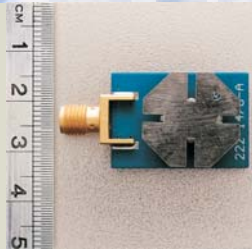


**EM-5TO6M**  
Antenna element

**EM-5TO6M-A**

Assembly including antenna element, PCB, and female SMA connector as shown



## 4.9 - 5.9 GHz Monopole Antenna

### Features

- Uniform Omni-directional Pattern
- Very Efficient MLA Technology
- Low Profile for Embedded Applications

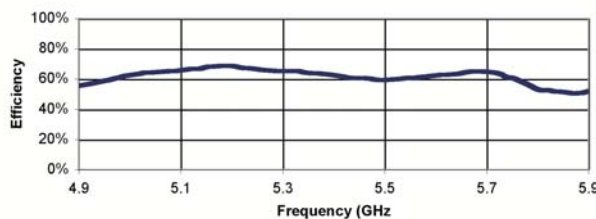
### Electrical Specifications

Frequency Range	4.9 - 5.9 GHz
Gain	> 1.3 peak across band
VSWR	< 2.2 across band
Polarization	Linear
Radiation Pattern	Azimuth Omni-directional
Feed Impedance	50 Ohms Unbalanced

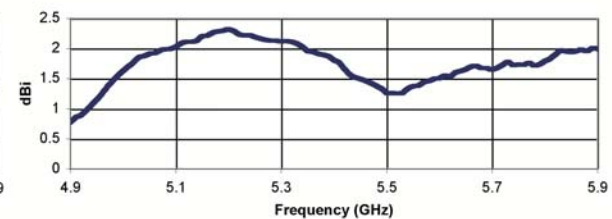
### Mechanical Specifications

Antenna Element	0.71 x 0.71 x 0.21 in 18.0 x 18.0 x 5.33 mm
Assembly Ground Plane	1.03 x 0.73 x 0.03 in 26.2 x 18.5 x 0.8 mm
Antenna Element Weight	0.5 g

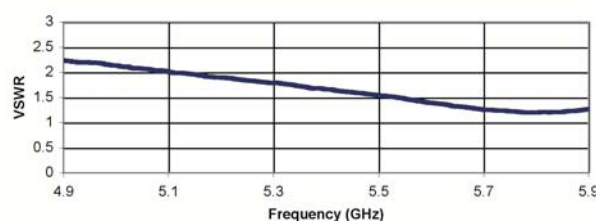
### Efficiency



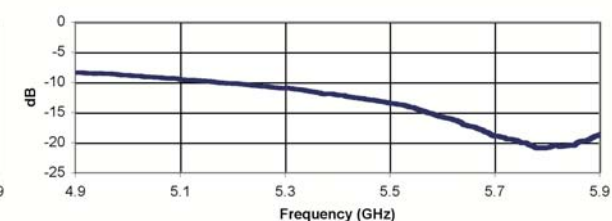
### Peak Gain



### VSWR



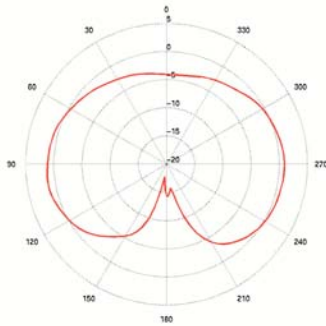
### Return Loss



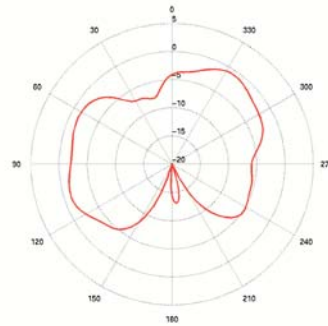
All antenna measurements are taken in free space. Results may vary depending on the particular implementation.

Diagrams Below are at 4.9 GHz

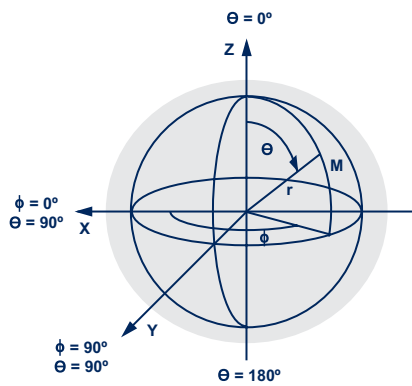
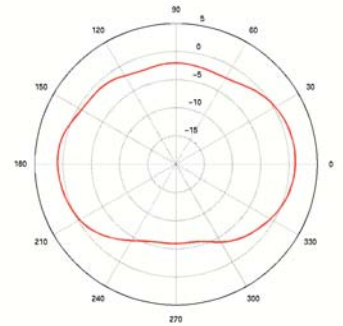
Elevation Cut **Phi=0 Degrees**



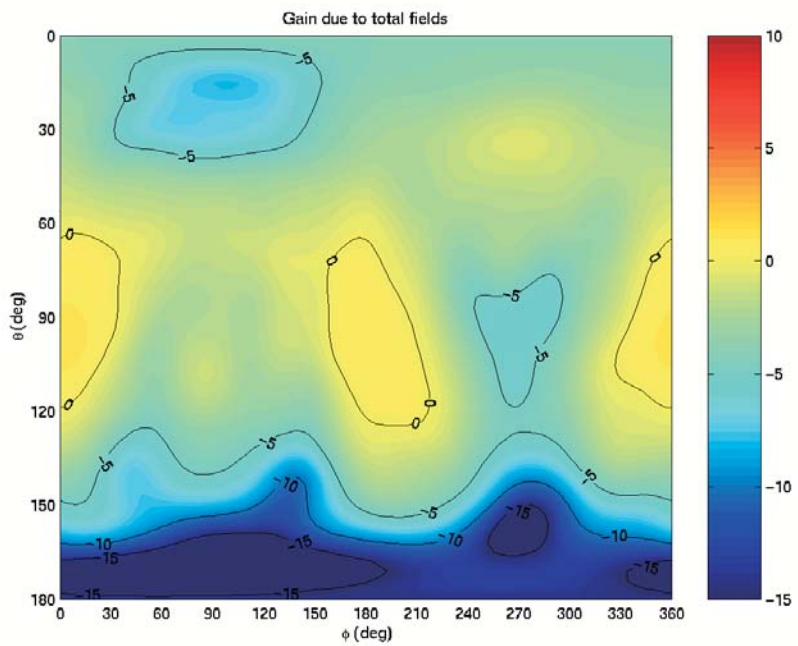
Elevation Cut **Phi=90 Degrees**



Azimuth Cut **Theta=90 Degrees**

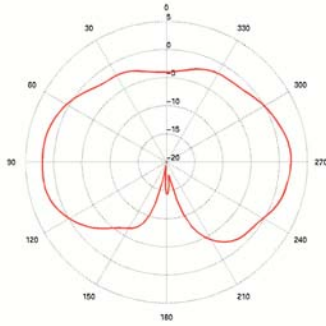


Spherical Gain Contour Map at 4.9 GHz

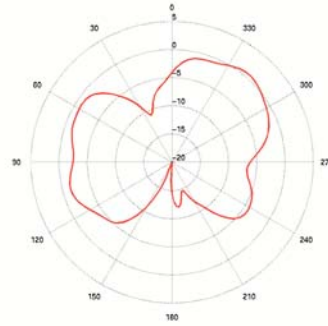


Diagrams Below are at 5.25 GHz

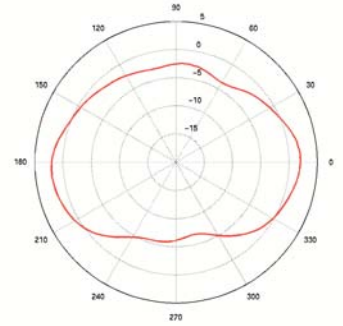
Elevation Cut **Phi=0 Degrees**



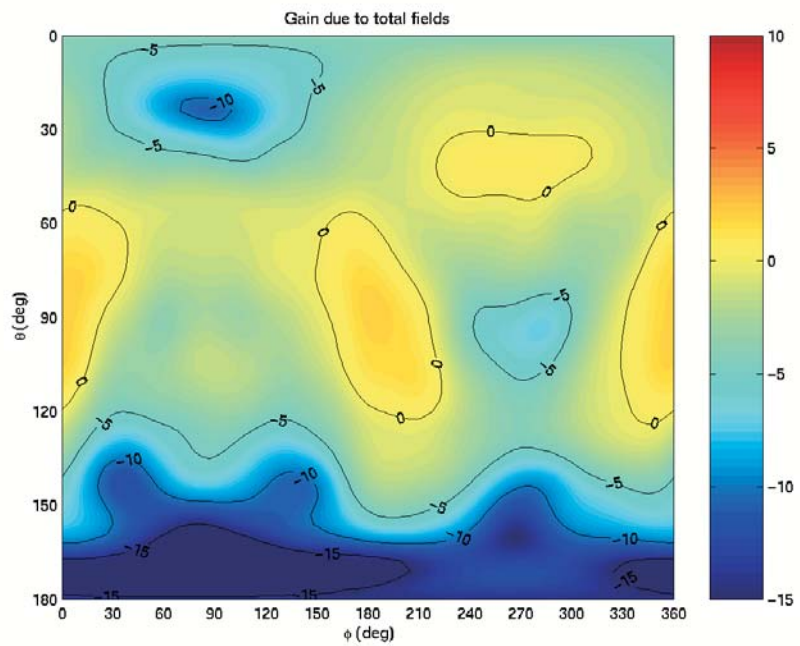
Elevation Cut **Phi=90 Degrees**



Azimuth Cut **Theta=90 Degrees**

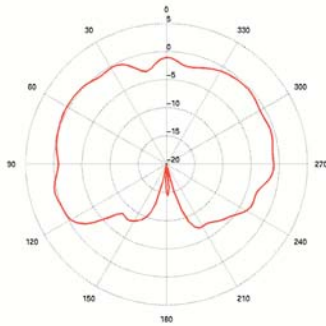


Spherical Gain Contour Map at 5.25 GHz

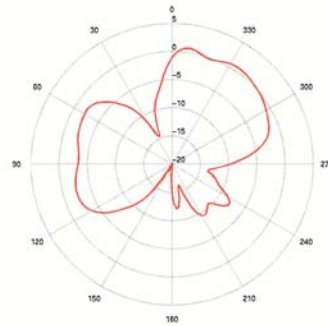


Diagrams Below are at 5.8 GHz

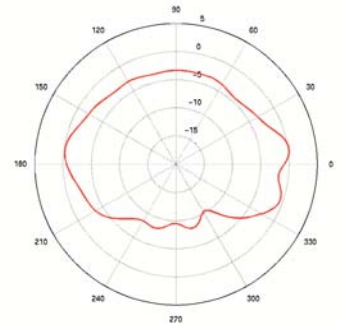
Elevation Cut **Phi=0 Degrees**



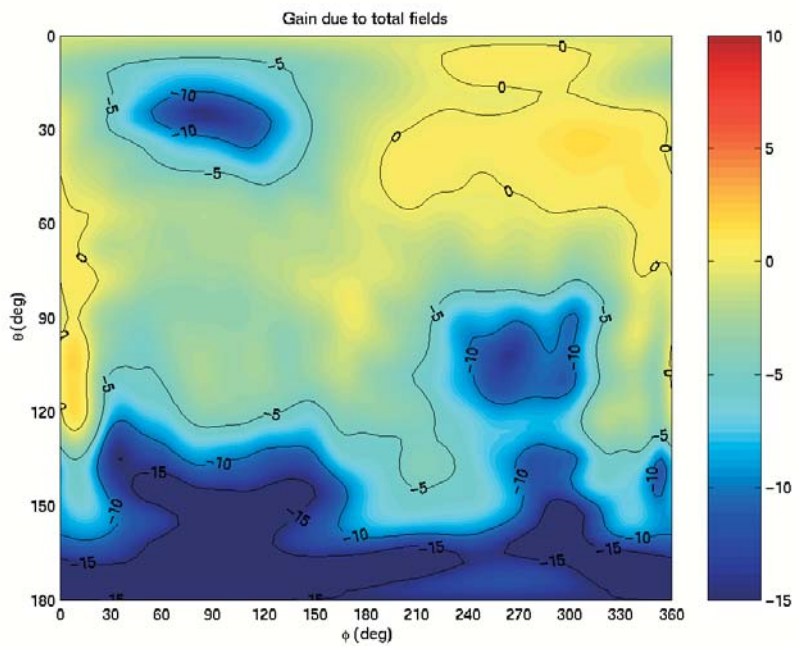
Elevation Cut **Phi=90 Degrees**



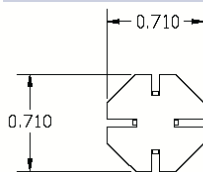
Azimuth Cut **Theta=90 Degrees**



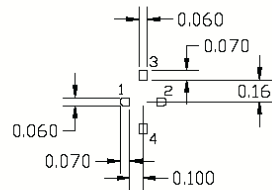
### Spherical Gain Contour Map at 5.8 GHz



### Footprint



PART DIMENSIONS AND PIN OUT, VIEW AS SEEN THROUGH PART FROM TOP



PAD LOCATIONS ON PART, VIEW AS SEEN THROUGH PART FROM TOP

PIN #	DESCRIPTION
1	FEED
2	FEED
3	GND
4	GND

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

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