LTCC Multi Layer Ceramic Chip Antenna- 3216 (1206) size

– AMANT3216110Y1T

FEATURES

1. Surface Mounted Devices with a small dimension of 3.2 X 1.6 X1.1 mm^3 meet future miniaturization trend.
2. LTCC process
3. High stability in Temperature / Humidity Change
4. Multilayer ceramic antenna (chip antenna)
5. Automotive, Qualified to AEC-Q200

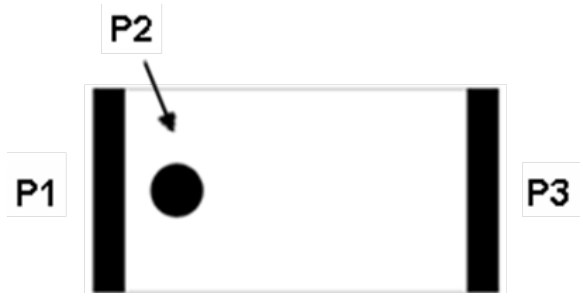
APPLICATIONS

1. 6240 – 8500 MHz working Frequency

Recommanded Link Parts

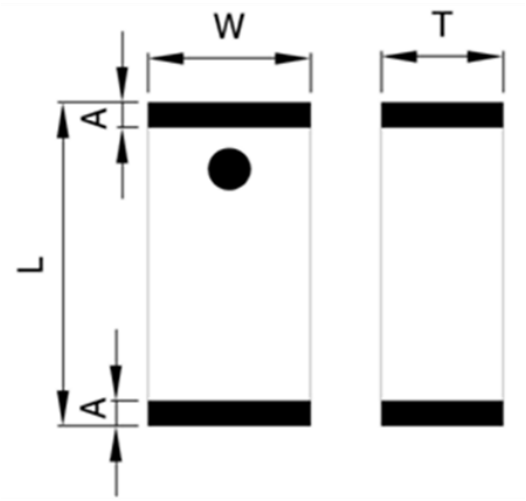
Product Category	Walsin PN	Remark
capacitor	RTxxN	high Q MLCC for fine tune matching (automotive version)

CONSTRUCTION



PIN	Connection
1	Feeding
2	Identification Mark
3	Soldering terminal

DIMENSIONS

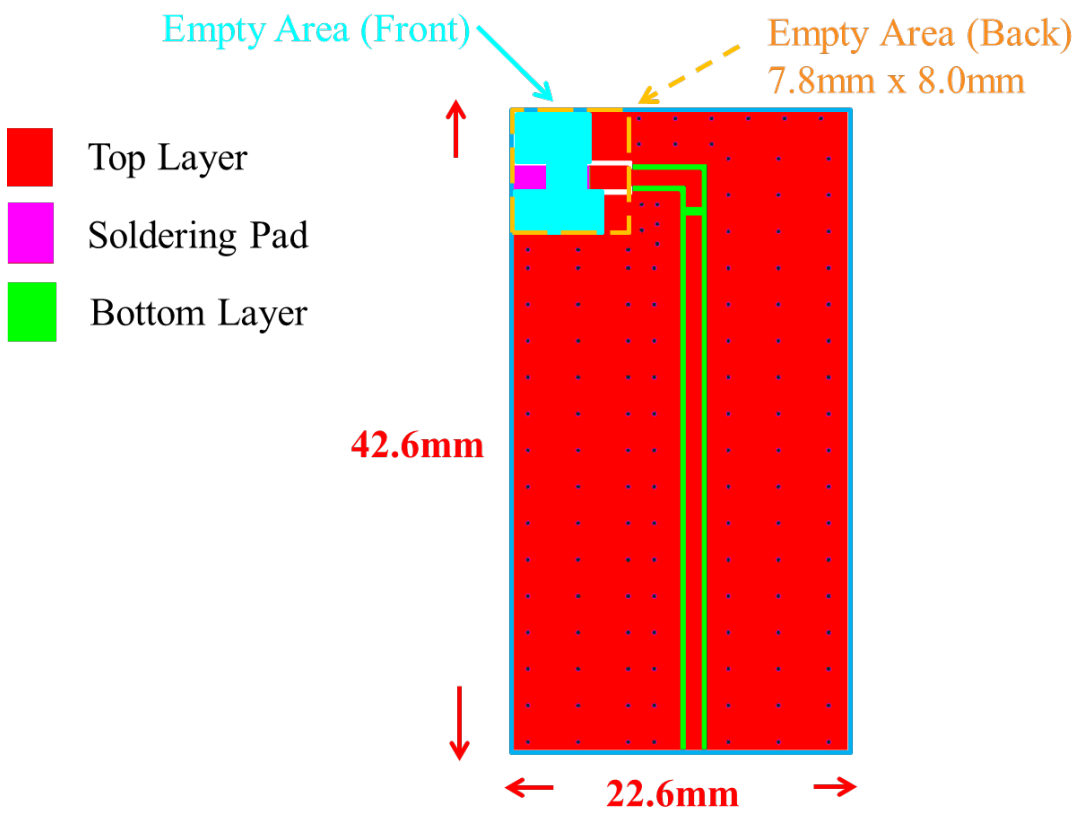
Figure	Symbol	Dimension (mm)
	L	3.20 ± 0.20
	W	1.60 ± 0.10
	T	1.10 ± 0.10
	A	0.25 ± 0.15

ELECTRICAL CHARACTERISTICS

AMANT3216110Y1T	Specification
Working Frequency Range	6240 - 8500 MHz
Fc	7370 MHz
VSWR	2 max.
Gain	3 – 4.5 dBi
Efficiency	70 – 80 %
Power Capacity	3 W max.
Maximum Input Power	5 Watts for 5 minutes
Polarization	Linear
Azimuth Beamwidth	Omni - Directional
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)
Operating & Storage Condition (Component) Operation Temperature Range: -55 ~ +125 ℃ Storage Temperature Range: -55 ~ +125 ℃	
Storage Condition before Soldering (Included packaging material) Storage Temperature Range: +5 ~ +40 ℃ Humidity: 30 to 70% relative humidity	

SOLDER LAND PATTERN DESIGN

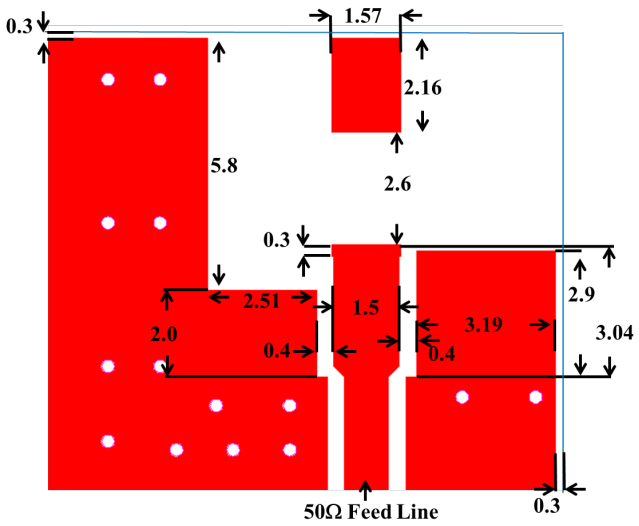
Figure



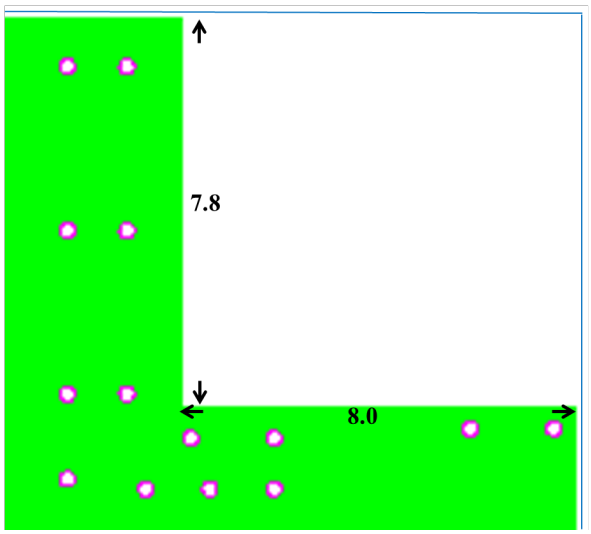
Antenna on Test Board (Thickness 0.8 mm)

Unit : mm

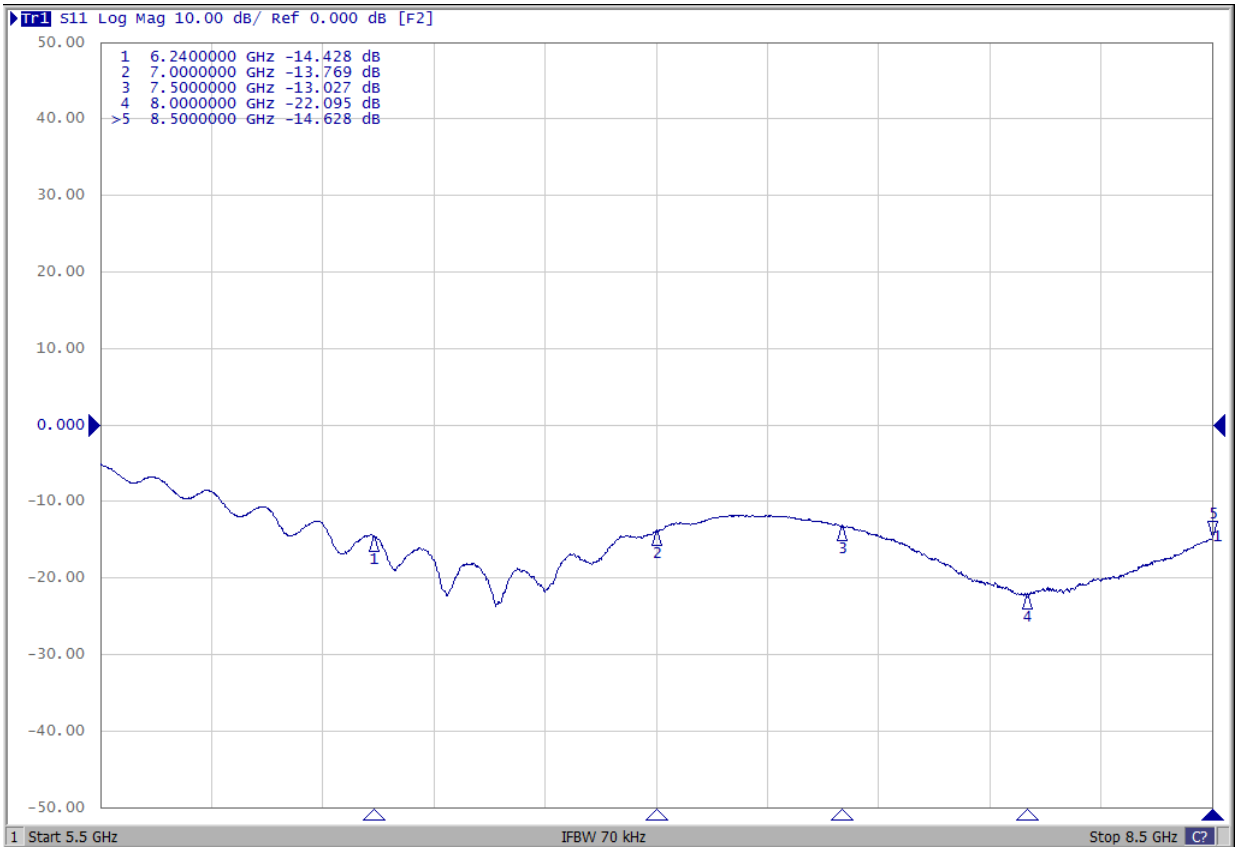
Front



Back



Antenna S11 on Test Board



RADIATION PATTERNS

Radiation Pattern and Gain were dependent on measurement board design. The specification of AMANT3216110Y1Tantenna was measured based on the PCB size and installation position as shown in the below figure Test Board.