-7RF Antenna-
7RF-ELS-3216-2450

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*ISO-SPEC-18-03_A

I. Introduction.

7RF provides high precision & quality ceramic chip antenna products. P/N: 7RF-ELS-3216-2450 is. a 3.2mm*1.6mm*0.5mm SMT chip antenna. This kind of tiny antenna is easily integrated through suitable layout on system board This chip antenna can deliver excellent performance for all 2.4GHz Band applications. Contact your local sales to get more product information.

II. Antenna Specification Table

Characteristics		Specifications	Unit
Outline Dimensions		3.2 x 1.6 x 0.5	mm
Ground Plane Dimensions		80 x 40	mm
Working Frequency		2400~2500	MHz
VSWR (@ center frequency)*		2 Max.	
Characteristic Impedance		50	Ω
Polarization		Linear Polarization	
Peak Gain	(@2442 MHz)	1.5 (typical**)	dBi
Efficiency		75 (typical**)	%

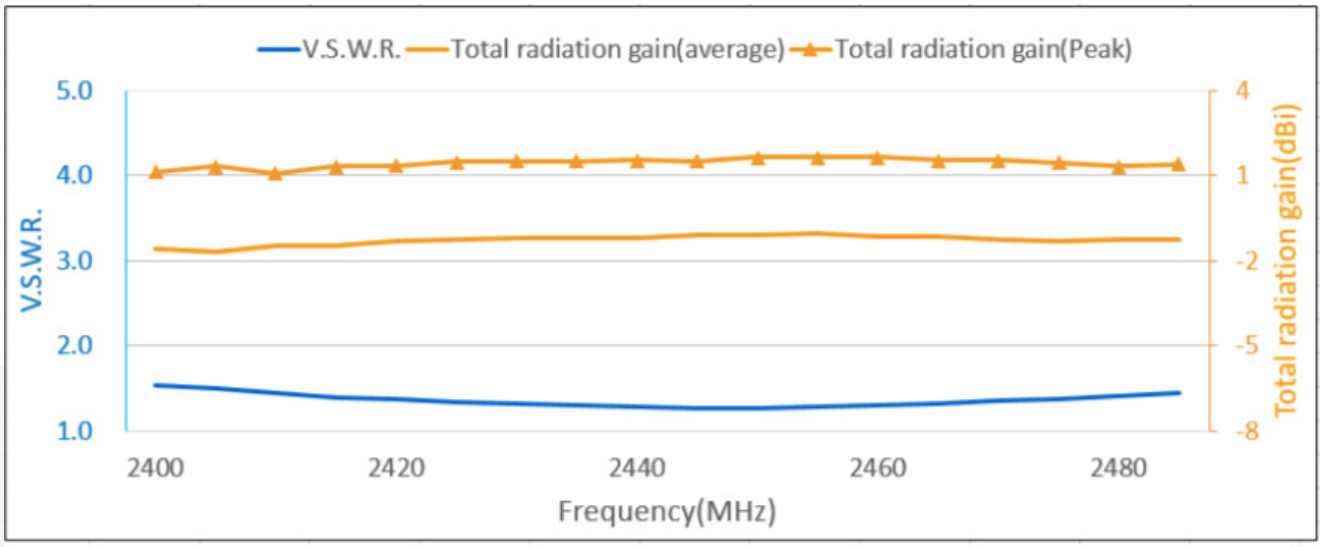
*Center frequency means the frequency with the lowest value in return loss of the chip antenna on the evaluation board.

**A typical value is for reference only, not guaranteed.

The antenna was measure with 80mm*40mm Evaluation board.

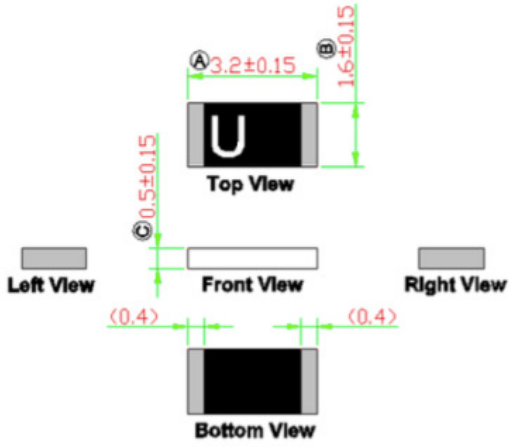
III. Antenna Parameters

VSWR, Average Gain & Peak Gain Chart:



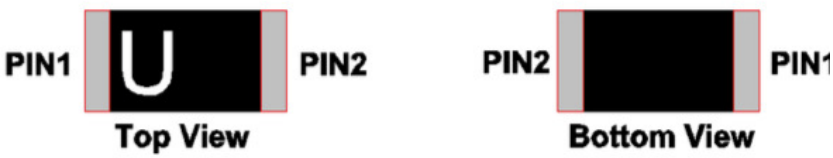
*The antenna was tested with 80*40mm EVB.

IV. Antenna Drawing



NOTE:
1.All materials are RoHS compliant.
2."Ⓐ~Ⓒ" Critical Dimensions.
3."( )" Reference Dimensions.

PIN Definition



PIN	1	2
Soldering PAD	Signal	Tuning / Ground

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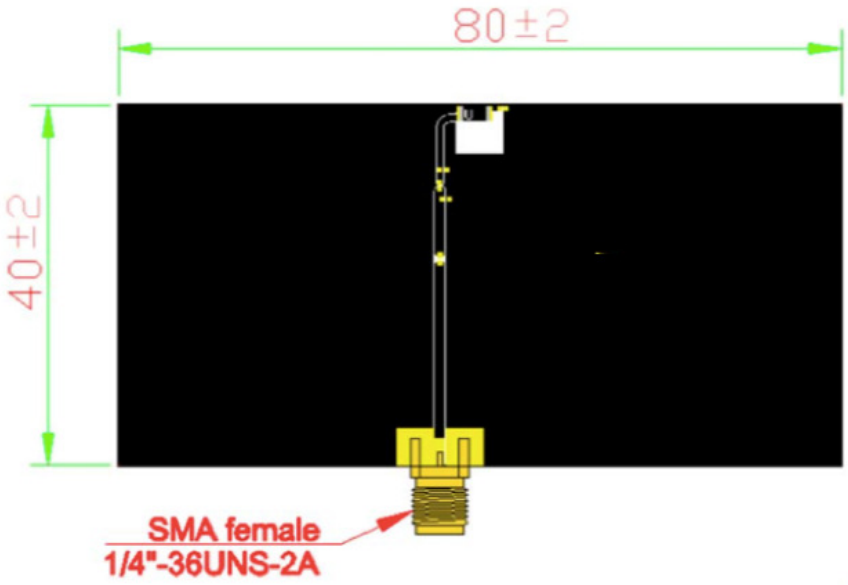
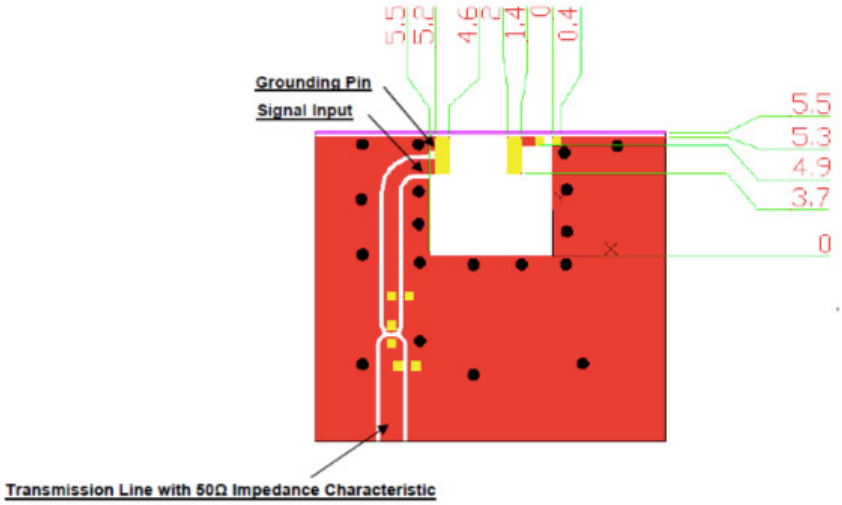
V. Antenna Evaluation Board

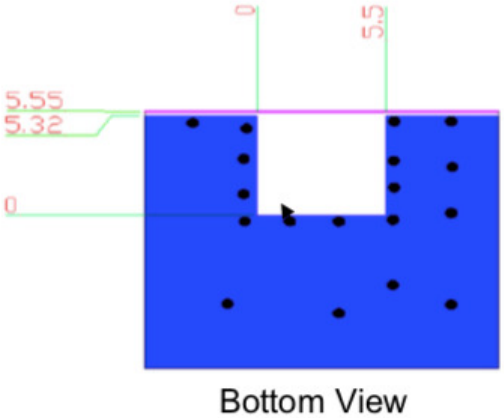


unit : mm

VI. Antenna Recommended Footprint



Top View



Bottom View

Unit:mm

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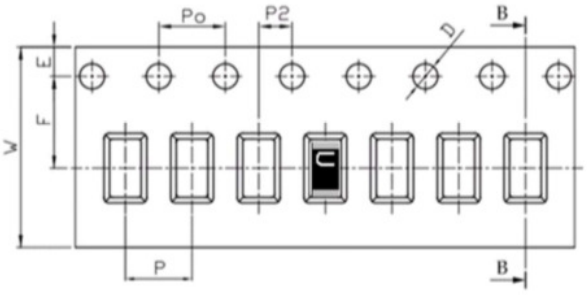
VII. Antenna Packaging Method

(1) Quantity/Reel: 5000 pcs/Reel

(2) Plastic tape: Black conductive polystyrene.

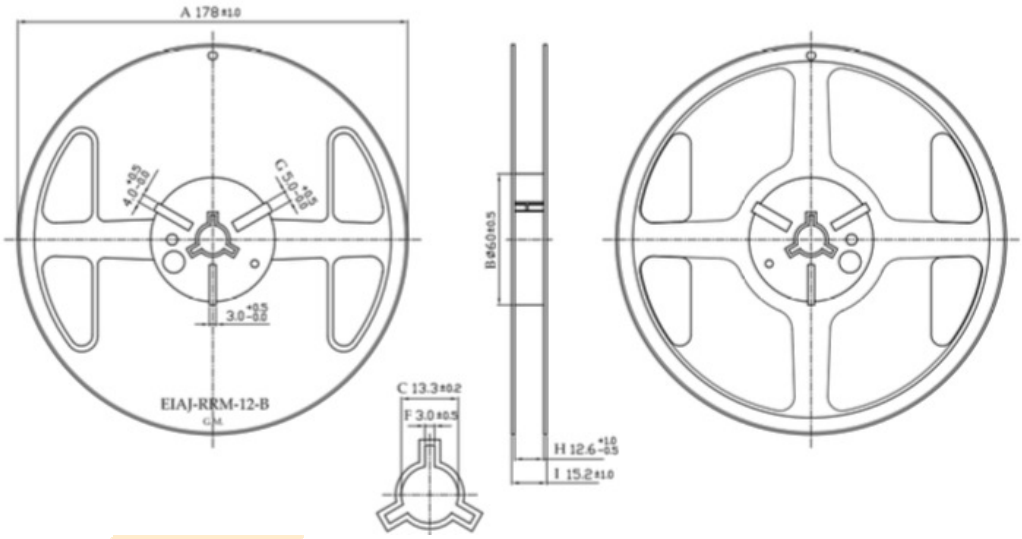
a. Tape Drawing



b. Tape Dimensions (unit: mm)

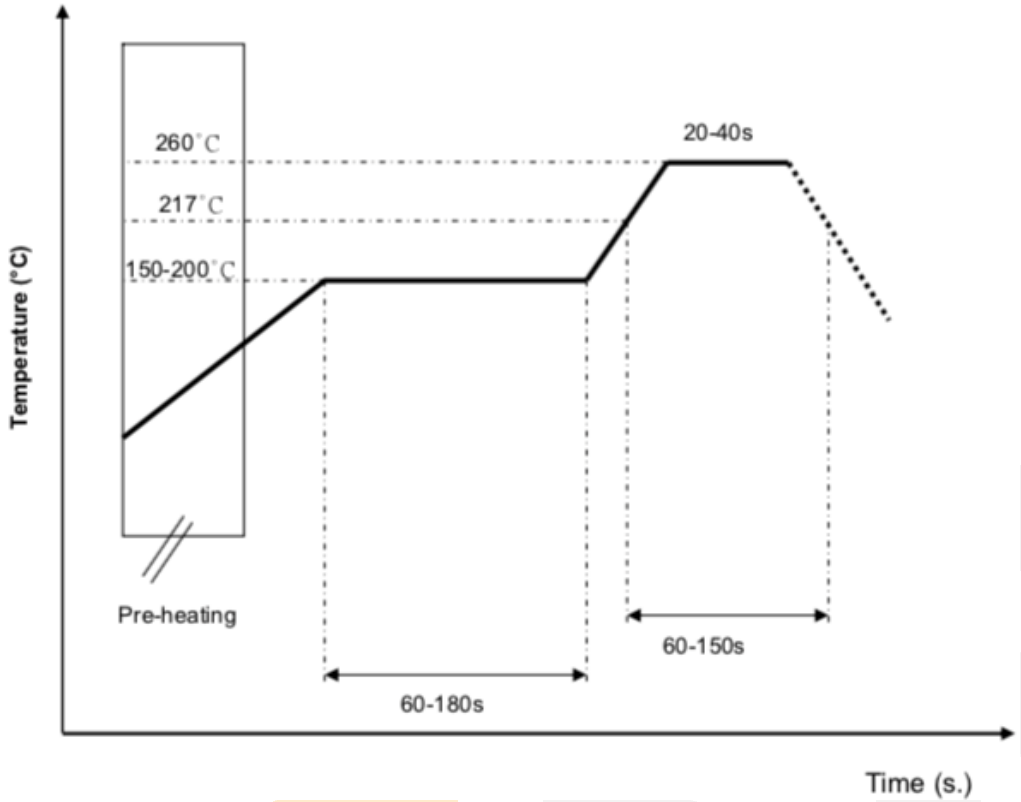
Feature	Specifications	Tolerances
W	12.00	±0.30
P	4.00	±0.10
E	1.75	±0.10
F	5.50	±0.10
P2	2.00	±0.10
D	1.50	+0.10 -0.00
Po	4.00	±0.10
10Po	40.00	±0.20

c. Reel Drawing

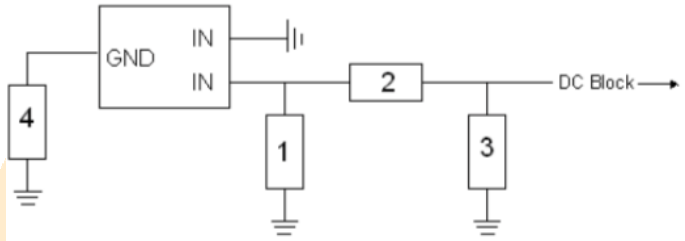


VIII. Application Note

a) Recommended Soldering Profile



b) Recommended Matching Circuits



Location	Description
1	1.2pF, (0402)
2	3.3nH, (0402)
3	NA
Fine tuning element 4	1.2pF, (0402)