC REV.
111 LL: C111F2430-3210	opecinication	NO.	3210	P1

7. Environmental Characteristics

(1) Reliability Test

Item	Condition	Specification
Thermal shock	1. 30 ± 3 minutes at -40° C $\pm5^{\circ}$ C, 2. Convert to $+105^{\circ}$ C (5 minutes) 3. 30 ± 3 minutes at $+105^{\circ}$ C $\pm5^{\circ}$ C, 4. Convert to -40° C (5 minutes) 5. Total 100 continuous cycles	No apparent damage Fulfill the electrical spec. after test.
Humidity resistance	1. Humidity: 85% R.H. 2. Temperature: $85\pm5^{\circ}$ C 3. Time: 1000 hours.	No apparent damage Fulfill the electrical spec. after test.
High temperature resistance	1. Temperature: 150° C±5° C 2. Time: 1000 hours.	No apparent damage Fulfill the electrical spec. after test.
Low temperature resistance	1. Temperature: -40° C $\pm 5^{\circ}$ C 2. Time: 1000 hours.	No apparent damage Fulfill the electrical spec. after test.
Soldering heat resistance	1. Solder bath temperature : 260 ± 5 °C 2. Bathing time: 10 ± 1 seconds	No apparent damage
Solderability	The dipped surface of the terminal shall be at least 95% covered with solder after dipped in solder bath of $245\pm5^\circ\!$	No apparent damage

(2) Storage Condition

(a) At warehouse:

The temperature should be within $0 \sim 30^{\circ}$ 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:

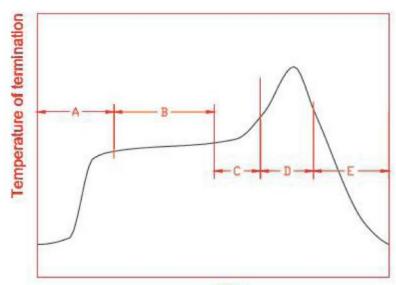
The temperature should be within -40~85°C and humidity should be less than 85% RH.

(3) Operating Temperature Range

Operating temperature range : -40° C to $+105^{\circ}$ C.

UNLESS OTHER SPECIFIED TOLERANCES ON: X=± X.X=± X.XX= ANGLES = ± HOLEDIA = ±		PENGBANXING Pe	深圳市朋伴兴业科技有 ngBanXingYe ShenZhen Technolog		
SCALE: N/A UNIT: mm		THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF PBXY			
DRAWN BY : Sera CHECKED BY: XD		TECHNOLOGY Limited AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR			
DESIGNED BY: Sera	APPROVED BY: XD	DEVICES WITHOU	JT PERMISSION		
TITLE: CHIP2450-3216 Specification		DOCUMENT	3216	SPEC REV.	
111EE: CITIF 2430-3210 S	pecification	NO.	3210	P1	

8. Recommended Reflow Soldering



Time

		rime		
A	1 st rising temperature	The normal to Preheating temperature	30s to 60s	
В	Preheating	140°C to 160°C	60s to 120s	
С	2 nd rising temperature	Preheating to 200°C	20s to 40s	
D Main heating			if 220°C	50s∼60s
		if 230°C	40s∼50s	
	Main heating	if 240°C	30s~40s	
	Jacobson and American	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 $350^{\circ}\,$ 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

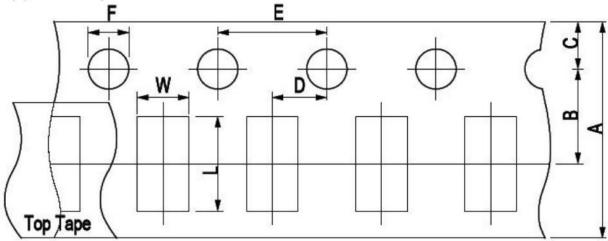
Note that excess of soldering volume will easily get crack the body of this product.

UNLESS OTHER SPECIFIED TOLERANCES ON:		als	※ AN I THE ON A A A A A A A A A A A A A A A A A A	左阳 八三
$X=\pm$ $X.X=\pm$	X.XX =	PENCHANNING	深圳市朋伴兴业科技	at the second se
$ANGLES = \pm$	$HOLEDIA = \pm$	Pe	ngBanXingYe ShenZhen Techno	logy Co. , Ltd
SCALE: N/A	UNIT: mm		S AND SPECIFICATIONS ARE THE PRO	
DRAWN BY : Sera CHECKED BY: XD		TECHNOLOGY Limited AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR		
DESIGNED BY: Sera	APPROVED BY: XD	DEVICES WITHOUT PERMISSION		
TITLE: CHIP2450-3216 Specification		DOCUMENT 3216	SPEC REV.	
			3210	P1

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

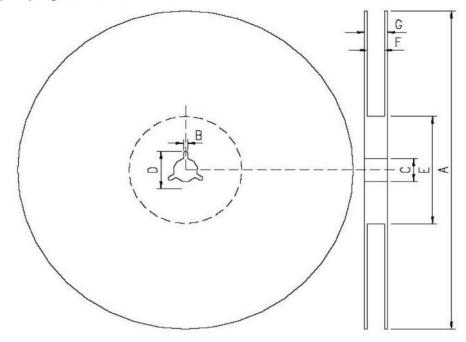
(1) Quantity/Reel: 5000pcs/Reel

(2) Carrier tape dimensions



Туре	A	В	С	D	Е	F	L	W
2450-21	8.00 \pm 0.3	3.50 ± 0.05	1.75±0.1	2.00±0.05	4.00 ± 0.1	1.50 \pm 0.1	2.30 ± 0.1	1.55 \pm 0.1

(3) Taping reel dimensions



Α	178.0±2.0
В	2.0±0.5
C	13.0±0.5
D	21.0±0.8
Ε	62.0±1.5
F	9.0±0.5
G	13.0±1.0

	UNLESS	OTHER	SPECIFIED	TOLERANCES ON:
--	--------	-------	-----------	----------------

 X=±
 X.XX=

 A N G L E S = ±
 H O L E D I A = ±

 SCALE: N/A
 UNIT: mm

 DRAWN BY : Sera
 CHECKED BY: XD

 DESIGNED BY: Sera
 APPROVED BY: XD



深圳市朋伴兴业科技有限公司

PengBanXingYe ShenZhen Technology Co., Ltd

THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF PBXY TECHNOLOGY Limited AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION

TITLE: CHIP2450-3216 Specification

DOCUMENT NO.

3216

SPEC REV.