

AQUA-2640P Data Sheet

S-DMB Quadrifilar Helix Antenna

MAY. 2007

Ver.1.1

Revision History

Revision	Date	Description of Changes
V052807	MAY. 28, 2007	First Release
V053007	MAY. 30. 2007	Insert the blocking capacitor (page.8)

* **AQUA** : Actenna's **QU**adrifilar **A**ntenna

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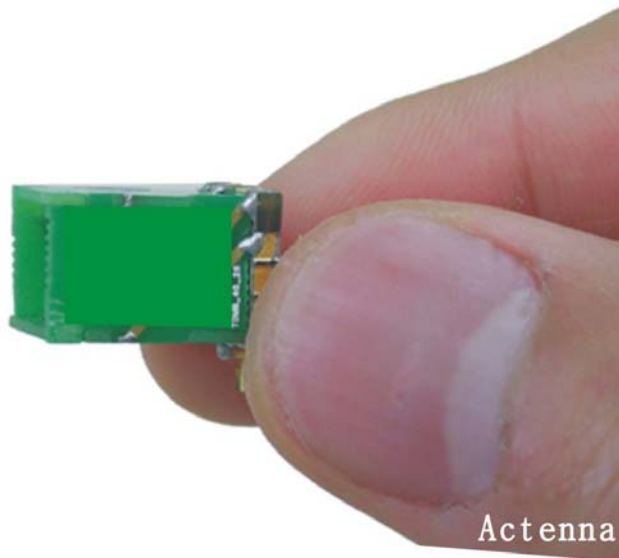
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1. General Description

AQUA-2640P is the smallest passive quadrifilar helix antenna (QHA) for S-DMB (satellite digital multimedia broadcasting) application.

1.1 Features

- Square-QHA*
- 2.64GHz RHCP Antenna
- Compact size
- Ideal for tight integration
- Low interaction with platform
- Wide beamwidth
- Negligible detuning close to users
- Internal and external mounting
- SMT compatible
- Easy Application and Save development time
- OEM/ODM

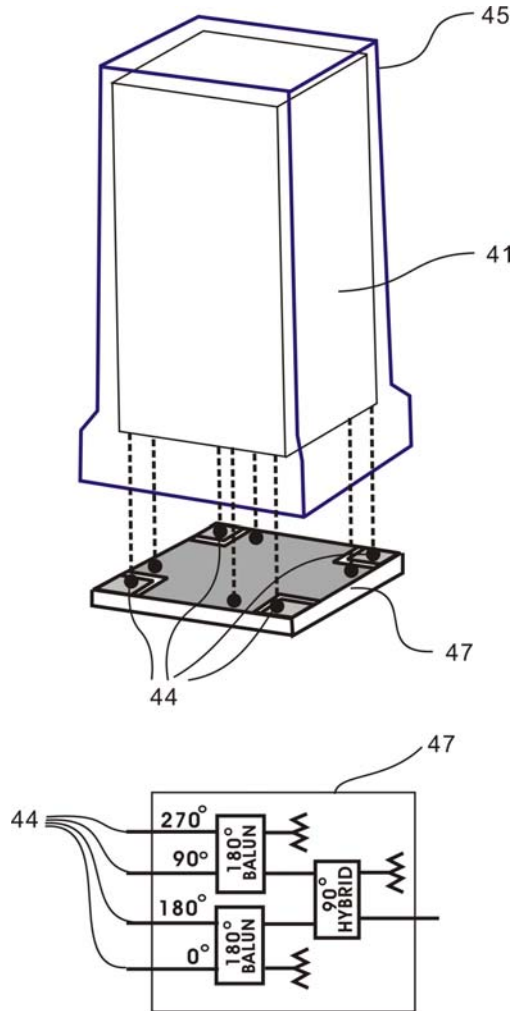


* Patent Pending

1.2 Typical Applications

- Consumer electronic devices requiring S-DMB feature
- Handheld devices such as PDA
- Cellular phones, Smart phones

2. System Block Diagram



*Patent Pending

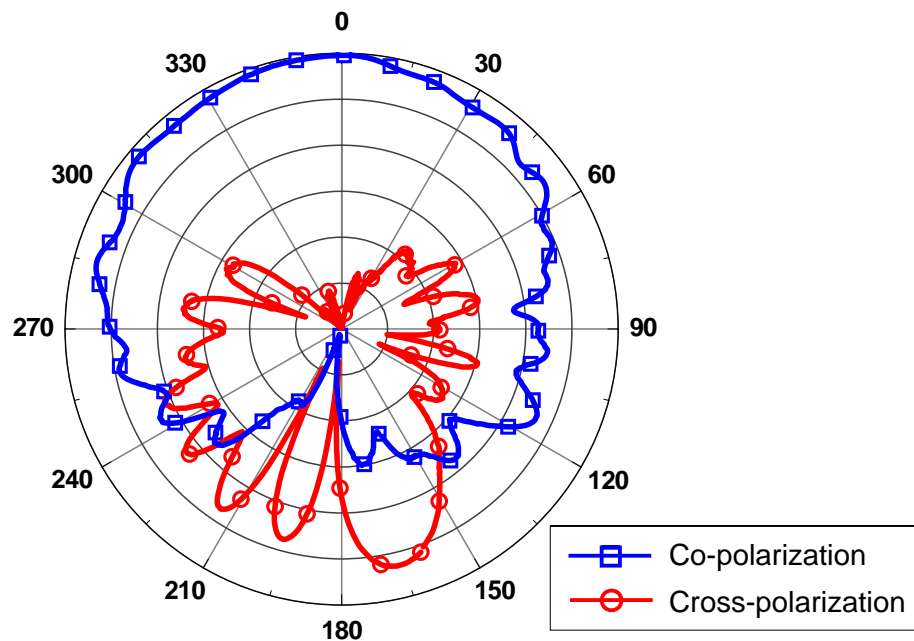
- 41 : Square-QHA
- 44 : Feeding Points
- 45 : Housing
- 47 : Feeding Network

3. Specifications

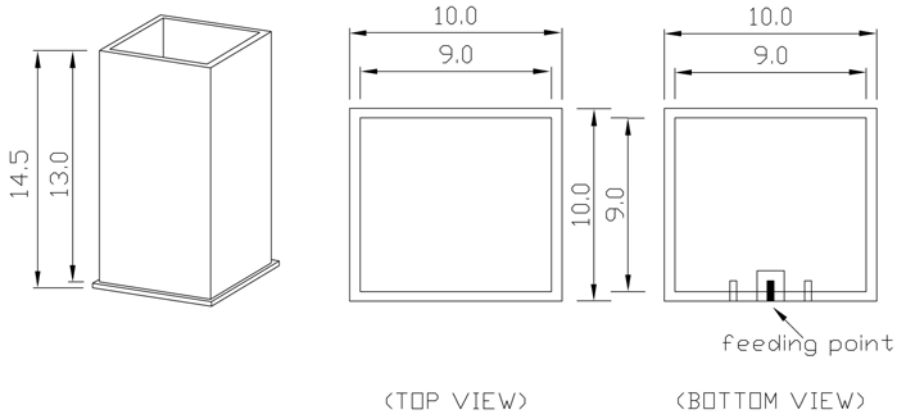
No		Min	Typ	Max	Unit
1	Part Number	AQUA-2640P			Each
2	Type	Square Quadrifilar Helix*			
3	Frequency	2630~2655			MHz
4	Polarization	Right-Hand Circular Polarization			
5	Gain	1	3		dBic
6	Beamwidth		>120		Degrees
7	Bandwidth(3dB)		40		MHz
8	Axial Ratio		<2.0		
9	VSWR		<2.0		
10	Impedance		50		Ohms
11	Element Dimensions	9.0x9.0x13.5			mm
12	Overall Dimensions (w/radome)	11x11x16			mm
13	Weight (exclusive radome)	3			grams
14	Mounting	SMT			

* Patent Pending

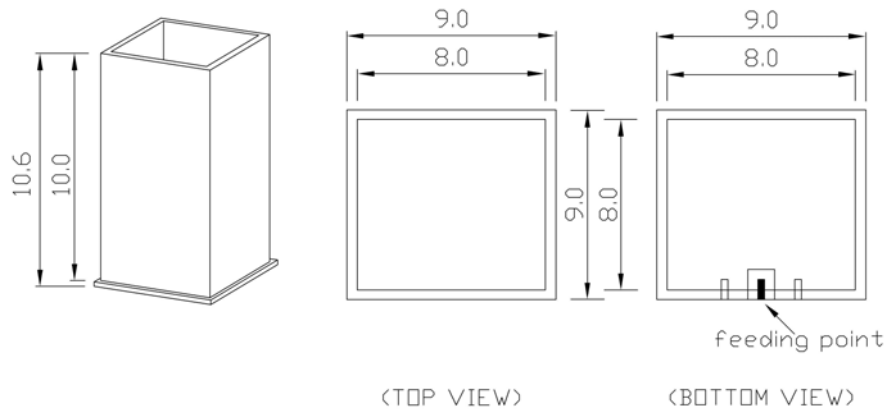
● Radiation Pattern (dBic)



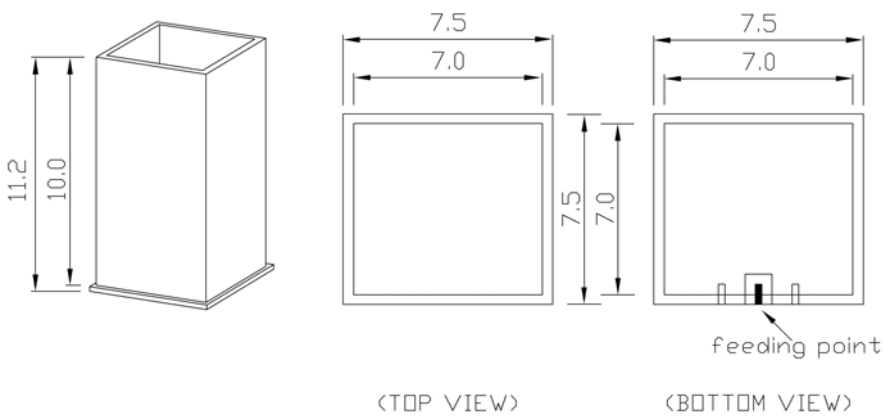
4. Mechanical Dimensions (mm)



(AQUA-2640P-A)



(AQUA-2640P-B)



(AQUA-2640P-C)

5. Application

- * Insert the DC blocking capacitor into the S-DMB receiver.

