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1. Antenna Gain:

	Gain_BT ANT	Gain_WIFI1 ANT	Gain_WIFI2 ANT
	Frequency range of operation: 2400-2500 MHz Antenna Type: Integral (PIFA Antenna)	Frequency range of operation: 2400-2500 & 5150-5850 MHz Antenna Type: Integral (PIFA Antenna)	Frequency range of operation: 2400-2500 & 5150-5850 MHz Antenna Type: Integral (PIFA Antenna)
Bluetooth	3.50dBi	n/a	n/a
WIFI 2.4G	n/a	3.05dBi	4.44dBi
WIFI 5.2G	n/a	4.06dBi	3.75dBi
WIFI 5.8G	n/a	3.98dbi	3.82dBi

The product has one ANT for Bluetooth, two ANT's for WIFI 2.4G/5.2G/5.8G.

2. Antenna Datasheet for BT ANT

WA-M-LB-02-269-B Specification**1. Explanation of part number :**

WA — M — LB — 02 — 269 — B
 (1) (2) (3) (4) (5) (6)

- (1) Product Type: Wireless Antenna
 (2) Material: Metal + Holder + Cable + Rubber
 (3) Frequency: 2400-2500MHZ ;
 (4) Coaxial Cable Type: 02
 (5) Suffix: 269
 (6) Vehicle use: Before loading

2. Operating Condition:

Temperature -40 to +85°C
 Humidity 20 to 85% RH

3. Storage Condition:

Temperature -40 to +85°C
 Humidity 20 to 85% RH

Recommended storage condition (storage period of one year) :

Store in room condition as listed below: Temperature -20°C~+45°C, Humidity 80% Max

UNLESS OTHER SPECIFIED TOLERANCES ON :

X = ± X.X = ±0.15 X.XX = ±0.15

ANGLES = ± HOLEDIA = ±

SCALE : /

UNIT : mm

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CHECKED BY : 李志强

DESIGNED BY : 王俐

APPROVED BY : 唐龙

TITLE : WA-M-LB-02-269-B Specification



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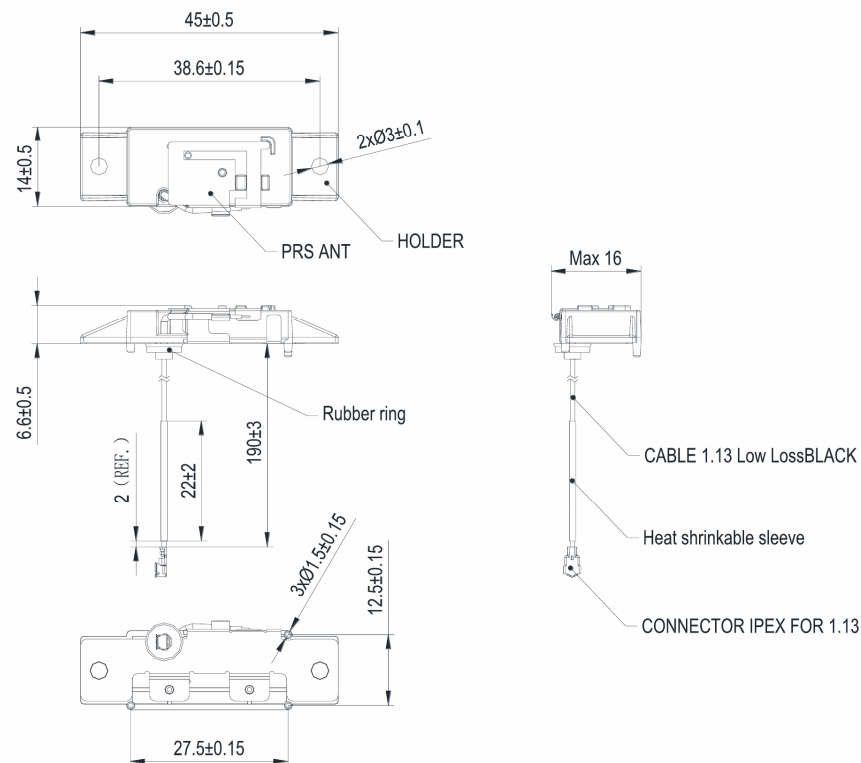
DOCUMENT
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ENS000163110

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4. Electrical Specification :

Frequency Band	2.40GHz~2.50GHz
Polarization	Linear
Peak Gain	>1dBi
Average Efficiency	>40%
Impedance	50Ω Typ.

5. Mechanical Specification :

UNLESS OTHER SPECIFIED TOLERANCES ON :

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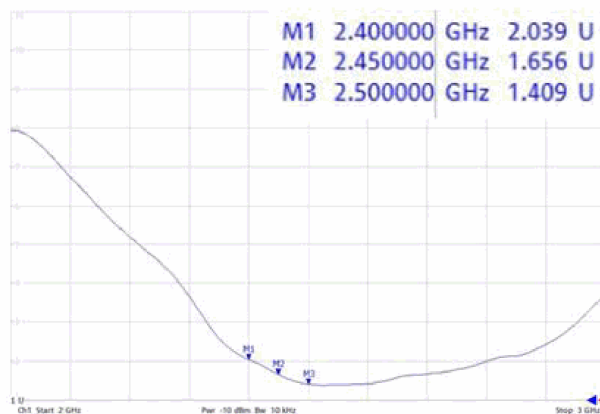
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6. Electrical Characteristics (In customer machine):

6.1 VSWR

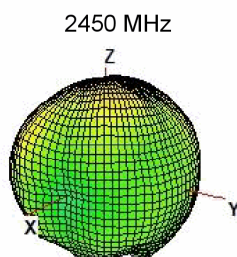


Frequency (Unit MHz)	2400	2450	2500
VSWR (SPEC)	≤2.5		
VSWR	2.04	1.66	1.41

6.2 Antenna Passive Test Result

Frequency(MHz)	Peak Gain(dBi)	Efficiency (%)
2400	2.41	46.62
2450	2.41	48.38
2500	3.50	58.11

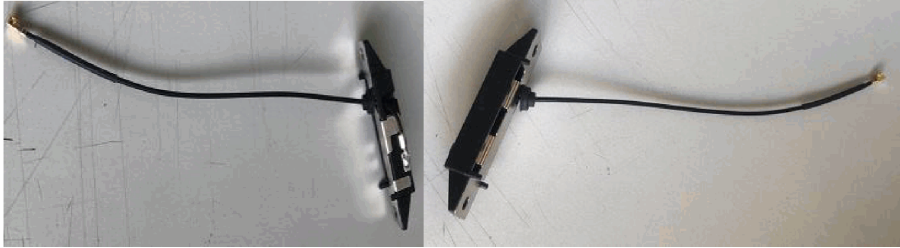
6.3 3D Gain Pattern



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7.实物图:



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3. Antenna Datasheet for WIFI1 ANT

WA-M-LA-02-271-B Specification**1. Explanation of part number :**

WA - M - LA - 02 - 271 - B
 (1) (2) (3) (4) (5) (6)

- (1) Product Type: Wireless Antenna
 (2) Material: Metal + Holder + Cable + Rubber
 (3) Frequency: 2400-2500MHz · 5150~5850 MHz
 (4) Coaxial Cable Type: 02
 (5) Suffix: 271
 (6) Vehicle use: Before loading

2. Operating Condition:

Temperature -40 to +85°C
 Humidity 20 to 85% RH

3. Storage Condition:

Temperature -40 to +85°C
 Humidity 20 to 85% RH

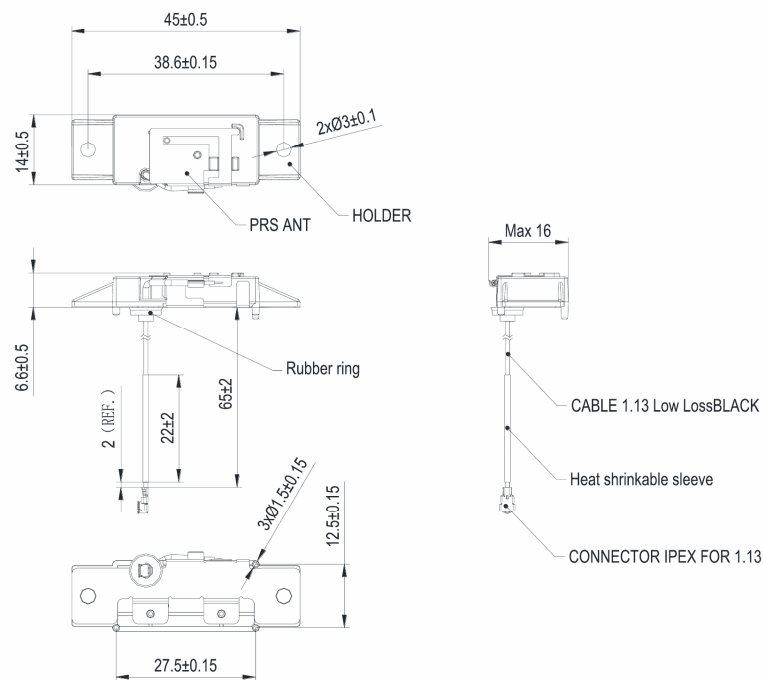
Recommended storage condition (storage period of one year) :

Store in room condition as listed below: Temperature -20°C~+45°C, Humidity 80% Max

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X = ±	X.X = ±0.15 X.XX = ±0.15		
ANGLES = ±	HOLEDIA = ±	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	
SCALE : /	UNIT : mm		
DRAWN BY : 李志强	CHECKED BY : 李志强		
DESIGNED BY : 王俐	APPROVED BY : 唐龙		
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4. Electrical Specification :

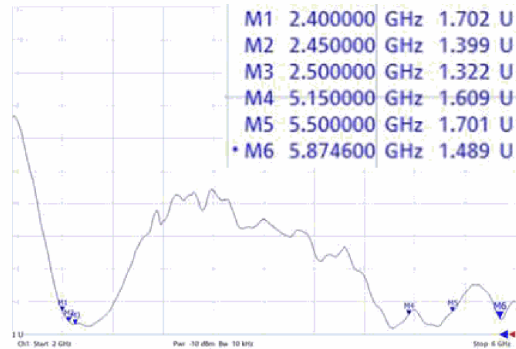
Frequency Band	2.40GHz~2.50GHz	5.15GHz~5.85GHz
Polarization	Linear	Linear
Peak Gain	>1dBi	>2.5dBi
Average Efficiency	>40%	>40%
Impedance	50Ω Typ.	50Ω Typ.

5. Mechanical Specification :**6. Electrical Characteristics (In customer machine) :****6.1 VSWR**

UNLESS OTHER SPECIFIED TOLERANCES ON : X = ± X.X = ±0.15 X.XX = ±0.15 ANGLES = ± HOLEDIA = ±		INPAQ TECHNOLOGY CO., LTD.	
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Frequency (Unit MHz)	2400	2450	2500	5150	5450	5850
VSWR (SPEC)	≤ 2.5			≤ 2.5		
VSWR	1.70	1.40	1.32	1.61	1.70	1.49



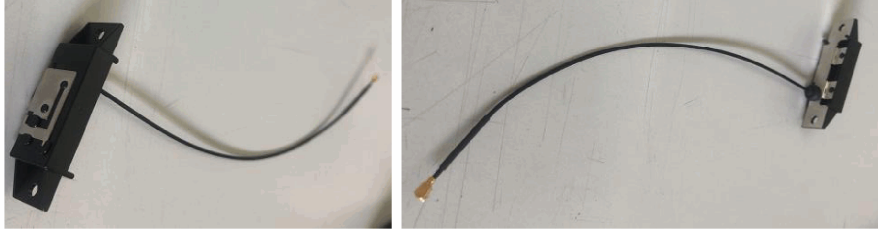
6.2 Antenna Passive Test Result

Frequency(MHz)	Peak Gain(dBi)	Efficiency (%)
2400	1.40	43.05
2450	2.59	55.56
2500	3.05	54.64
5150	4.06	59.26
5450	4.06	63.18
5850	3.98	62.59

6.3 3D Gain Pattern (2450 MHz)



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7. Physical picture :

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4. Antenna Datasheet for WIFI2 ANT

WA-M-LA-02-273-B Specification**1. Explanation of part number :**

WA - M - LA - 02 - 273 - B
 (1) (2) (3) (4) (5) (6)

- (1) Product Type: Wireless Antenna
 (2) Material: Metal + Holder + Cable + Rubber
 (3) Frequency: 2400-2500MHz · 5150~5850 MHz
 (4) Coaxial Cable Type: 02
 (5) Suffix: 273
 (6) Vehicle use: Before loading

2. Operating Condition:

Temperature -40 to +85°C
 Humidity 20 to 85% RH

3. Storage Condition:

Temperature -40 to +85°C
 Humidity 20 to 85% RH

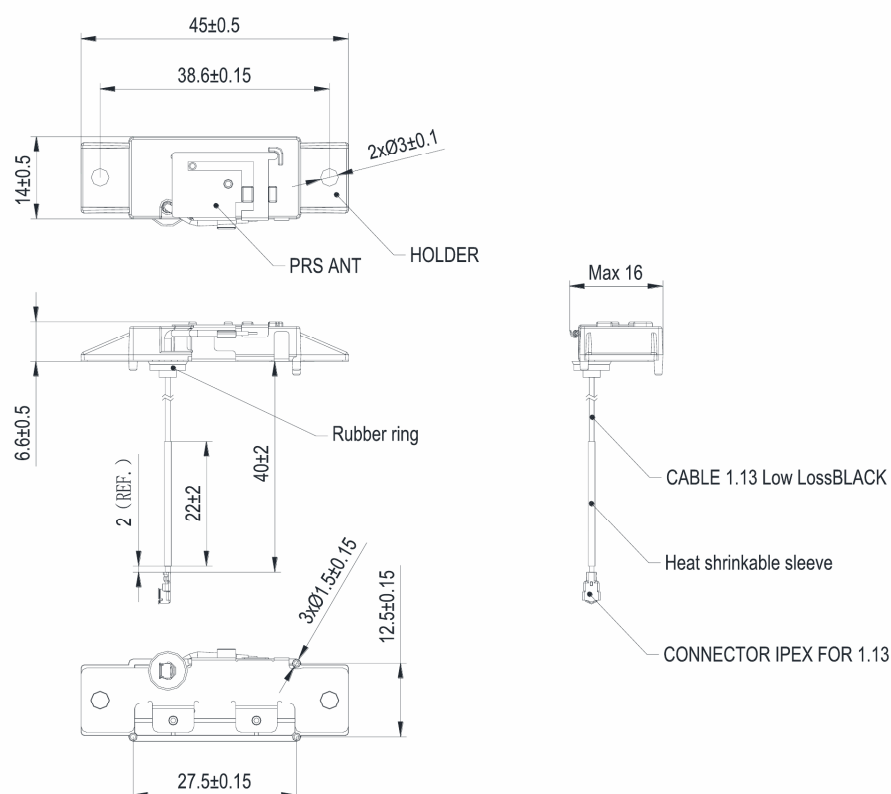
Recommended storage condition (storage period of one year) :

Store in room condition as listed below: Temperature -20°C~+45°C, Humidity 80% Max

UNLESS OTHER SPECIFIED TOLERANCES ON : X = ± X.X = ±0.15 X.XX = ±0.15 ANGLES = ± HOLEDIA = ±		INPAQ TECHNOLOGY CO., LTD.	
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DESIGNED BY : 王俐	APPROVED BY : 唐龙		
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4. Electrical Specification :

Frequency Band	2.40GHz~2.50GHz	5.15GHz~5.85GHz
Polarization	Linear	Linear
Peak Gain	>1dBi	>2.5dBi
Average Efficiency	>40%	>40%
Impedance	50Ω Typ.	50Ω Typ.

5. Mechanical Specification :

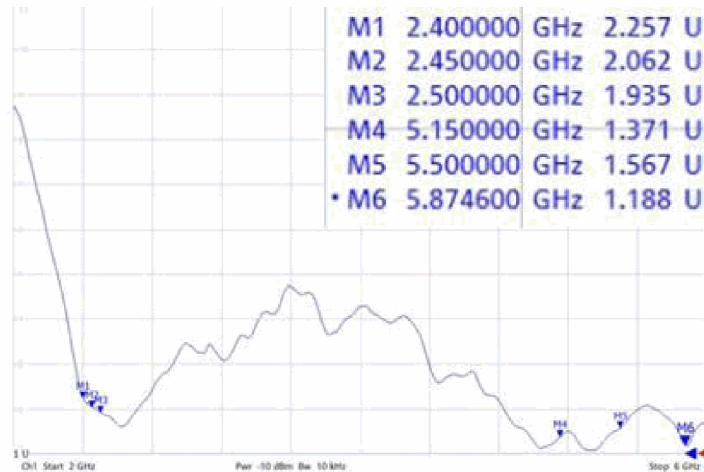
UNLESS OTHER SPECIFIED TOLERANCES ON :		INPAQ TECHNOLOGY CO., LTD.	
X.X = ±0.15 X.XX = ±0.15			
ANGLES = ±			

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6. Electrical Characteristics (In customer machine) :

6.1 VSWR

Frequency (Unit MHz)	2400	2450	2500	5150	5450	5850
VSWR (SPEC)	≤ 2.5			≤ 2.5		
VSWR	2.26	2.06	1.94	1.37	1.58	1.19



6.2 Antenna Passive Test Result

Frequency(MHz)	Peak Gain(dBi)	Efficiency (%)
2400	4.05	42.26
2450	4.12	45.61
2500	4.44	49.67
5150	3.75	54.70
5450	2.88	55.96
5850	3.82	62.00

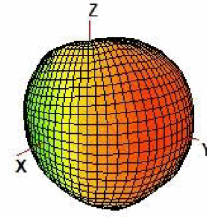
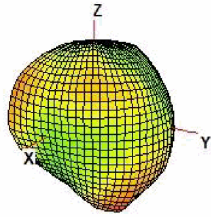
6.3 3D Gain Pattern (2450 MHz)

2450 MHz

5450 MHz

UNLESS OTHER SPECIFIED TOLERANCES ON :		INPAQ TECHNOLOGY CO., LTD.	
X.X = ±0.15 X.XX = ±0.15			
ANGLES = ±			

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7. Physical picture :



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