



TopGain

SPECIFICATION

DESCRIPTION	Chip Antenna
PART NO.	CH2G4-5022-000D1-01
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

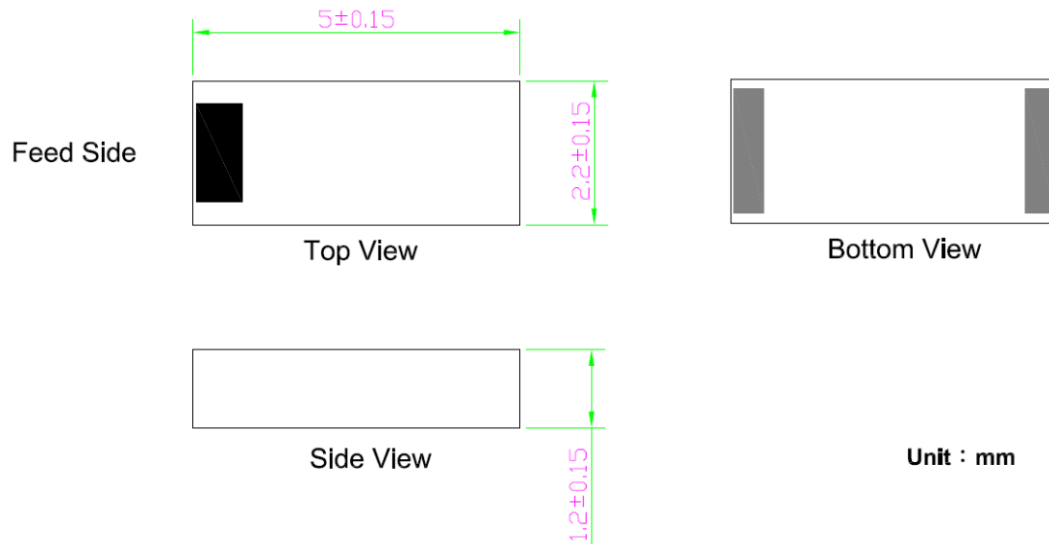
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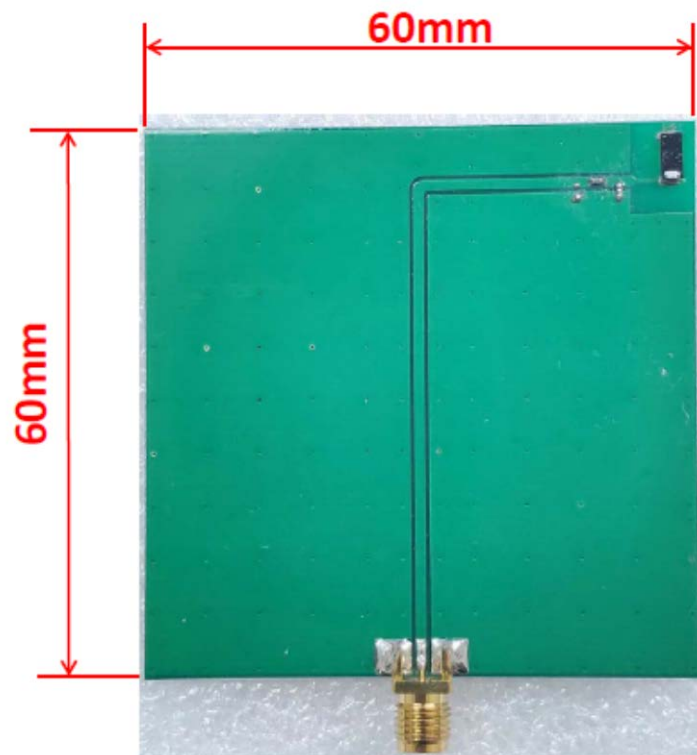
1. Antenna Specification

Outline Dimensions	5.0x2.2x1.2(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	2.34 dBi (Typ.)
Efficiency	53% (Typ.)
Polarization	Linear Polarization
Storage Temp	-25℃ ~ +85℃
Color	Black

2. Antenna Dimension

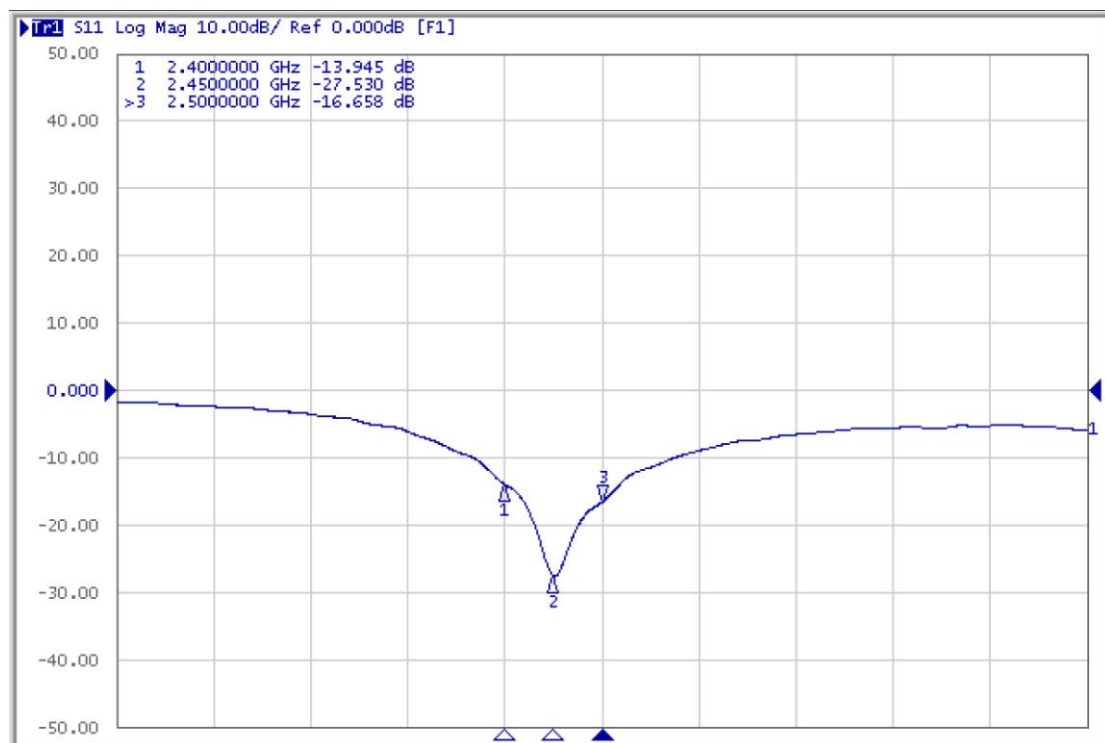


3. Test Data



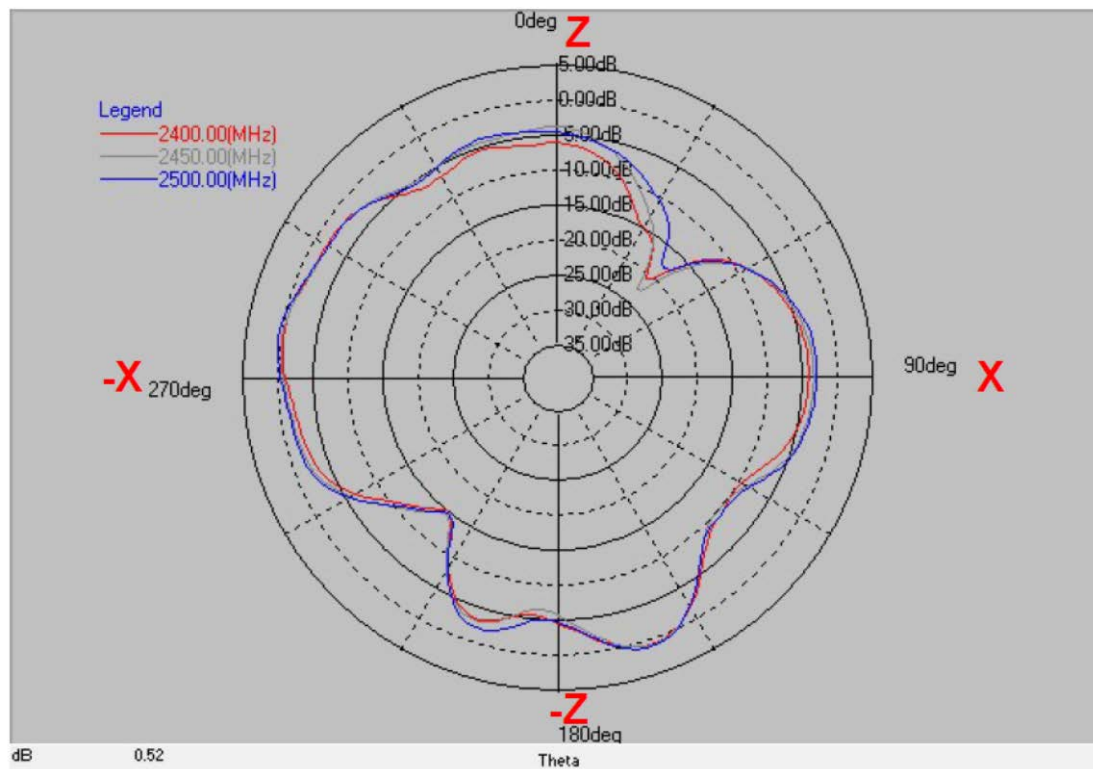
3.1 ELECTRICAL CHARACTERISTICS

S11



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

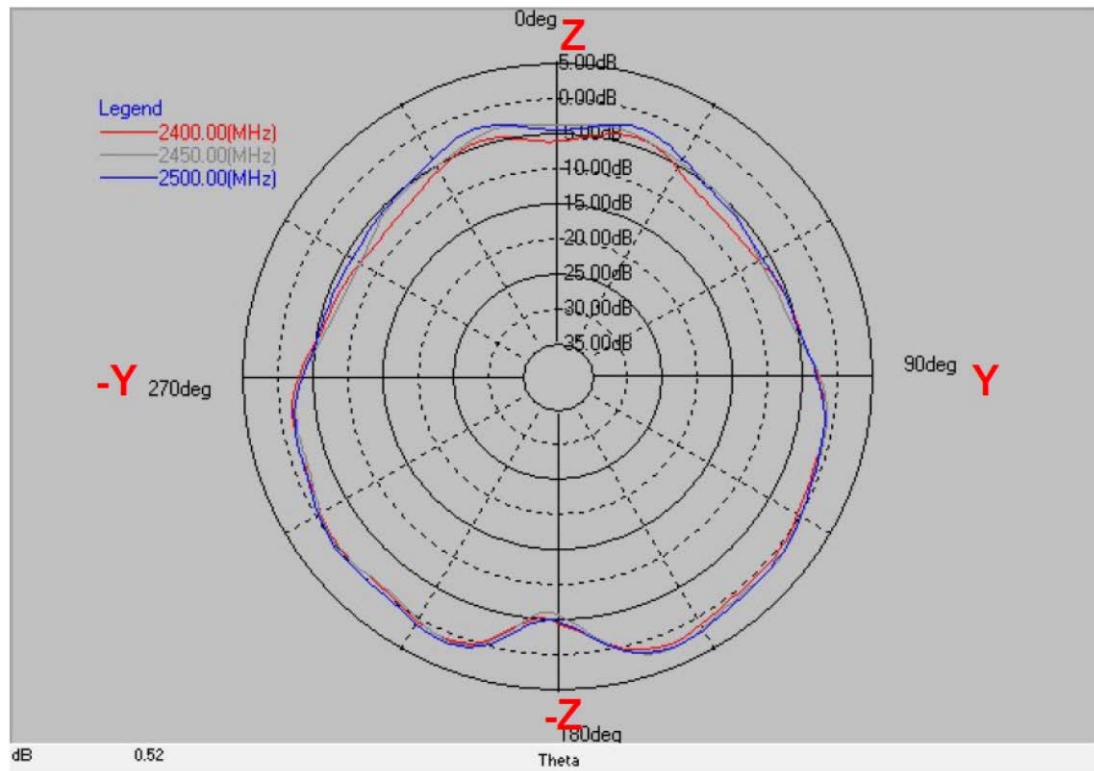
**Phi=0
Z-X**



Frequency	Pick Gain
2400(MHz)	0.52 dB
2450(MHz)	0.62 dB
2500(MHz)	0.85 dB

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

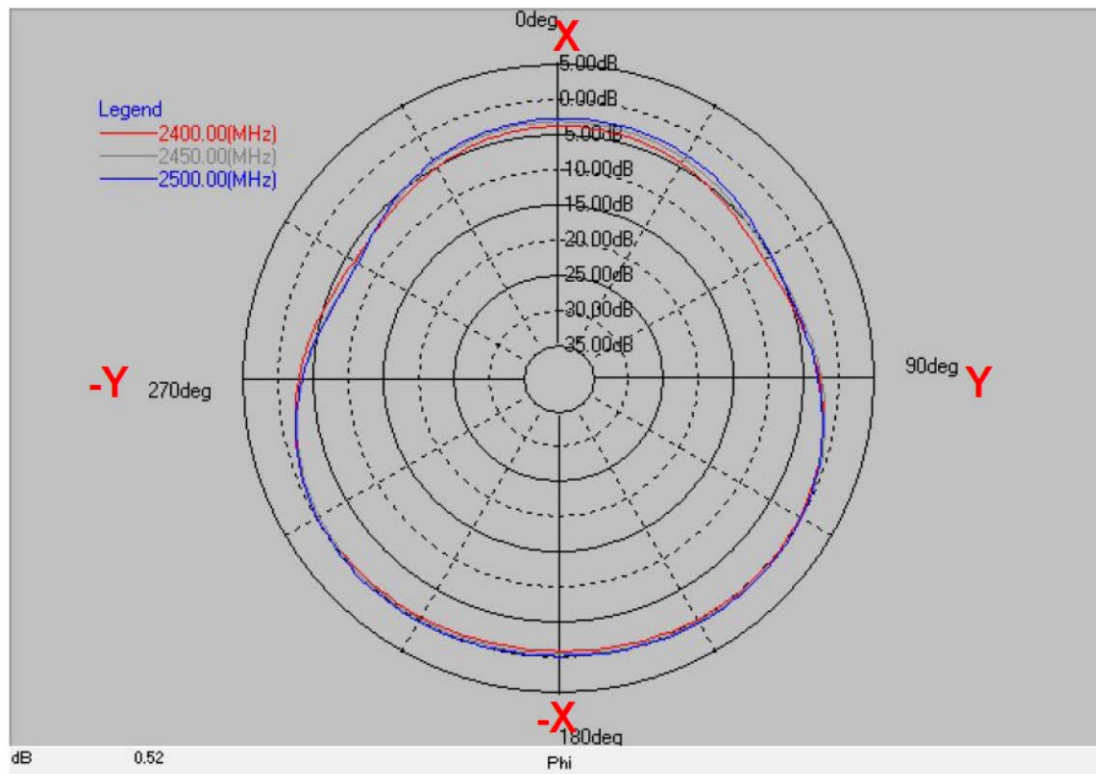
Phi=90
Z-Y



Frequency	Pick Gain
2400(MHz)	1.51 dB
2450(MHz)	2.23 dB
2500(MHz)	2.15 dB

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

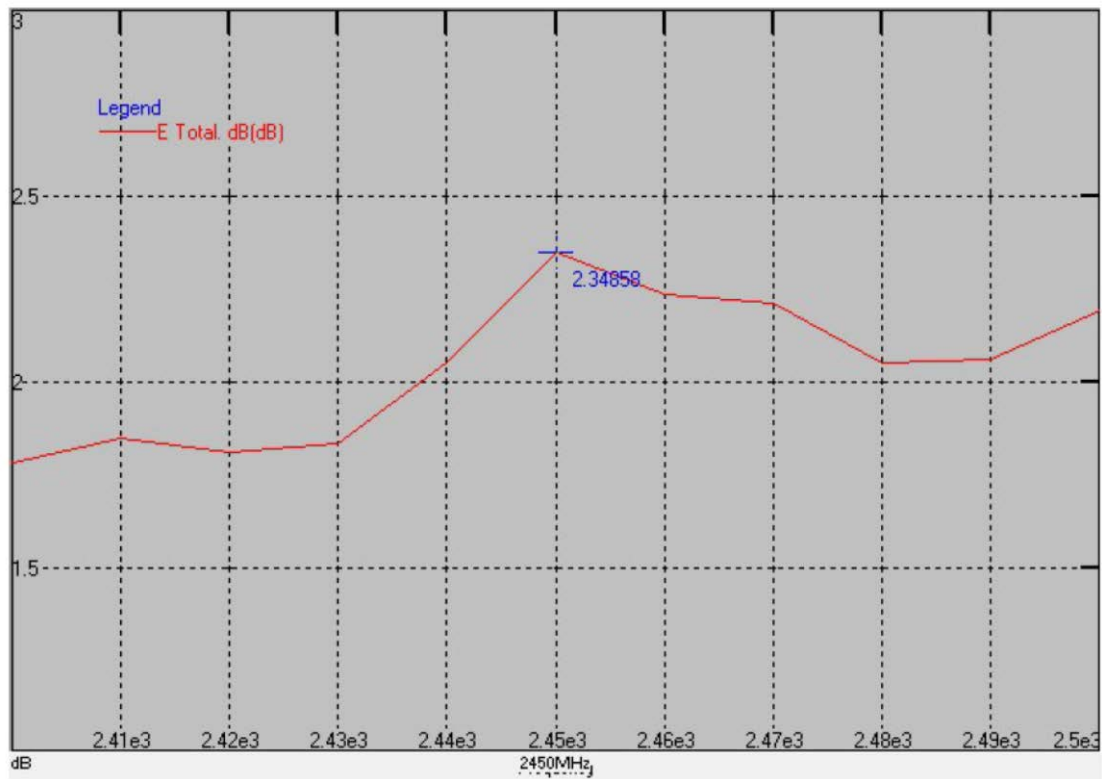
Theta=90
X-Y



Frequency	Pick Gain
2400(MHz)	0.03 dB
2450(MHz)	0.34 dB
2500(MHz)	0.38 dB

3.3 Antenna Peak Gain

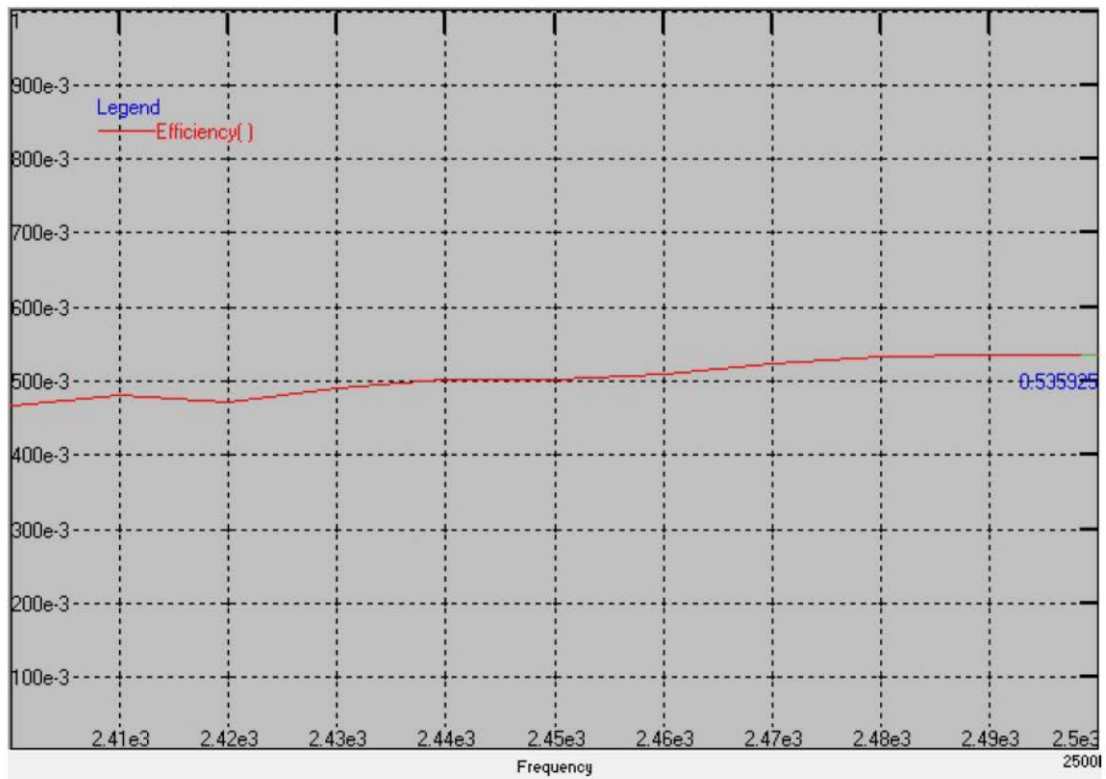
Frequency(MHz) : 2400~2500.



Peak Gain : Max 2.34 dBi @ 2450 MHz

3.4 Antenna Efficiency

Frequency(MHz) : 2400~2500.

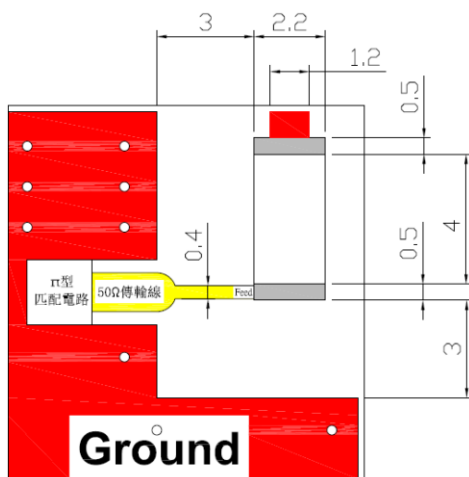


Efficiency : Max 53 % @ 2490 MHz

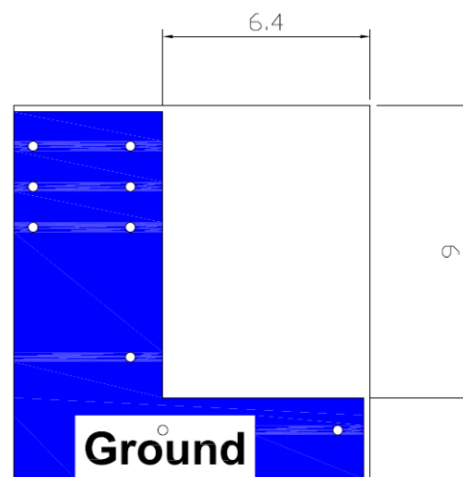
4. Layout Guide

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

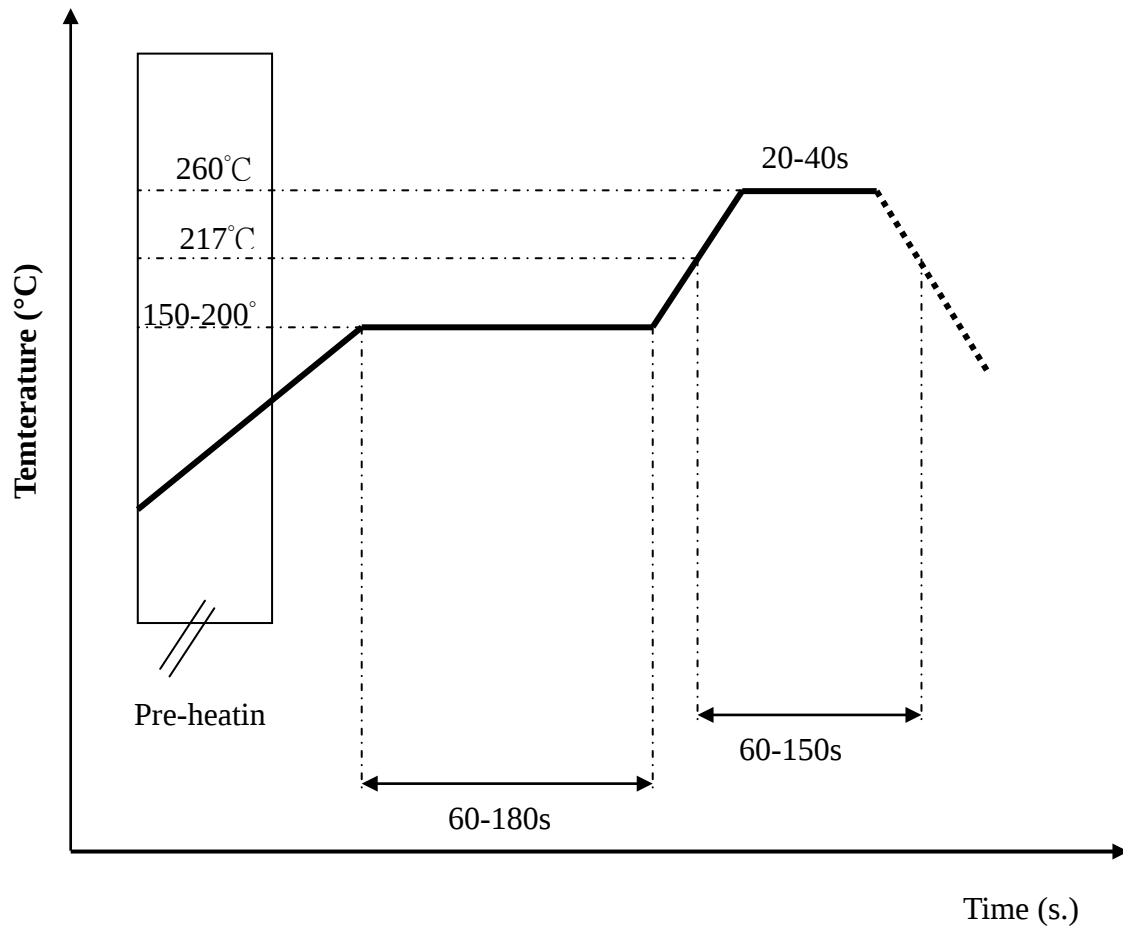


Bottom Layout

Unit : mm

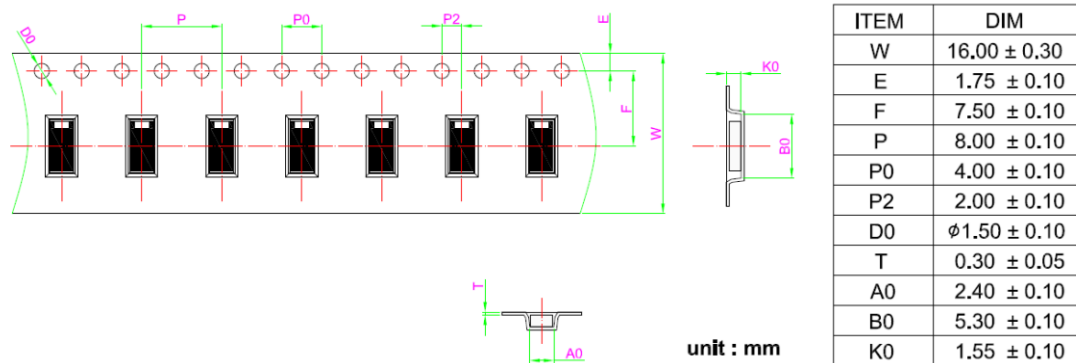
5. Soldering Conditions

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

