

2.4GHz 1005 Chip Antenna: ANT1005R2400L2L1

Applications:

WLAN, 802.11b/g, Bluetooth, etc...

Manufacturer: Always Promotion, Inc.

**Address: 1000 Sawgrass Village Dr Ste 102,
Ponte Vedra Beach, FL 32082**

Features

SMD, high reliability, ultra compact, Omni-directional...



Part number

ANT 1005 R 2400 L2 L1
(1) (2) (3) (4) (5) (6)

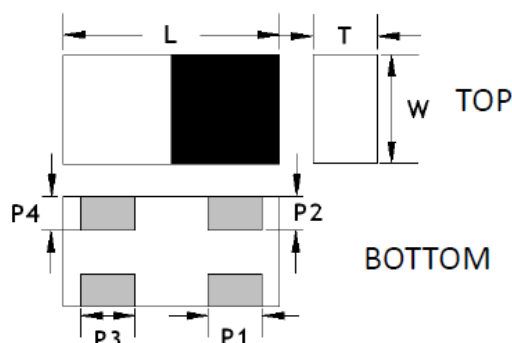
(1) Product code	Chip Antenna
(2) Size Code	1.0x0.5mm
(3) Packing	Tape and reel
(4) Frequency	2.4GHz
(5) Series	L2
(6) Type	L1

Electrical Specification

Working Frequency Range	2402 ~2480MHz
Peak Gain	2.21dBi(typ.)
Impedance	50 Ohm
VSWR	3.0 Max
Polarization	Linear
Azimuth Beamwidth	Omni-directional
Operation Temperature(°C)	-40~85°C

The specification is defined on EVB.

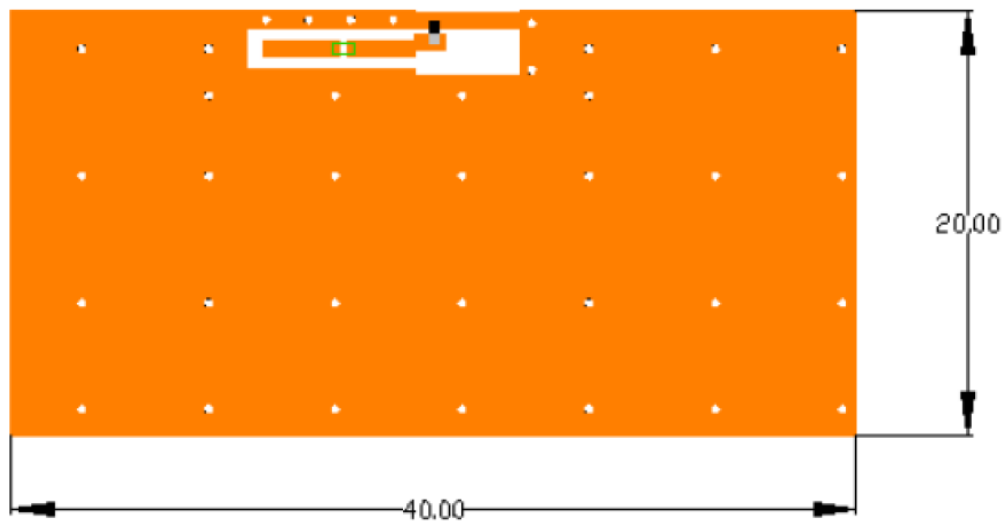
Dimension and Terminal Configuration



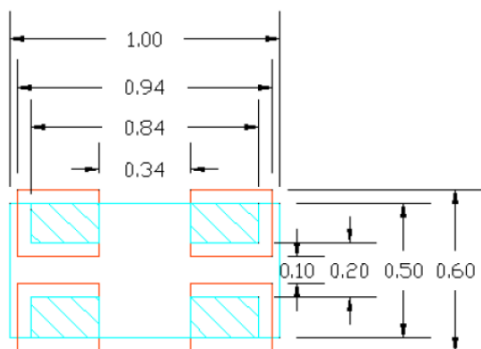
Dimension (mm)		No.	Terminal Name
L	1.00 ± 0.10	P1	Ground point
W	0.50 ± 0.10	P2	Ground point
T	0.37 Max	P3	Feeding Pad
P1	0.25 +0.10/ -0.15	P4	Feeding Pad
P2	0.15 +0.10/ -0.15		
P3	0.25 +0.10/ -0.15		
P4	0.15 +0.10/ -0.15		

Evaluation Board Reference - Regular Layout

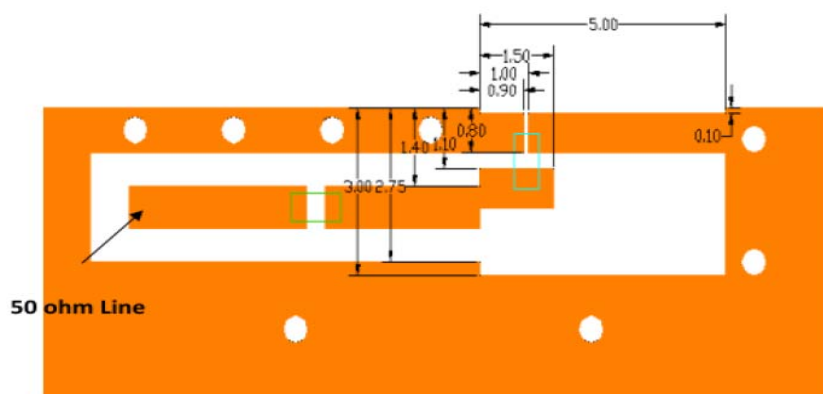
PCB Dimension



Antenna Layout Reference



□ : Chip Antenna
□ : Land Pattern



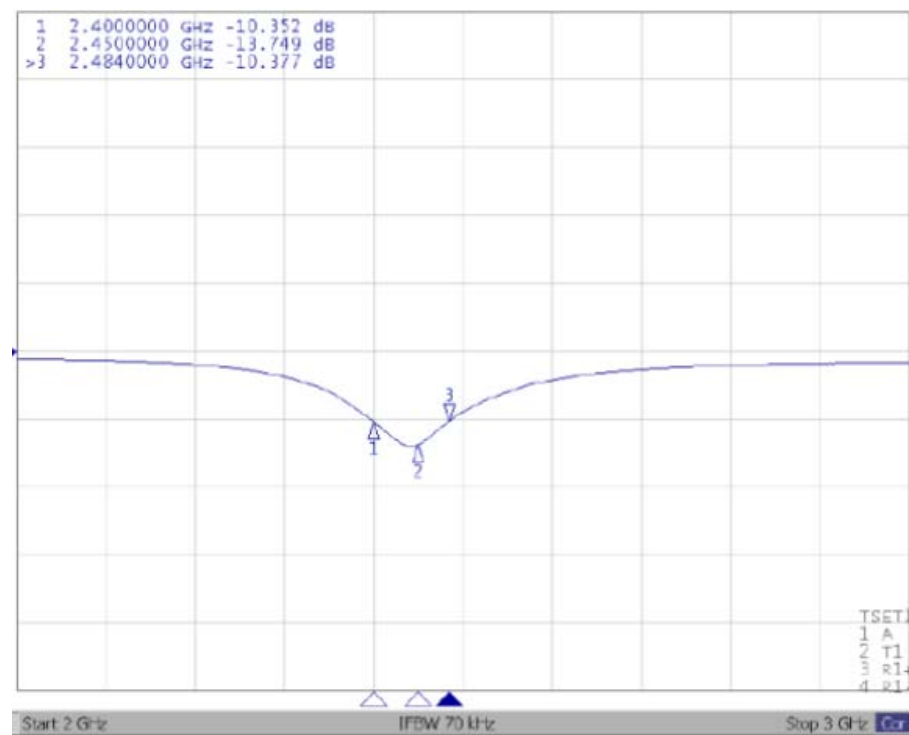
50 ohm Line

Unit : mm

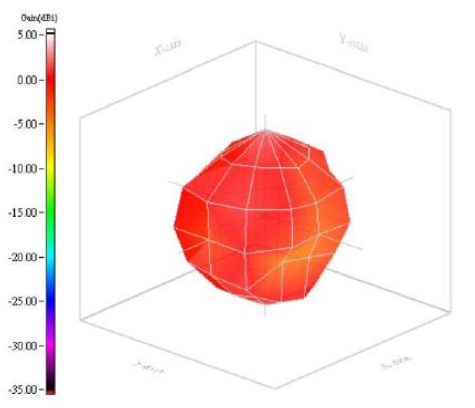
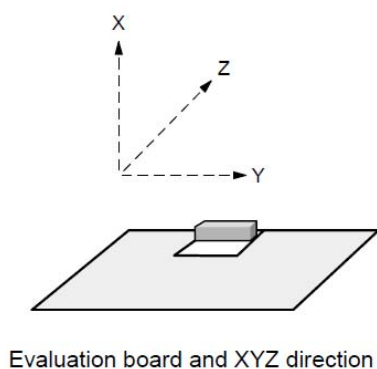
□ : Chip Antenna
□ : L/C matching components
□ : Land Pattern

Electrical Characteristics

Return Loss



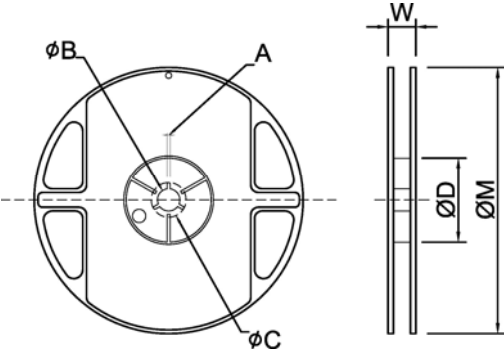
Radiation

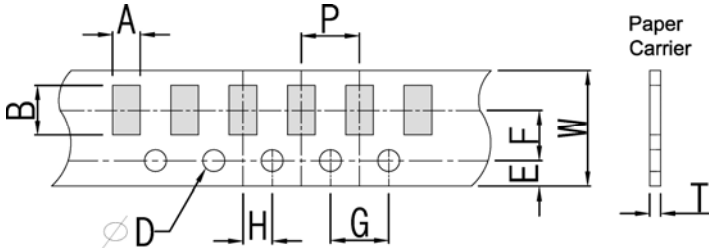


Max Gian:2.21dBi

Efficiency = 70.3%

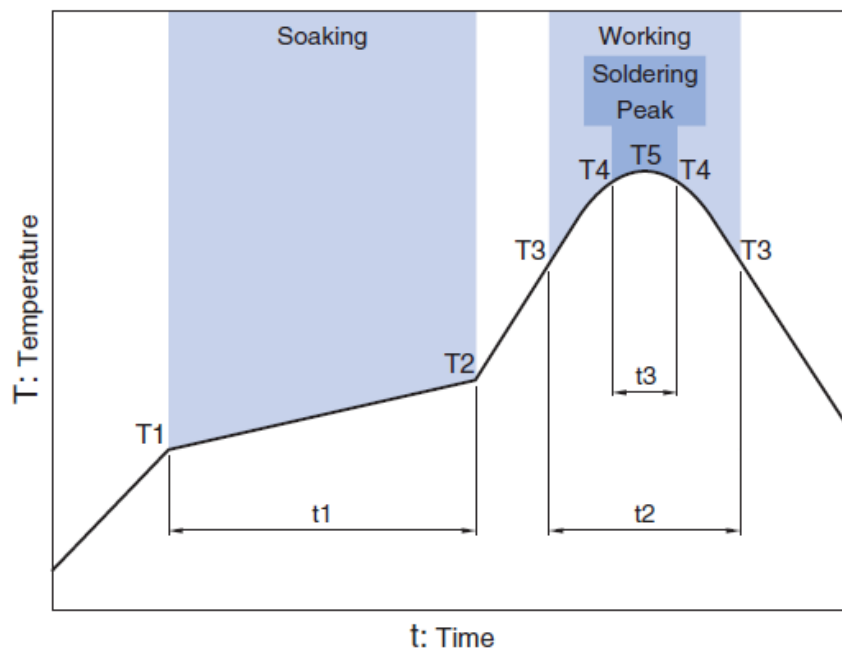
Taping Specifications

Reel and Taping Specification											
Reel Specification											
											
TYPE		SIZE		A	φB	φC	φD	W	φM		
1005		7"	10K/Reel	2.0±0.5	13.5±1.0	21±1.0	60±1.0	11.5±2.0	178±2.0		

Tapping Specification											
											
Packaging	Type	A	B	W	E	F	G	H	T	φD	P
Paper Type	1005	0.8±0.05	1.3±0.05	8.0±0.20	1.75±0.10	3.0±0.05	4.0±0.10	2.0±0.05	0.75±0.10	1.50±0.10	4.0±0.1

TYPICAL ROHS REFLOW PROFILE

Pb free solder



Soaking			Working		Soldering		Peak
Temp.		Time	Temp.	Time	Temp.	Time	Temp.
T1	T2	t1	T3	t2	T4	t3	T5
150°C	180°C	60 to 120sec	230°C	more than 30sec	247 to 253°C	within 10sec	260°C Max.

Revision History

Version	Date	Description
Ver.01	Nov.2023	New issue.