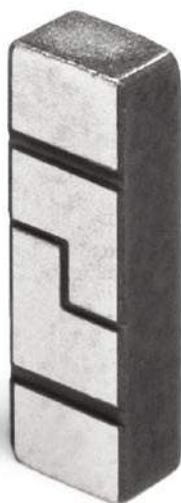


# 1.92–2.17 GHz WCDMA Ceramic Antenna

Ground cleared under antenna, clearance area 10.60 x 8.25 mm

*Pulse Part Number: W3040*



## Features

- Low profile
- Compact size W x L x H (10 x 3.2 x 2 mm)
- Low weight (310 mg)
- Lead free materials
- Fully SMD compatible
- Lead free soldering compatible
- Tape and reel packing
- RoHS Compliant Product

## Applications

- W-CDMA
- 1.92–2.17 GHz

## Electrical specifications @ +25 °C

*Note: Electrical characteristics depend on test board (GP) size and antenna positioning on GP and Ground Clearance area size.*

## WCDMA 1.92–2.17 GHz W3040

Typical performance

(test board size 80 x 37 mm, antenna position side center, PWB ground clearance area 10.60 x 8.25 mm)

Frequency Range [MHz]	Linear Max Gain [dBic]	Efficiency [%] / [dB]	Return loss min. [dB]	Impedance [ $\Omega$ ]	Operating Temperature [°C]
1920–2170	2.3 (Peak) 1.5 (Band edges)	80 / -1 (Peak) 70 / -1.55 (Band edges)	-10	50	-40 to +85

### Pulse Finland Oy

Takatie 6  
90440 Kempele, Finland  
Tel: +358 207 935 500  
Fax: +358 207 935 501

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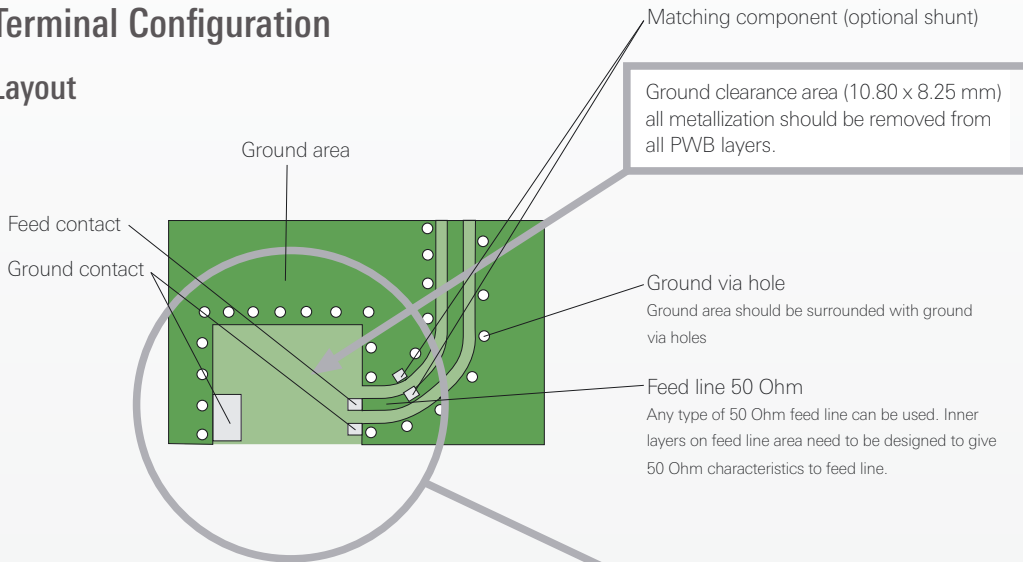
# 1.92–2.17 GHz WCDMA Ceramic Antenna

Ground cleared under antenna, clearance area 10.60 mm x 8.25 mm

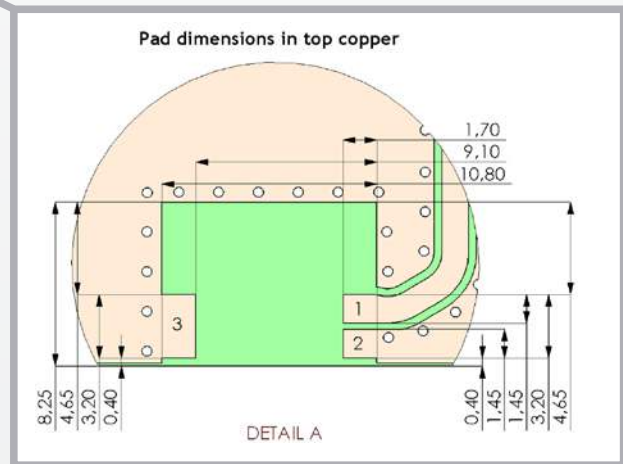
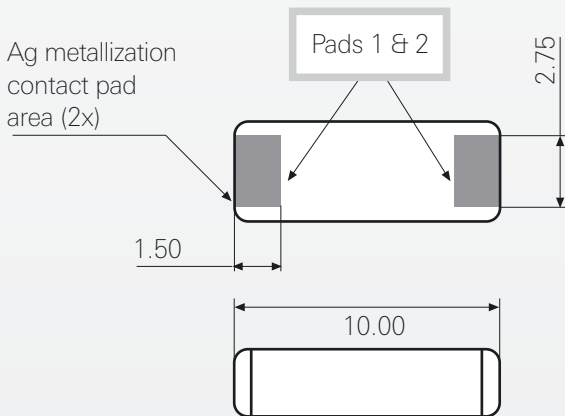
Pulse Part Number: W3040

## Terminal Configuration

### Layout



### Antenna



### Antenna features

No.	Terminal Name	Terminal Dimensions
1	Feed / GND	1.50 x 2.75 mm
2	Feed / GND	1.50 x 2.75 mm

Antenna is symmetrical.  
Either of terminals 1 or 2 can be Feed / GND

### PWB features

No.	Terminal Name	Terminal Dimensions
1	Feed	1.70 x 1.45 mm
2	GND	1.70 x 1.45 mm
3	GND	1.70 x 3.20 mm

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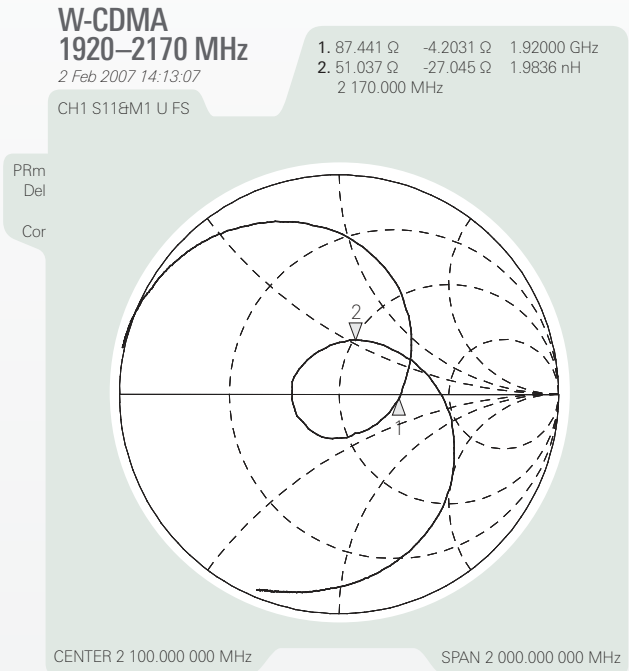
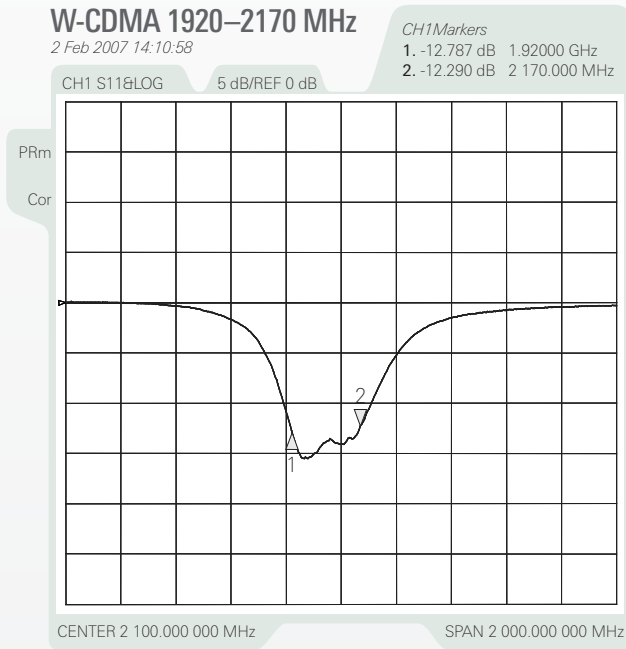
Ground cleared under antenna, clearance area 10.60 x 8.25 mm

Pulse Part Number: W3040

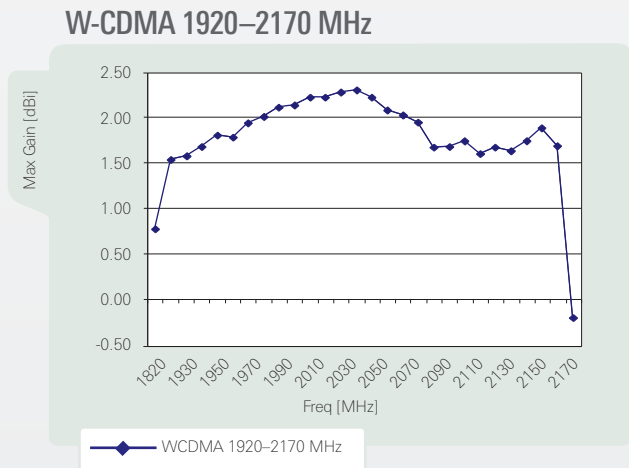
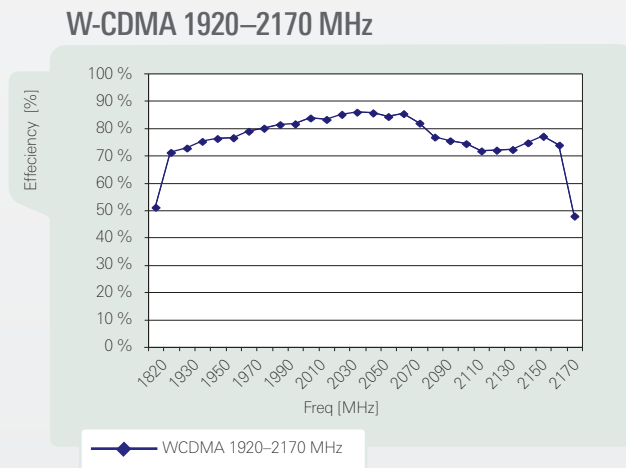
## W3040 Typical Electrical Characteristics (T=25 °C)

Measured on the 80 x 37 mm test board. Antenna location side center. 2.7pF shunt matching capacitor used.

Typical Return Loss S11/ impedance.



Free space efficiency and maximum gain



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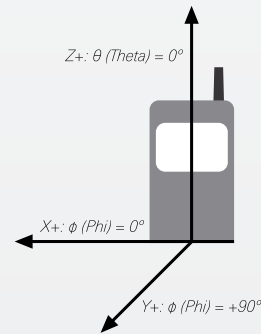
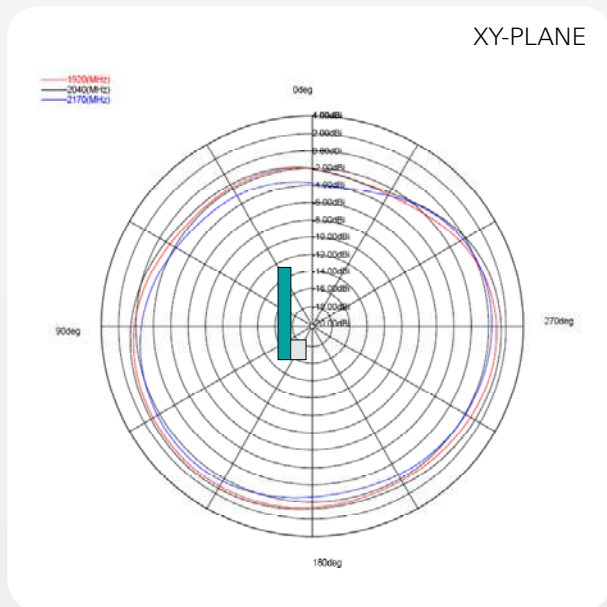
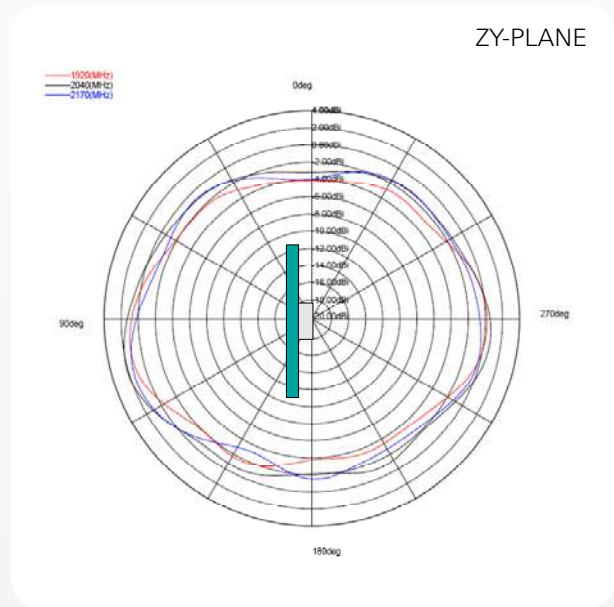
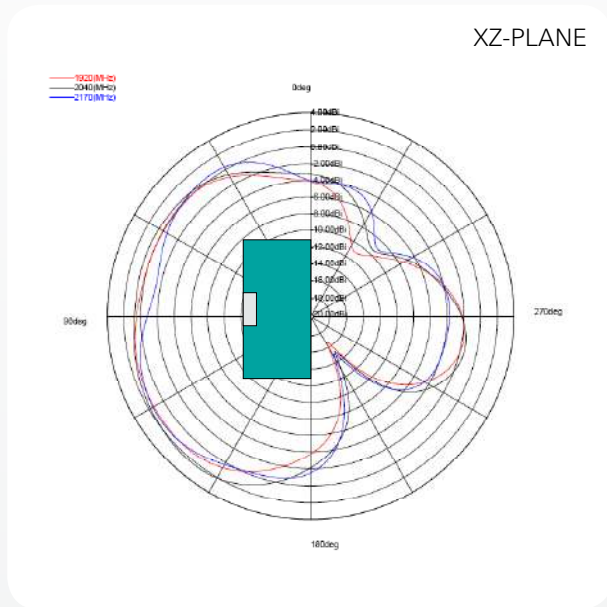


# 1.92–2.17 GHz WCDMA Ceramic Antenna

Ground cleared under antenna, clearance area 10.60 x 8.25 mm

Pulse Part Number: W3040

W3040 Typical Free Space Radiation Patterns



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Takatie 6  
90440 Kempele, Finland  
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Fax: +358 207 935 501

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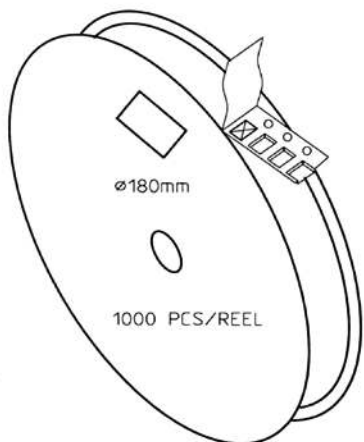


# 1.92–2.17 GHz WCDMA Ceramic Antenna

Ground cleared under antenna, clearance area 10.60 x 8.25 mm

Pulse Part Number: W3040

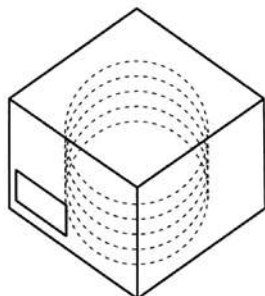
## Packing Form



CARRIER TAPE H85-00188  
width=24,00 depth=2.20  
COVER TAPE H85-00159  
width=21.20

LENGTH OF TAPE:

- Leader section: min 350 mm before component section
- Trailer section: min 40 mm after component section.


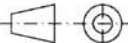


Empty part cavities at leader and trailer section of the tape must be sealed with top cover tape.

- |                                |            |
|--------------------------------|------------|
| BOX H85-00128<br>(182x182x125) | 1 pcs      |
| - LABEL                        | 1 pcs/BOX  |
| REEL H85-00160<br>(D180, W28)  | 4 pcs      |
| - REEL LABEL                   | 1 pcs/REEL |

MATERIAL

HANDLINGS

		RATIO	DRWN	160107 PeHa	H
			DGNER		G
			CHKD		F
			APPRD		E
PRODUCT	H90-OY113-F01P01	APPRD BY			D
DENOMINATION	PACKING FORM				C
					B
					A
		VERSION			MOD/DATE/NAME

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