

2.5–2.69 GHz US-WiMAX Ceramic Chip Antenna

Ground cleared under antenna. *Pulse Part Number: W3020*



Features

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

Applications

- Devices using WiMAX
- 2.5–2.69 GHz

Engineering samples available Q4/2006

Electrical specifications @ +25 °C

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

US-WiMAX 2.5-2.69 GHz

Typical performance (testboard size 80 x 35 mm, PWB ground clearance area 4.0 x 6.25 mm)

Frequency Range [MHz]	Max Gain [dBi]	Efficiency [%] / [dB]	Return Loss min. [dB]	Impedance [Ω]	Operating Temperature [°C]
2500 – 2690	2.8 (peak) 1 (band edges)	80 / -1 (peak) 60 / -2.25 (band edges)	-5.5	50	-40 to +85

Pulse Antennas

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Ground cleared under antenna

Typical Electrical Characteristics (T=25 °C)

Typical Return Loss S11/ impedance, measured on the test board

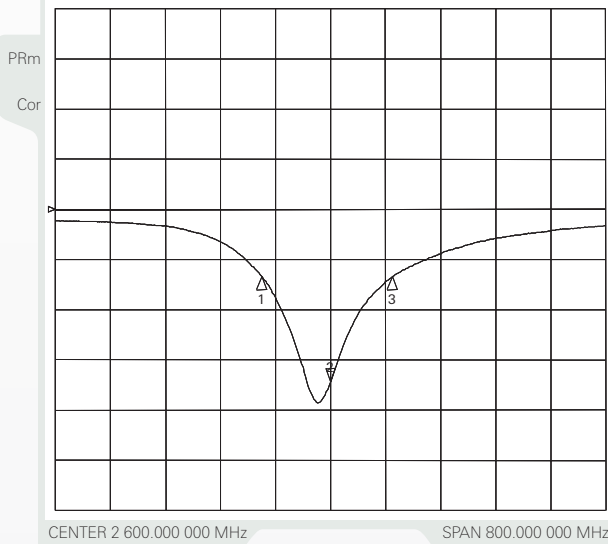
WiMAX 2.6 GHz

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CH1Markers

- 1. -6.7176 dB 2.50000 MHz
- 2. -17.209 dB 2.60000000 MHz
- 3. -6.7182 dB 2.69000 GHz

CH1 S11&MLOG 5 dB/REF 0 dB



WiMAX 2.6 GHz

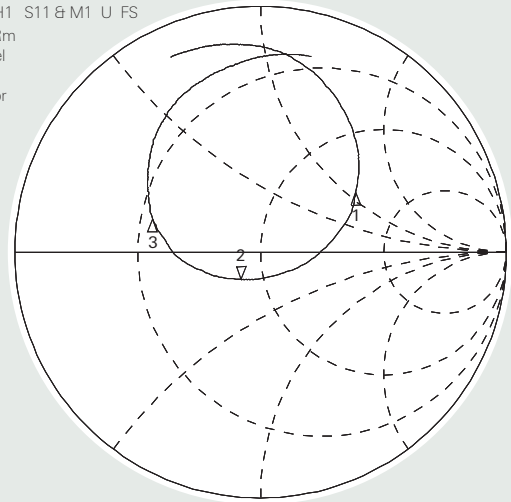
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CH1Markers

- 1. 90.996 Ω 56.090 Ω 2.50000 GHz
- 2. 41.742 Ω -9.4199 Ω 6.4983 pF
2 600.000 000 MHz
- 3. 18.850 Ω 6.4639 Ω 2.69000 GHz

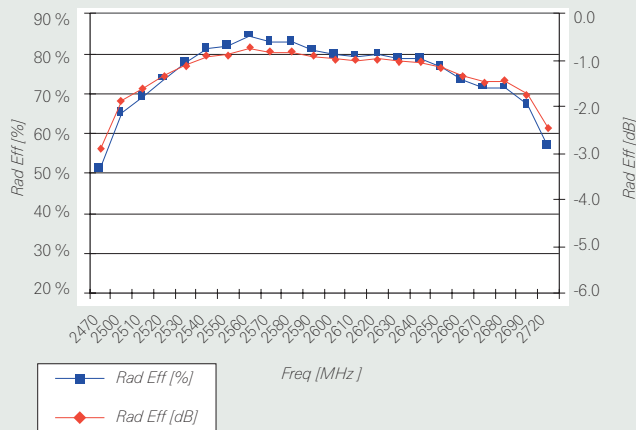
CH1 S11 & M1 U FS

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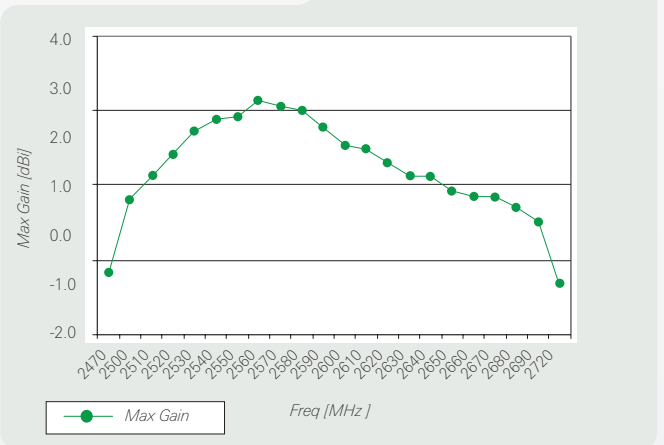


Free space efficiency and maximum gain

WiMAX 2.5–2.69 GHz



WiMAX 2.5–2.69 GHz



Pulse Antennas

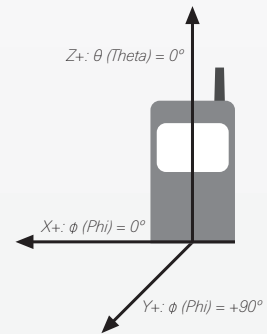
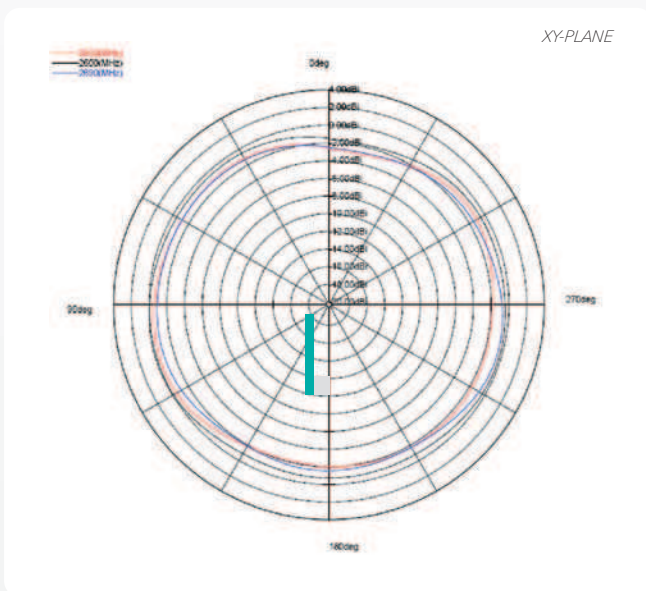
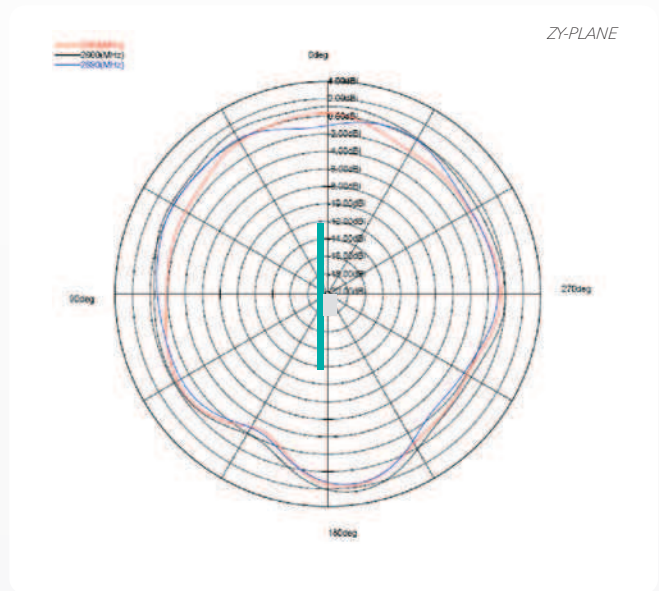
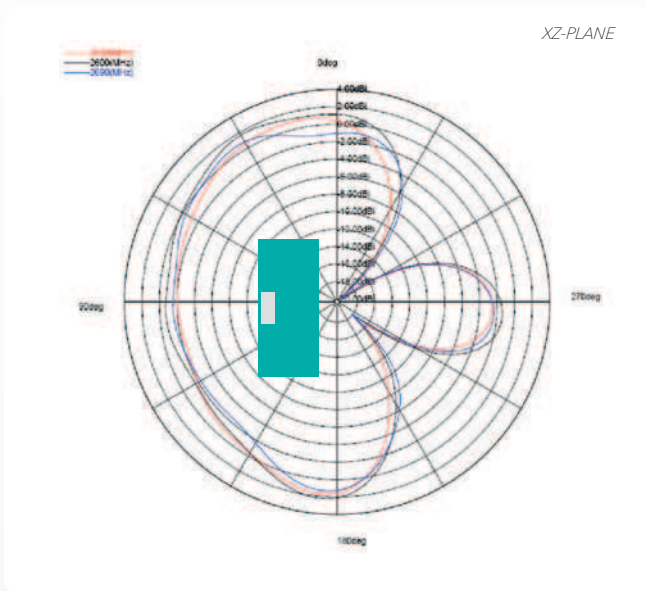
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Ground cleared under antenna, clearance area 4.00 x 6.25 mm

Typical Free Space Radiation Patterns



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