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850/1900MHz Dual Band Diversity RX Ceramic Antenna

Ceramic Chip Antenna. PWB ground removal area under antenna 12.80 x 6.25 mm. Pulse Part Number: W3047A



Features

- PIFA antenna
- Dual band operation, single feed point
- SMD compatible
- Lead free materials
- Size W x L x H (12 x 3 x 3 mm)
- Weight: 530 mg
- RoHS Compliant

Applications

- Dual band US GSM Rx
- 850MHz/1900MHz Rx

W3047A Dual band diversity antenna typical performance @ +25 °C

Note: Performance figures are measured when antenna is mounted on Pulse evaluation board

Frequency Range [MHz]	Efficiency [%] / [dB]	Impedance [Ω]
869-894	50 / -3 (peak)	50
1930-1990	70 / -1,55 (peak)	

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90440 Kempele, Finland
Tel: +358 207 935 500
Fax: +358 207 935 501
www.pulseeng.com/antennas

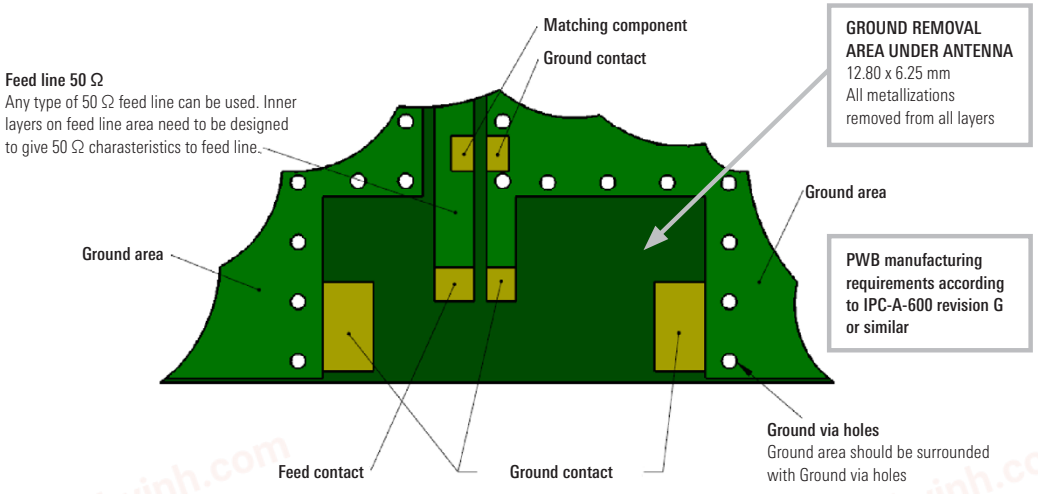
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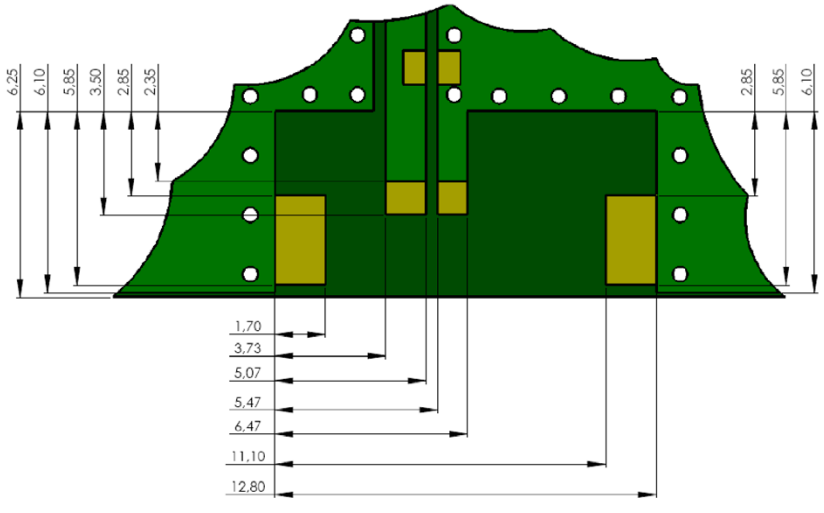
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Recommended Antenna Pad Dimensions on PWB Layout (top surface)

No.	Terminal Name	Terminal Dimensions [mm]
1	Feed	1.34 x 1.15
2	GND	1.00 x 1.15
3	GND	3.00 x 1.70
4	GND	3.00 x 1.70

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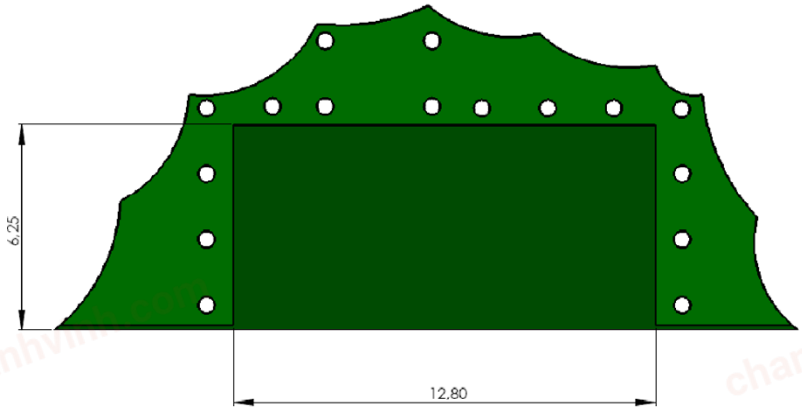
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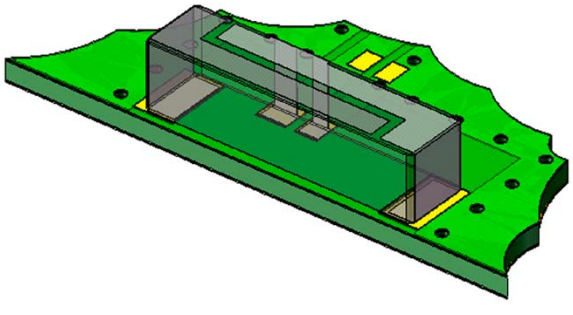
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Recommended ground clearance area under antenna on PWB (bottom surface)



3D-view of test setup



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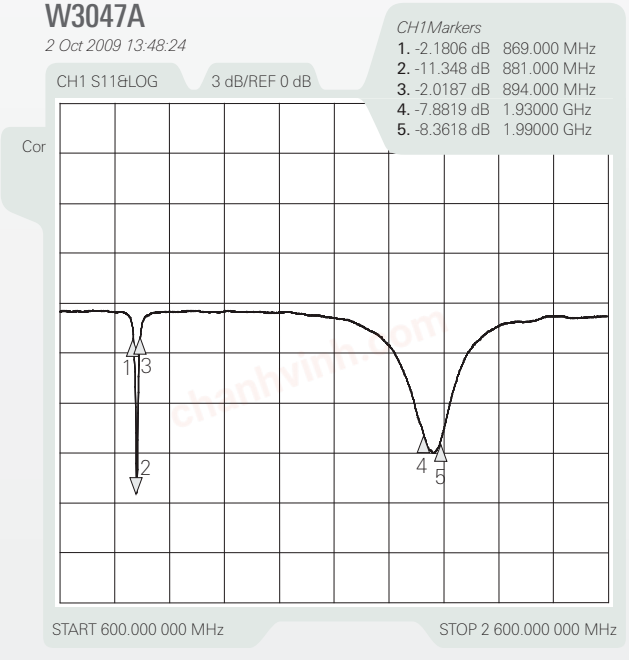
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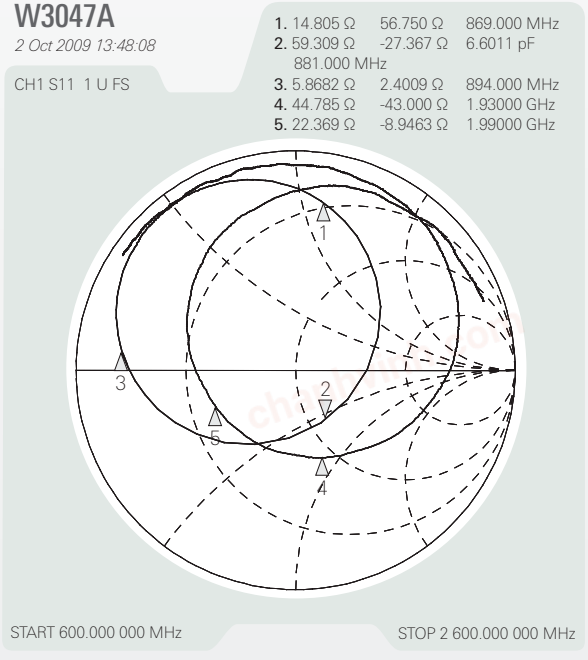
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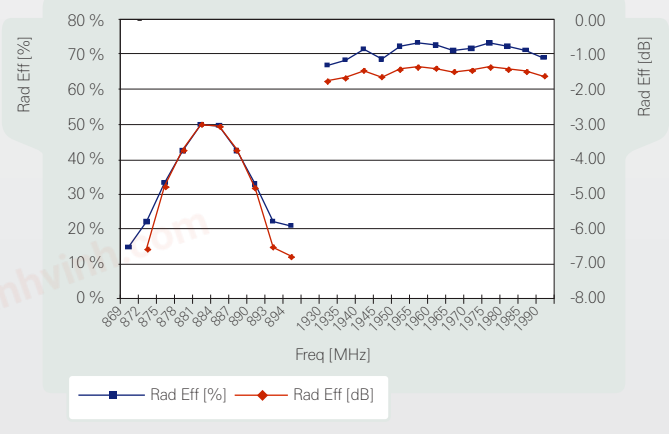
W3047A Dual band diversity antenna typical Return Loss and Smith chart

Antenna location is on side center of 40x100mm Pulse evaluation board

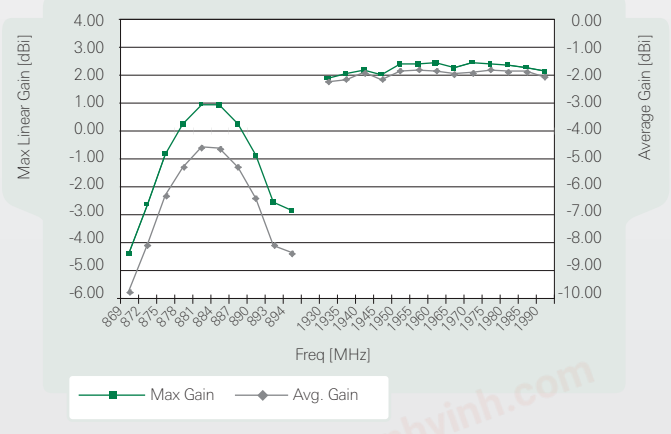




W3047A Efficiency



W3047A Gain



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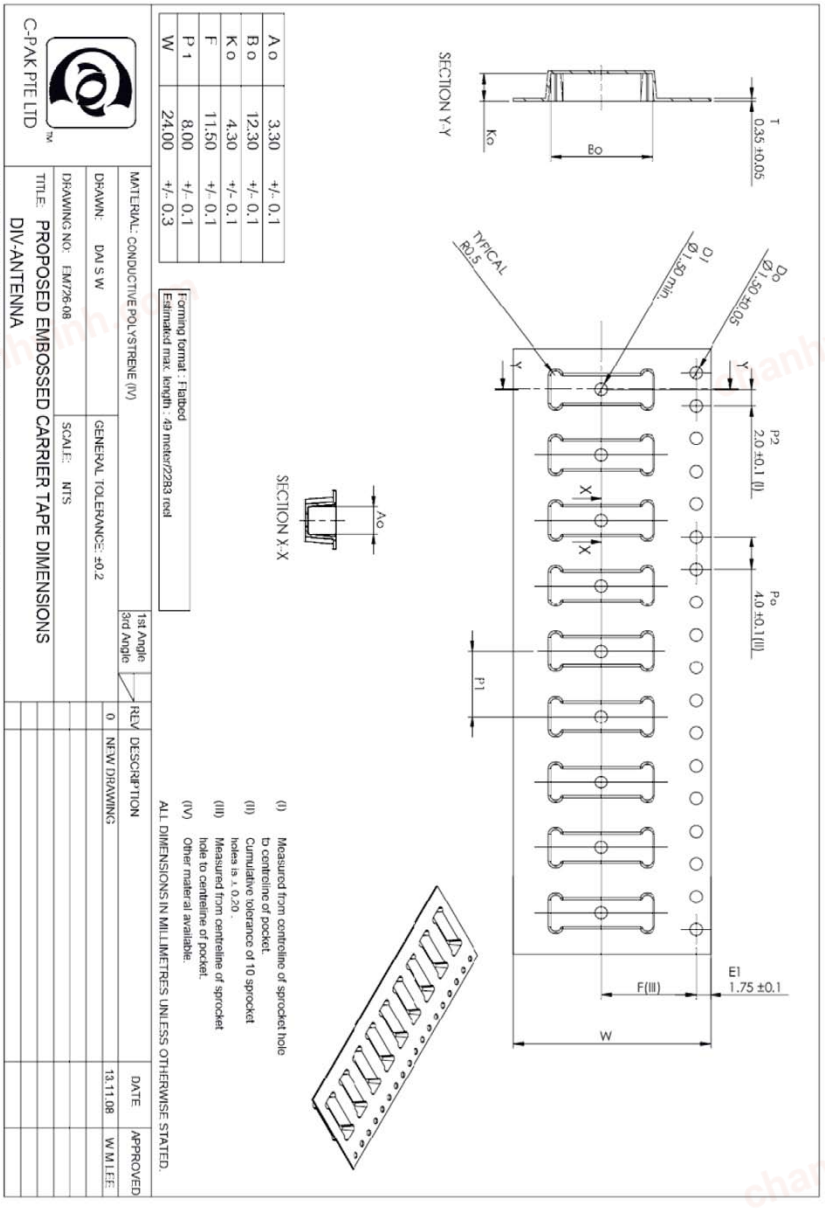
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General

Tape and reel packing is used. Carrier tape, reel and box dimensions are presented in following pictures.

Carrier tape



Ao	3.30	+/- 0.1
Bo	12.30	+/- 0.1
Ko	4.30	+/- 0.1
F	11.50	+/- 0.1
P1	8.00	+/- 0.1
W	24.00	+/- 0.3

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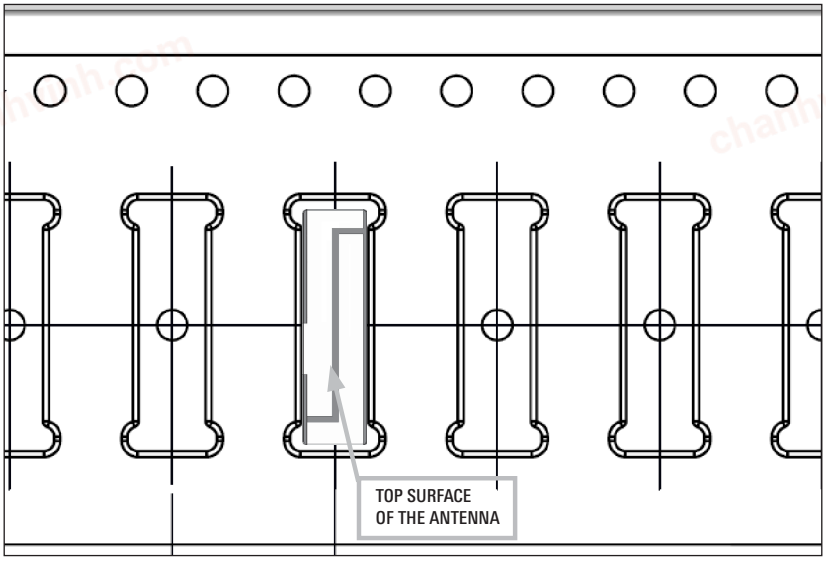
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Block orientation

Antenna soldering pads facing down to the bottom of the carrier tape.



Top View of the Carrier Tape

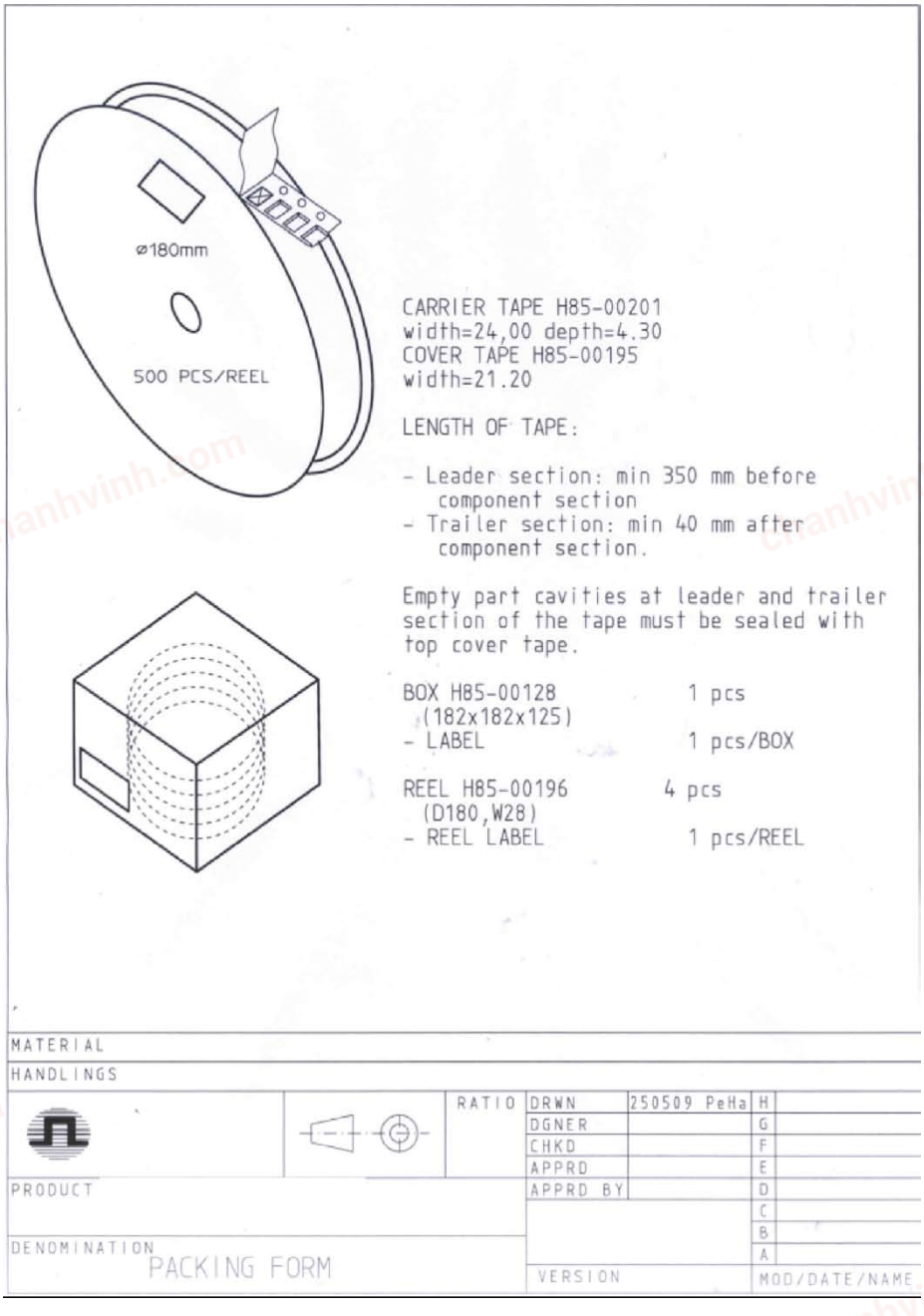
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