

## LTCC Multi Layer Ceramic Chip Antenna- 5.2 mm x2.0 mm size

### - RFANT5220110A0T

#### FEATURES

1. Surface Mounted Devices with a small dimension of 5.2 x 2.0 x 1.1 mm<sup>3</sup> meet future miniaturization trend.
2. Embedded and LTCC (Low Temperature Co-fired Ceramic) technology is able to future integrate with system design as well as beautifying the housing of final product.
3. High Stability in Temperature / Humidity Change
4. Reel Packaging

#### APPLICATIONS

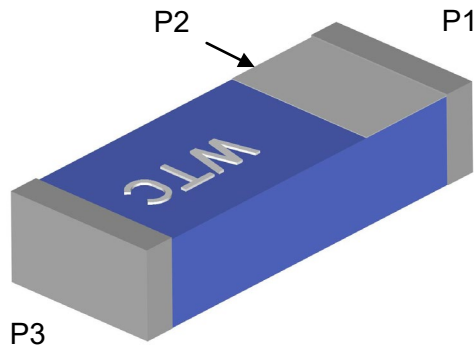
1. Bluetooth
2. Wireless LAN
3. HormRF
4. ISM band 2.4GHz wireless applications



#### Recommended Link Parts

Product Category	Walsin PN	description	Remark
capacitor	RFxxN	high Q MLCC	matching circuit
chip antenna	AMANT3216120A5T	3.2 X 1.6mm, automotive version	other choice
chip antenna	AMANT5220110A0T	5.2 x 2.0mm, automotive version	other choice
chip antenna	RFANT3216120A5T	2.4GHz, 3.2 X 1.6mm, monopole type	other choice
chip antenna	RFANT9520120A0T	2.4GHz, 9.5 x 2.1mm, monopole type	other choice
chip antenna	RGFRA1204021A1T	2.4GHz, 12.0 x 4.0mm, FR4 type	other choice
chip antenna	RGFRA1903041A1T	2.4GHz, 19 x 3 mm, FR4 type	other choice
chip antenna	RGFRA8010110A2T	2.4GHz, 8.0 x 1.0mm, FR4 type	other choice

**CONSTRUCTION**



PIN	Connection
P1	Feeding
P2	Identification Mark
P3	Soldering terminal

**DIMENSIONS**

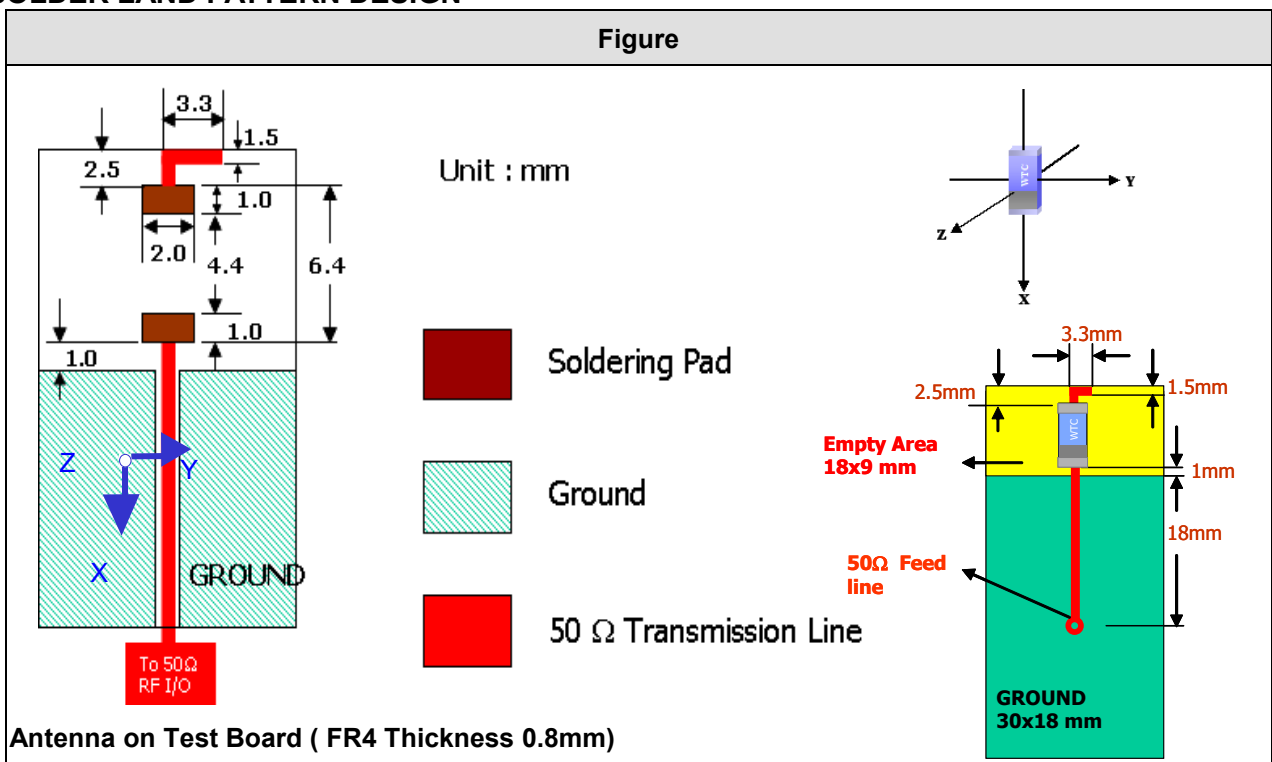
Figure	Symbol	Dimension (mm)
	L	$5.20 \pm 0.20$
	W	$2.00 \pm 0.20$
	T	$1.15 \pm 0.10$
	A	$0.40 \pm 0.25$

**ELECTRICAL CHARACTERISTICS**

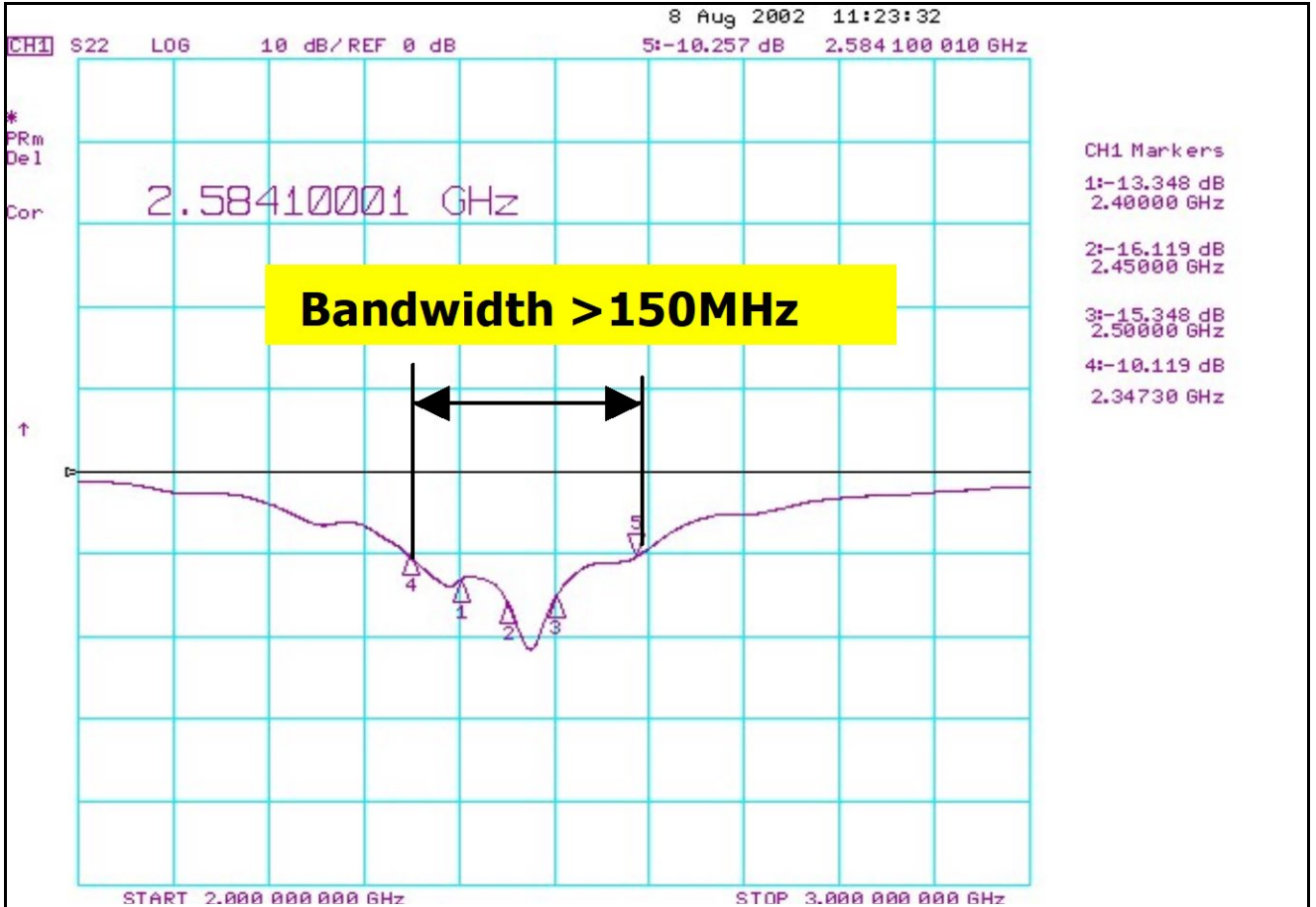
<b>RFANT5220110A0T</b>	<b>Specification</b>
Working Frequency Range	2.4 GHz ~ 2.5GHz
Gain	2 dB (Typical)
VSWR	2 max.
Polarization	Linear
Azimuth Beamwidth	Omni-directional
Impedance	50Ω
Rated Power (max.)	3 Watts
Maximum Input Power	5 Watts for 5 minutes
Moisture sensitivity levels	MSL is LEVEL 1 (Refer to : IPC/JEDEC J-STD-020)
HBM ESD	Pass 1KV on all pins (Base on AEC-Q200-002)
MM ESD	Pass 200V (Base on EIA/JESD22-A115)
<b>Operating &amp; Storage Condition (Component)</b>	
Operation Temperature Range: -40°C ~ +85°C	
Storage Temperature Range: -40°C ~ +85°C	
<b>Storage Condition before Soldering (Included packaging material)</b>	
Storage Temperature Range: +5 ~ +40 °C	
Humidity: 30 to 70% relative humidity	

Remark: The specification is defined based on the test board dimension as in below

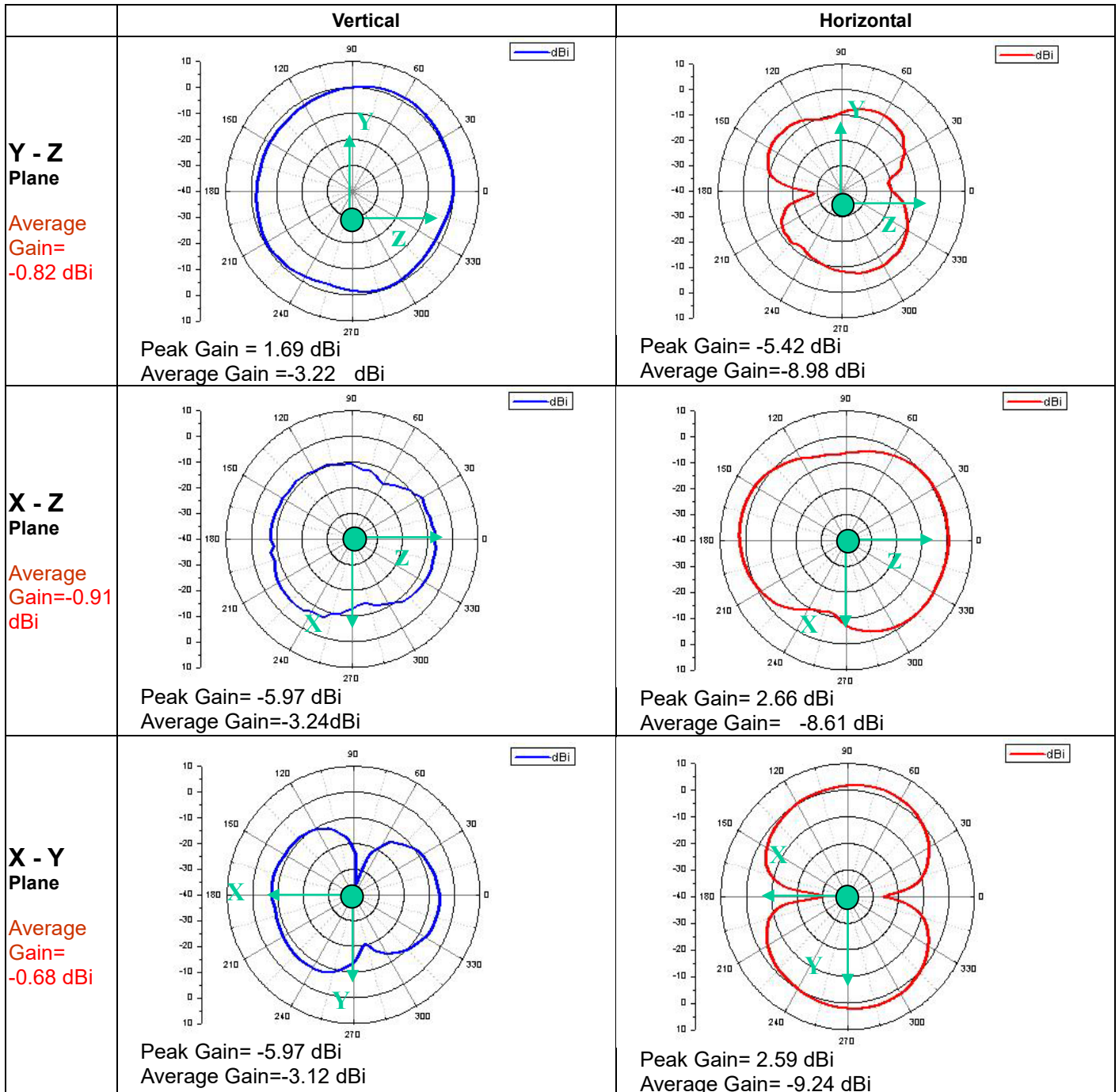
**SOLDER LAND PATTERN DESIGN**



Antenna S11 on Test Board



**RADIATION PATTERN**



**CONTACT INFORMATION**

For more information, please contact with

[Walsin Technology Corporation](http://www.walsin.com)

Tel : 886-3-475-8711

Fax : 886-3-475-5197

E mail : [info@passivecomponent.com](mailto:info@passivecomponent.com)

Web Site : <http://www.passivecomponent.com>

Specification subject to change without prior notice