

客戶名稱：Inventec
CUSTOMER

Doc No: 000421004007
Rev : A0

承認書

APPROVAL SHEET

產品品名 / Product Model No. : **ACA-5320-A1**

發行日期 / Issue Date : **2005/8/3**

承認日期 / Approved Date :

Approved by customer: (signing or stamping here)



佳邦科技股份有限公司

INPAQ TECHNOLOGY Co., Ltd.

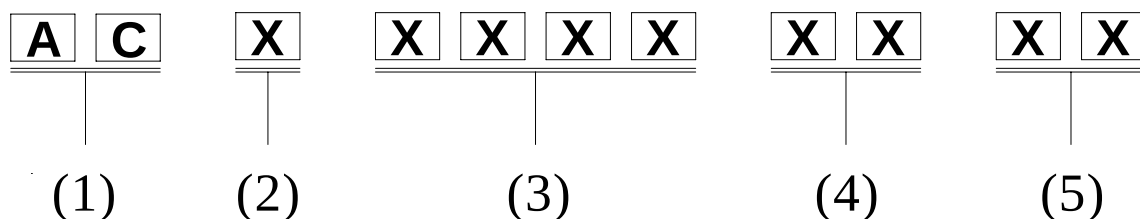
■ 新竹科學工業園區新竹市工業東四路 38 號 ☐ 苗栗縣竹南鎮大厝里 9 鄰 59-12 號

No. 38, Industry E.4, RD
Science-Based Industrial Park,
Hsinchu, Taiwan 300, R.O.C.

No. 59-12, 9 Lin, Ta Tsuo Li, Chu
Nan Chen, Miao Li Hsien, Taiwan,
R.O.C.

LAN Chip Type Antenna Module

1. Explanation of part number :



(1)Product series : LAN Antenna Chip

(2)System code : X for antenna center frequency

Exp.: A = 2.45G group

(3)Size code :

Exp.: 5320 = 5.3x2.0 mm

(4)Type code :

Exp.: A1=Type 1

(5)Suffix :

UNLESS OTHER SPECIFIED TOLERANCES ON :

X=± X.X=± X.XX=

ANGLES=± HOLEDIA=±

SCALE : -----

UNIT : mm

DRAWN BY : 張明貴 *George*

CHECKED BY : 許偉綱 *Ken*

DESIGNED BY : 張明貴 *George*

APPROVED BY : 曾泓瑋 *test*

TITLE : ACA5320A1XX Specification



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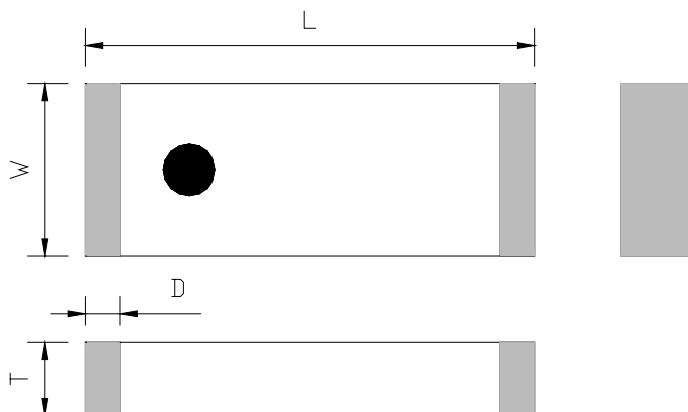
2. Electrical Specification :

ITEM	SPECIFICATION
Frequency Band	2400MHz~2500MHz
VSWR	Less than 2
Polarization	Linear
Peak Gain	0~1dBi typ.
Impedance	50Ω typ.

Matching circuit :

A Pi matching circuit will be required to have better performance

3. Physical Dimension :



Model \ Size(mm)	L	W	T	D
ACA5320A1XX	5.3±0.2	2.0±0.2	1.2±0.2	0.4±0.2

unit : mm

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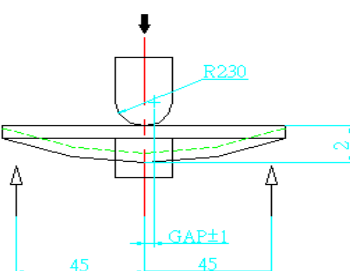
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4. Performance Specifications:

RELIABILITY TEST

Item	Condition	Specification
Thermal shock	-40°C~+85°C for 100 cycles each cycle being 30 min	No apparent damage Fulfill the electrical spec. after test
Humidity resistance	85±2°C, 80~90% R.H. for 500 hours	No apparent damage Fulfill the electrical spec. after test
High temperature resistance	+85±2°C for 500 hours	No apparent damage Fulfill the electrical spec. after test
Low temperature resistance	-40±3°C for 500 hours	No apparent damage Fulfill the electrical spec. after test
Vibration	10 Hz/min~55 Hz/min~10 Hz/min vibration frequency with 1.5 mm amplitude for two hours in x, y, z directions	No apparent damage
Drop shock	Dropped onto printed circuit board from 100cm height three times in x, y, z directions. The terminals shall be protected.	No apparent damage
Soldering heat resistance	Preheating temperature : 150±10°C Preheating time : 1 to 2 minutes Solder bath temperature : 260±5°C Bathing time : 5±0.5 seconds	No apparent damage
Bending test onto printed circuit board	Solder specimen LTCC components on the test printed circuit board (L: 100 x W: 40 x T: 1.6mm) in appended recommended PCB pattern. Apply the load in direction of the arrow until bending reaches 2 mm.  Unit: mm	No apparent damage
Solderability	The dipped surface of the terminal shall be at least 75% covered with solder after dipped in solder bath of 235±5°C for 3±0.5 seconds.	No apparent damage

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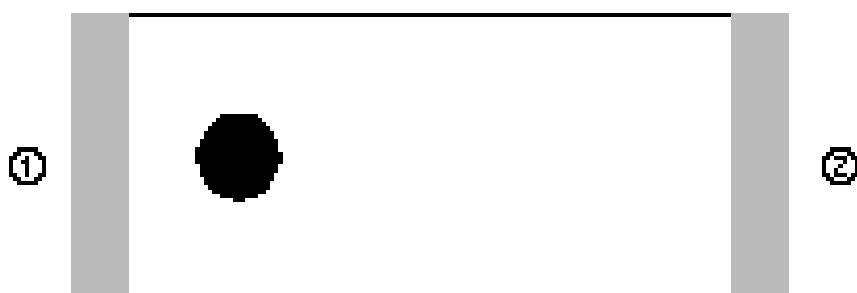
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5. Layout Recommendation:



PAD Definition:

- 1: Feed Termination (50 ohm feed point)
- 2: Solder Termination

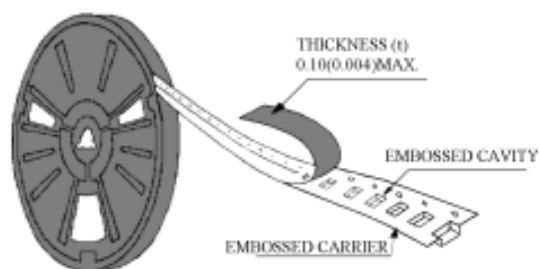
Note:

Adding a 50 ohm transmission line before the feed point will be ok

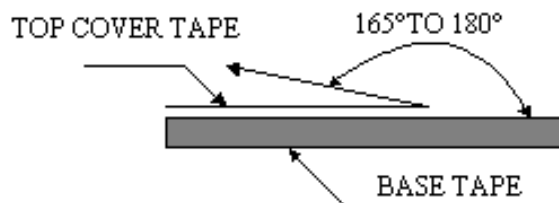
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ANGLES=± HOLEDIA=±				
SCALE : ----	UNIT : mm	THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF INPAQ TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION		
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DESIGNED BY : 張明貴 <i>George</i>	APPROVED BY 曾泓瑋 <i>Jack</i>			
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6. Taping Package and Label Marking:

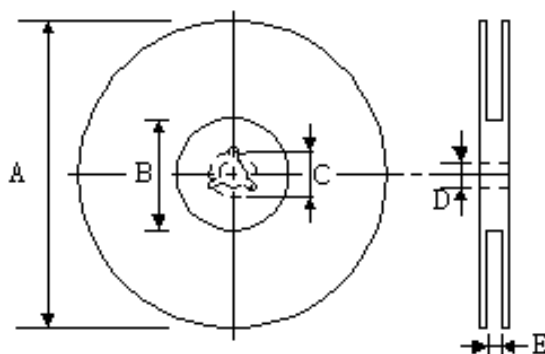
6-1. Carrier tape dimensions



The force for tearing off cover tape is 10 grams in the arrow direction.



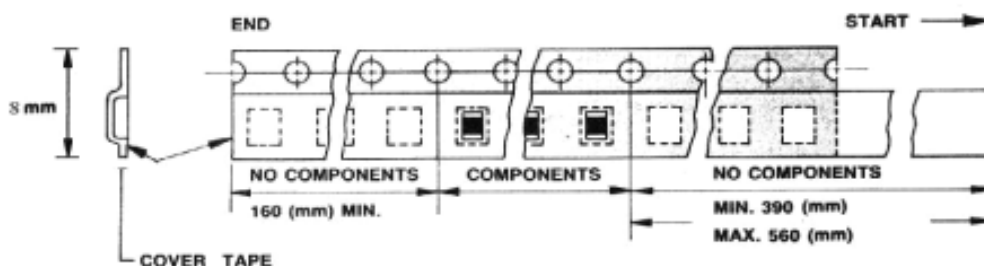
CARRIER TAPE REELS



TYPE	A	B	C	D	E
8 mm	178 ±0.2	62 ±0.2	20.2 ±0.1	13 ±0.1	9 ±0.1
12 mm	178 ±0.3	60 ±0.2	19.3 ±0.1	13.5 ±0.1	13.6 ±0.1

TAPING QUANTITY

SERIES	5824	5320	4532	4516	3225 321616	321611	2012 1608	1005
PCS/Reel	5000	5000	1000	2000	2500	3000	4000	10000



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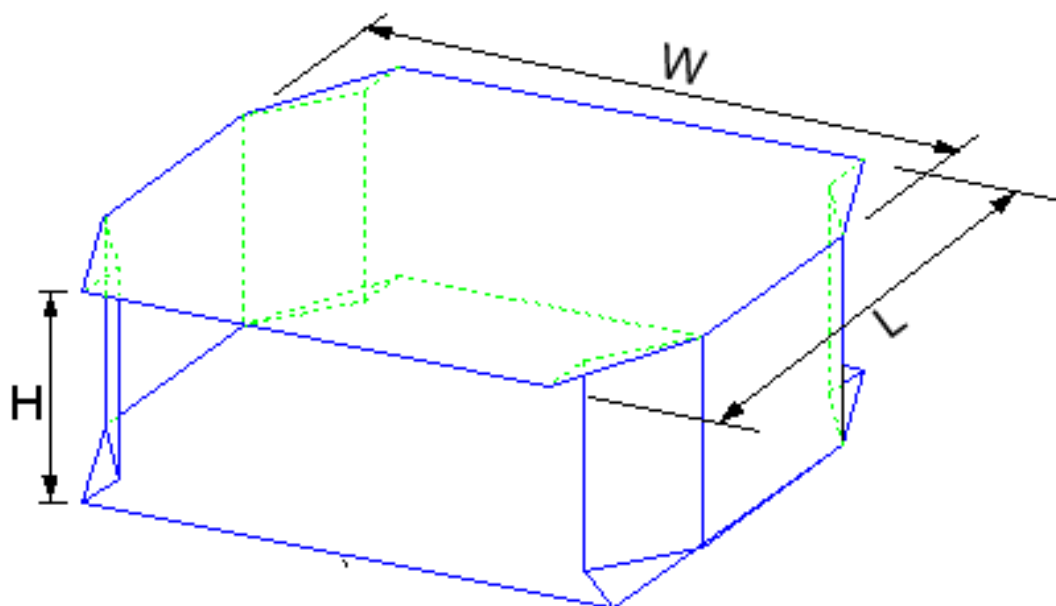
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6-2. Package



Unit: mm

No. of Reels	W	L	H
2	18±0.5	18±0.5	2.4±0.2
3	18±0.5	18±0.5	3.6±0.2
4	18±0.5	18±0.5	4.8±0.2
5	18±0.5	18±0.5	6.0±0.2

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