

# DATA SHEET

## WIRELESS COMPONENTS

Ceramic Antenna  
ANT4005B000RWHEXS

LTE-BAND  
4005 Series



FEATURES

- Compact Size
- High radiation efficiency
- Multi-band coverage
- Reflow process compatible
- RoHS compliant

APPLICATIONS

- Global cellular network devices
- Telematics
- Cellular broadband access
- M2M module

ORDERING INFORMATION

All part numbers are identified by the series, packing type, material, size, antenna type, working frequency and packing quantity.

**PART NUMBER**

**ANT 4005 B 000 R WHEXS**  
 (1) (2) (3) (4) (5) (6)

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(1) PRODUCT

ANT = Antenna

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(2) SIZE

4005 = 40 × 5 mm

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(3) ANTENNA TYPE

B= Bulk Antenna

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(4) SERIAL NO.

000

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(5) PACKING STYLE

R = Reel

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(6) WORKING FREQUENCY

WHEX=0.698~ 0.96 / 1.71~2.69 GHz

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PHYCOMP CTC

CAN439144400HEX1K

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I2NC

439144400HEX

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**SPECIFICATION**

Table I

DESCRIPTION	VALUE
Working Frequency	698~960 / 1710~2690 MHz
Bandwidth	260 / 980 MHz (Typ.)
VSWR	3.0 dB max
Polarization	Linear
Azimuth Beamwidth	Omni-directional
Peak Gain	3.2 / 4.0 dBi(Typ.)
Impedance	50 Ω
Operating Temperature	- 40~105 °C
Maximum Power	1 W
Termination	Ag (Environmentally-Friendly Leadless)
Resistance to Soldering Heats	260°C , 5sec.

**NOTE**

I. The specification is defined on Yageo evaluation board

**DIMENSIONS**

**OUTLINES**

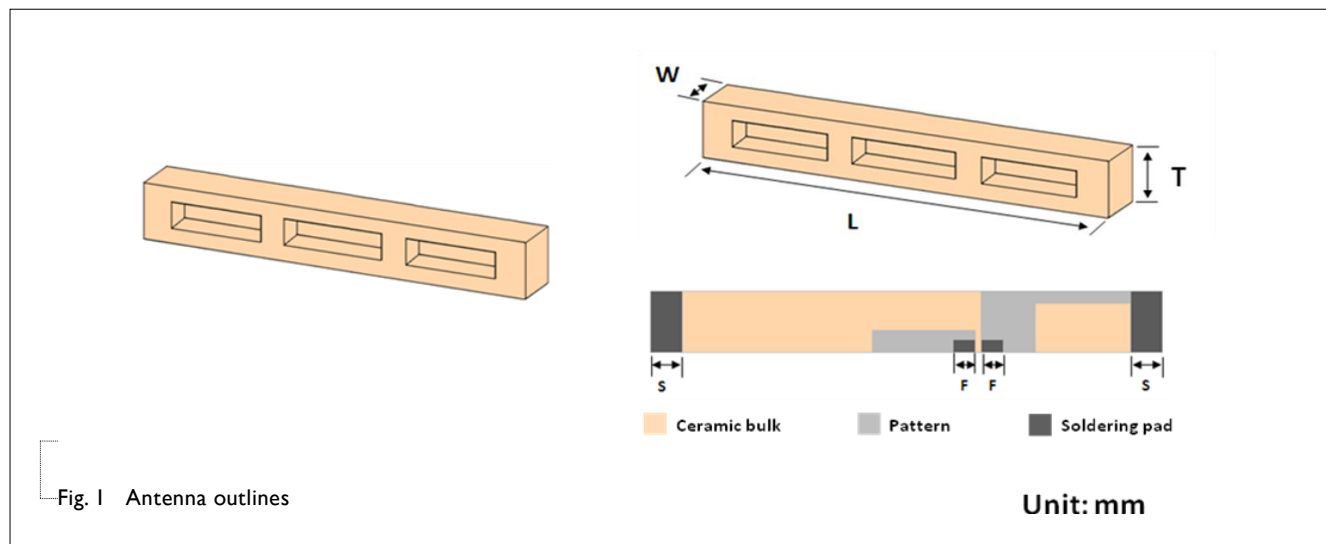


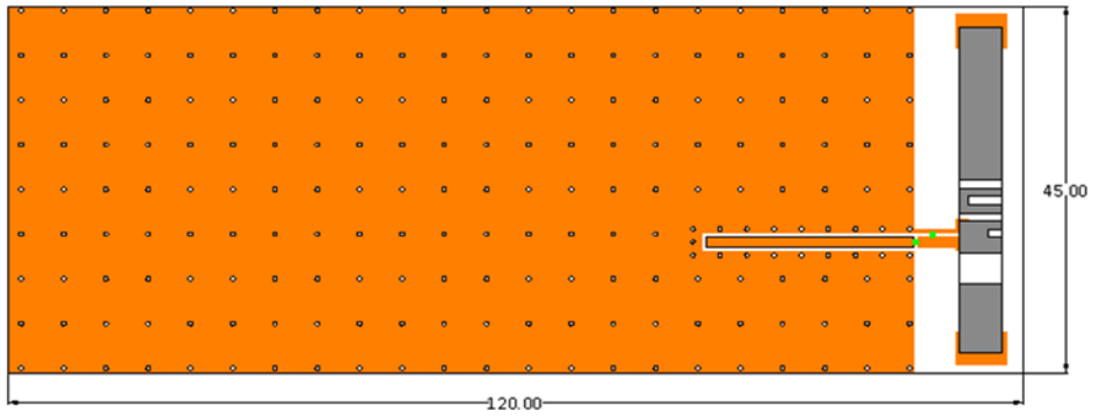
Table 2 Mechanical Dimension

MARK	DIMENSION
L (mm)	40.0 ±0.5
W (mm)	5.0 ±0.3
T (mm)	6.00 ±0.3
S (mm)	2.4 ±0.2
F (mm)	1.6 ±0.2

Table 3 Termination configuration

MARK	FUNCTION
F	Feeding Point
S	Soldering Point

REFERENCE DESIGN OF EVALUATION BOARD



Unit: mm

Fig. 2 Outlook and dimension of evaluation board

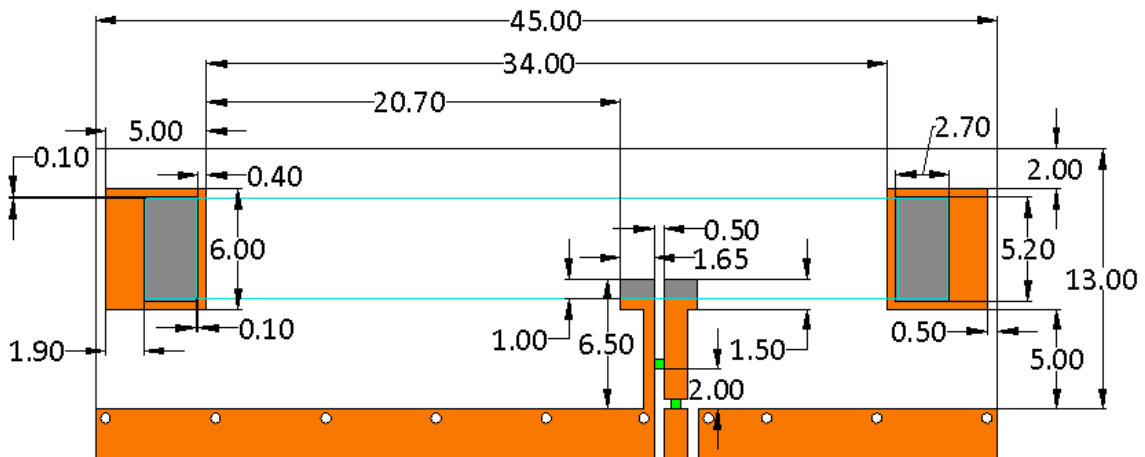
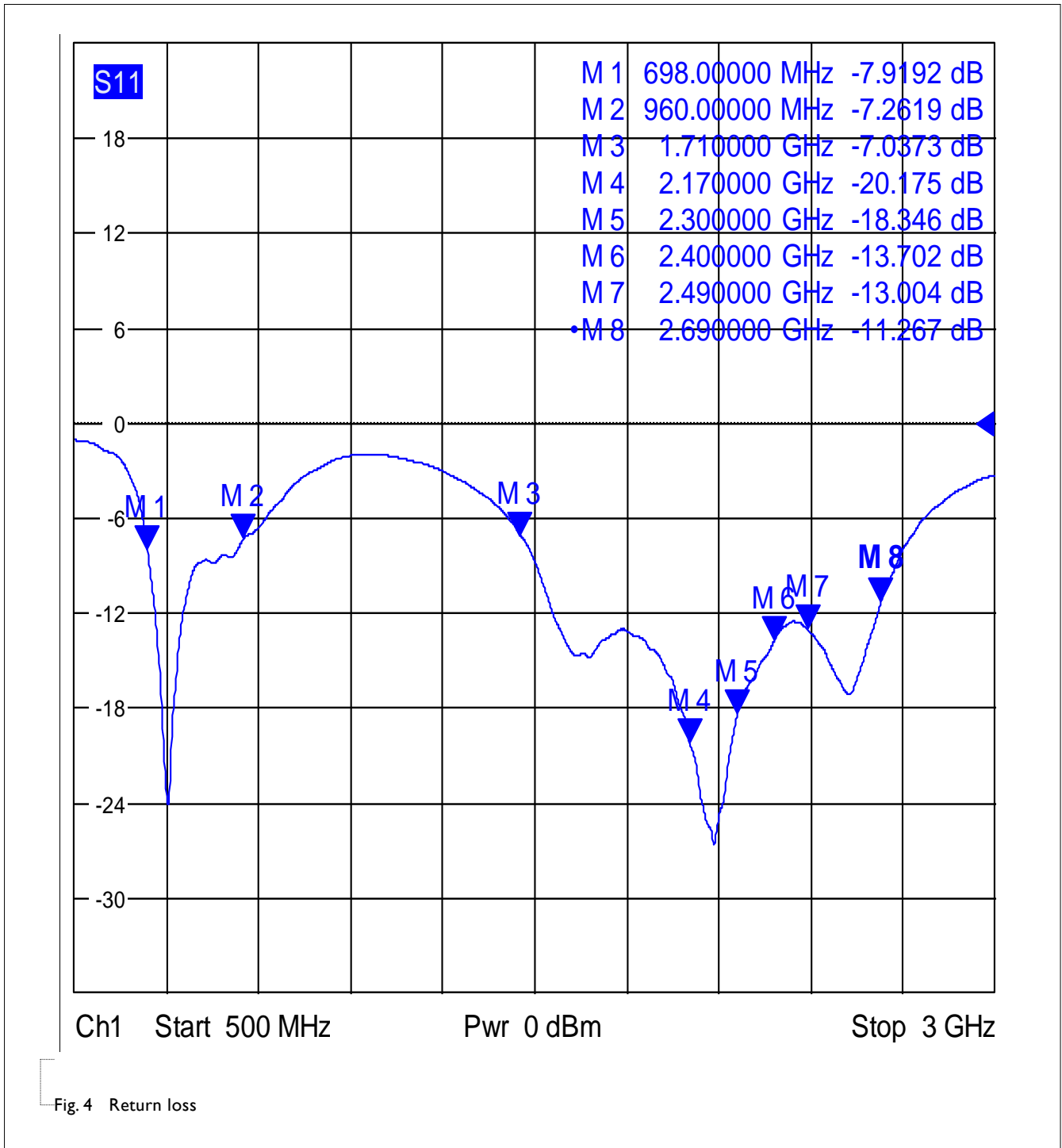
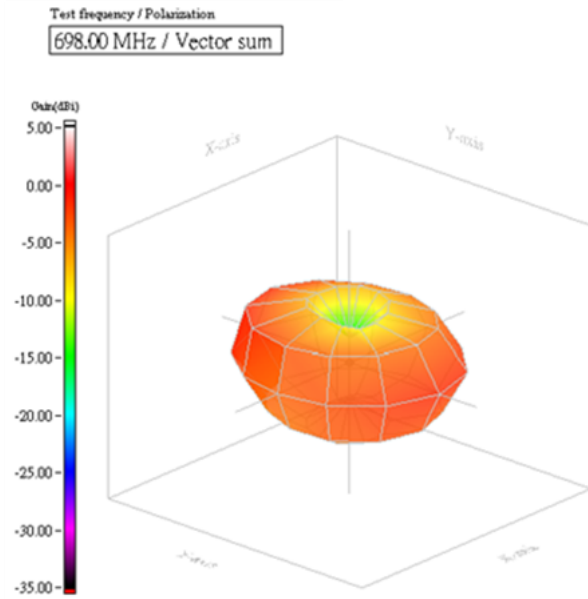
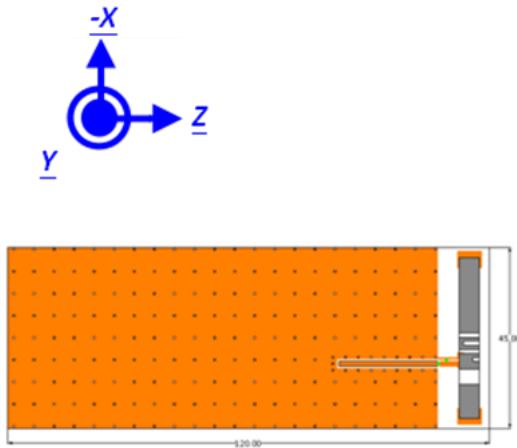


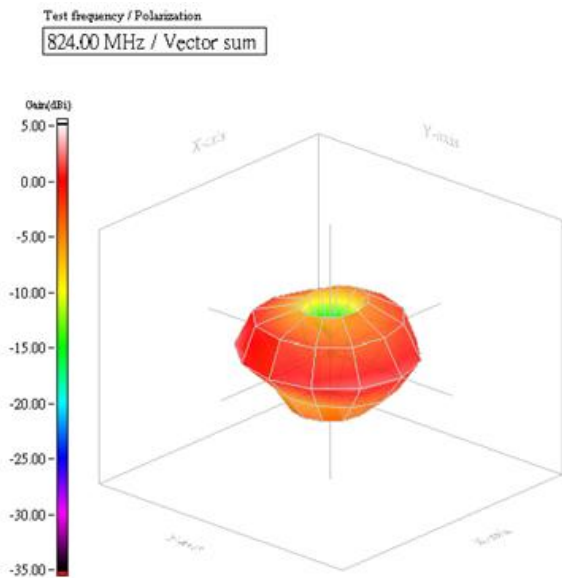
Fig. 3 Details of soldering Pad

ELECTRICAL PERFORMANCES

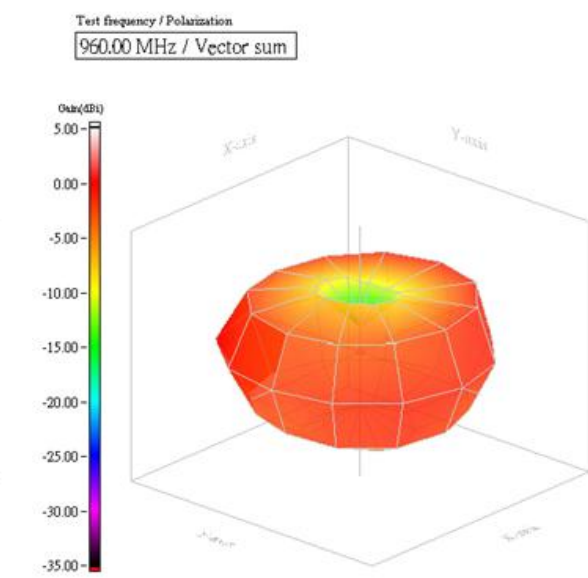




Max gain= -0.70dBi, at (90, 270)  
MEG (mean effective gain)= -5.66dBi  
Directivity(dB)= 3.21  
Efficiency= -3.91dB, 40.62%

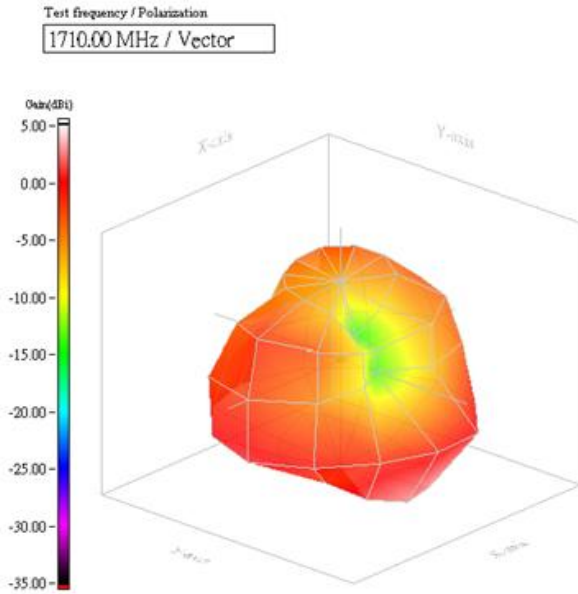


Max gain= 2.94dBi, at (90, 270)  
MEG (mean effective gain)= -3.58dBi  
Directivity(dB)= 4.70  
Efficiency= -1.76dB, 66.64%

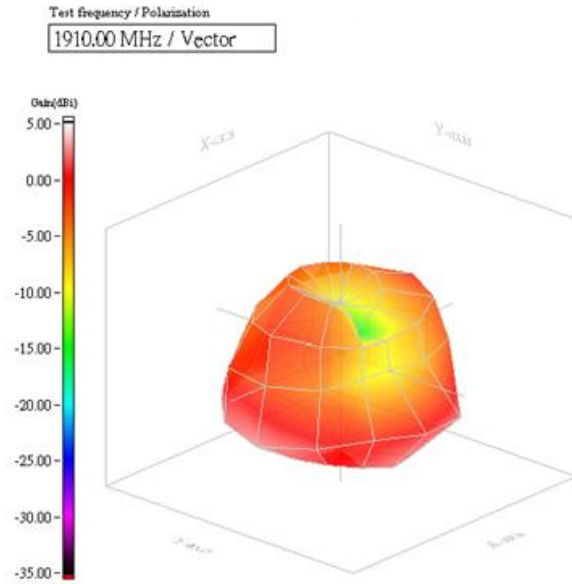


Max gain= 0.50dBi, at (90, 270)  
MEG (mean effective gain)= -4.36dBi  
Directivity(dB)= 3.08  
Efficiency= -2.58dB, 55.22%

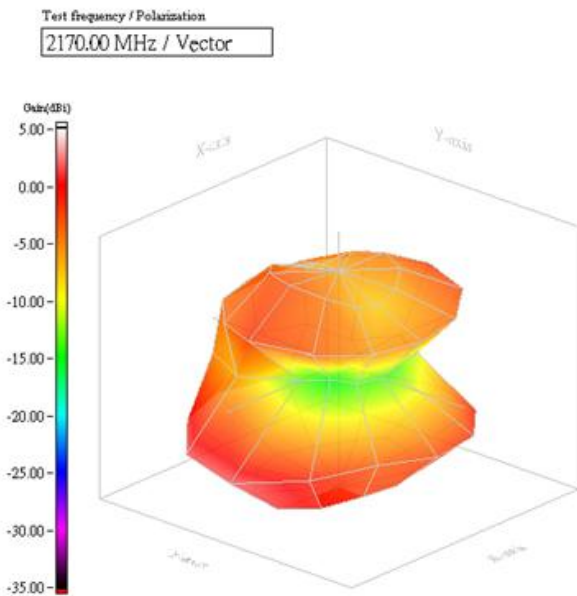
Fig. 5 Radiation Pattern



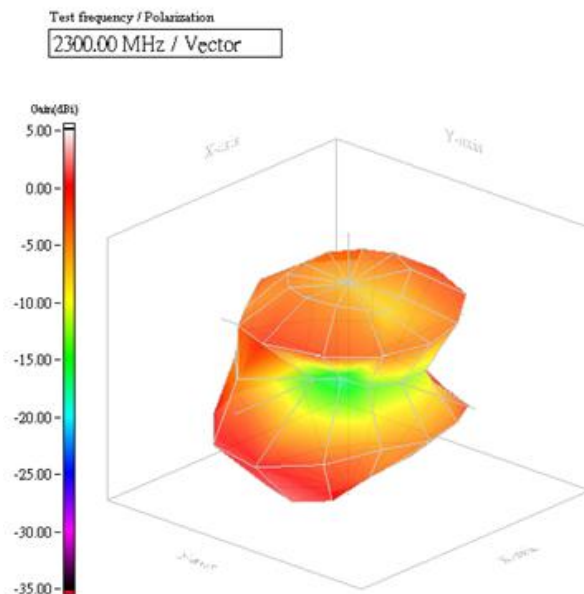
Max gain= 2.98dBi, at (150, 120)  
MEG (mean effective gain)= -2.79dBi  
Directivity(dB)= 5.60  
Efficiency= -2.62dB, 54.70%



Max gain= 3.65dBi, at (120, 210)  
MEG (mean effective gain)= -1.67dBi  
Directivity(dB)= 4.87  
Efficiency= -1.22dB, 75.50%

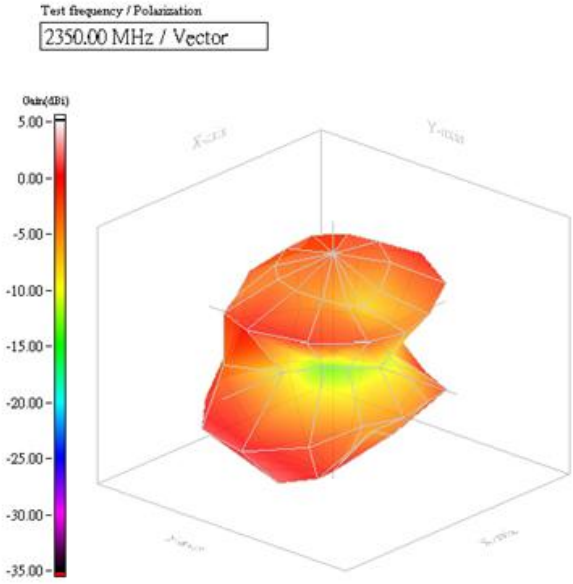


Max gain= 3.02dBi, at (120, 240)  
MEG (mean effective gain)= -2.78dBi  
Directivity(dB)= 5.83  
Efficiency= -2.81dB, 52.34%



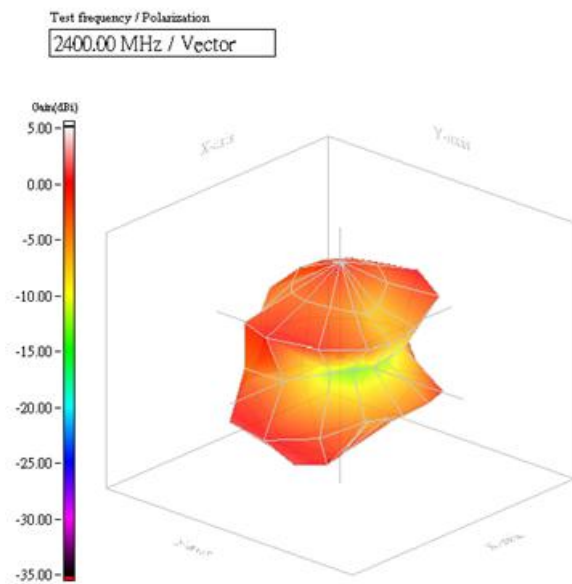
Max gain= 3.29dBi, at (120, 240)  
MEG (mean effective gain)= -2.05dBi  
Directivity(dB)= 5.67  
Efficiency= -2.38dB, 57.75%

Fig. 6 Radiation Pattern



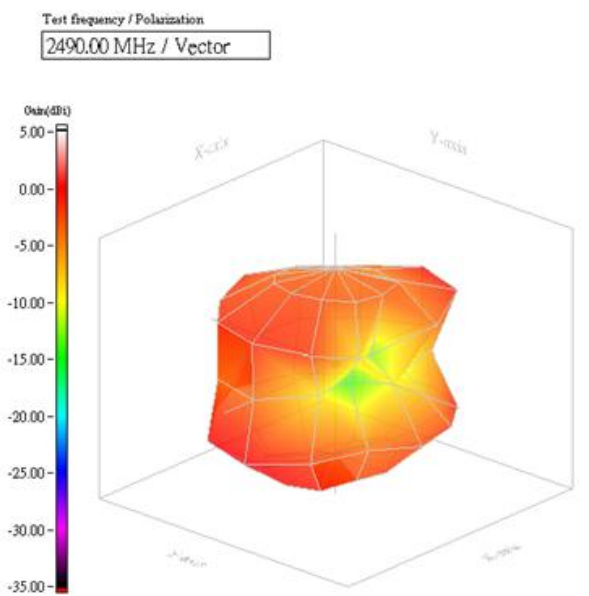
Test frequency / Polarization  
2350.00 MHz / Vector

Max gain= 3.76dBi, at (150, 240)  
MEG (mean effective gain)=-1.37dBi  
Directivity(dB)= 5.74  
Efficiency= -1.98dB, 63.35%



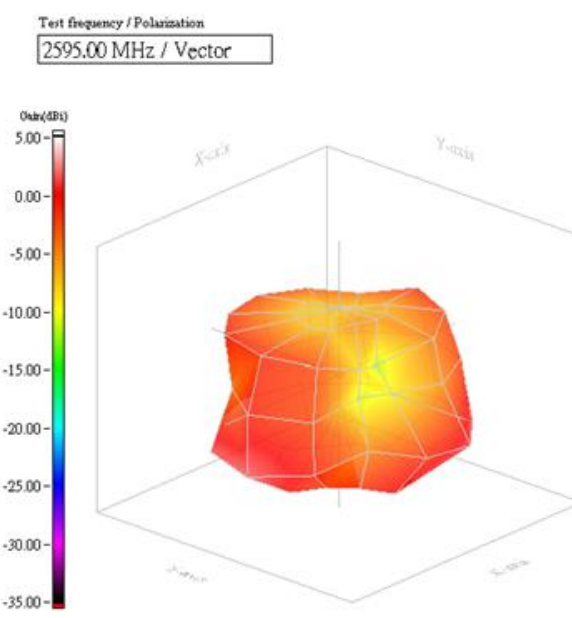
Test frequency / Polarization  
2400.00 MHz / Vector

Max gain= 3.98dBi, at (150, 240)  
MEG (mean effective gain)=-1.31dBi  
Directivity(dB)= 6.00  
Efficiency= -2.02dB, 62.84%



Test frequency / Polarization  
2490.00 MHz / Vector

Max gain= 3.22dBi, at (150, 240)  
MEG (mean effective gain)=-2.71dBi  
Directivity(dB)= 5.65  
Efficiency= -2.43dB, 57.15%

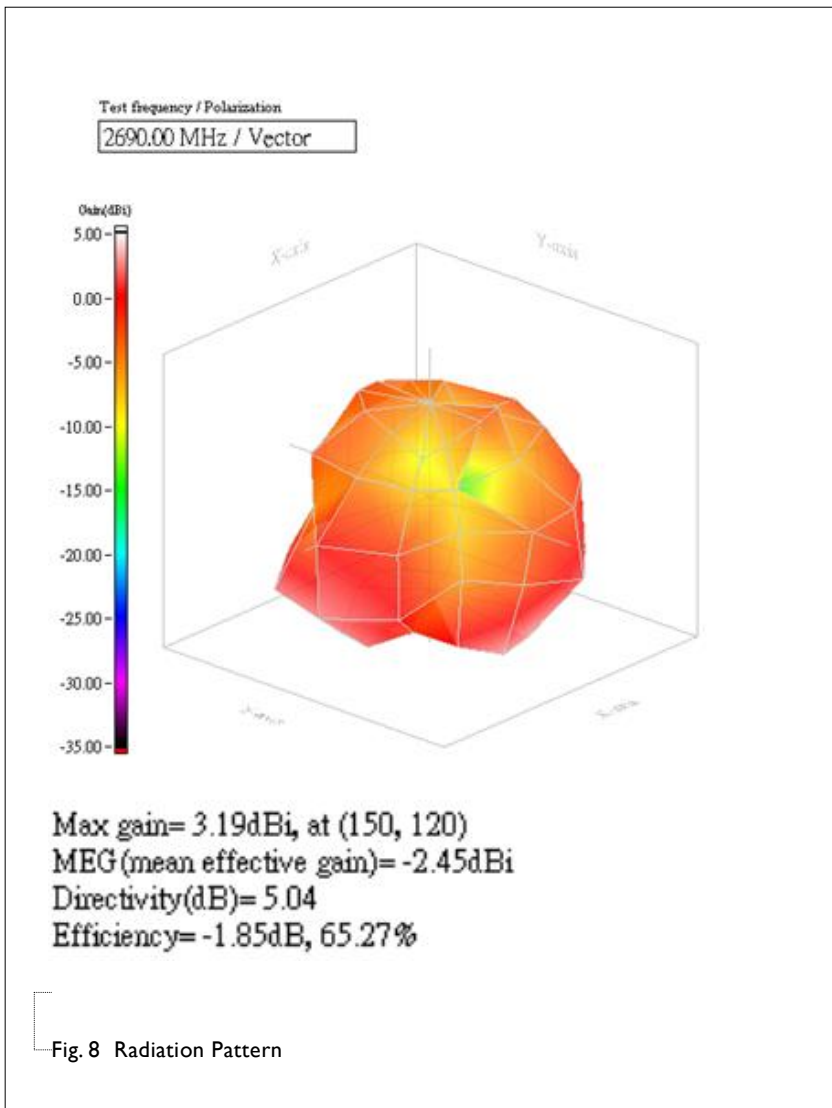


Test frequency / Polarization  
2595.00 MHz / Vector

Max gain= 3.35dBi, at (120, 180)  
MEG (mean effective gain)=-3.23dBi  
Directivity(dB)= 5.46  
Efficiency= -2.11dB, 61.56%

Fig. 7 Radiation Pattern





REVISION HISTORY

REVISION	DATE	CHANGE NOTIFICATION	DESCRIPTION
Version 0	Jun. 02, 2015	-	New data sheet for SMD type antenna, WHEXS application, 4005 series

单击下面可查看定价，库存，交付和生命周期等信息

[>>Yageo\(国巨\)](#)