

## LTCC Multi Layer Ceramic chip antenna- 2012 (0805) size

### - AMANT2012090A0T

#### FEATURES

1. Surface Mounted Devices with a small dimension of 2.0 x 1.25 x 0.9 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. Omni - directional in azimuth
5. Automotive, Qualified to AECQ-200
6. Reel Packaging



#### APPLICATIONS

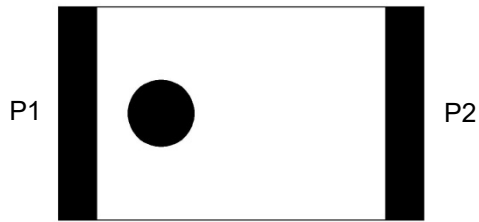
1. 2400 ~ 2500 MHz working frequency
2. Bluetooth
3. Wireless LAN
4. HormRF

#### Recommended Link Parts

Product Category	Walsin PN	description	Remark
capacitor	RTxxN	high Q MLCC (automotive version)	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

**CONSTRUCTION**

Top view



PIN	Connection
P1	Feeding
P2	Soldering terminal

**DIMENSIONS**

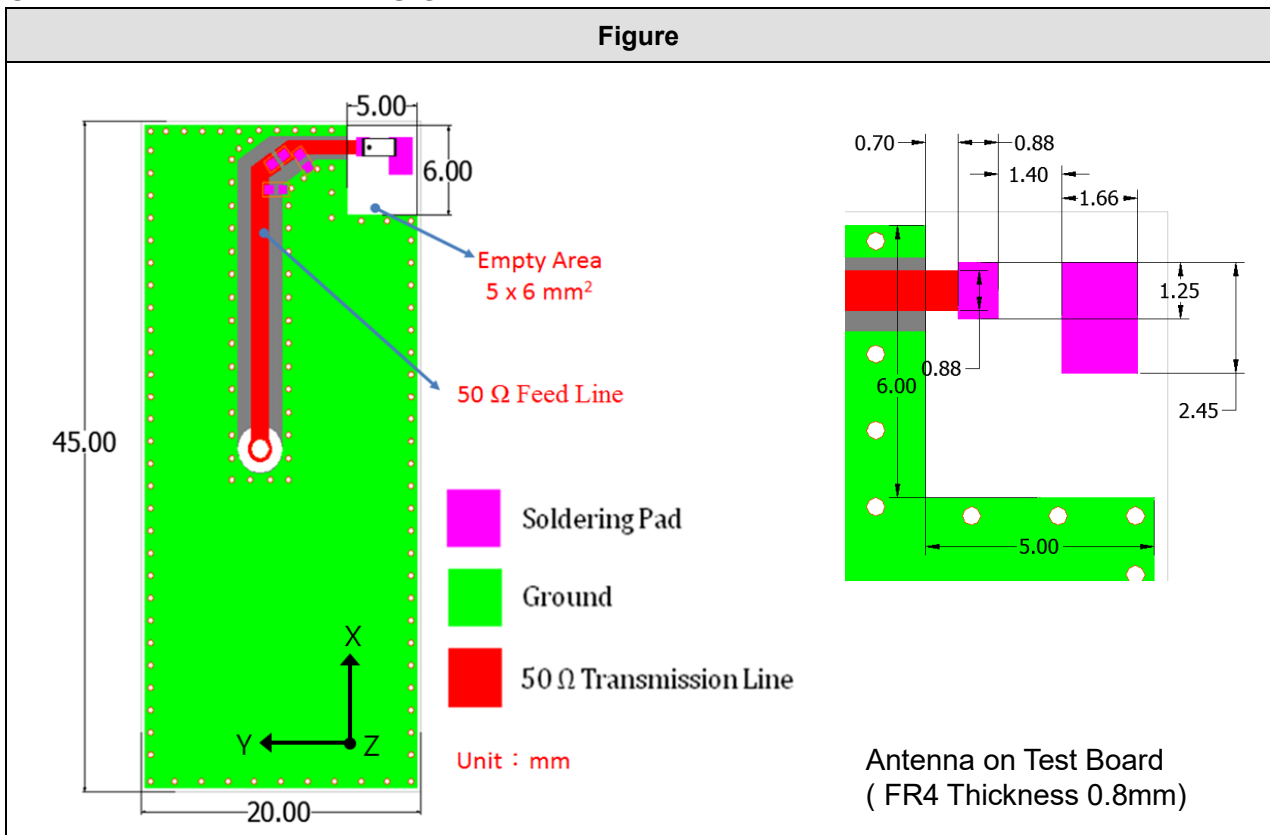
Figure	Symbol	Dimension (mm)
Top view	L	$2.0 \pm 0.20$
Side view	W	$1.25 \pm 0.20$
Side view	T	$0.90 \pm 0.10$
Bottom view	A	$0.25 \pm 0.15$

**ELECTRICAL CHARACTERISTICS**

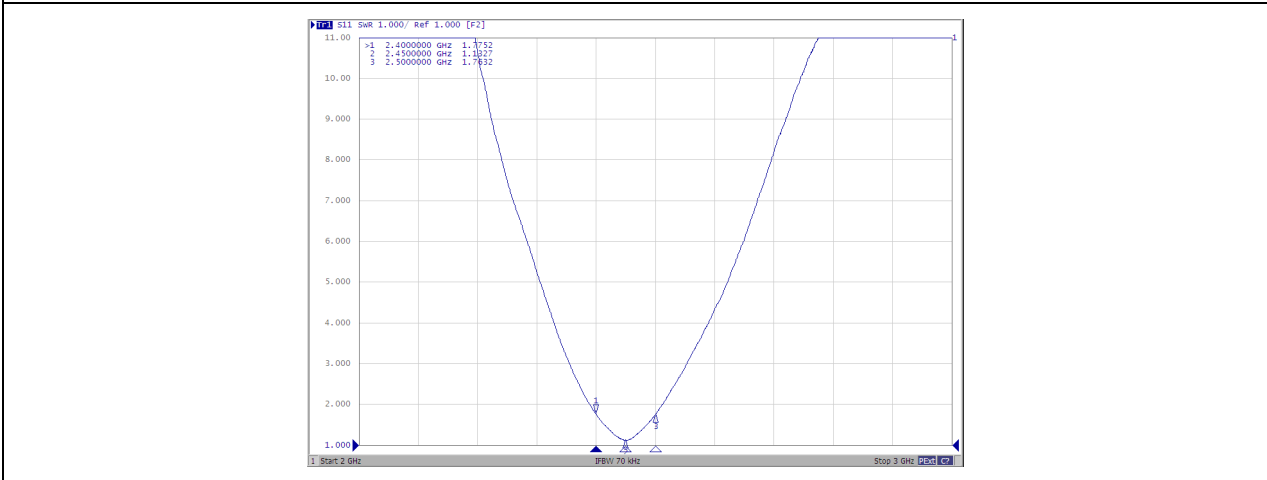
<b>AMANT2012090A0T</b>	<b>Specification</b>
Working Frequency Range	2400 ~ 2500 MHz
Gain	1.32 dBi (Typical)
VSWR	2.0 max.
Polarization	Linear
Azimuth Beamwidth	Omni-directional
Impedance	50Ω
Rated Power (max.)	3 Watts
Maximum Input Power	5 Watts for 5 minutes
Moisture sensitivity levels	MSL is LEVEL 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: -55°C ~ +125°C	
Storage Temperature Range: -55°C ~ +125°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**

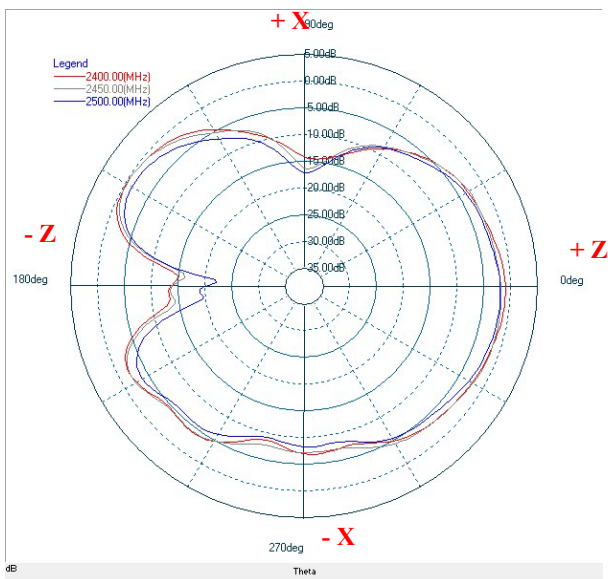


**Antenna VSWR on Test Board**

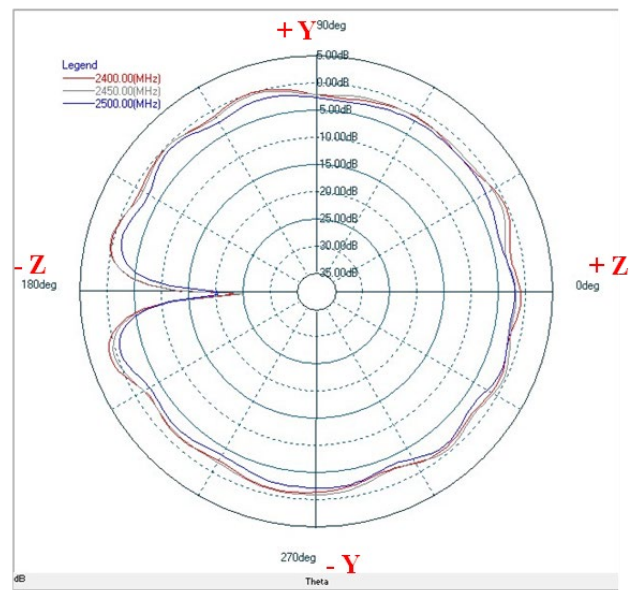


**RADIATION PATTERN**

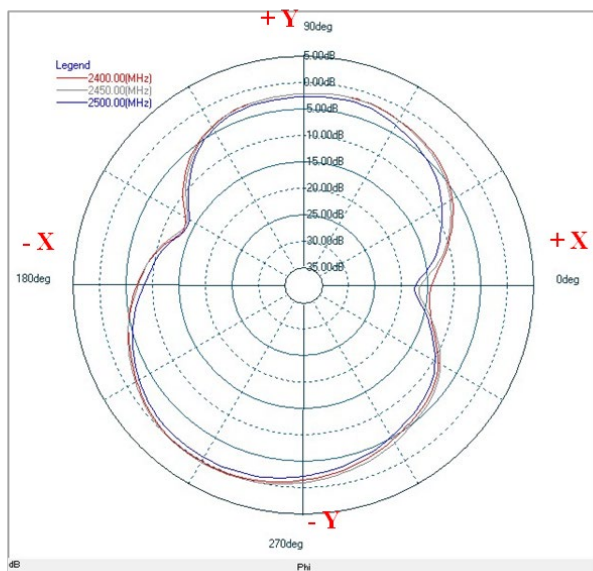
(XZ plane)



(YZ plane)



(XY plane)



**CONTACT INFORMATION**

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Specification subject to change without prior notice.