



TopGain

SPECIFICATION

ANTENNA TYPE

Chip Antenna

MODEL NO.

CH2G4-6022-000D1-01

VERSION

V01

頂益科技有限公司

TOPGAIN TECHNOLOGY CO., LTD.

新竹市新源街 108 號 4 樓之 1

4F.-1, No.108, Xinyuan St., East Dist., Hsinchu City 300, Taiwan

TEL: +886-3-5722777

FAX: +886-3-5725777

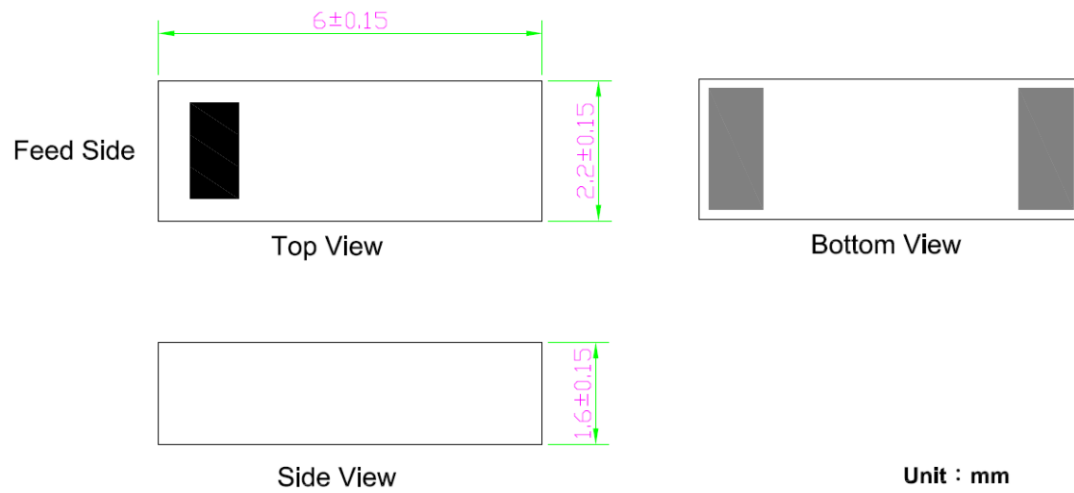
Contents

1. Antenna Specification	3
2. Antenna Dimension	4
3. Test Data	5~10
4. Layout Guide	11
5. Soldering Conditions	12
6. Package	13

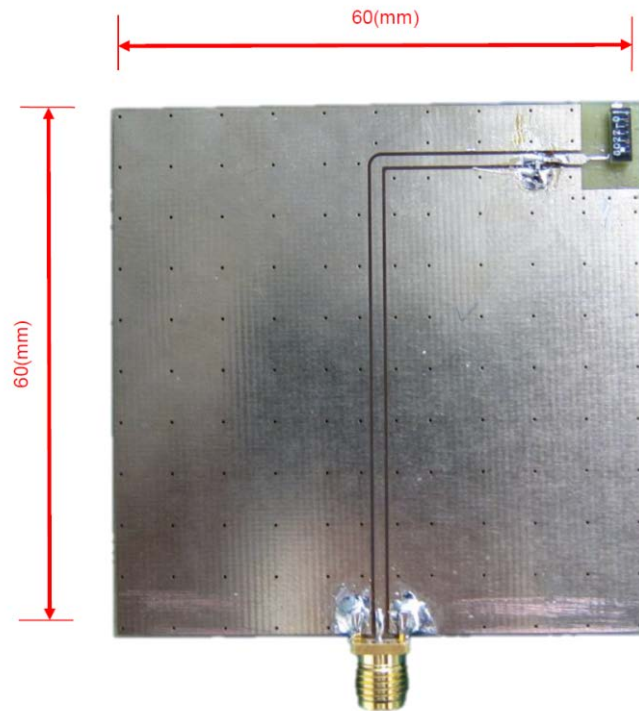
1. Antenna Specification

Outline Dimensions	6.0x2.2x1.6(mm)
Ground Plane	60×60(mm)
Frequency Range	2.4GHz ~ 2.5GHz
Impedance	50 Ohm Nominal
Bandwidth (under -10dB return loss)	100MHz (Typ.)
Radiation	Omni-directional
Peak Gain	2.3 dBi (Typ.)
Efficiency	60% (Typ.)
Polarization	Linear Polarization
Storage Temp	-25℃ ~ +85℃
Color	Black

2. Antenna Dimension

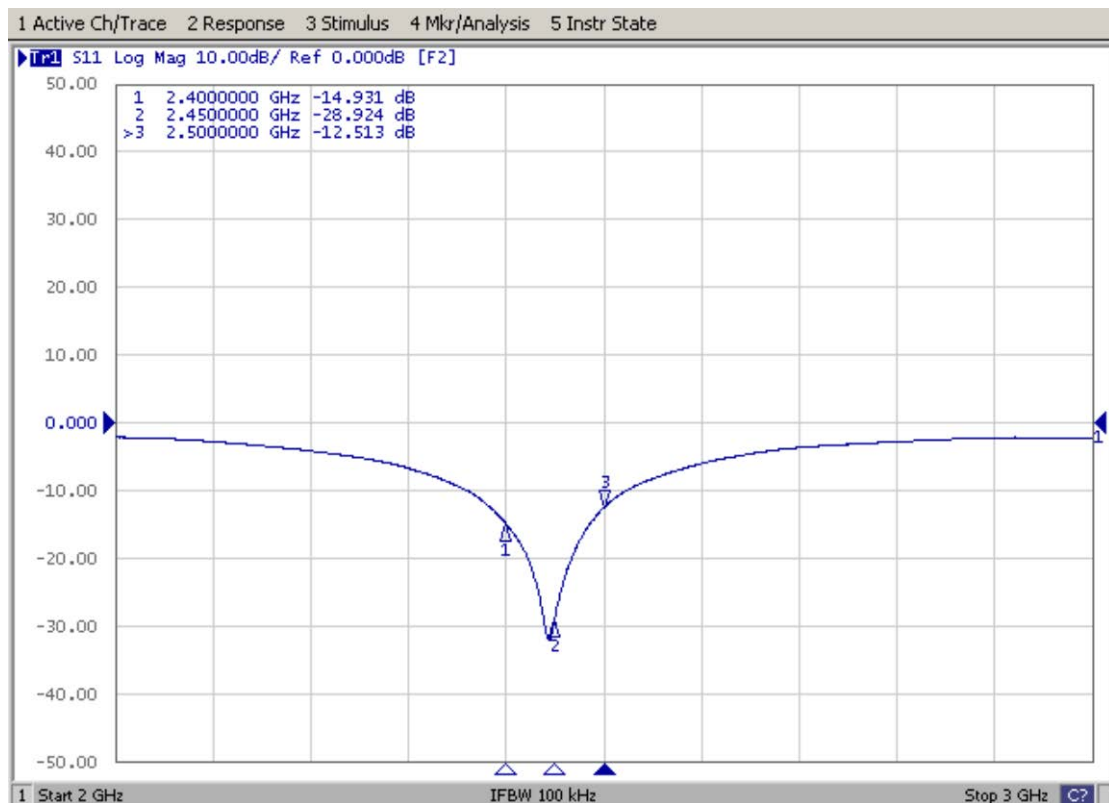


3. Test Data

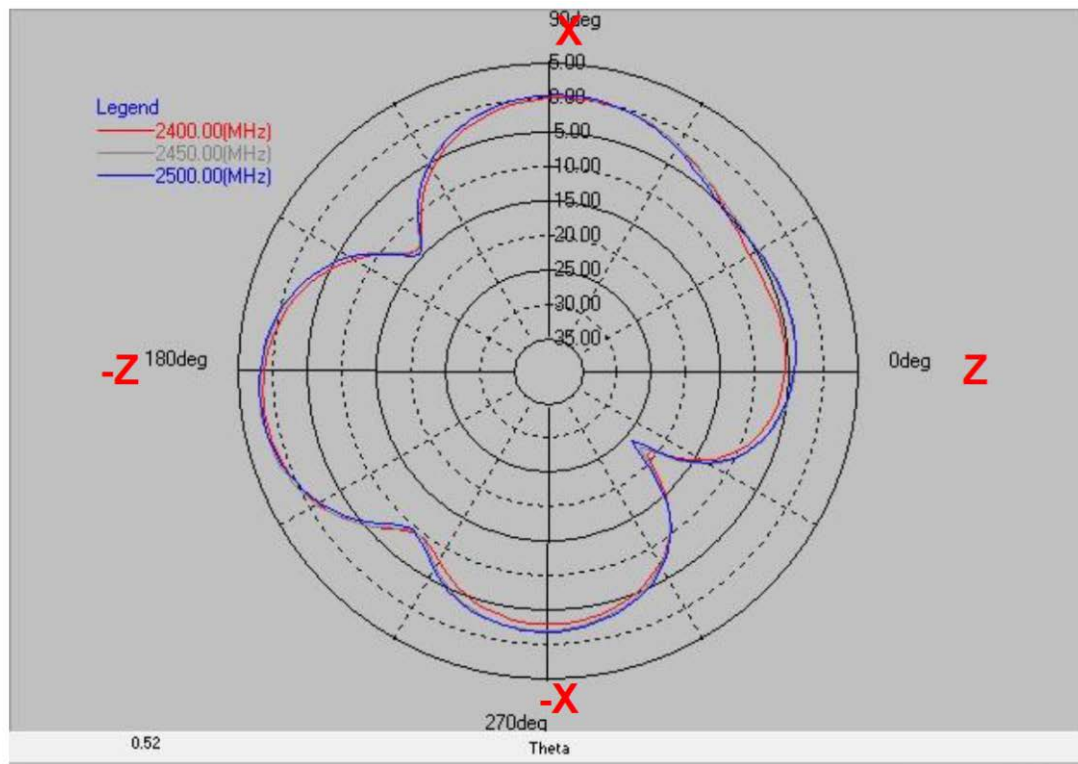


3.1 ELECTRICAL CHARACTERISTICS

S11

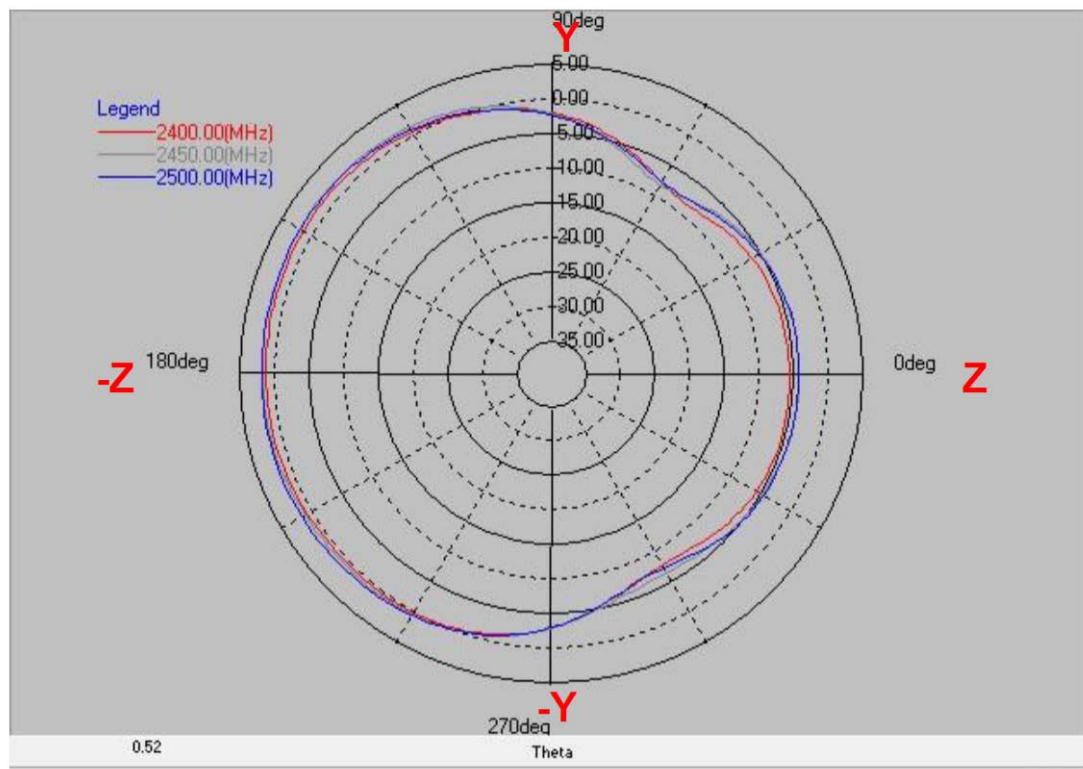


Frequency(MHz) : **2400~2500.** Pattern Field : **Z-X plane**



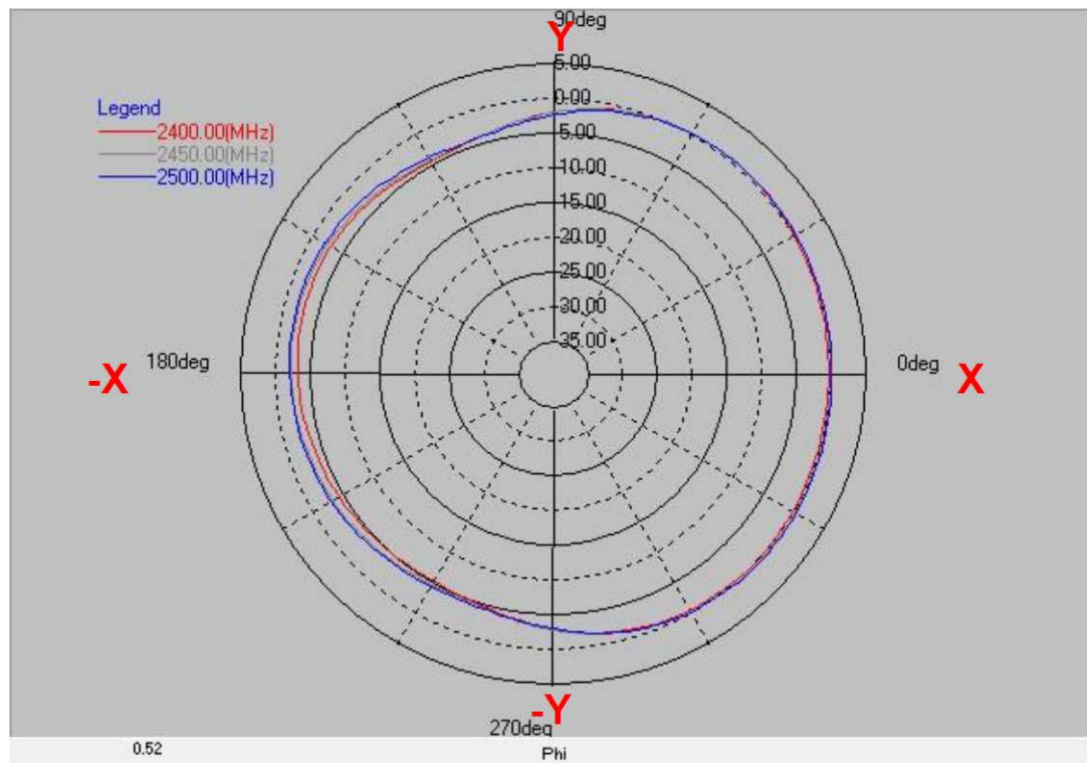
Frequency	Max value(dBi)	Min value(dBi)	Average(dBi)
2400(MHz)	1.64	-21.05	-3.40
2450(MHz)	2.12	-22.47	-2.82
2500(MHz)	2.08	-24.13	-2.88

Frequency(MHz) : **2400~2500.** Pattern Field : **Z-Y plane**



Frequency	Max value(dBi)	Min value(dBi)	Average(dBi)
2400(MHz)	1.45	-8.68	-1.62
2450(MHz)	2.00	-8.51	-1.09
2500(MHz)	1.92	-8.10	-1.08

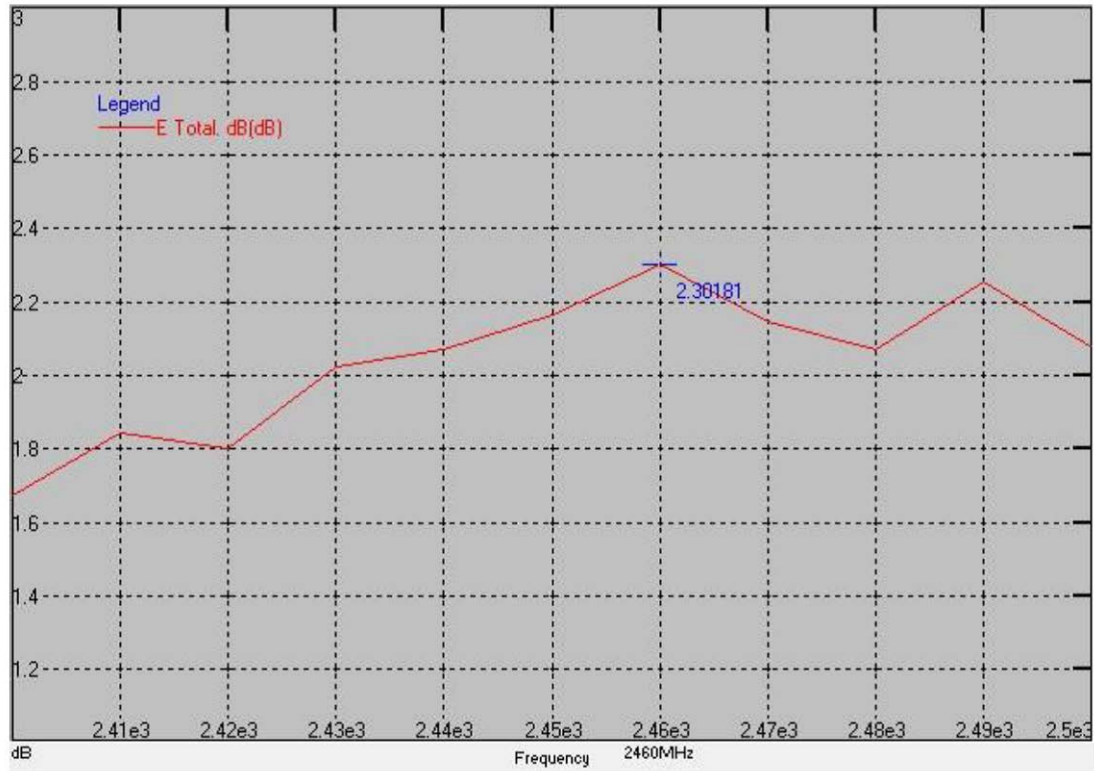
Frequency(MHz) : **2400~2500.** Pattern Field : **X-Y plane**



Frequency	Max value(dBi)	Min value(dBi)	Average(dBi)
2400(MHz)	0.30	-5.40	-1.82
2450(MHz)	0.41	-4.87	-1.47
2500(MHz)	0.38	-4.66	-1.40

3.2 Antenna Peak Gain

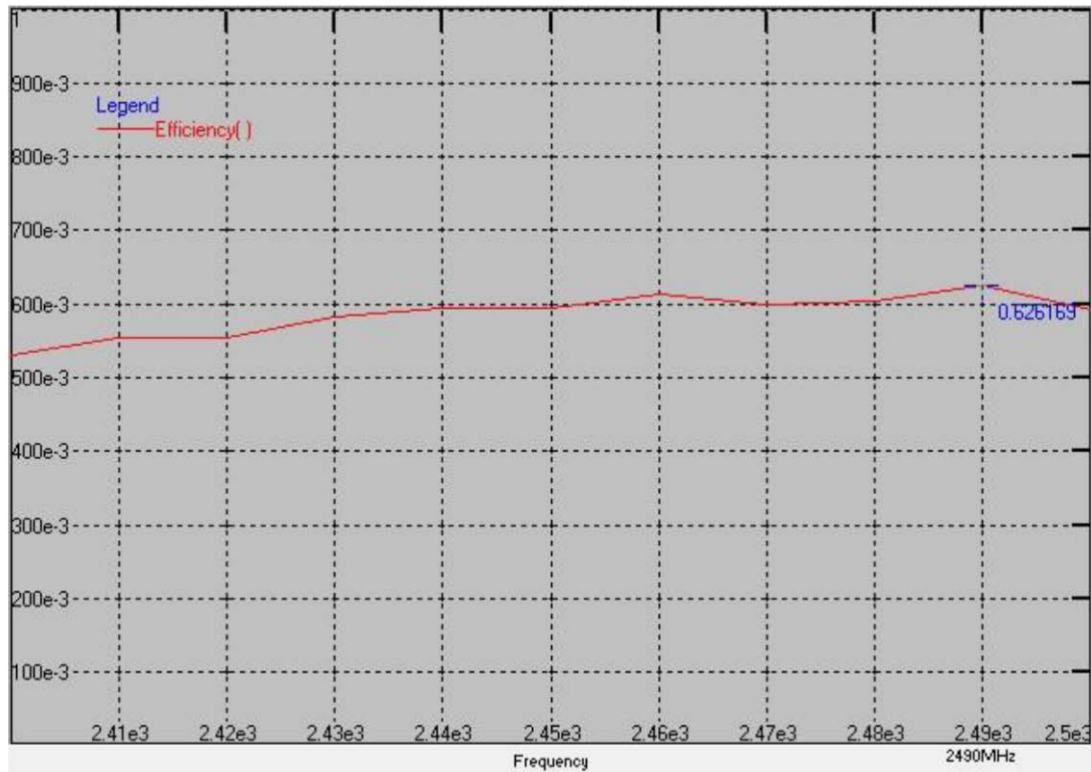
Frequency(MHz) : 2400~2500.



Peak Gain : Max 2.3dBi @ 2460 MHz

3.3 Antenna Efficiency

Frequency(MHz) : 2400~2500.

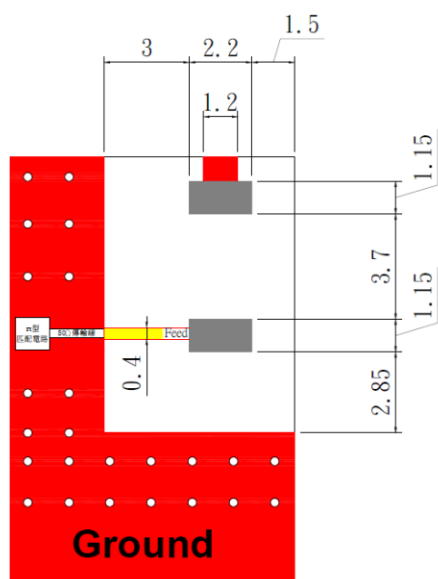


Efficiency : Max 62 % @ 2490 MHz

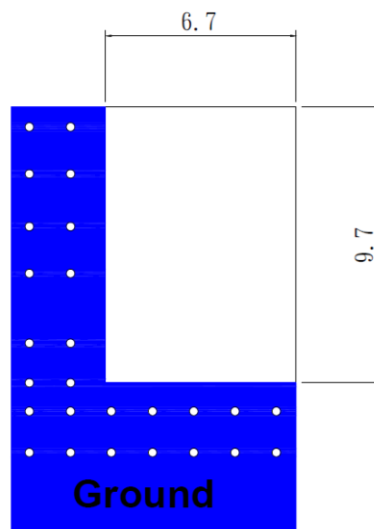
4. Layout Guide

4.1 Solder Land Pattern

Land pattern for soldering (black marking areas) is as shown below. Matching circuit is needed for good performance, when customer's device is different.



Top Layout

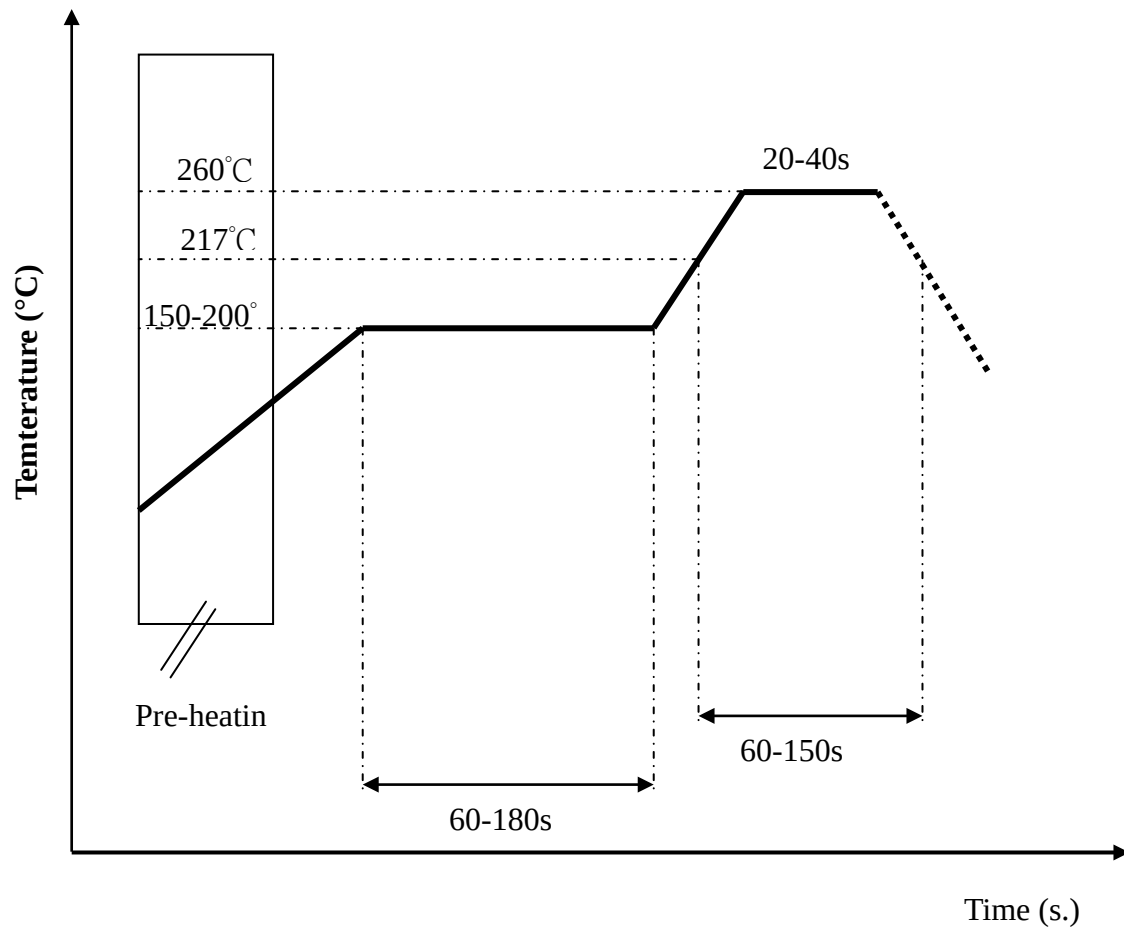


Bottom Layout

Unit:mm

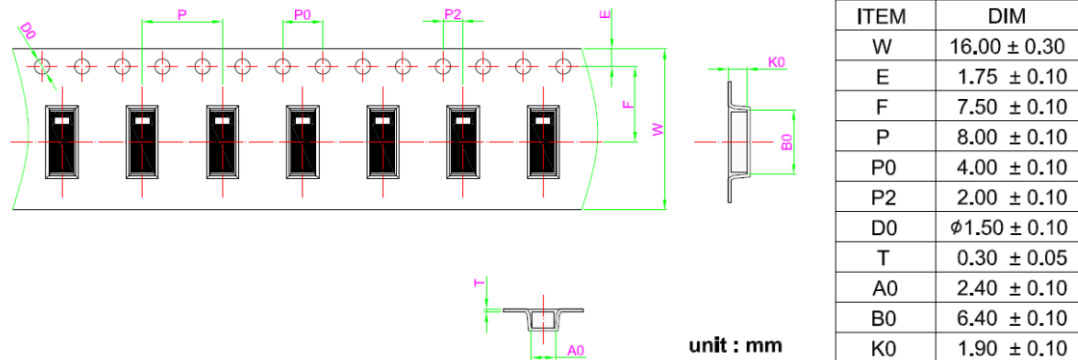
5. Soldering Conditions

5.1 Typical Soldering Profile for Lead-free Process



6. Package

6.1 Plastic Tape Specifications



6.2 Reel Dimensions

Typing Quantity : 4000 pieces per 13" reel

