

# FRF-148: Conformal C-Band Antenna

## Description:

The FIRST RF Corporation FRF-148 antenna is a small conformal flush mounted antenna providing efficient hemispherical pattern coverage over the 5.4 – 5.9 GHz band. It is well suited for weapons, aircraft and UAVs or other conformal flush-mounted installations.

## RF Performance Overview:

**Frequency:**  
5.4 – 5.9 GHz

**VSWR:**  
< 2.0:1

**Polarization:**  
RHCP

**Impedance:**  
50 omhs

**Radiation Pattern:**  
Hemispherical

**Power Handling:**  
50 W Continuous

### Antenna Gain (typical):

5.5 GHz

3.0 dBic

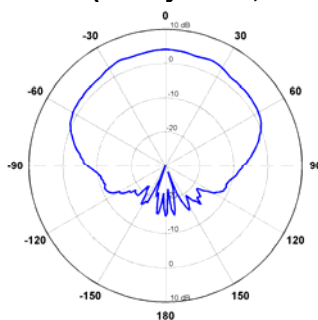
5.75 GHz

4.4 dBic

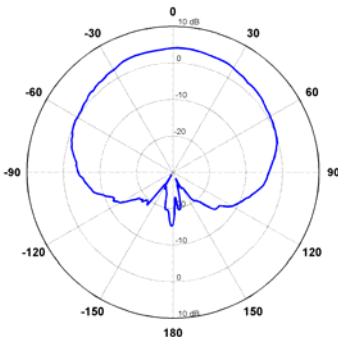
5.9 GHz

1.2 dBic

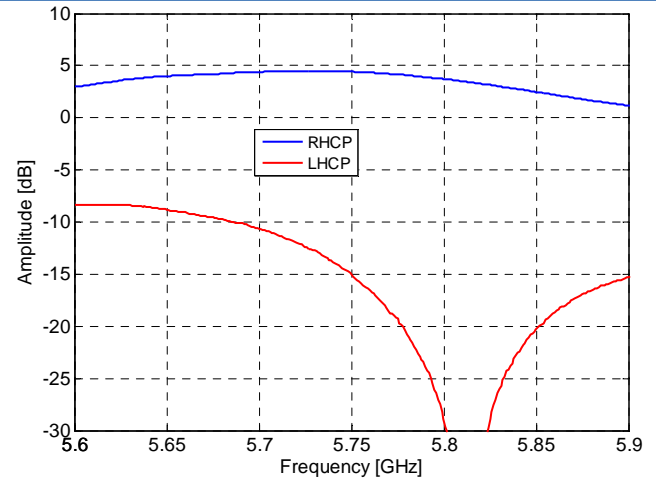
### Radiation Pattern (18" cylinder, band center):



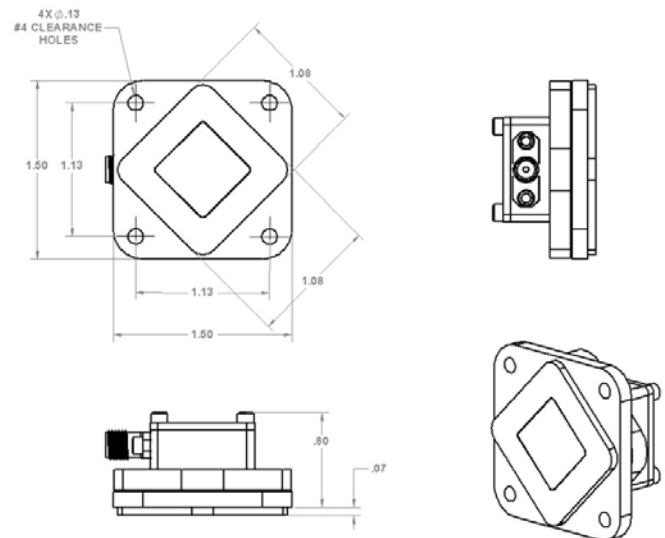
Pitch



Roll



## Mechanical Overview:



**Weight:**  
2.0 oz

**Physical Dimensions:**  
1.5" x 1.5" (38mm x 38mm)  
overall  
1.0" x 1.0" (25mm x 25mm)  
cutout

**Connector:**  
SMA female

## Environmental:

**Protection:**  
Sealed from rain, sand, dust,  
salt fog in accordance with  
MIL-STD-810.

