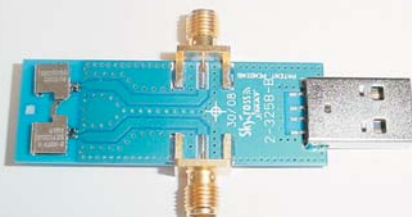


iMAT-1113
Antenna element

iMAT-1113-A
Assembly including antenna element, PCB,
and connectors as shown



3.3-3.8 GHz
WiMAX Antenna

Features

- Single antenna structure with multiple feeds behaves like multiple antennas
- Ready-made diversity or MIMO antenna system
- High isolation, low correlation, and high efficiency in a very small footprint
- Surface mount technology & common materials translate to cost effective manufacturing

Mechanical Specifications

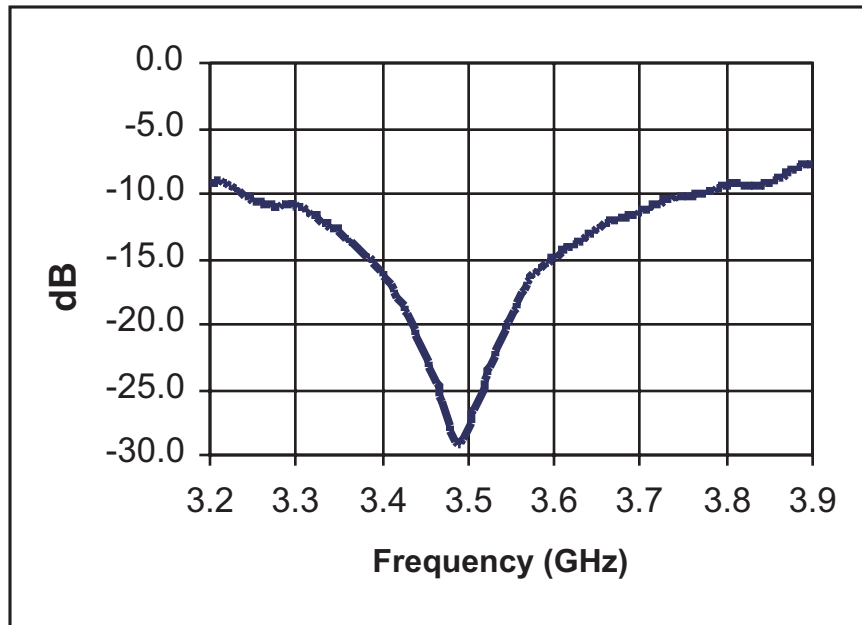
Antenna Element _____	0.24 x 0.63 x 0.09 in
_____	6.2 x 16 x 2.2 mm
Assembly PCB _____	2.12 x 0.75 in
_____	54.0 x 19.0 mm
Area of PCB that is Ground _____	1.7 x 0.75 in
_____	43.0 x 19.0 mm
Antenna Element Weight _____	0.3 g

Electrical Specifications

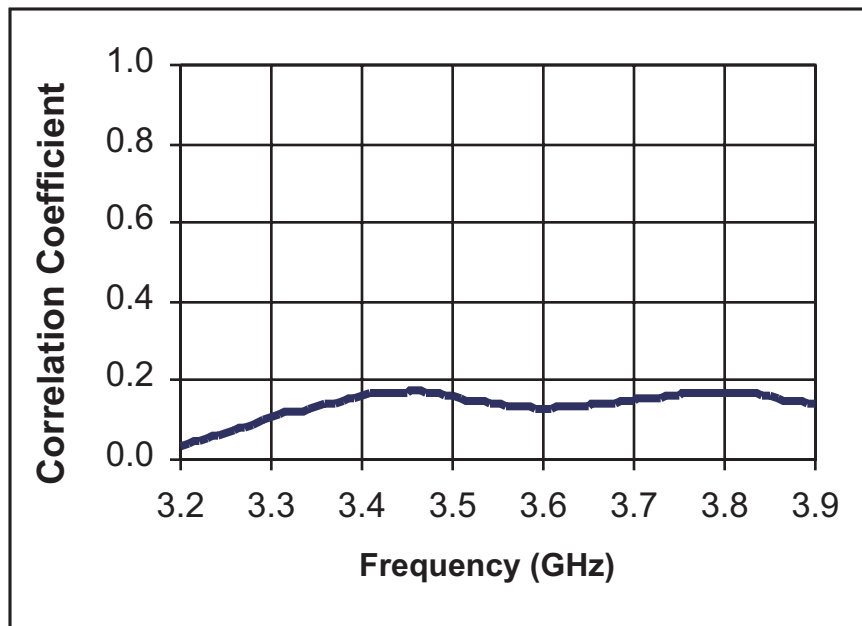
Frequency Range _____	3.3-3.8 GHz
Gain _____	>1.2 dBi at 3.55 GHz
VSWR _____	<2.8:1 across band
Isolation _____	< -8 dB across band
Envelope Correlation Coefficient _____	<0.3 across band
Polarization _____	Linear
Radiation Pattern _____	Elevation onmi-directional
FeedImpedance _____	50 Ohms Unbalanced

All antenna measurements are taken in free space. Antenna will need to be customized (tuned and/or trimmed) to achieve similar performance when fitted in a plastic enclosure. Results may vary depending on the particular implementation.

Isolation: S21 (1 to 2)



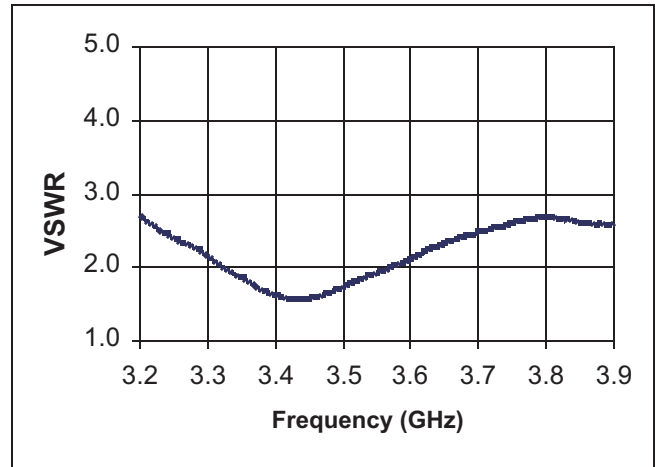
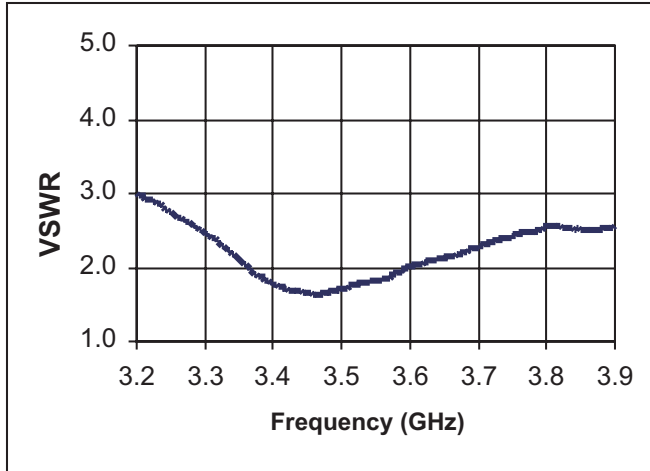
Envelope Correlation Coefficient



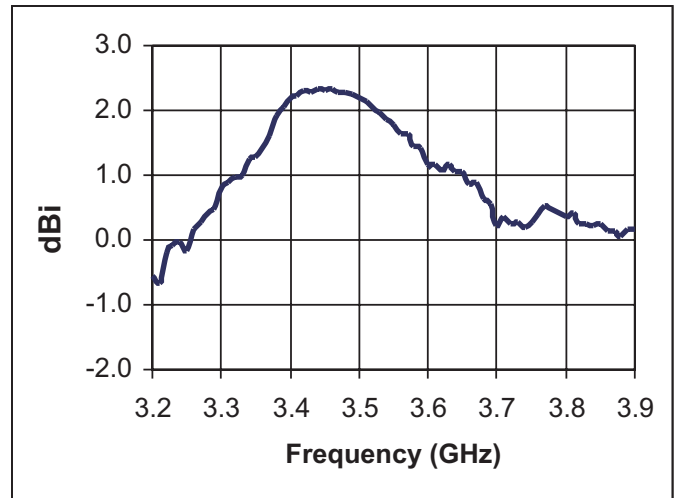
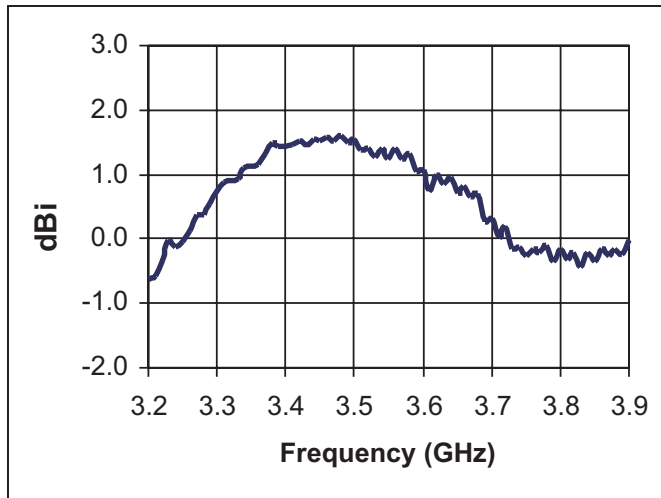
Port 1

Port 2

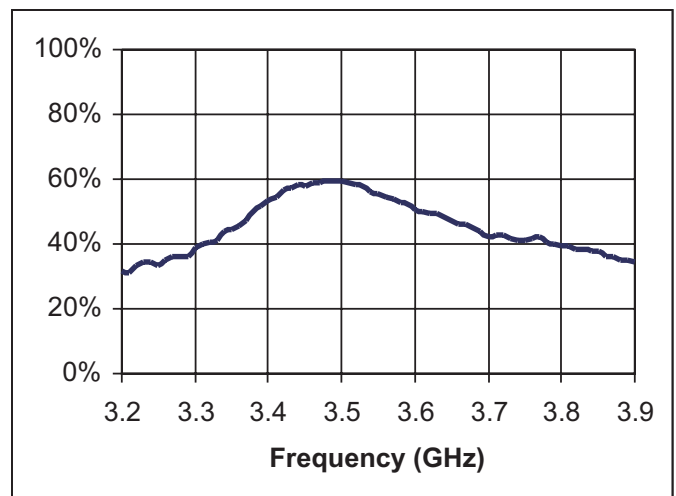
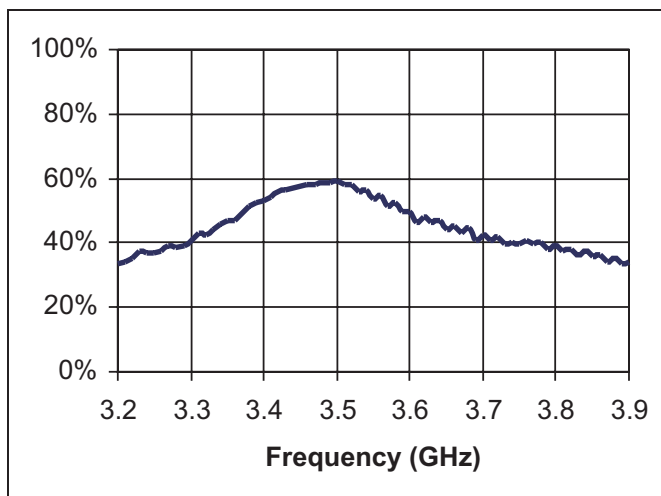
VSWR



Peak Gain



Efficiency

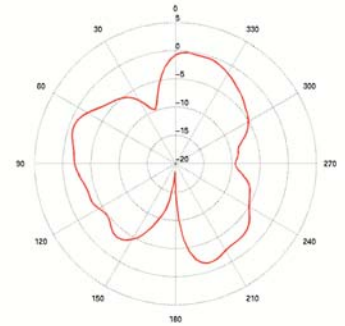
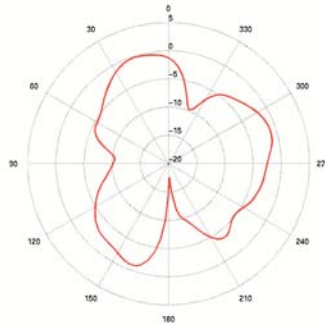


Diagrams Below are at 3.55 GHz

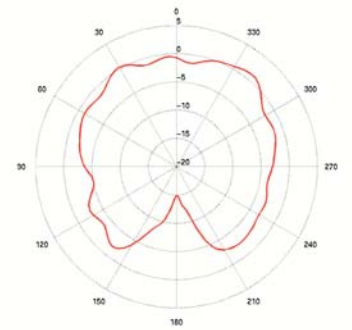
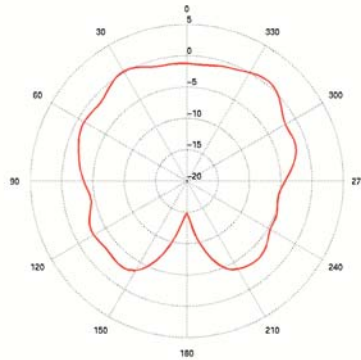
Port 1

Port 2

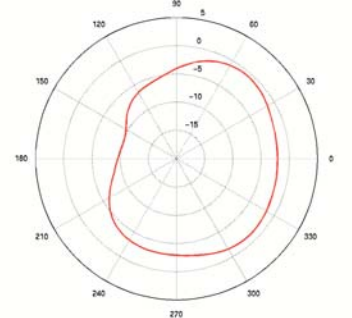
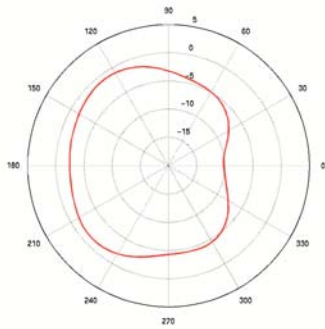
Elevation Cut **Phi=0 Degrees**



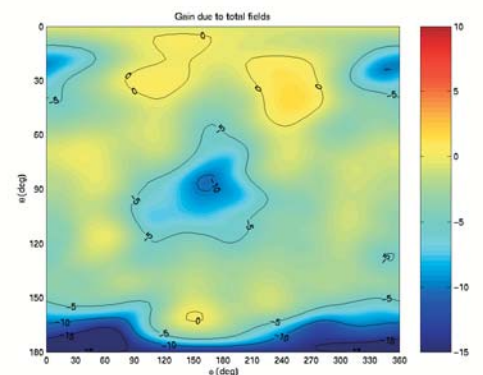
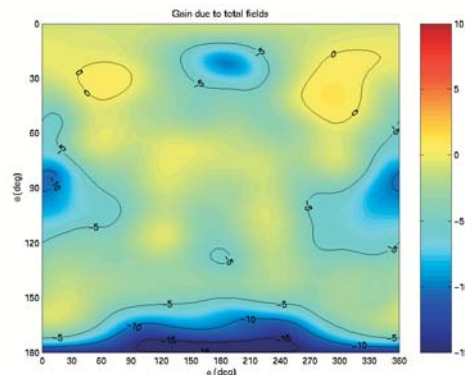
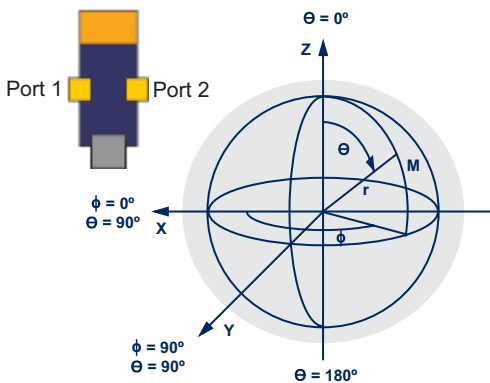
Elevation Cut **Phi=90 Degrees**



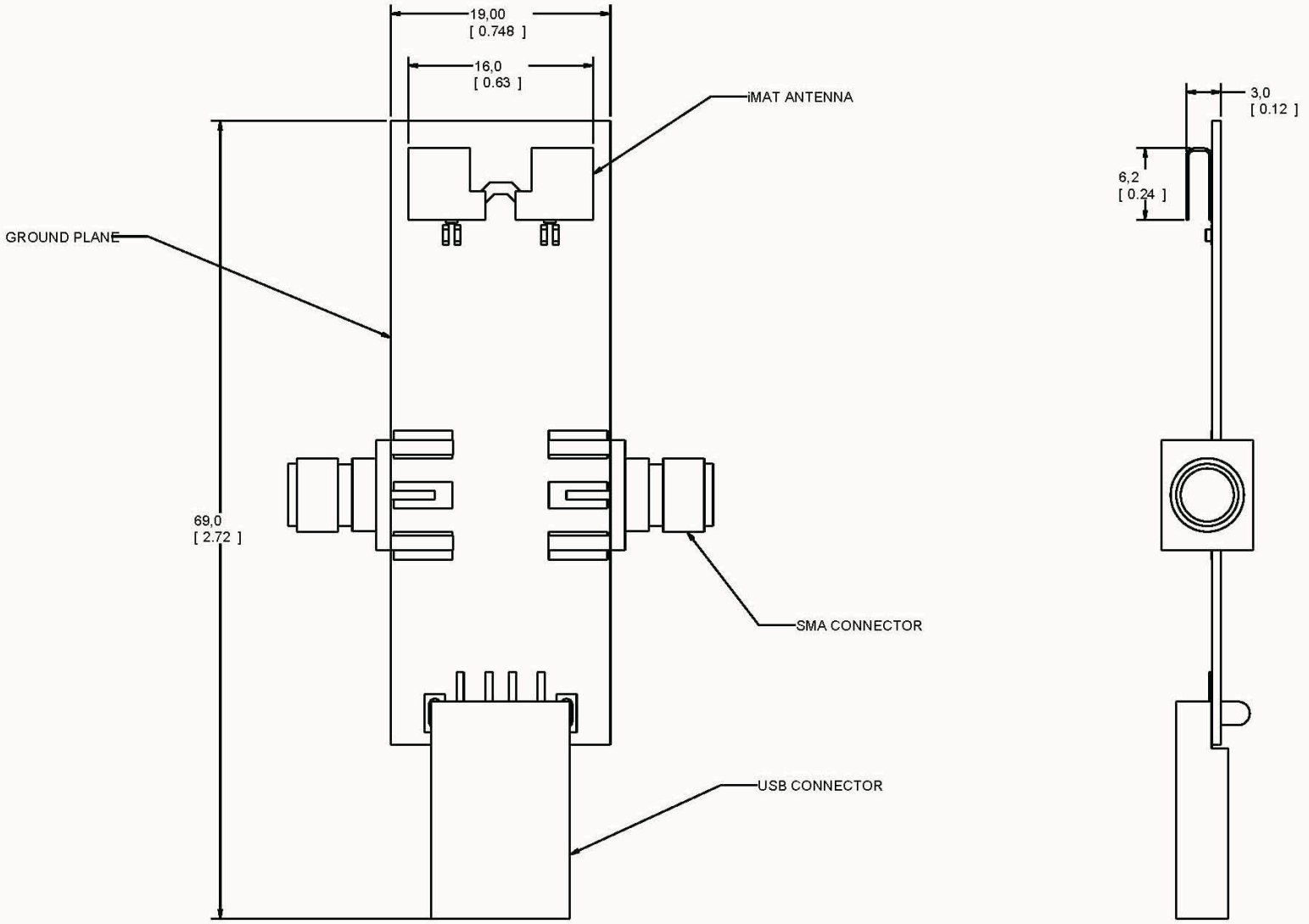
Azimuth Cut **Theta=90 Degrees**



Spherical Gain Contour Map

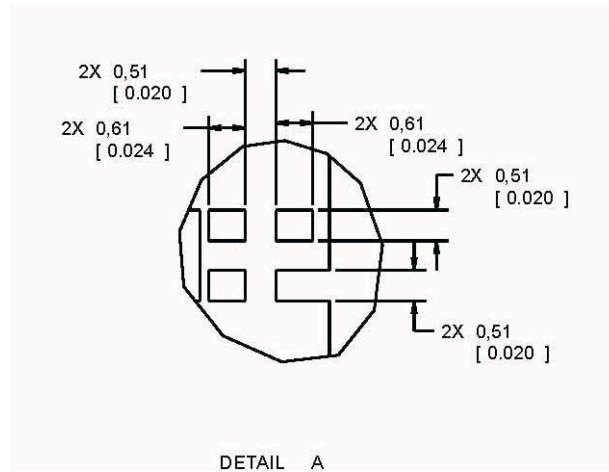
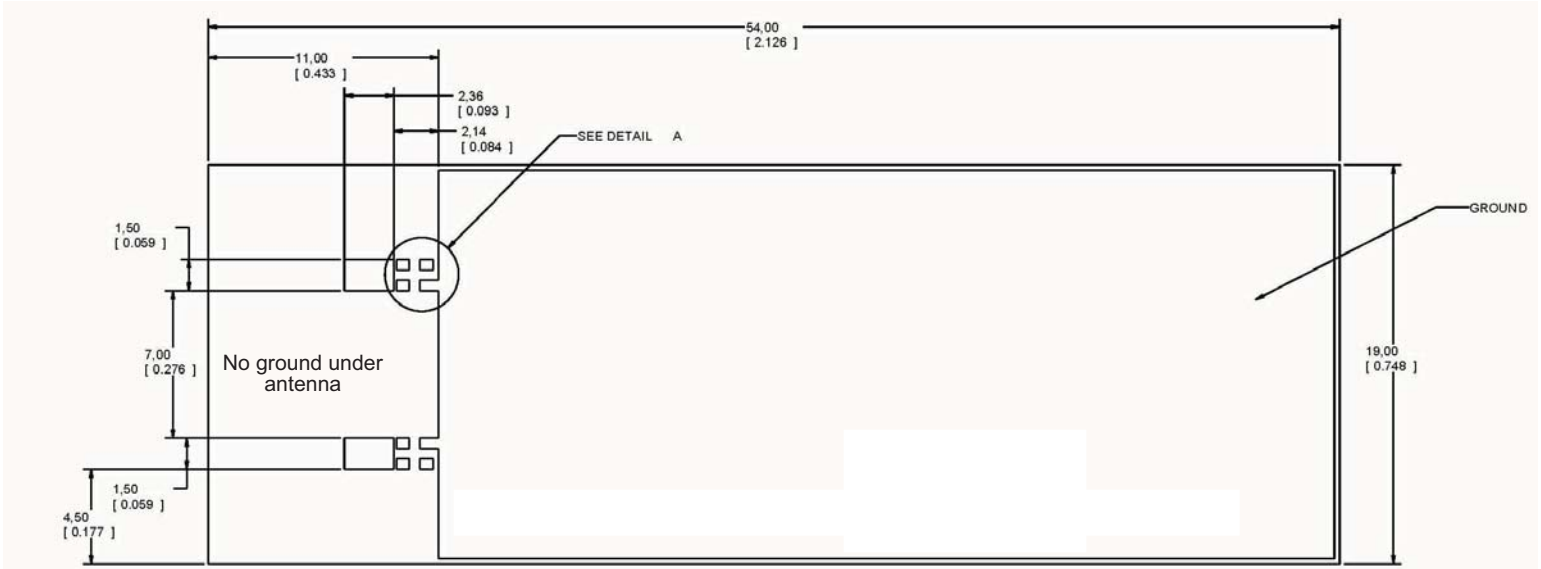


Footprint



ALL DIMENSIONS SHOWN ARE CRITICAL.

Footprint



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