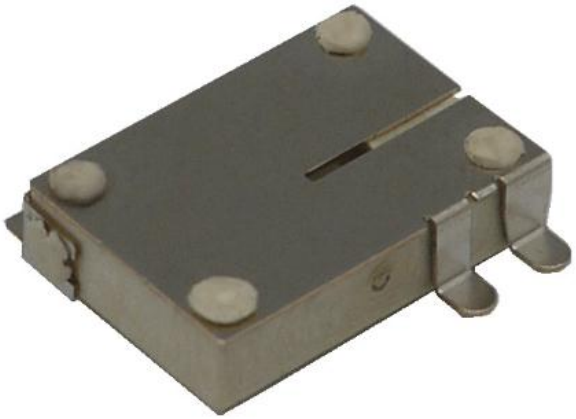
PulseLARSEN Antennas

TECHNICAL DATA SHEET

Description: 2.4GHz SMT PIFA Antenna

Series: Embedded Antenna

PART NUMBER: W3613



Features:

- Frequency: 2.4-2.5GHz
- Gain: 4dBi
- Size: 14.2 x 13.3 x 3.2 mm
- SMT compatible
- Packing: Tape&Reel
- RoHS compliant

Applications:

- WiFi, ISM 2.4-2.5GHz
- Tablets, Notebooks
- IoT and M2M devices
- Portable Electronics
- Security, Transportation

All dimensions are in mm / inches

Issue: 1719

RoHS COMPLIANT

For more information:

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Suzhou New District
Jiangsu Province, Suzhou 215009 PR China
Tel: 86 512 6807 9998

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ELECTRICAL SPECIFICATIONS

Frequency	2.4-2.5GHz
Nominal Impedance	50Ω
VSWR	2:1
Peak Gain	4dBi +/- 1 dB
Radiation Pattern	Omni
Polarization:	Linear
Power withstanding	5W

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MECHANICAL SPECIFICATIONS

Plastic frame	LCP	
Color	Gray	
Weight	1	g
Size(LXWXT)	14.2(0.56)X13.3(0.52)X3.2(0.13)	mm(inch)
Fixing system	SMT	

ENVIRONMENTAL SPECIFICATIONS

Operating temperature	-40/+85	° C

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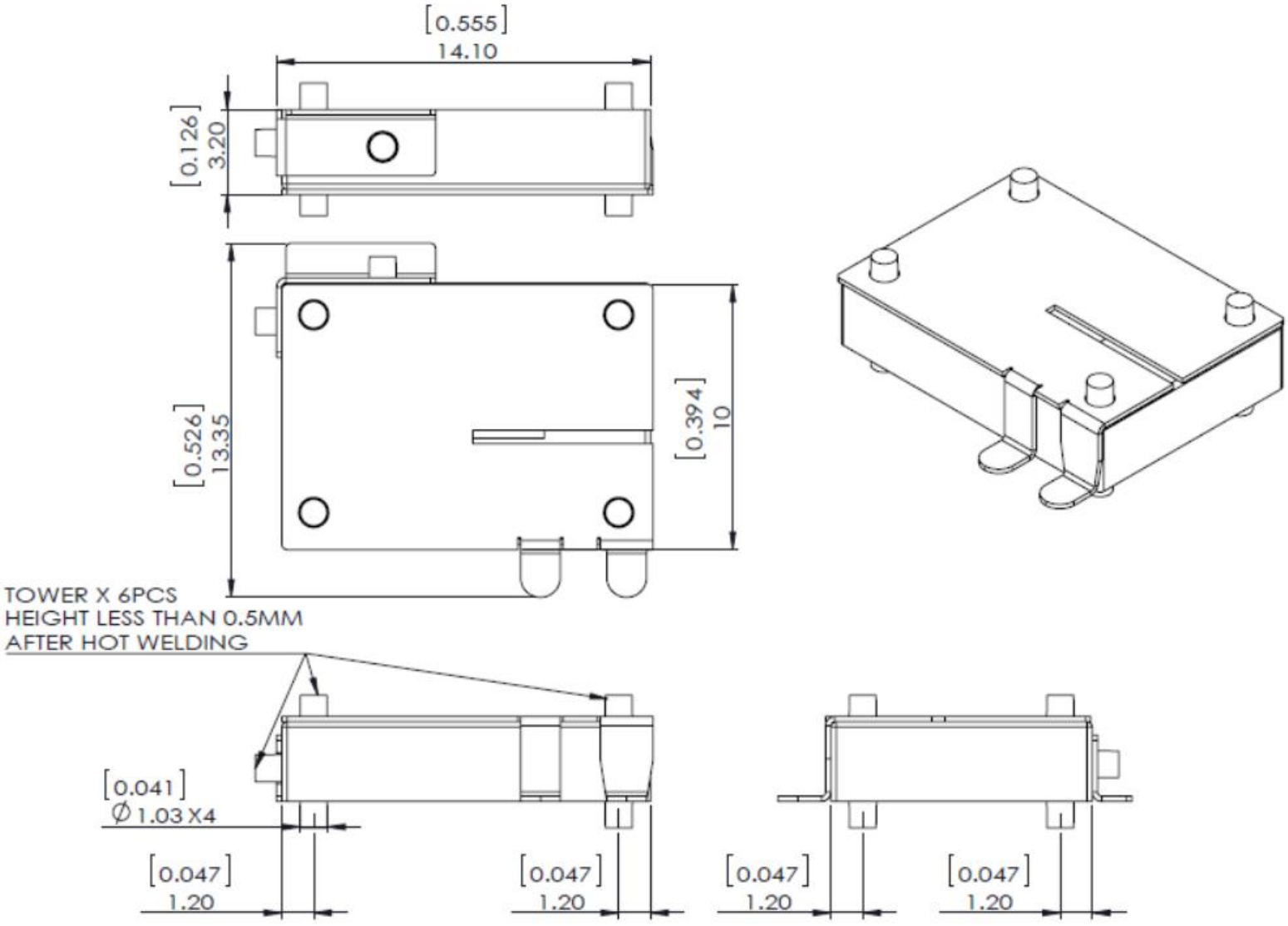
MECHANICAL DRAWING



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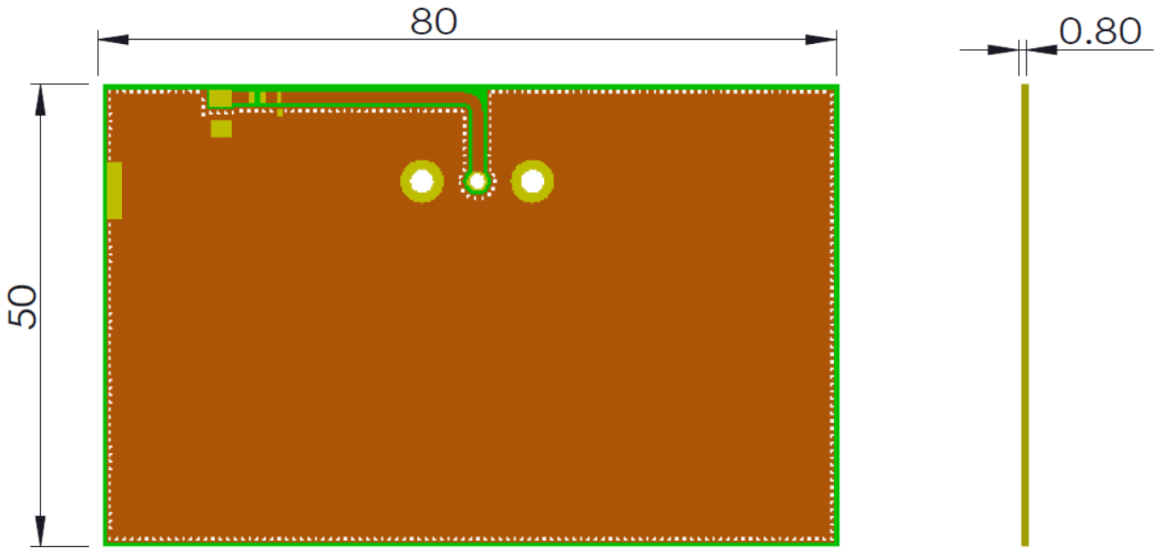
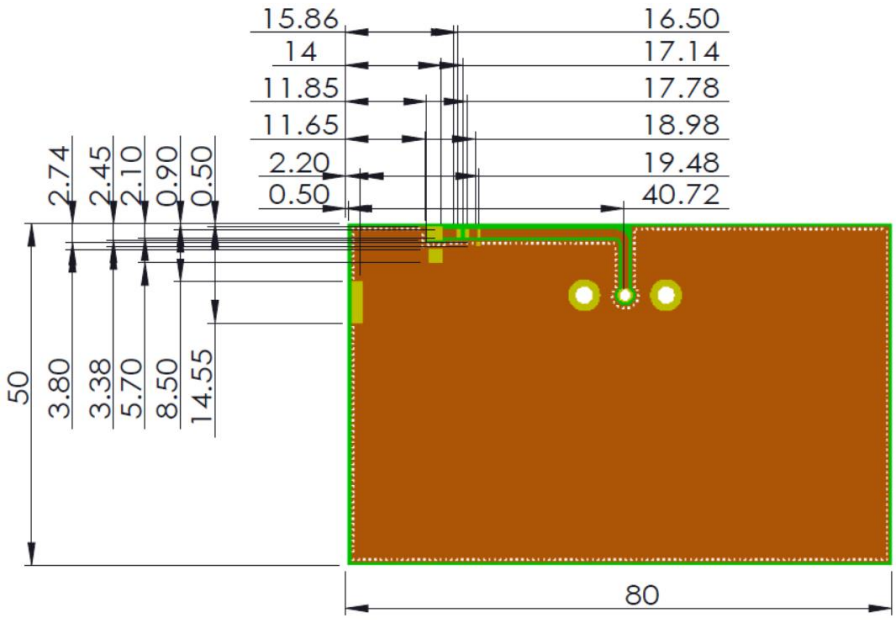
OTHER SPECIFICATIONS

PCB LAYOUT:

1， PCB material, FR4, size, 80X50X0.8mm



2， Clearance area (Top)



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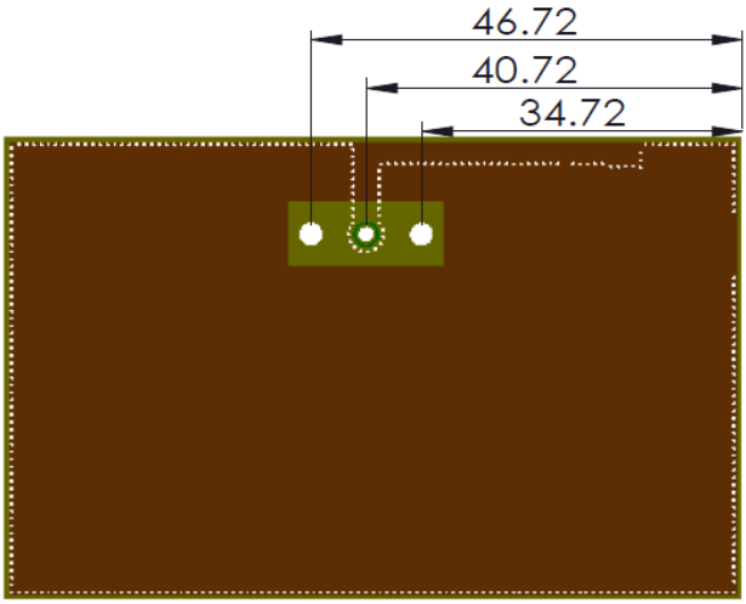
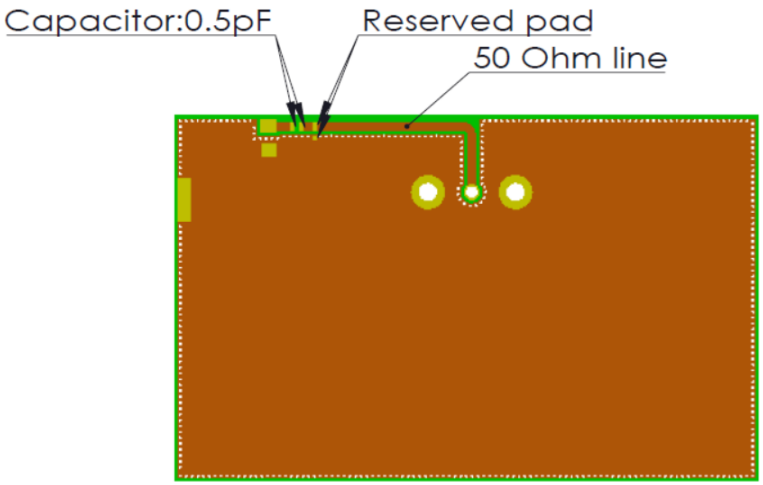
OTHER SPECIFICATIONS

3, Clearance area (Bottom)



4, PCB Features



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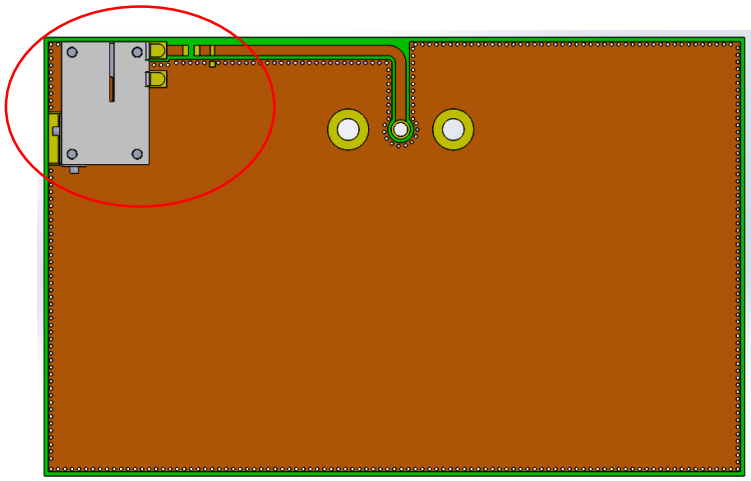
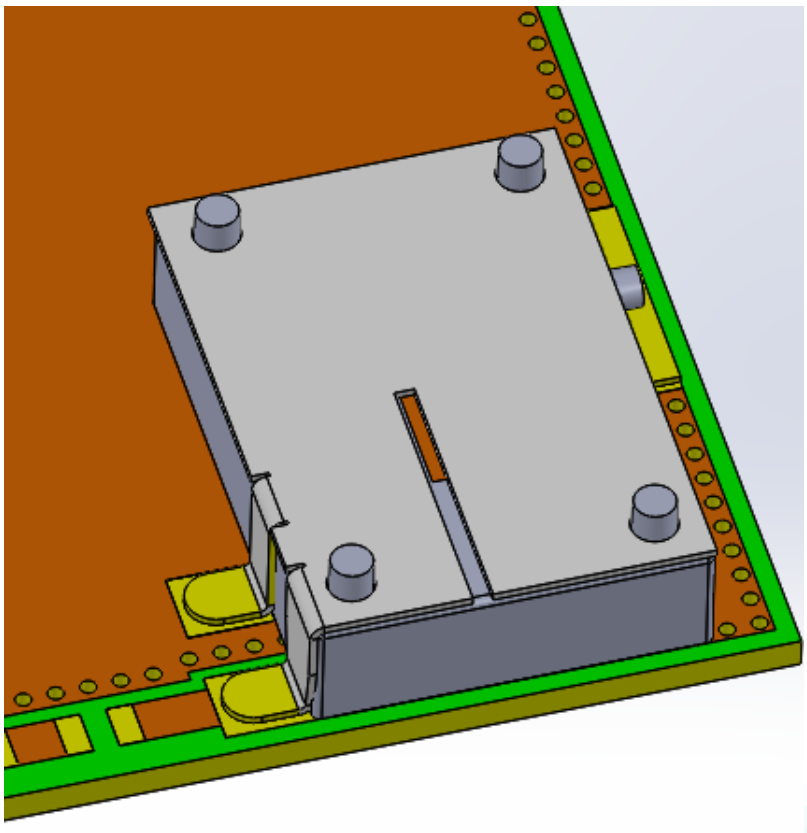
OTHER SPECIFICATIONS

5, Antenna on test board





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OTHER SPECIFICATIONS

Recommendation for reflow soldering process

Printing stencil thickness 0,15 - 0,25 mm is recommended for the solder paste. The maximum soldering temperature should not exceed 260°C. The temperature profile recommendations for reflow soldering process is presented in the Figures 1 and 2. The reflow profile presented in figure 1 describes minimum reflow temperatures. The reflow profile presented in figure 2 describes maximum reflow temperatures. located at the center of the coverage area.

	Method of heat transfer	Controlled hot air convection
1	Average temperature gradient in preheating	2.5 °C/s
2	Soak time	2-3 minutes
3	Max temperature gradient in reflow	3 °C/s
4	Time above 217 °C	Max 30 sec
5	Peak temperature in reflow	230 °C for 10 seconds
6	Temperature gradient in cooling	Max -5 °C/s

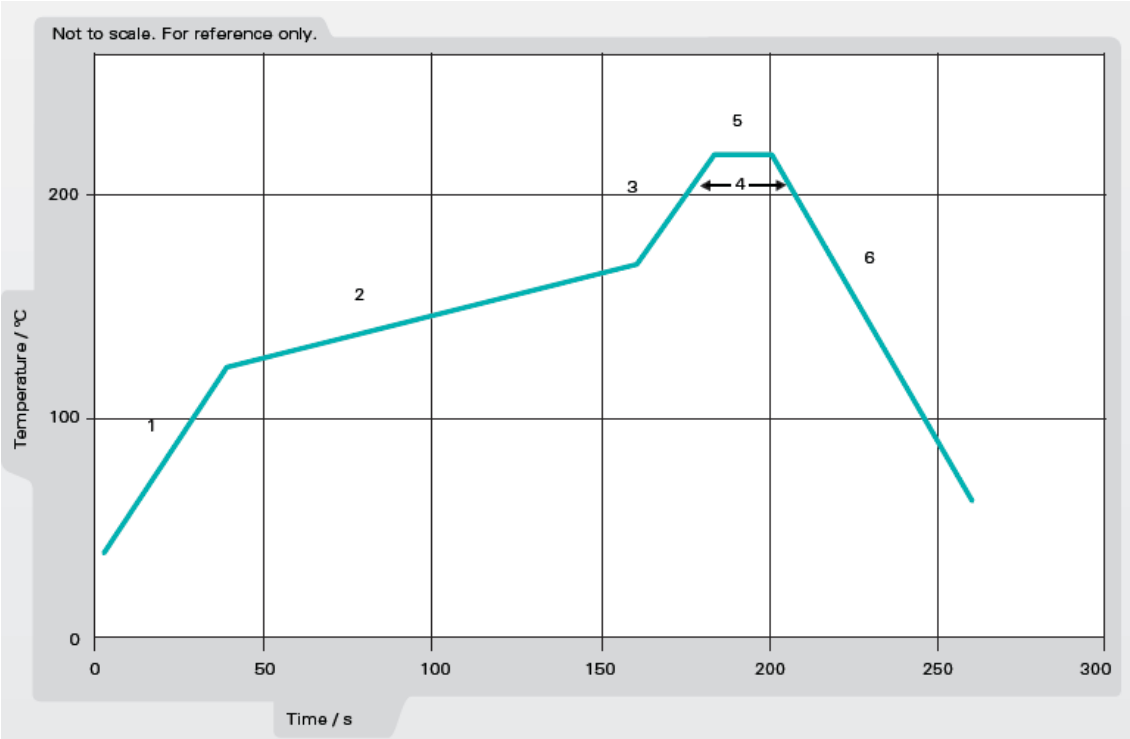

Figure 1. Minimum temperature profile recommendation for reflow soldering process

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	Method of heat transfer	Controlled hot air convection
1	Average temperature gradient in preheating	2.5 °C/s
2	Soak time	2-3 minutes
3	Max temperature gradient in reflow	3 °C/s
4	Time above 217 °C	Max 60 sec
5	Time above 230 °C	Max 50 sec
6	Time above 250 °C	Max 10 sec
7	Peak temperature in reflow	260 °C for 5 seconds
8	Temperature gradient in cooling	Max -5 °C/s

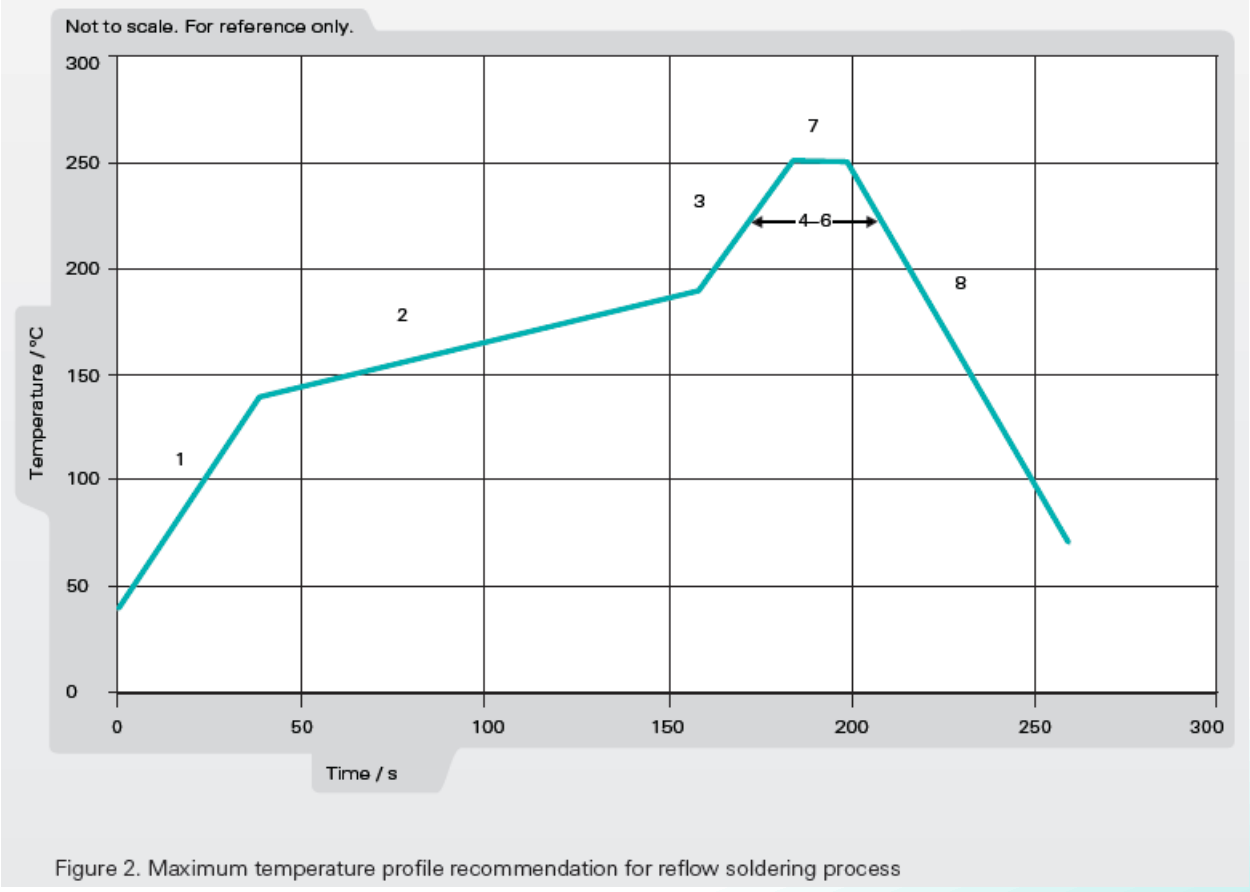

Figure 2. Maximum temperature profile recommendation for reflow soldering process

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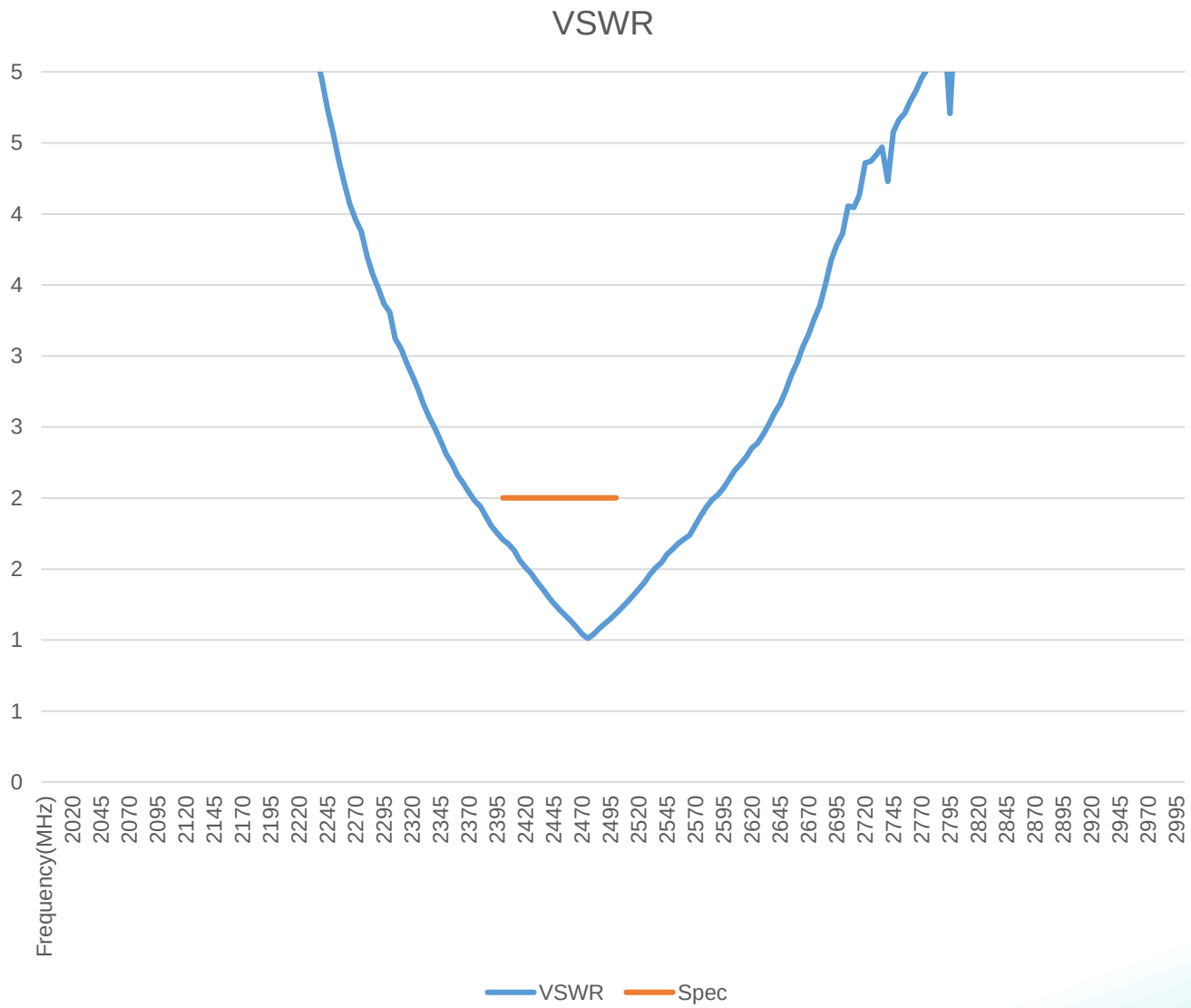
CHARTS

VSWR



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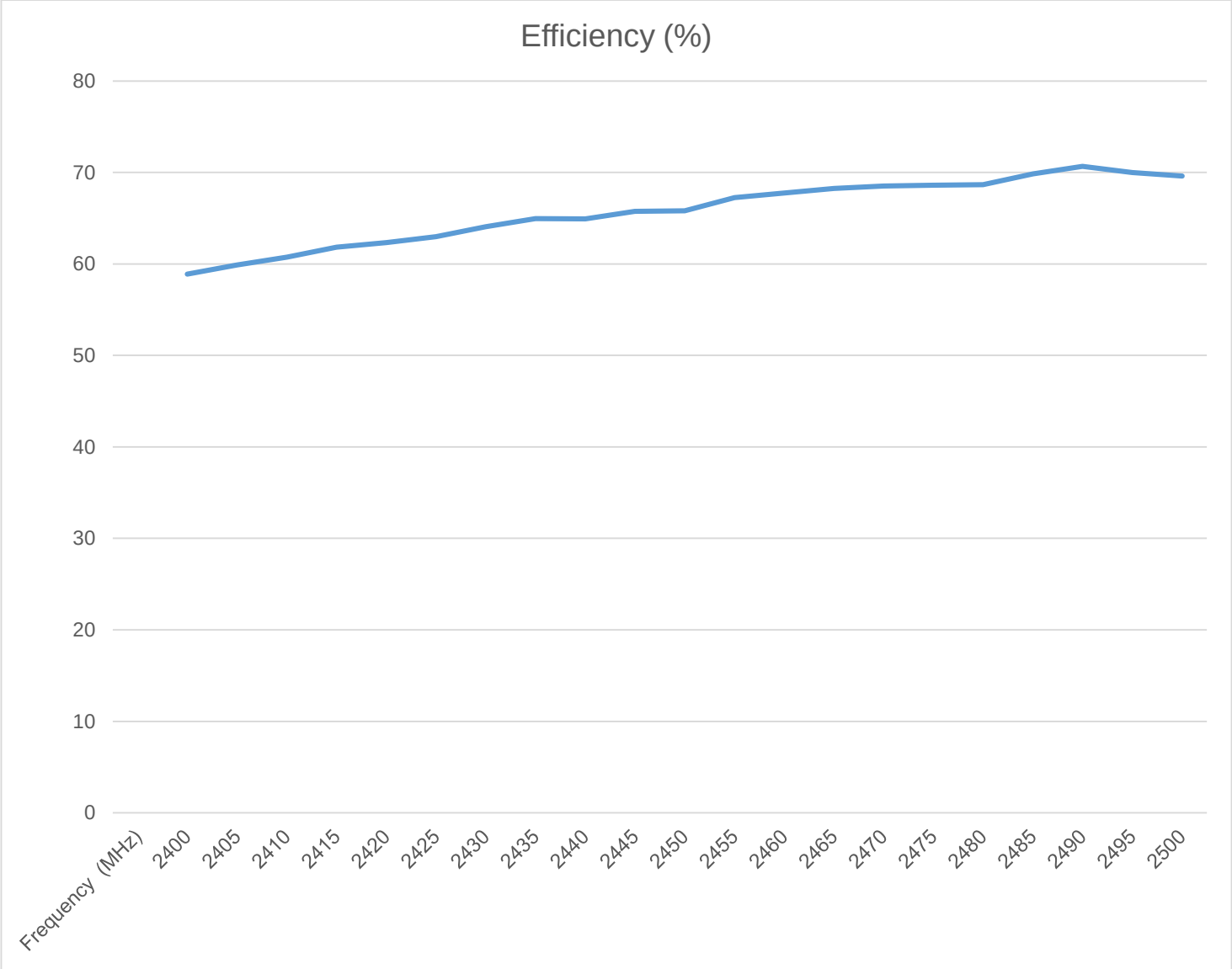
CHARTS

Efficiency(%)



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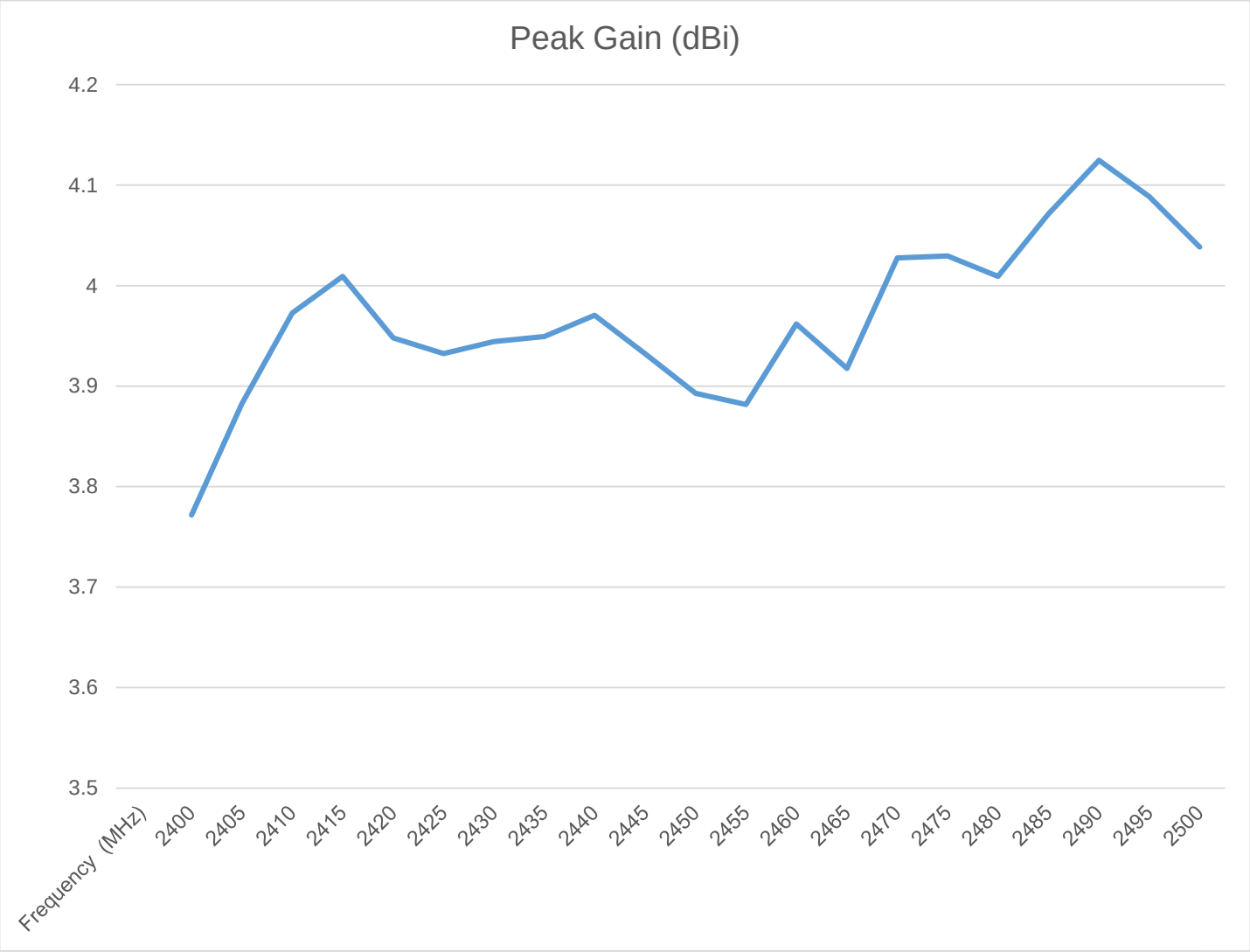
CHARTS

Peak Gain (dBi)



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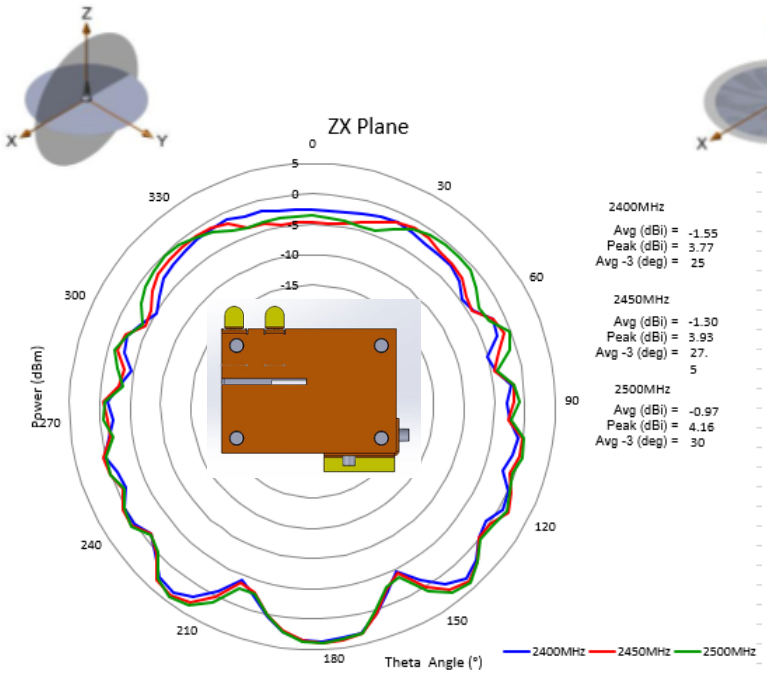
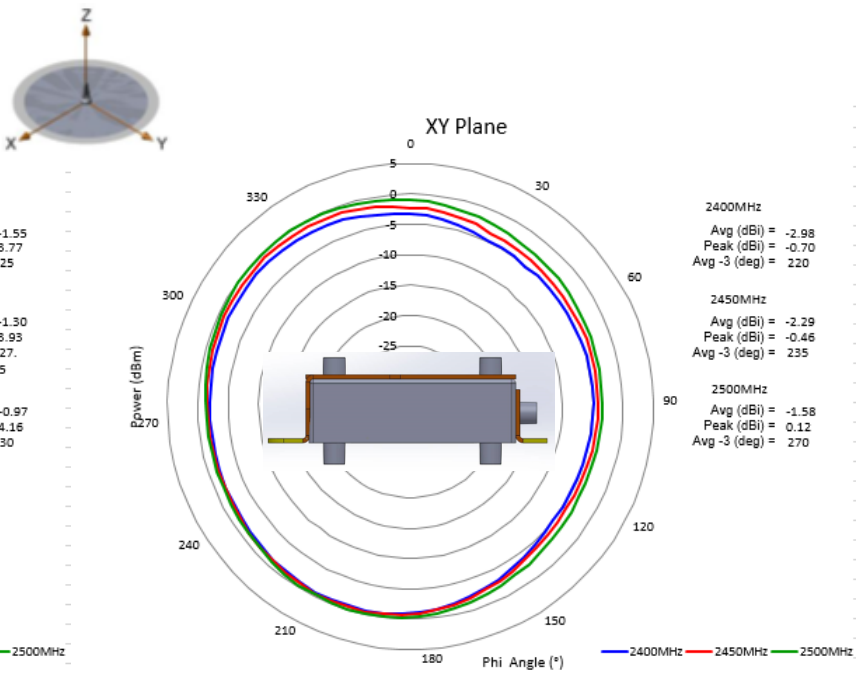
CHARTS

Free Space Radiation Pattern

Elevation Plane



Horizontal Plane



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PACKAGING

Tray packing
500PCS/Tray
1000PCS/ Carton box