

2.3 GHz Satellite Radio Ceramic Chip Antenna

Ground cleared under antenna 4.00 x 4.25 mm. Pulse Part Number: W3017



Features

- Omni directional radiation
- Low profile
- Compact size W x L x H (3.2 x 1.6 x 1.1 mm)
- Low weight (33 mg)
- Lead free materials
- Fully SMD compatible
- Lead free soldering compatible
- Tape and reel packing
- RoHS Compliant Product

Applications

- Satellite radio
- 2.320 – 2.345 GHz

Electrical specifications @ +25 °C

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

2.3GHz Satellite Radio

Typical performance (Test board size 80 x 37 mm, PWB ground clearance area 4.00 x 4.25 mm)

Frequency Range [MHz]	LHCP Gain [dBic]	Max Gain [dBi]	Efficiency [%] / [dB]	Return loss min. [dB]	Impedance [Ω]	Operating Temperature [°C]
2320–2345	-0.1 (Peak) -0.6 (Band edges)	2.7 (Peak) 2.4 (Band edges)	80 / -1.0 (Peak) 75 / -1.2 (Band edges)	-12	50	-40 to +85

Pulse Finland Oy

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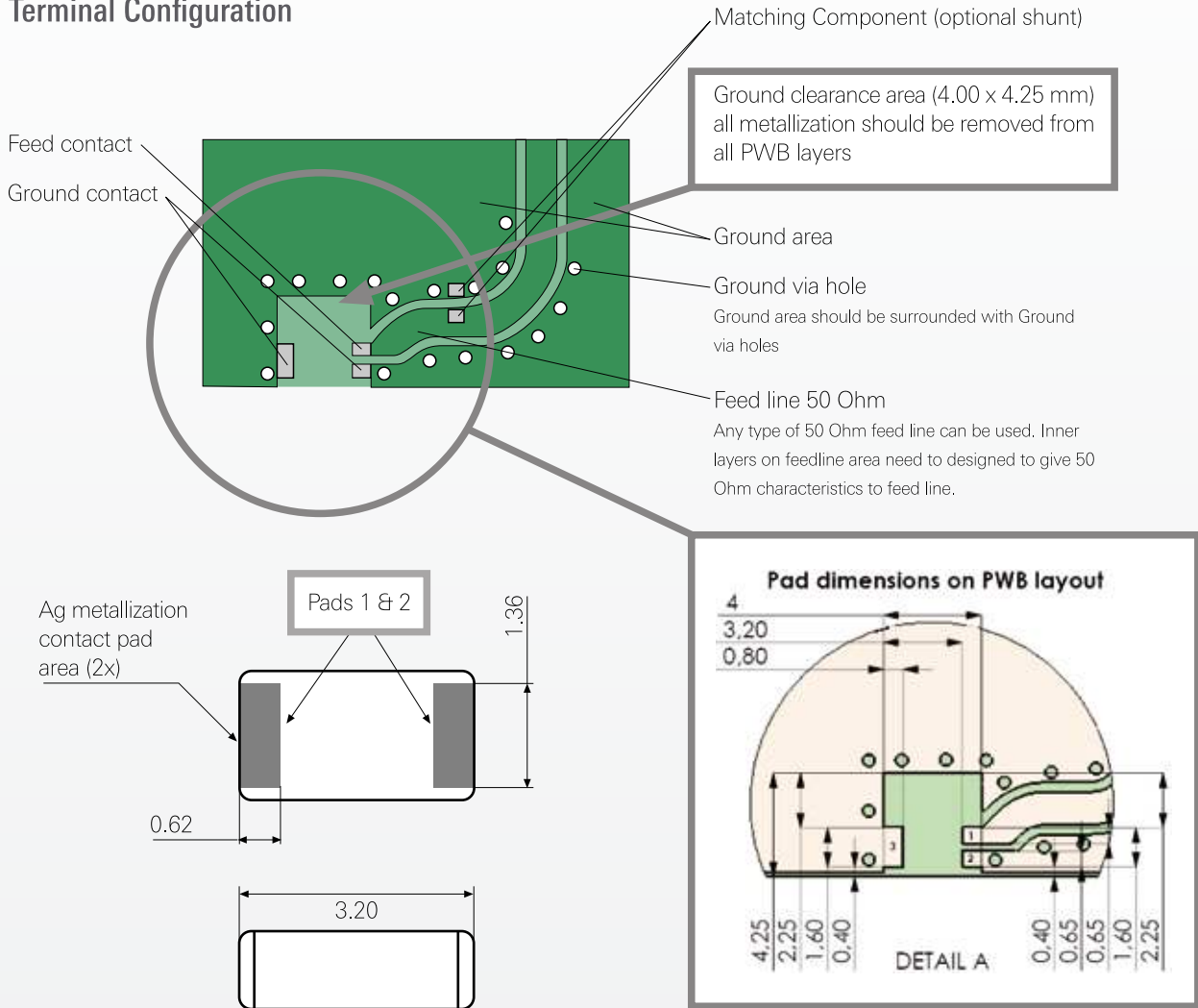
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Terminal Configuration



Antenna features

No.	Terminal name	Terminal Dimensions
1	Feed / GND	0.62 x 1.36 mm
2	Feed / GND	0.62 x 1.36 mm

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

PWB features

No.	Terminal name	Terminal Dimensions
1	Feed	0.8 x 0.65 mm
2	GND	0.8 x 0.65 mm
3	GND	0.8 x 1.60 mm

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Typical Electrical Characteristics (T=25 °C)

Measured on the 80 x 37 mm test board without matching circuit and in antenna position 1 on PWB layout.

Typical Return Loss S11/ impedance, free space efficiency and gain.

Satellite Radio 2.320–2.345 GHz

4 Jun 2007 09:53:10

CH1 Markers

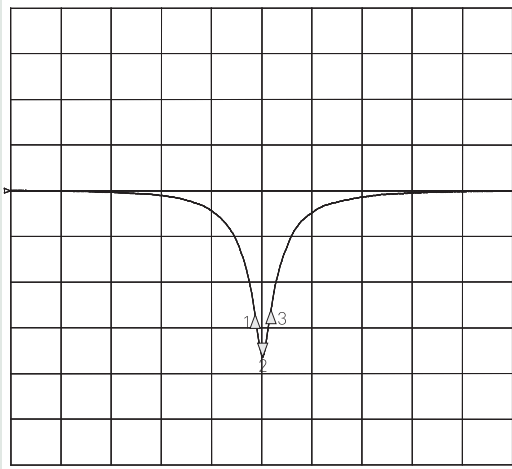
- 1. -13.744 dB 2.32000 GHz
- 2. -18.188 dB 2.33200 000 MHz
- 3. -13.050 dB 2.34500 GHz

CH1 S11&LOG

5 dB/REF 0 dB

PRm

Cor



CENTER 2.330.000.000 MHz

SPAN 800.000.000 MHz

Satellite Radio 2.320–2.345 GHz

4 Jun 2007 10:14:51

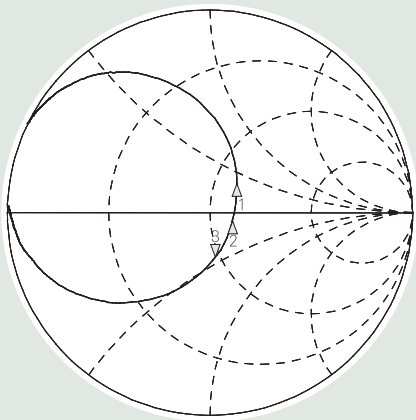
- | | | |
|-------------|-----------|-----------------|
| 1. 62.322 Ω | 18.084 Ω | 2.32000 GHz |
| 2. 62.434 Ω | -4.7949 Ω | 2.33200 GHz |
| 3. 47.324 Ω | -22.244 Ω | 3.0511 pF |
| | | 2.34500 000 MHz |

CH1 S11&I U FS

PRm

Del

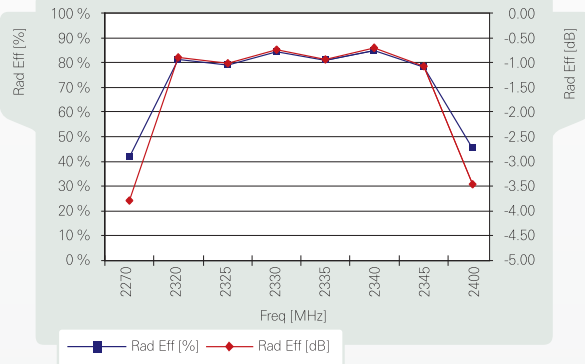
Cor



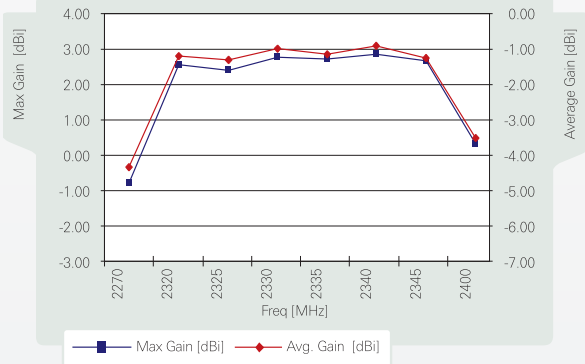
CENTER 2.330.000.000 MHz

SPAN 800.000.000 MHz

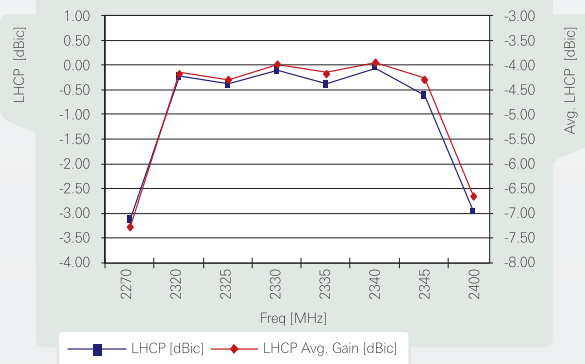
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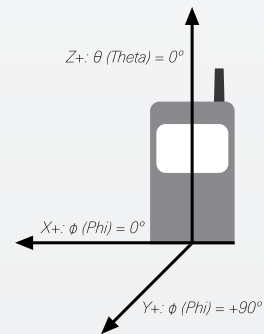
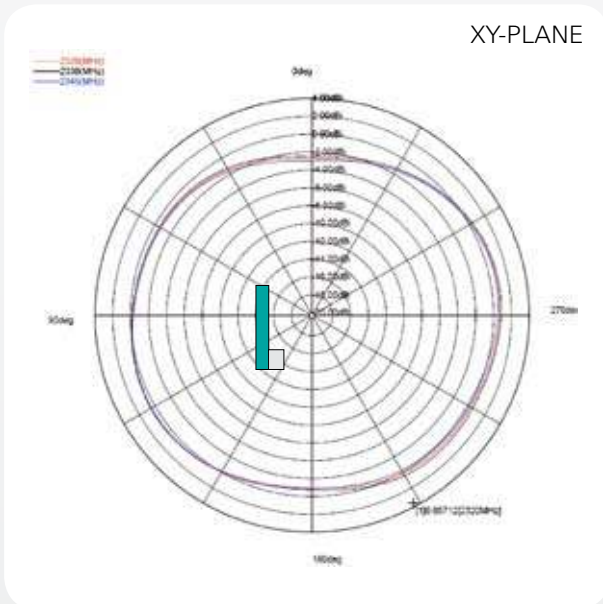
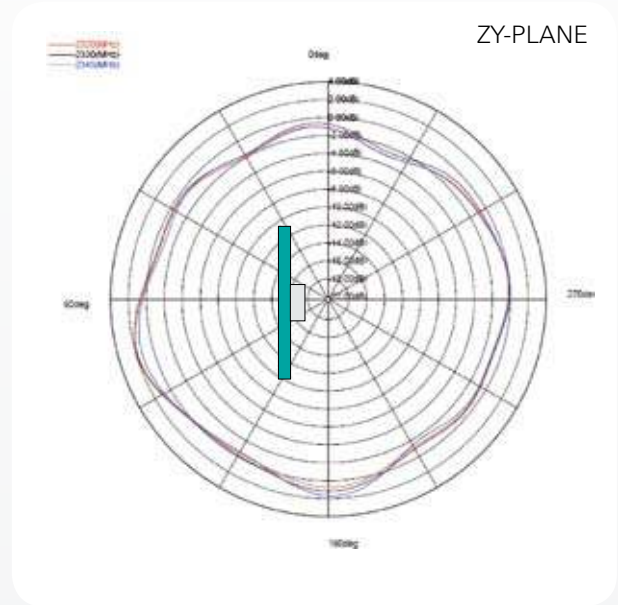
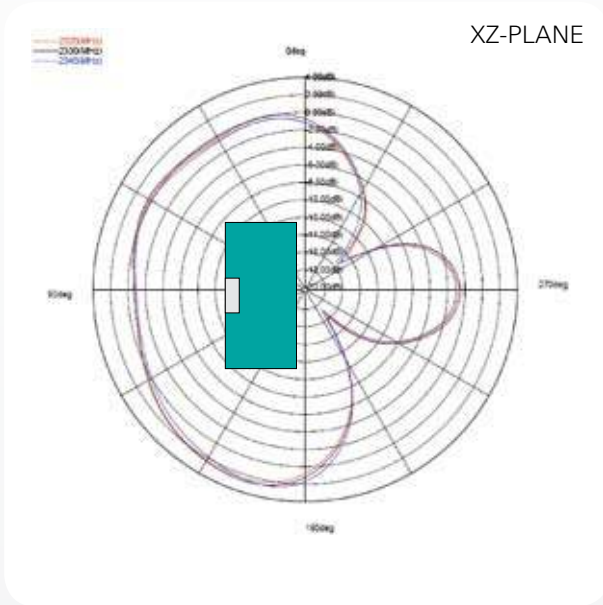
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Typical Free space Radiation Patterns



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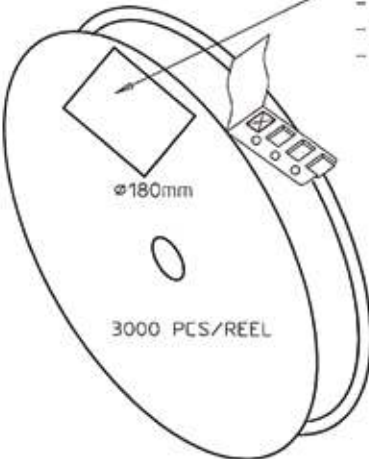
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Packing Form



∅180mm
3000 PCS/REEL

REEL LABEL INFORMATION:

- TRACEABILITY
- QUANTITY
- PRODUCT CODE

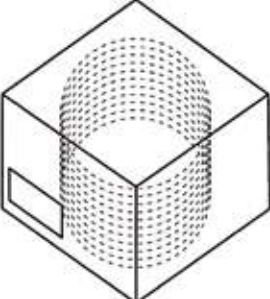
CARRIER TAPE H85-00125
width=8,00 depth=1,22
COVER TAPE H85-00126
width=5,60

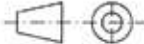
LENGTH OF TAPE:

- Leader section: 50 empty cavities before component section
- Trailer section: 25 empty cavities after component section.

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

BOX H85-00128 (182x182x132)	1 pcs
- LABEL	1 pcs/BOX
REEL H85-00127 (D180, W12)	10 pcs
- REEL LABEL	1 pcs/REEL



MATERIAL																																							
HANDLINGS																																							
LK Products		RATIO	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">DRWN</td> <td style="width: 20%;">010305</td> <td style="width: 15%;">PeHa</td> <td style="width: 50%;">H</td> </tr> <tr> <td>DGNER</td> <td></td> <td></td> <td>G</td> </tr> <tr> <td>CHKD</td> <td></td> <td></td> <td>E</td> </tr> <tr> <td>APPRD</td> <td></td> <td></td> <td>E</td> </tr> <tr> <td>APPRD BY</td> <td></td> <td></td> <td>D</td> </tr> <tr> <td></td> <td></td> <td></td> <td>C</td> </tr> <tr> <td></td> <td></td> <td></td> <td>B</td> </tr> <tr> <td></td> <td></td> <td></td> <td>A</td> </tr> <tr> <td colspan="3">VERSION</td> <td>MOD/DATE/NAME</td> </tr> </table>	DRWN	010305	PeHa	H	DGNER			G	CHKD			E	APPRD			E	APPRD BY			D				C				B				A	VERSION			MOD/DATE/NAME
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