

10 dBi Gain, 11.9-18 GHz, WR62 Standard Gain Horn with UBR140

Flange

Rev 1

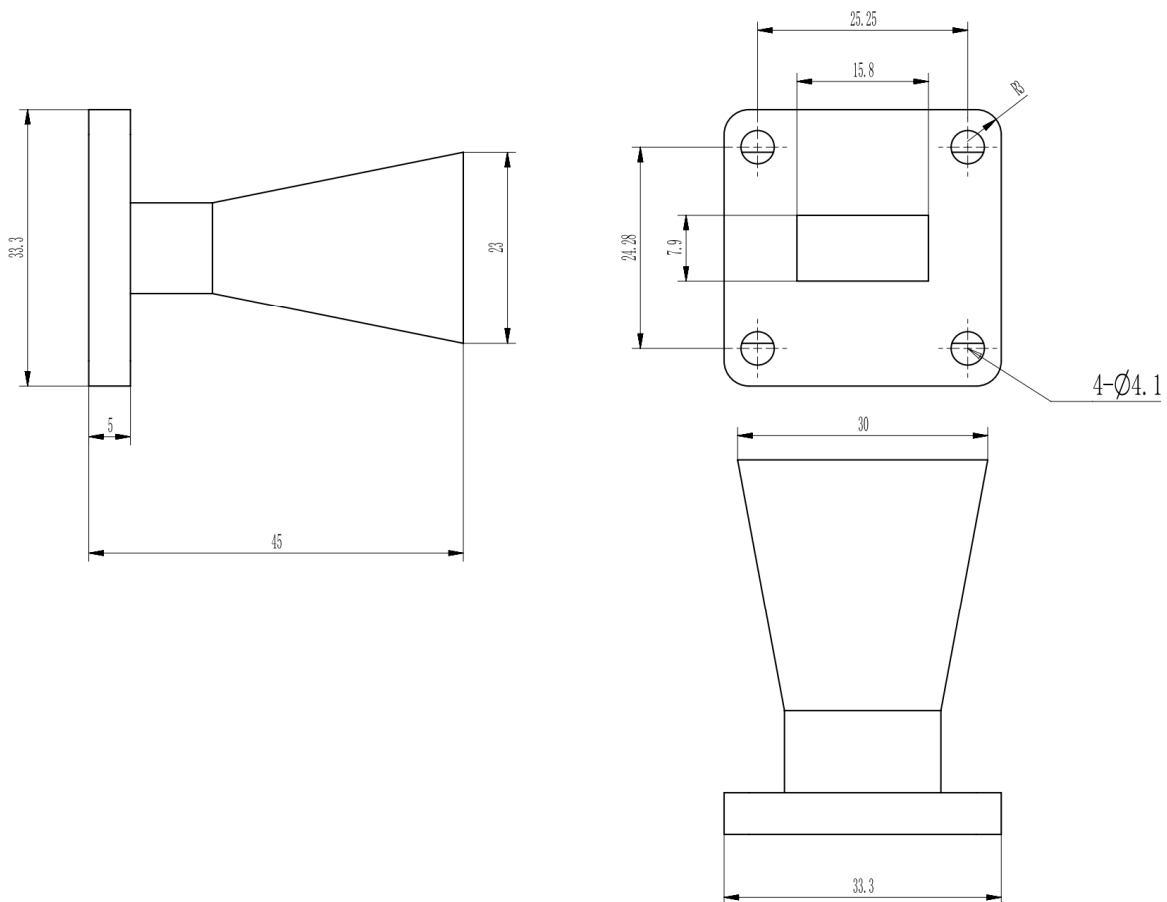
Electrical

Frequency Range	11.9-18 GHz
Norminal Gain	10 dBi
Polarization	Linear
VSWR	1.25 max
3dB Beamwidth	E-Plane: 31.7~46.7 deg, H-Plane: 33.2~51.2 deg
Operating Temperature	-40°C~+70°C

Mechanical

Waveguide Size	WR62
Flange Type	UBR140 Square Cover Flange
Body Material and Finish	Aluminum, Painted

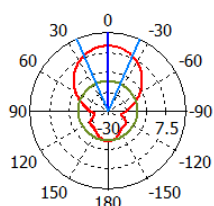
Dimensions(mm)



# Simulated Antenna Patterns

## 11.9GHz E-Plane

Farfield Gain Abs (Phi=0)



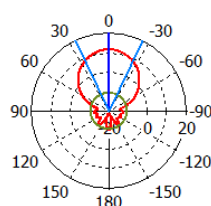
Theta / Degree vs. dB

farfield (f=11.9) [1]

Frequency = 11.9  
Main lobe magnitude = 11.7 dB  
Main lobe direction = 0.0 deg.  
Angular width (3 dB) = 46.7 deg.  
Side lobe level = -22.1 dB

## H-Plane

Farfield Gain Abs (Phi=90)



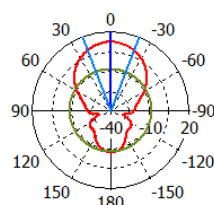
Theta / Degree vs. dB

farfield (f=11.9) [1]

Frequency = 11.9  
Main lobe magnitude = 11.7 dB  
Main lobe direction = 0.0 deg.  
Angular width (3 dB) = 51.2 deg.  
Side lobe level = -22.1 dB

## 13GHz E-Plane

Farfield Gain Abs (Phi=0)



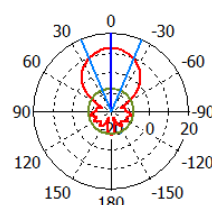
Theta / Degree vs. dB

farfield (f=13) [1]

Frequency = 13  
Main lobe magnitude = 12.5 dB  
Main lobe direction = 0.0 deg.  
Angular width (3 dB) = 41.9 deg.  
Side lobe level = -20.7 dB

## H-Plane

Farfield Gain Abs (Phi=90)



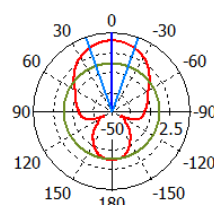
Theta / Degree vs. dB

farfield (f=13) [1]

Frequency = 13  
Main lobe magnitude = 12.5 dB  
Main lobe direction = 0.0 deg.  
Angular width (3 dB) = 46.2 deg.  
Side lobe level = -20.7 dB

## 14GHz E-Plane

Farfield Gain Abs (Phi=0)



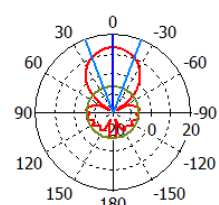
Theta / Degree vs. dB

farfield (f=14) [1]

Frequency = 14  
Main lobe magnitude = 13.3 dB  
Main lobe direction = 0.0 deg.  
Angular width (3 dB) = 39.1 deg.  
Side lobe level = -20.0 dB

## H-Plane

Farfield Gain Abs (Phi=90)



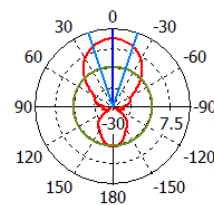
Theta / Degree vs. dB

farfield (f=14) [1]

Frequency = 14  
Main lobe magnitude = 13.3 dB  
Main lobe direction = 0.0 deg.  
Angular width (3 dB) = 41.9 deg.  
Side lobe level = -19.6 dB

## 15GHz E-Plane

Farfield Gain Abs (Phi=0)



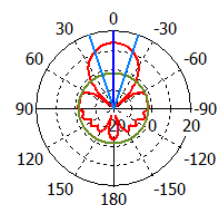
Theta / Degree vs. dB

farfield (f=15) [1]

Frequency = 15  
Main lobe magnitude = 13.9 dB  
Main lobe direction = 0.0 deg.  
Angular width (3 dB) = 36.8 deg.  
Side lobe level = -17.8 dB

## H-Plane

Farfield Gain Abs (Phi=90)



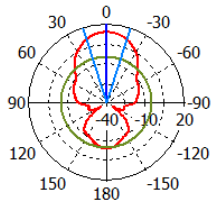
Theta / Degree vs. dB

farfield (f=15) [1]

Frequency = 15  
Main lobe magnitude = 13.9 dB  
Main lobe direction = 0.0 deg.  
Angular width (3 dB) = 37.8 deg.  
Side lobe level = -15.5 dB

16GHz E-Plane

Farfield Gain Abs (Phi=0)



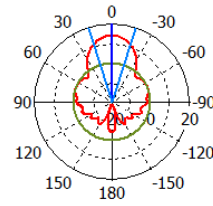
Theta / Degree vs. dB

farfield (f=16) [1]

Frequency = 16  
 Main lobe magnitude = 14.2 dB  
 Main lobe direction = 0.0 deg.  
 Angular width (3 dB) = 34.6 deg  
 Side lobe level = -18.8 dB

H-Plane

Farfield Gain Abs (Phi=90)



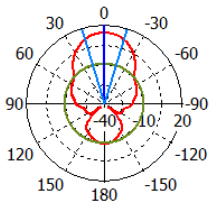
Theta / Degree vs. dB

farfield (f=16) [1]

Frequency = 16  
 Main lobe magnitude = 14.2 dB  
 Main lobe direction = 0.0 deg.  
 Angular width (3 dB) = 35.4 deg  
 Side lobe level = -14.2 dB

17GHz E-Plane

Farfield Gain Abs (Phi=0)



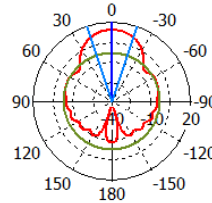
Theta / Degree vs. dB

farfield (f=17) [1]

Frequency = 17  
 Main lobe magnitude = 14.5 dB  
 Main lobe direction = 0.0 deg.  
 Angular width (3 dB) = 33.9 deg  
 Side lobe level = -23.4 dB

H-Plane

Farfield Gain Abs (Phi=90)



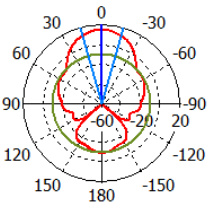
Theta / Degree vs. dB

farfield (f=17) [1]

Frequency = 17  
 Main lobe magnitude = 14.5 dB  
 Main lobe direction = 0.0 deg.  
 Angular width (3 dB) = 36.1 deg  
 Side lobe level = -17.3 dB

18GHz E-Plane

Farfield Gain Abs (Phi=0)



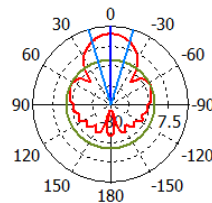
Theta / Degree vs. dB

farfield (f=18) [1]

Frequency = 18  
 Main lobe magnitude = 15.2 dB  
 Main lobe direction = 0.0 deg.  
 Angular width (3 dB) = 31.7 deg  
 Side lobe level = -24.9 dB

H-Plane

Farfield Gain Abs (Phi=90)



Theta / Degree vs. dB

farfield (f=18) [1]

Frequency = 18  
 Main lobe magnitude = 15.2 dB  
 Main lobe direction = 0.0 deg.  
 Angular width (3 dB) = 33.2 deg  
 Side lobe level = -16.7 dB