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Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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GSM Rugged 'Puck' Antenna IP67

- GSM 3G Quad Band Antenna
- Low Profile Package
- World-Wide Use
 - 850 960MHz
 - 1770 2100MHz
- +3dBi Gain
- Rugged IP67 Waterproof
- VSWR <2.0
- 3metres RG174 Cable
- SMA Male Connector
- Operates from –40 to +70°C
- M12 Screw thread Connector



Applications

- Automotive Applications
- Covert Applications
- Machine to Machine
- Secure Rugged Applications

Description

A Rugged antenna with high performance for worldwide use. This antenna provides 3G GSM Antenna with 2dBi gain. Housed in a rugged low profile UV resistant IP67 housing, this antenna is compact and resistant to Vandalism.

	Description	Cable Length	Connector
ANT-GSMPUKS-IP67	GSM QuadBand Puck Antenna	3metres	SMA (M)



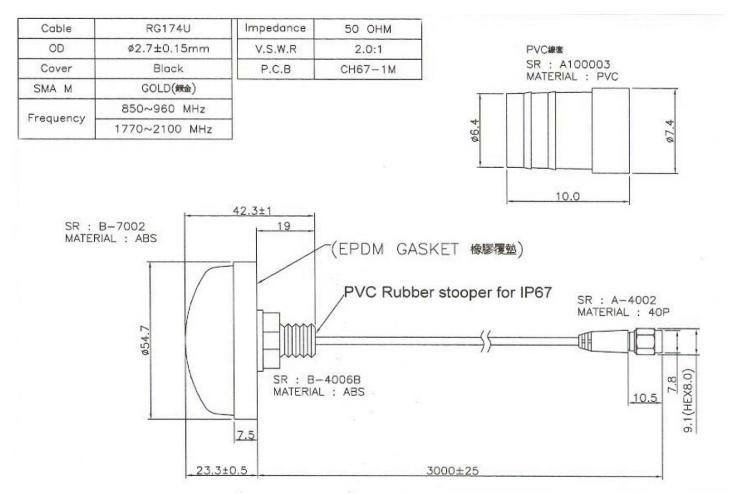


GSM Rugged 'Puck' Antenna IP67

Underside View



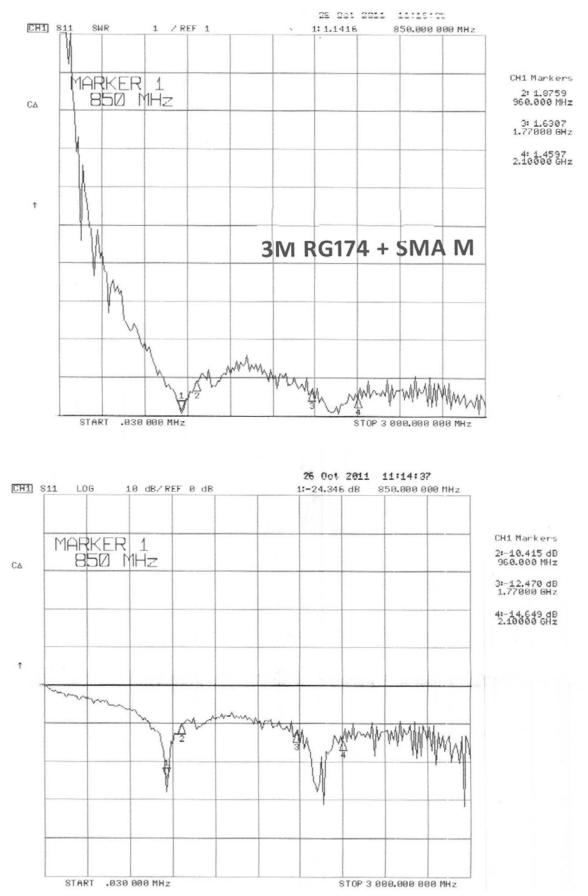
Mechanical Data



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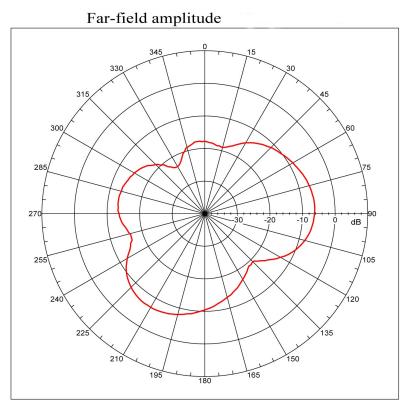
GSM Rugged 'Puck' Antenna IP67

Test VSWR





Measured Performance at 824MHz Vertical Plane



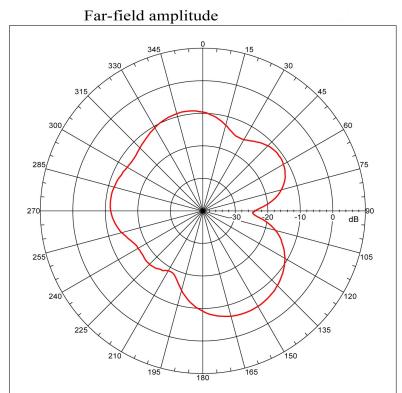
Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg Gain = -6.20455 dBi Max far-field (global) = -49.20389 dB, Max far-field (plot) = -49.20391 dB Normalization: Reference, Network offset = 0.000 dB Mpeak attion: Reference Metwork offset = 0.000 dB Plot centering: On

NSI2000 V4.0.124, Filename:C:\Documents and Settings\NSI\Desktop\20 Measurement date/time: 4/15/2014 1:43:10 PM, Filetype: NSI-97 Far-field Cut Analysis: A. dB beam width: 51.34 deg -6. dB beam width: 10.31 deg Fight Sichebe: Not Fout 1:006 deg Fight Sichebe: Not Fout 1:006 Far-field display astup Azimuth (deg) Span = 360:00001 deg, Center = 0.000 deg, Bpts = 181 Siches - 190.00001 deg, Scop = 180.00001 deg, Delta = 2.000

g Elevation (deg) Center = 0.000 deg, #pts = 1

elected beam(s) 1 of 8 Aam Frequency Azimuth Elevation Pol 0.824 GHz Azimuth Elevation Single-pol

Measured Performance at 850MHz Vertical Plane



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg Gain = -6.0091 dBi Max far-field (global) = -47.26596 dB, Max far-field (plot) = -47.26603 dB Normalization: Reference, Network offset = 0.000 dB Hpeak at: 133.99999 deg, Vpeak at: 0.000 deg Flot centering: On

GSM-04A

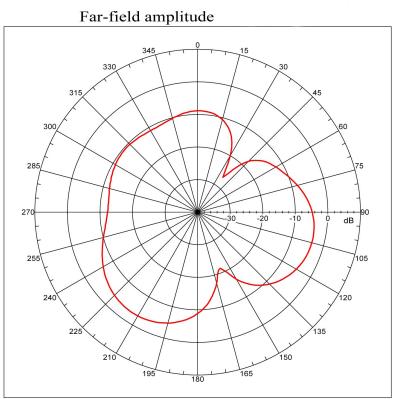
UGD-UVM NSI2000 V4.0.124, Filename:C:\Documents and Settings\NSI\Desktop\20 Measurement date/time: 4/15/2014 1:36:36 PM, Filetype: NSI-97 Far-field CUt Analysis: Avg value: -11,924 dB -6, dB beam width: Not Found -10, dB beam width: Not Found Left Sidelobe: -5,01 dB at 57,318 deg Right Sidelobe: Not Found Far-field display setup

field display octup Zimuth (deg) Span = 360.00001 deg, Center = 0.000 deg, #pts = 181 Start= -180.00001 deg, Stop = 180.00001 deg, Delta = 2.000 deg Elevation (deg) Center = 0.000 deg, #pts = 1

Selected beam(s) 1 of 8 Beam Frequency Azimuth Elevation Pol 2 0.850 GHz Azimuth Elevation Single-pol



Measured Performance at 900MHz Vertical Plane



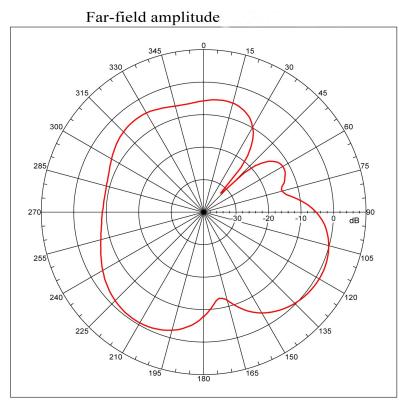
Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg Gain = -3.17831 dBi Max far-field (global) = -44.73799 dB, Max far-field (plot) = -44.73805 dB Normalization: Reference, Network offset = 0.000 dB Hpeak at: -146.00001 deg, Vpeak at: 0.000 deg Flot centering On

NSI2000 V4.0.124, FilenamerCr\Documents and Settings\NSI\Desktop\20 Measurement date/time: 4/15/2014 1;43:10 PM, Filetype: NSI-97 Far-field Cut Analysis: A. B beam withth: 50.22 deg -6. dB beam withth: Not Found -10. dB beam withth: Not Found -10.

deg Elevation (deg) Center = 0.000 deg, #pts = 1

- Selected beam(s) 1 of 8 Beam Frequency Azimuth Elevation Pol 3 0.900 GHz Azimuth Elevation Single-pol

Measured Performance at 960MHz Vertical Plane



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg Gain = 1.10737 dBi Max far-field (global) = -41.5223 dB, Max far-field (plot) = -41.5223 dB Normalization: Reference, Network offset = 0.000 dB Mpeak at: 112.9999 deg, Vpeak at: 0.000 deg Plot centering: On

C NSI2000 V4.0.124, Filename:C:\Documents and Settings\NSI\Desktop\20 Measurement date/time: 4/15/2014 1:43:10 FM, Filetype: NSI-97 Far-field CU Analysis: A data for the set of the set of the set of the set of the set and the set of the set -6. db beam width: 75.85 deg -10. dB beam widt

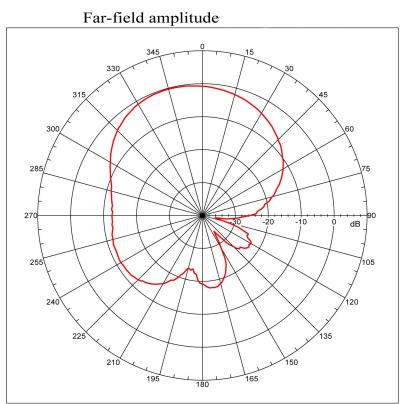
eg Elevation (deg) Center = 0.000 deg, #pts = 1

lected beam(s) 1 of 8 am Frequency Azimuth Elevation Pol 0.960 GHz Azimuth Elevation Single-pol





Measured Performance at 1.770GHz Vertical Plane



Ear-field amplitude, Eprincipal: Linear, Tau = 0.000 deg Gain = -0.20641 ddl Max far-field (global) = -46.49443 dB, Max far-field (plot) = -46.49443 dB Normalization: Reference, Network offset = 0.000 dB Hpeak at: -14.00061 deg, Vpeak at: 0.000 deg Flot centering on

N3I2000 V4.0.124, Filenameric:\Documents and Settings\NSI\Desktop\20 Measurement date/time: 4/15/2014 1:43:10 PM, Filetype: NSI-97 Far-field (ut Analysis - 3. dB beam width: 65.23 deg - 6. dB beam width: 155.61 deg - 10. dB beam width: 155.61 deg - 10. dB beam width: 155.61 deg Hipht Sidelobe: -24.62 dB at 113.631 deg Far-field display setup Asimuth (deg) Span - 360.0001 deg, Center - 0.000 deg, Mpts = 181 Start - 180.0001 deg, Center - 0.000 deg, Mpts = 2.000

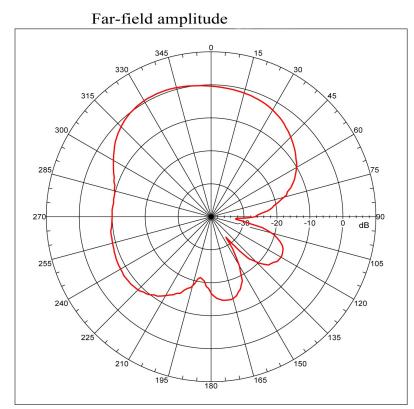
g Elevation (deg) Center = 0.000 deg, #pts = 1

 Selected beam(s)
 1 of 8

 Beam
 Frequency
 Azimuth
 Elevation
 Pol

 5
 1.770
 GHz
 Azimuth
 Elevation
 Single-pol

Measured Performance at 1.85GHz Vertical Plane



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg Gain = 0.74919 dBi Max far-field (global) = -45.67785 dB, Max far-field (plot) = -45.67786 dB Normalization: Reference, Network offset = 0.000 dB Hpeak at: -24.00001 deg, Vpeak at: 0.000 deg Flot centering On

NSI2000 V4.0.124, Filenameric:\Documents and Settings\NSI\Desktop\20 Measurement date/time: 4/15/2014 1:43:10 FM, Filetype: NSI-97 Far-field (tri Knalysis: -3. dB beam with: 16.36 deg -6. dB beam with: 10.00 deg -10. dB beam with: 10.00 deg +10, dB beam with: 10, dB

g Elevation (deg) Center = 0.000 deg, #pts = 1

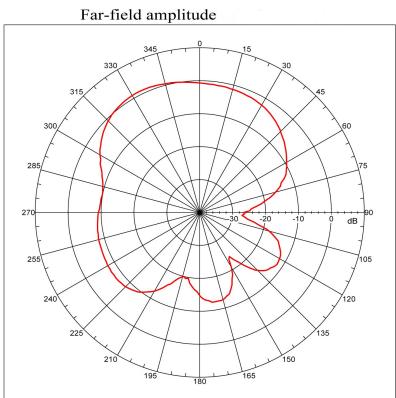
cted beam(s) 1 of 8 Frequency Azimuth Elevation Pol 1.850 GHz Azimuth Elevation Single-pol



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Measured Performance at 1.9GHz Vertical Pane

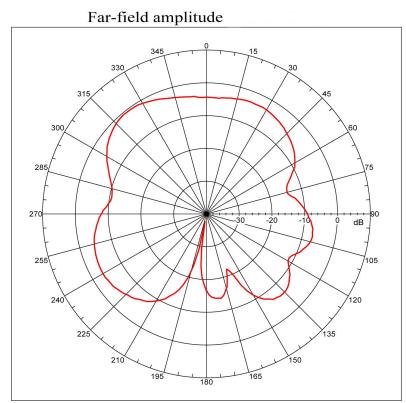


Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg Gain = 1.05218 dBi Max far-field (global) = -45.98458 dB, Max far-field (plot) = -45.98458 dB Normalization: Reference, Network offset = 0.000 dB Bpeak at: -28.00001 deg, Vpeak at: 0.000 deg Flot centering On GSM-04A usar-Usa NSI200 V4.0.124, FilenametC:\Documents and Settings\NSI\Desktop\20 Measurement date/time: 4/15/2014 1;43:10 PM, Filetype: NSI-97 Far-field (ut Analysis - 3. dB beam width: 16.4.5 deg - 6. dB beam width: 10.7.1 deg - 10. dB beam width: 10.7.1 deg - 10.8.1 deg - 10.8.1

deg Elevation (deg) Center = 0.000 deg, #pts = 1

Selected beam(s) 1 of 8 Beam Frequency Azimuth Elevation Pol 7 1.900 GHz Azimuth Elevation Single-pol

Measured Performance at 2.17GHz Vertical Plane



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg Gain = -0.59095 dBi Max far-field (global) = -48.12306 dB, Max far-field (plot) = -48.12307 dB Normalization: Reference, Network offset = 0.000 dB Hpeak at: +0.00001 deg, Vpeak at: 0.000 deg Flot centering: On

GSM-04A

- GGM-UAA GGM-UAA MiIOD V4.0.124, Filename:C:\Documents and Settings\WSI\Desktop\20 Measurement date/time: 4/15/2014 1:43:10 EW, Filetype: NSI-97 Far-field Cut Analysis: Avg value: -6.723 dB -3. dB beam width: 186.96 dg -6. dB beam width: 186.96 dg -10. dB beam width: 186.

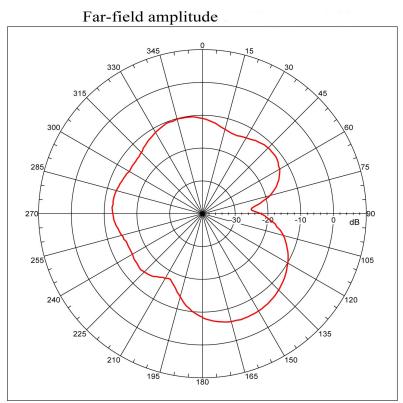
Elevation (deg) Center = 0.000 deg, #pts = 1

- ed beam(s) 1 of 8 Frequency Azimuth Elevation Pol 2.170 GHz Azimuth Elevation Single-pol





Measured Performance at 824MHz Horizontal Plane



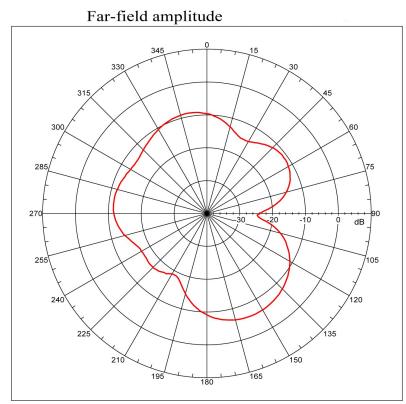
Ear-field amplitude, Eprincipal: Linear, Tau = 0.000 deg Cain = -5.4511 dBi Max far-field (global) = -48.65444 dB, Max far-field (glot) = -48.65449 dB Normalization: Reference, Network offset = 0.000 dB Hpeak at: 155.9959 deg, Vpeak at: 0.000 deg Flot contering on GSM-04A NSI2000 V4.0.124, Filename:C:\Documents and Settings\NSI\Desktop\20 Weasurement date/time: 4/15/2014 1:36:36 FM, Filetype: NSI-97 Far-relation 1:1.563 - 3. db beam width: Not Found - 6. db beam width: Not Found - 10. dB beam width: Not Found - 10.

- imuth (deg)
 Span = 360.00001 deg, Center = 0.000 deg, #pts = 181
 Start = -180.00001 deg, Stop = 180.00001 deg, Delta = 2.000

g Elevation (deg) Center = 0.000 deg, #pts = 1

- cted beam(s) 1 of 8 Frequency Azimuth Elevation Pol 0.824 GHz Azimuth Elevation Single-pol

Measured Performance at 850MHz Horizontal Plane



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg Gain = -6.0031 dBi Max far-field (global) = -47.26596 dB, Max far-field (plot) = -47.26693 dB Mormalization: Reference, Network offset = 0.000 dB Hpeak at: 153.99989 deg, Vpeak at: 0.000 deg Plot centering on

GSM-04A

GSM-04A NGI2000 V4.0.124, Filaname:C:\Documents and Settings\NSI\Dasktop\20 Measurement date/line: 4/15/2014 1:36:36 PM, Filetype: NSI-97 Farfield Cut Analysis: Arg value: -11.924 dB -3. dB beam width: Not Found -6. dB beam width: Not Found -0. dB beam width: Not Found Left Sidelobe: -0.10 dB at 57.318 deg Right Sidelobe: Not Found Farinuth (deg) Span =360.00001 deg, Center = 0.000 deg, Mpts = 181 Start = -180.00001 deg, Stop = 180.00001 deg, Delta = 2.000 deg

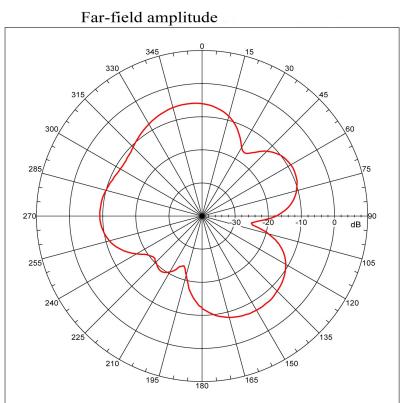
Elevation (deg) Center = 0.000 deg, #pts = 1

Selected beam(s) 1 of 8 Beam Frequency Azimuth Elevation Pol





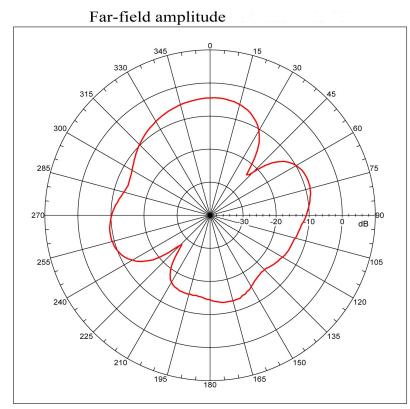
Measured Performance at 900MHz Horizontal Plane



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg Gain = -5.85129 GBi Max far-field (global) = -47.41097 dB, Max far-field (plot) = -47.41097 dB Normalization: Reference, Network offset = 0.000 dB Hpeak at: -8.0001 deg, Vpeak at: 0.000 deg Flot centering: On GSM-04A GSM-04A NSI2000 V4.0.124, Filename:C:\Documents and Settings\NSI\Desktop\20 Measurement date/Fime: 4/15/2014 1:36:36 PM, Filetype: NSI-97 Fary value: -11.058 dB -3. dB beam width: 131.05 deg -6. dB beam width: 131.05 deg -10. dB beam width: 131.05 deg Left Sideiobe: -3.26 dB at 63.352 deg Eartfield display, setup Arimuth (deg) Span = 360.0001 deg, Center = 0.000 deg, #pts = 181 Start -180.00001 deg, Stop = 180.00001 deg, Delta = 2.000 deg deg Elevation (deg) Center = 0.000 deg, #pts = 1

Selected beam(s) 1 of 8 Beam Prequency Azimuth Elevation Pol 3 0.900 GHz Azimuth Elevation Single-pol

Measured Performance at 960MHz Horizontal Plane



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg Gain = -4.44603 dBi Max far-field (global) = -47.0757 dB, Max far-field (plot) = -47.0757 dB Normalization: Reference, Network offaet = 0.000 dB Hpoak at: 1.93939 deg, Vpeak at: 0.000 deg Flot centering: On

GSM=04A

UGM-UA NG:200 V4.0.124, Filename:C:\Documents and Settings\NSI\Desktop\20 Measurement date/ime: 4/15/2014 1:36:36 FM, Filetype: NSI-97 Far-field Cut Analysis: Avg value: -11.169 dB -3. dB beam width: 54.96 deg -6. dB beam width: 78.59 deg -10. dB beam width: 78.59 deg 10. dB beam width: 78.59 deg Left Sidelobe: -4.09 db at 71.397 deg Right Sidelobe: -4.09 db at 71.397 deg Patistic Sidelobe: -4.09 db at 71.397 deg Fainth: (deg) Span = 360.00001 deg, Center = 0.000 deg, épts = 181 Start = -180.00001 deg, Stop = 180.00001 deg, Delta = 2.000 deg

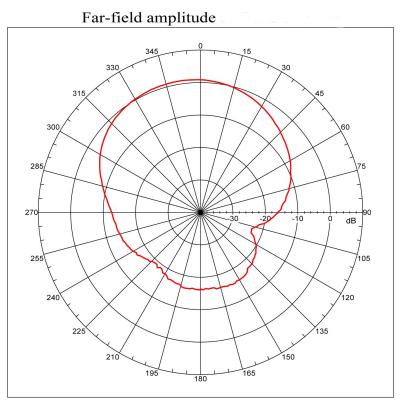
deg Elevation (deg) Center = 0.000 deg, #pts = 1

Selected beam(s) 1 of 8 Beam Frequency Azimuth Elevation Pol 4 0.960 GHz Azimuth Elevation Single-pol





Measured Performance at 1.770GHz Horizontal Plane



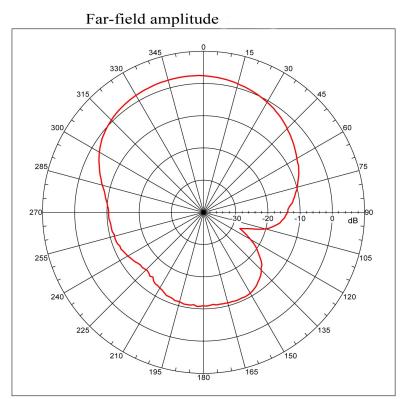
Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg Gain = 0.97956 dBi Max far-field (global) = -45.20866 dB, Max far-field (plot) = -45.20867 dB Normalization: Reference, Network offset = 0.000 dB Mpcek at: 0.000 deg Vpcek at: 0.000 deg For consering: On

NII2000 V4.0.124, FilenamerC:\Documents and Settings\WSI\Desktop\20 Measurement date/time: 4/15/2014 1:36:36 PM, Filetype: NSI-97 Far-field Cut Analysis and Analysis and

deg Elevation (deg) Center = 0.000 deg, #pts = 1

Selected beam(s) 1 of 8 Beam Frequency Azimuth Elevation Pol 5 1.770 GHz Azimuth Elevation Single-pol

Measured Performance at 1.85GHz Horizontal Plane



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg Gain = 2.55662 dBi Max far-field (global) = -43.90042 dB, Max far-field (plot) = -43.90041 dB Normalization: Reference, Network offset = 0.000 dB Hpeak at: -10.00001 deg, Vpeak at: 0.000 deg Flot contexing: On

GSM-04A

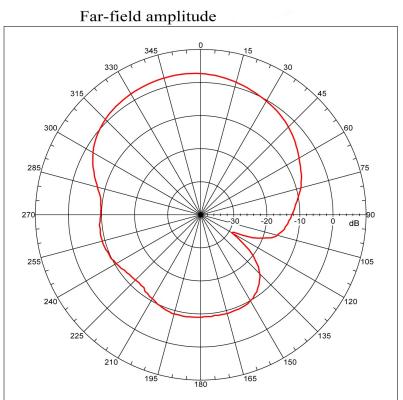
GGM-04A GGM-04A Measurement date/time: 4/15/2014 1:36:36 FM, Filetype: NSI-97 Far-field Cut Analysis: NSI-05 FM, Filetype: NSI-97 Far-field Cut Analysis: A dB beam width: 180.50 deg -6. dB beam width: 180.80 deg -10. dB beam width: 180.80 deg Far-field display setup db at 151.866 deg Far-field display setup Azimuth (deg) Span = 360.00001 deg, Center = 0.000 deg, Bpts = 181 Statt = 180.0001 deg, Center = 0.000 deg, Bpts = 2.000 deg deg Elevation (deg) Center = 0.000 deg, #pts = 1

Selected beam(s) 1 of 8 Beam Frequency Azimuth Elevation Pol 6 1.850 GHz Azimuth Elevation Single-pol





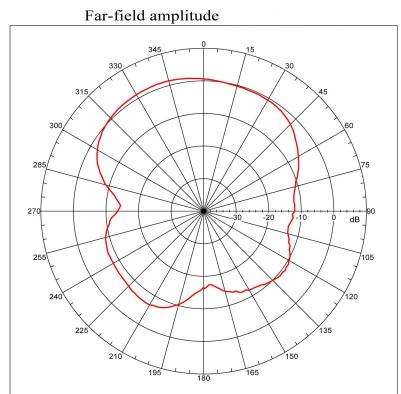
Measured Performance at 1.9GHz Horizontal Plane



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg rain = 2.0226 dB; principar: Linear, au = 0.000 deg Max far-field (global) = -44.1446 dB, Max far-field (plot) = -44.1446 dB Normalization: Reference, Network offset = 0.000 dB Bpeak at: -6.00001 deg, Vpeak at: 0.000 deg Flot centering: On GSM-04A GSM-04A MSI2000 V4.0.124, EllenamerC:\Documents and Settings\NS1\Desktop\20 Measurement date/ime: 4/15/2014 1:36:36 FM, Filetype: NSI-97 Far-field Cut Analyzis: Avg value: -4.947 dB -3. dB beam width: 111.04 deg -6. dB beam width: 115.6 deg 10. dB beam width: 115.6 deg 10. dB beam width: 115.6 deg 11.78 dB at 150.888 deg Far-field display sotup Arimuth (deg) Span =360.0001 deg, Center = 0.000 deg, Ppts = 181 Start - 180.00001 deg, Stop = 180.00001 deg, Delta = 2.000 deg State-deg Elevation (deg) Center = 0.000 deg, #pts = 1

Selected beam(s) 1 of 8 Beam Frequency Azimuth Elevation Pol 7 1.900 GHz Azimuth Elevation Single-pol

Measured Performance at 2.17GHz Horizontal Plane



Ear-field amplitude, Eprincipal: Linear, Tau = 0.000 deg Gain = 1.44719 dBi Max far-field (global) = -46.08492 dB, Max far-field (plot) = -46.08493 dB Normalization: Reference, Network offset = 0.000 dB Hpoak att = 20.00001 deg, Vpeak att 0.000 deg Flot centering on

GSM-04A

- GSM-04A MSI2000 V4.0.124, EilenamerCi'LOccuments and Settings/MSI\Desktop\20 Measurement date/times 4/15/2014 1:36:36 FM, Filetype: NSI-97 Far-field Cut Analysis: Avg value: -5.442 dB -3. dB beam width: 120.42 deg -6. dB beam width: 120.42 deg -10. dB beam width: 120.42 deg -10. dB beam width: 123.42 deg Eaft Sideiobe: -9.40 dB at -113.631 deg Eaft Sideiobe: -9.40 dB at -113.637 deg Far-field display setup Azimuth (deg) Span = 360.0001 deg, Center = 0.000 deg, Ppts = 181 Start = -180.00001 deg, Stop = 180.00001 deg, Delta = 2.000 deg deg Elevation (deg) Center = 0.000 deg, #pts = 1

- Selected beam(s) 1 of 8 Beam Frequency Azimuth Elevation Pol 8 2.170 GHz Azimuth Elevation Single-pol



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ROHS Directive 2002/95/EC

Specifies certain limits for hazardous substances.

WEEE Directive 2002/96/EC

Waste electrical & electronic equipment. This product must be disposed of through a licensed WEEE collection point. RF Solutions Ltd., fulfills its WEEE obligations by membership of an approved compliance scheme.

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