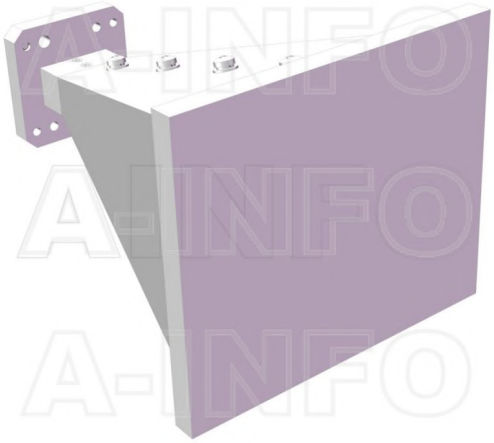


LB-58160-10-ASPO Multi Octave Horn Antenna 5.8-16GHz 10dB Gain Double Ridge Waveguide Interface

Multi Octave Horn Antenna From 5.8GHz to 16GHz With a Nominal 10dB Gain With Double Ridge Waveguide Interface

Product Information

SKU	LB-58160-10-ASPO

Description

Multi octave horn antenna LB-58160-10-ASPO, operating from 5.8 to 16GHz with a nominal 10dB gain and low VSWR 1.5:1 with FPWRD580D28 output. The model LB-58160-10-ASPO has uniform gain through its frequency span, providing efficient performance characteristics and directionality. Constructed of lightweight corrosion-resistant aluminum, the horn comes with a specially designed weatherproof radome which provides excellent protection against the rain and dust but has very little loss across the full operating frequency band. This multi octave horn antenna is linearly polarized and ideally suited for EMI testing, direction finding, surveillance, antenna gain and pattern measurements and other applications.

Technical Specification

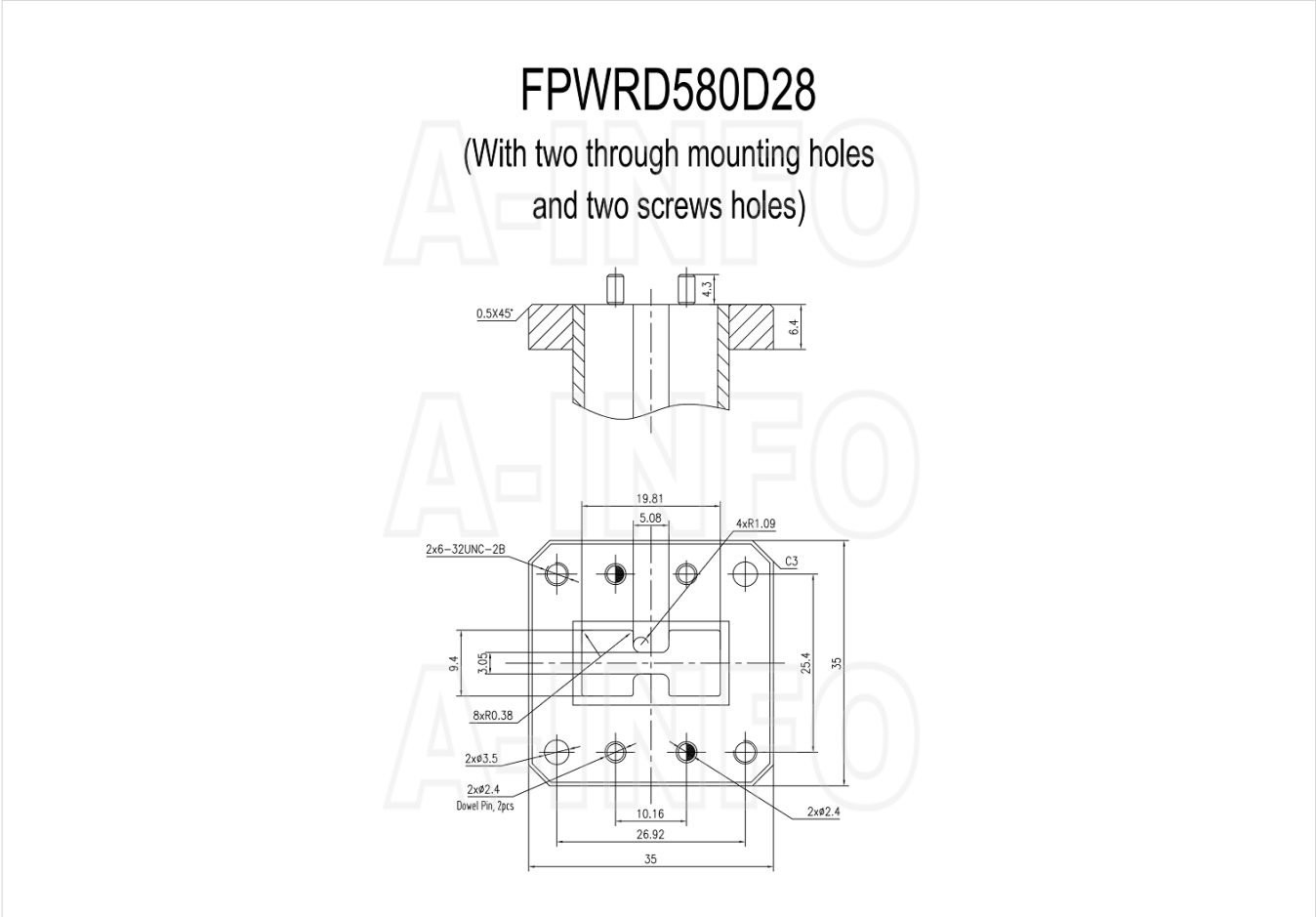
Electrical Specification	
Frequency, Min (GHz)	5.8
Frequency, Max (GHz)	16
Waveguide Type	Double Ridge
Waveguide Size EIA WRD	WRD580
Gain, Typ (dBi)	10
Polarization	Linear
3dB Beamwidth, E-Plane, Min (Deg.)	18
3dB Beamwidth, E-Plane, Max (Deg.)	58
3dB Beamwidth, H-Plane, Min (Deg.)	21
3dB Beamwidth, H-Plane, Max (Deg.)	58
Cross Pol. Isolation, Typ (dB)	40
VSWR, Typ	1.5:1

Interface	
Output Type	Waveguide
Flange Designation, WRD	FPWRD580D28
Connector Gender	N/A
Mechanical Specification	
Figure	A Type
Body Material	Al
Finish	Chemical Conversion Coating, Gray Paint
Size, W (mm)	71
Size, H (mm)	57
Size, L (mm)	101
Weight, (kg)	0.25

Additional Information

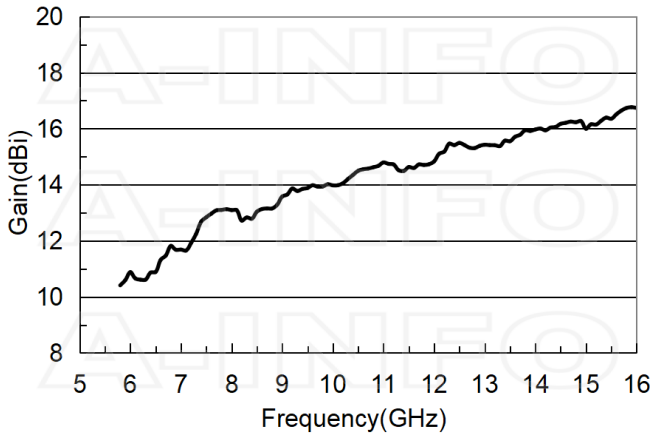
Application	Outdoor, Waterproof and Dustproof, Fixed	Solution for	Gain Reference Antenna Measurement Far-field Measurement System Intergration

Flange Drawing

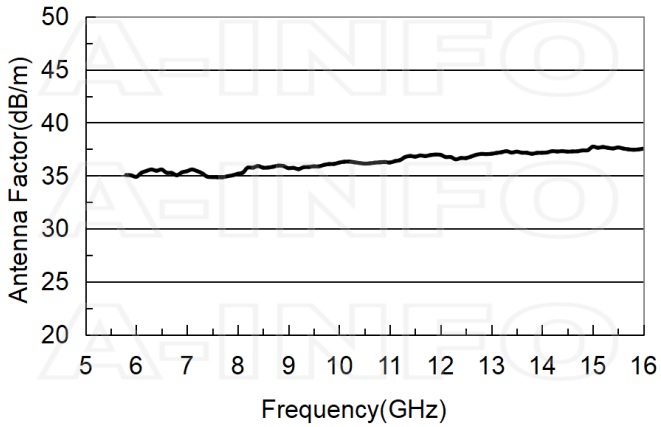


Typical Test Results

Gain



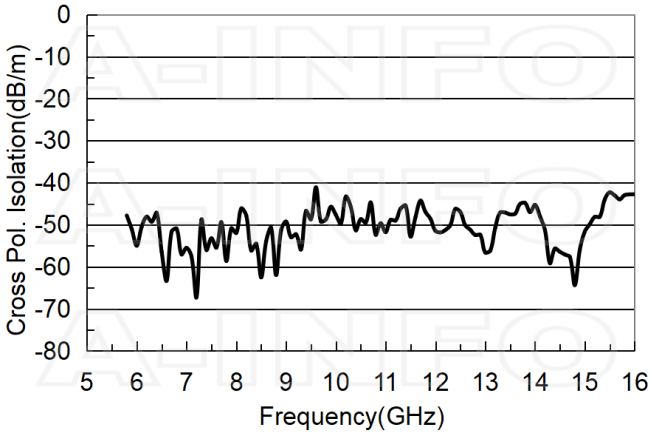
Antenna Factor



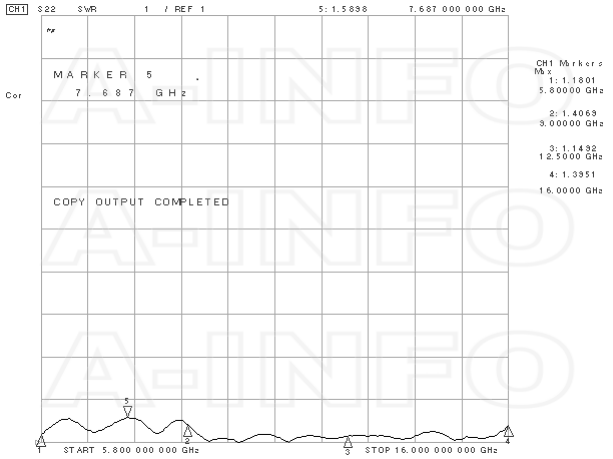
Antenna Factor (Table)

Frequency(GHz)	Gain(dBi)	AF(dB/m)
5.8	10.41	35.07
6.0	10.88	34.89
7.0	11.69	35.43
8.0	13.10	35.18
9.0	13.58	35.72
10.0	13.98	36.23
11.0	14.79	36.24
12.0	14.83	36.96
13.0	15.43	37.06
14.0	15.97	37.16
15.0	16.00	37.73
16.0	16.74	37.55

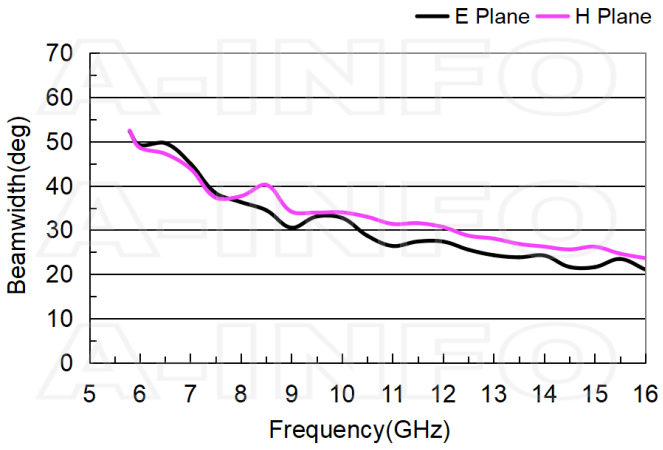
Cross Polarization Isolation



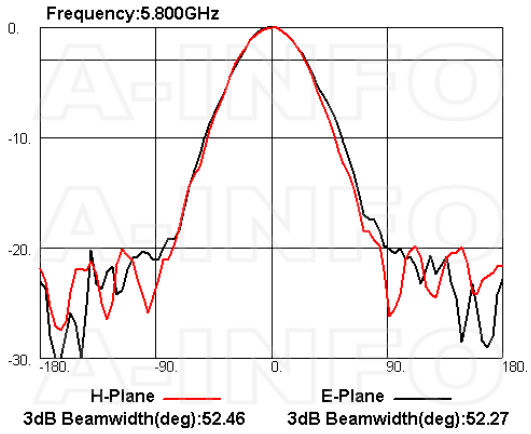
VSWR

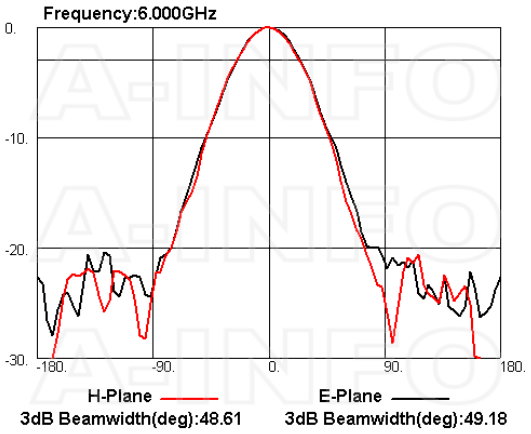


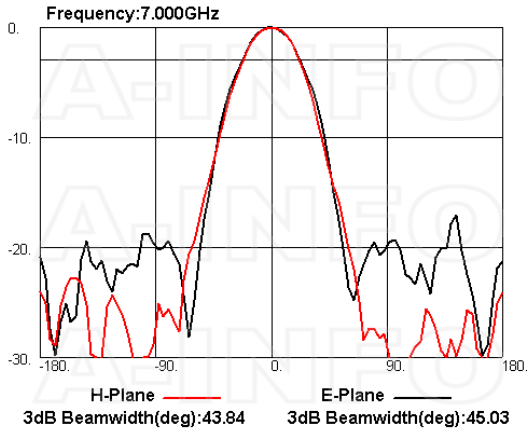
Beamwidth

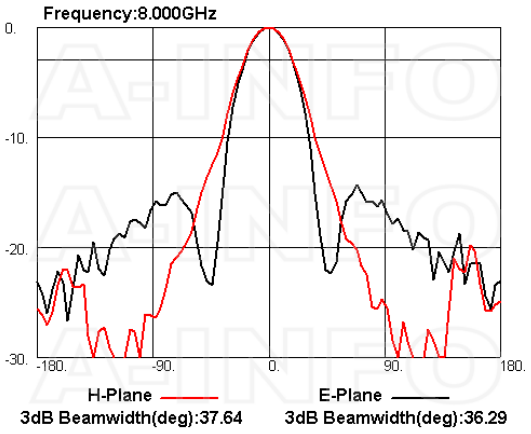


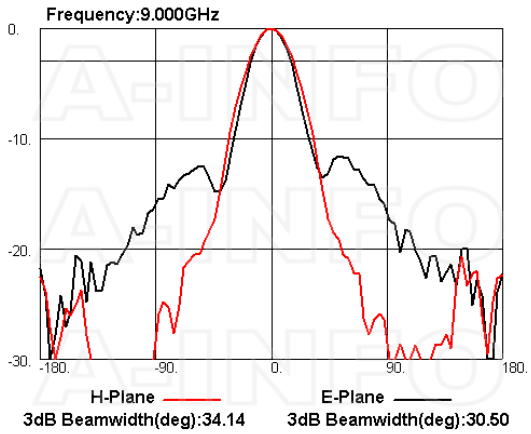
Pattern

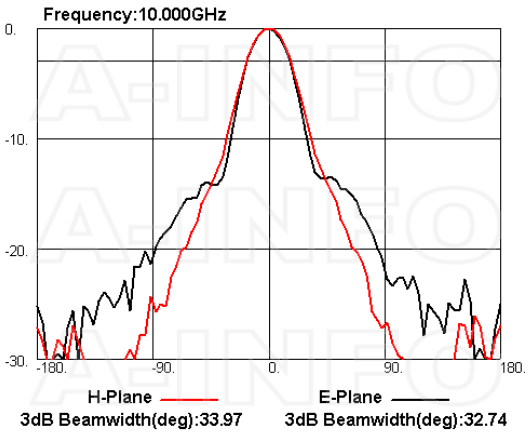

Frequency:5.800GHz
0.
-10.
-20.
-30.
-180.
-90.
0.
90.
180.
H-Plane
E-Plane
3dB Beamwidth(deg):52.46
3dB Beamwidth(deg):52.27

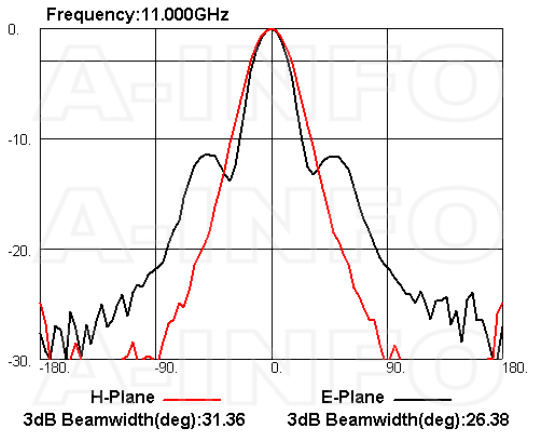

Frequency:6.000GHz
0.
-10.
-20.
-30.
-180.
-90.
0.
90.
180.
H-Plane
E-Plane
3dB Beamwidth(deg):48.61
3dB Beamwidth(deg):49.18

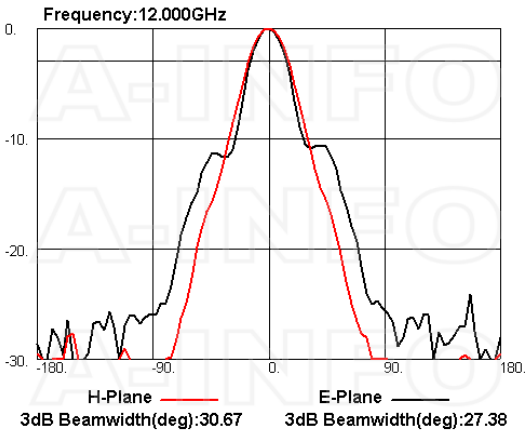

Frequency:7.000GHz
0.
-10.
-20.
-30.
-180.
-90.
0.
90.
180.
H-Plane
E-Plane
3dB Beamwidth(deg):43.84
3dB Beamwidth(deg):45.03

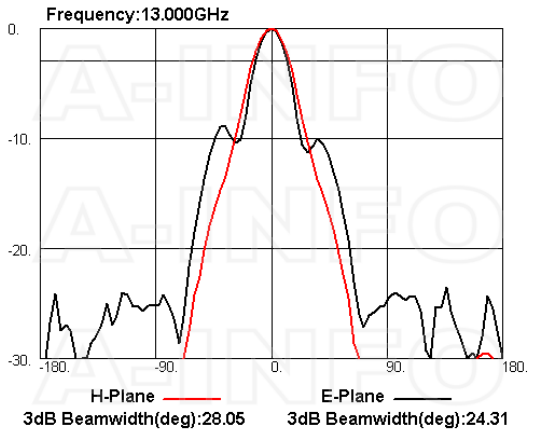

Frequency:8.000GHz
0.
-10.
-20.
-30.
-180.
-90.
0.
90.
180.
H-Plane
E-Plane
3dB Beamwidth(deg):37.64
3dB Beamwidth(deg):36.29

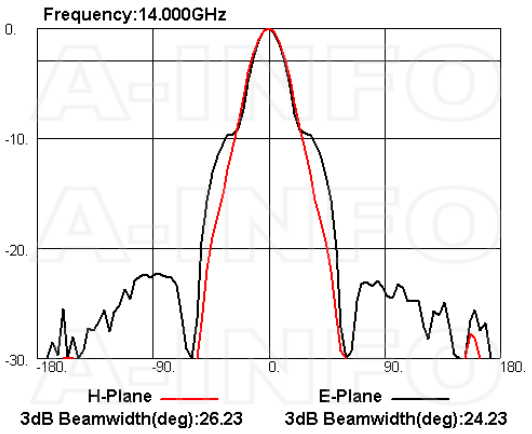

Frequency:9.000GHz
0.
-10.
-20.
-30.
-180.
-90.
0.
90.
180.
H-Plane
E-Plane
3dB Beamwidth(deg):34.14
3dB Beamwidth(deg):30.50

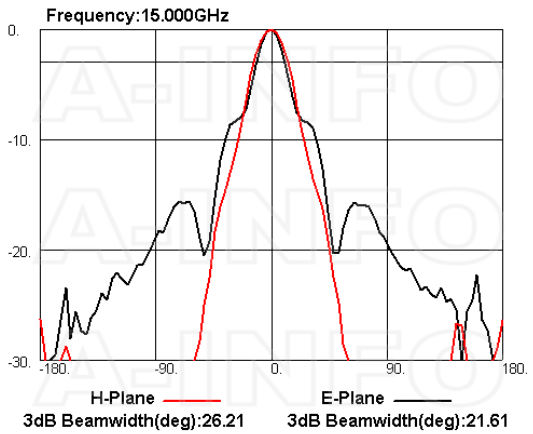

Frequency:10.000GHz
0.
-10.
-20.
-30.
-180.
-90.
0.
90.
180.
H-Plane
E-Plane
3dB Beamwidth(deg):33.97
3dB Beamwidth(deg):32.74

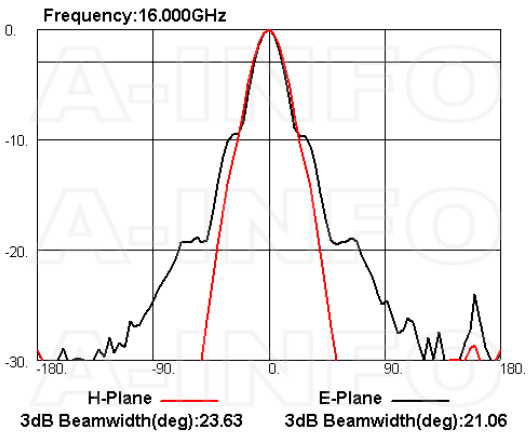

Frequency:11.000GHz
0.
-10.
-20.
-30.
-180.
-90.
0.
90.
180.
H-Plane
E-Plane
3dB Beamwidth(deg):31.36
3dB Beamwidth(deg):26.38


Frequency:12.000GHz
0.
-10.
-20.
-30.
-180.
-90.
0.
90.
180.
H-Plane
E-Plane
3dB Beamwidth(deg):30.67
3dB Beamwidth(deg):27.38


Frequency:13.000GHz
0.
-10.
-20.
-30.
-180.
-90.
0.
90.
180.
H-Plane
E-Plane
3dB Beamwidth(deg):28.05
3dB Beamwidth(deg):24.31


Frequency:14.000GHz
0.
-10.
-20.
-30.
-180.
-90.
0.
90.
180.
H-Plane
E-Plane
3dB Beamwidth(deg):26.23
3dB Beamwidth(deg):24.23


Frequency:15.000GHz
0.
-10.
-20.
-30.
-180.
-90.
0.
90.
180.
H-Plane
E-Plane
3dB Beamwidth(deg):26.21
3dB Beamwidth(deg):21.61


Frequency:16.000GHz
0.
-10.
-20.
-30.
-180.
-90.
0.
90.
180.
H-Plane
E-Plane
3dB Beamwidth(deg):23.63
3dB Beamwidth(deg):21.06

Related Products

580DRWCAN_Cu Right Angle Double Ridge Waveguide to Coaxial Adapter 5.8-16GHz WRD580 to N Type Female

580DRWCAS_Cu Right Angle Double Ridge Waveguide to Coaxial Adapter 5.8-16GHz WRD580 to SMA Female

580DRWECAN_Cu Endlaunch Double Ridge Waveguide to Coaxial Adapter 5.8-16GHz WRD580 to N Type Female

580DRWECAS_Cu Endlaunch Double Ridge Waveguide to Coaxial Adapter 5.8-16GHz WRD580 to SMA Female

580DRWHCAN_Cu Right Angle High Power Double Ridge Waveguide to Coaxial Adapter 5.8-16GHz WRD580 to N Type Female

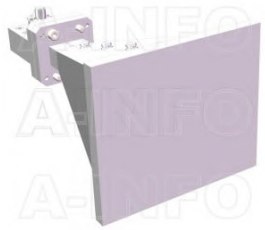
Similar Products

LB-58160-10-A Multi Octave Horn Antenna 5.8-16GHz 10dB Gain Double Ridge Waveguide Interface

LB-58160-10-C-NF Multi Octave Horn Antenna 5.8-16GHz 10dB Gain N Type Female

LB-58160-10-C-NFSPO Multi Octave Horn Antenna 5.8-16GHz 10dB Gain N Type Female

LB-58160-10-C-SF Multi Octave Horn Antenna 5.8-16GHz 10dB Gain SMA Female



LB-58160-10-C-SFSPO Multi Octave Horn Antenna 5.8-16GHz 10dB Gain SMA Female

About this Datasheet

● Product Information Product Link: https://www.ainfoinc.com/lb-58160-10-aspo-multi-octave-horn-antenna-5-8-16-ghz-10db-gain-fpwrd580d28 Data subject to change without notice. 	● Contact Us Address: 60 Tesla, Irvine, CA 92618, USA Website: www.ainfoinc.com Email: sales@ainfoinc.com	● Phone & Fax Phone: +1-949-639-9688 +1-949-639-9608 Fax: +1-949-639-9670