RH75-SMA-10

10 dBi Gain, 9.84-15 GHz, WR75 Standard Gain Horn with SMA Female Port

Rev 2

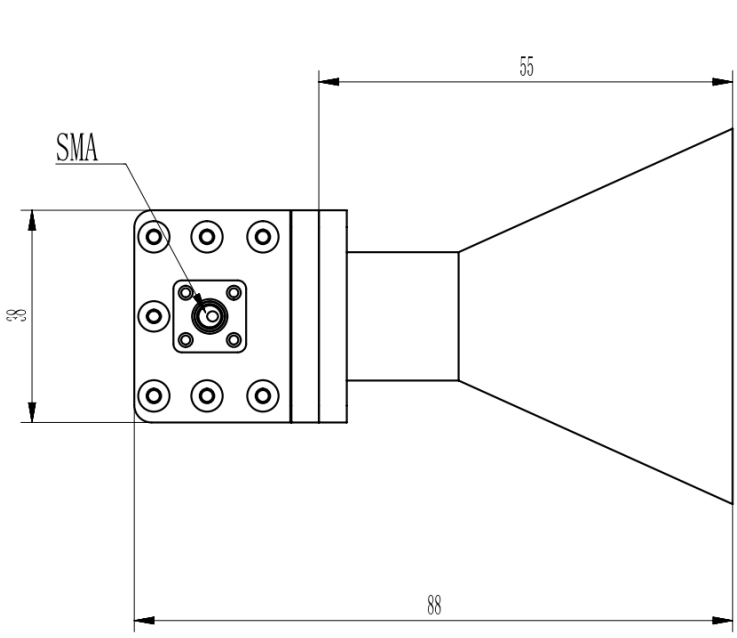
Electrical

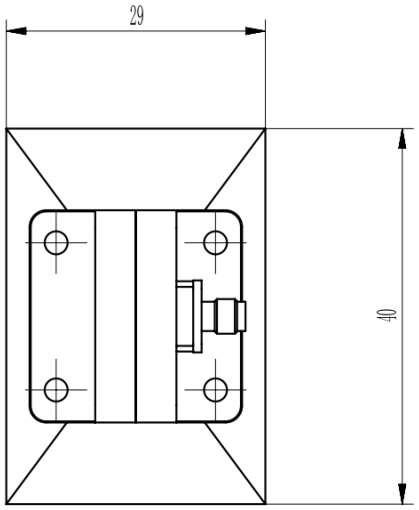
Frequency Range	9.84-15 GHz
Norminal Gain	10 dBi
Polarization	Linear
VSWR	1.3 max
3dB Beamwidth	E-Plane: 34.6~51.7 deg, H-Plane: 36.0~57.7 deg
Operating Temperature	-40℃~+70℃

Mechanical

Waveguide Size	WR75
Flange Type	UBR120 Square Cover Flange
Body Material and Finish	Aluminum, Painted
RF Connector	SMA Female

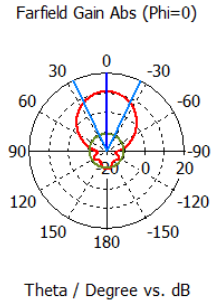
Dimensions(mm)





Simulated Antenna Patterns

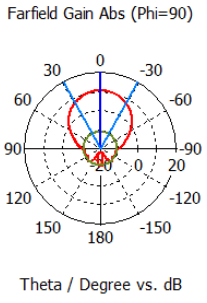
9.85GHz E-Plane



farfield (f=9.85) [1]

Frequency = 9.85
Main lobe magnitude = 10.6 dB
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 51.7 deg.
Side lobe level = -21.2 dB

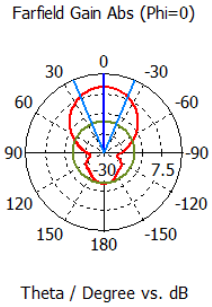
H-Plane



farfield (f=9.85) [1]

Frequency = 9.85
Main lobe magnitude = 10.6 dB
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 57.7 deg.
Side lobe level = -21.2 dB

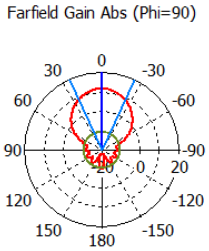
11GHz E-Plane



farfield (f=11) [1]

Frequency = 11
Main lobe magnitude = 11.7 dB
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 45.8 deg.
Side lobe level = -21.8 dB

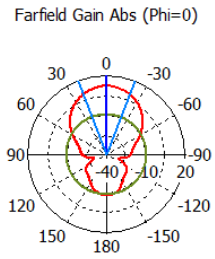
H-Plane



farfield (f=11) [1]

Frequency = 11
Main lobe magnitude = 11.7 dB
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 50.1 deg.
Side lobe level = -21.8 dB

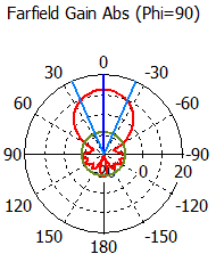
12GHz E-Plane



farfield (f=12) [1]

Frequency = 12
Main lobe magnitude = 12.5 dB
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 42.3 deg.
Side lobe level = -21.1 dB

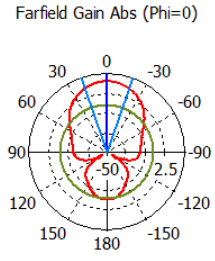
H-Plane



farfield (f=12) [1]

Frequency = 12
Main lobe magnitude = 12.5 dB
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 47.2 deg
Side lobe level = -21.1 dB

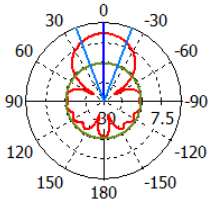
13GHz E-Plane



farfield (f=13) [1]

Frequency = 13
Main lobe magnitude = 13.3 dB
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 38.9 deg.
Side lobe level = -20.6 dB

H-Plane

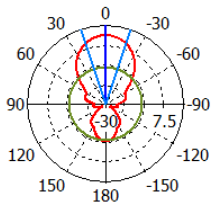


farfield (f=13) [1]

Frequency = 13
Main lobe magnitude = 13.3 dB
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 41.5 deg.
Side lobe level = -19.0 dB

14GHz E-Plane

Farfield Gain Abs (Phi=0)



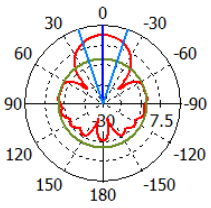
Theta / Degree vs. dB

farfield (f=14) [1]

Frequency = 14
Main lobe magnitude = 14.0 dB
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 36.2 deg.
Side lobe level = -20.1 dB

H-Plane

Farfield Gain Abs (Phi=90)



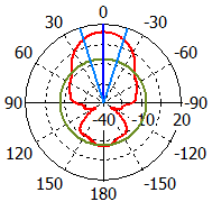
Theta / Degree vs. dB

farfield (f=14) [1]

Frequency = 14
Main lobe magnitude = 14.0 dB
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 37.1 deg.
Side lobe level = -15.3 dB

15GHz E-Plane

Farfield Gain Abs (Phi=0)



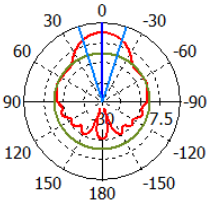
Theta / Degree vs. dB

farfield (f=15) [1]

Frequency = 15
Main lobe magnitude = 14.0 dB
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 34.6 deg
Side lobe level = -20.0 dB

H-Plane

Farfield Gain Abs (Phi=90)



Theta / Degree vs. dB

farfield (f=15) [1]

Frequency = 15
Main lobe magnitude = 14.0 dB
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 36.0 deg.
Side lobe level = -13.3 dB