

LB-180400-10-C-E2.4F Multi Octave Horn Antenna 18-40GHz 10dB Gain  
Endlaunch 2.4mm Female



Multi Octave Horn Antenna Operating From 18GHz to 40GHz With a  
Nominal 10dB Gain With Endlaunch 2.4mm Female Connector

### Product Information

|     |                      |
|-----|----------------------|
| SKU | LB-180400-10-C-E2.4F |
|-----|----------------------|

### Description

Multi octave horn antenna LB-180400-10-C-E2.4F, operating from 18 to 40GHz with a nominal 10dB gain and low VSWR 1.5:1 with Endlaunch 2.4mm Female output connector. The model LB-180400-10-C-E2.4F has uniform gain through its frequency span, providing efficient performance characteristics and directionality. It can handle 10W continuously and 20W peak power. Constructed of high thermal and electrical conductivity durable copper, the antenna will provide years of trouble-free indoor and outdoor service. 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

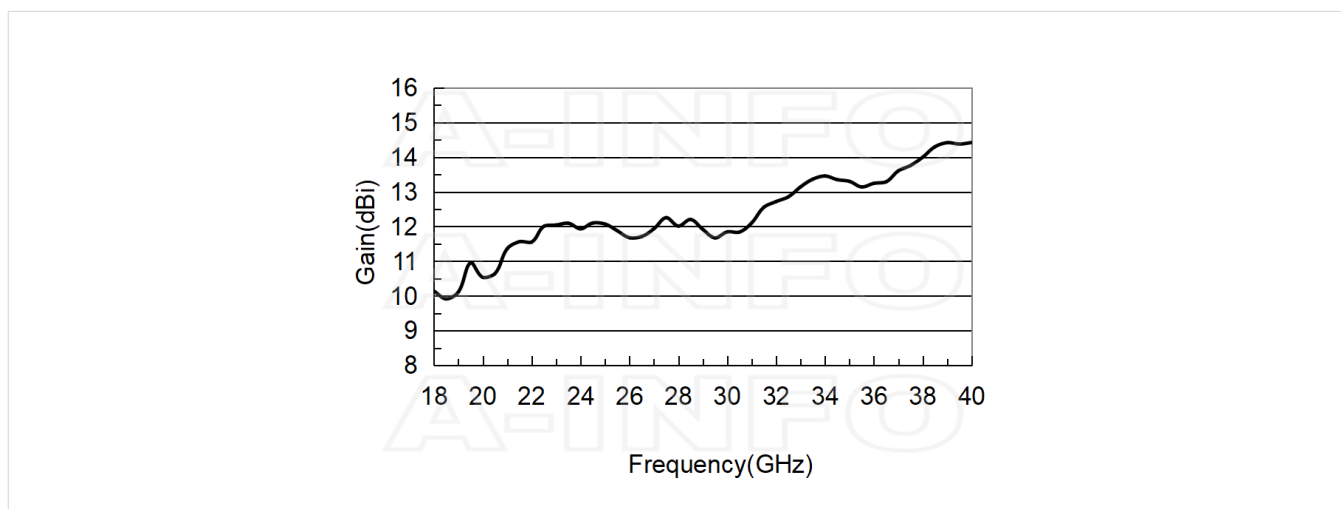
| Electrical Specification           |              | Interface                |                         |
|------------------------------------|--------------|--------------------------|-------------------------|
| Frequency, Min (GHz)               | 18           | Output Type              | Coaxial                 |
| Frequency, Max (GHz)               | 40           | Connector                | 2.4mm                   |
| Waveguide Type                     | Double Ridge | Connector Gender         | Female                  |
| Waveguide Size EIA WRD             | WRD180       | Mechanical Specification |                         |
| Gain, Typ (dBi)                    | 10           | Figure                   | C Type                  |
| Polarization                       | Linear       | Body Material            | Cu                      |
| 3dB Beamwidth, E-Plane, Min (Deg.) | 24           | Finish                   | Gold Plated, Gray Paint |
| 3dB Beamwidth, E-Plane, Max (Deg.) | 59           | Size, W (mm)             | 22.4                    |
| 3dB Beamwidth, H-Plane, Min (Deg.) | 25           | Size, H (mm)             | 22.4                    |
| 3dB Beamwidth, H-Plane, Max (Deg.) | 57           | Size, L (mm)             | 75.3                    |
| Cross Pol. Isolation, Typ (dB)     | 40           | Weight, (kg)             | 0.07                    |
| VSWR, Typ                          | 1.5:1        |                          |                         |
| Impedance, (Ohm)                   | 50           |                          |                         |
| Power Handling, CW, (W)            | 10           |                          |                         |
| Power Handling, Peak, (W)          | 20           |                          |                         |

## Additional Information

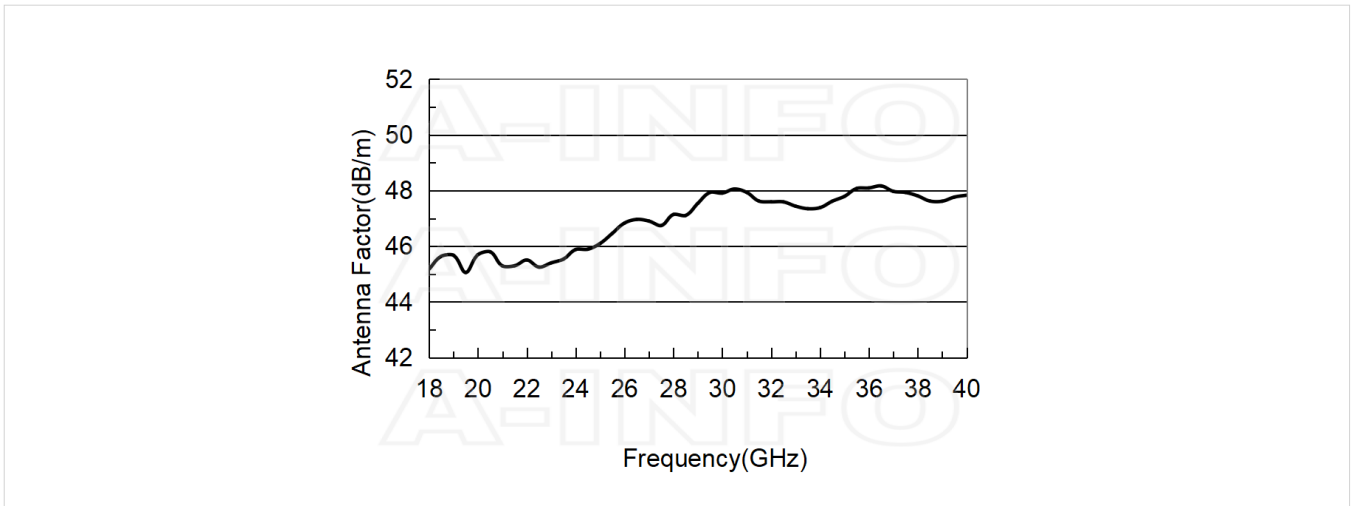
|             |   |              |   |
|-------------|---|--------------|---|
| Application | General Purpose Indoor & Outdoor, Fixed | Solution for | Gain Reference<br>Antenna Measurement<br>Far-field Measurement<br>System Intergration |
|-------------|---|--------------|---|

## Typical Test Results

### Gain



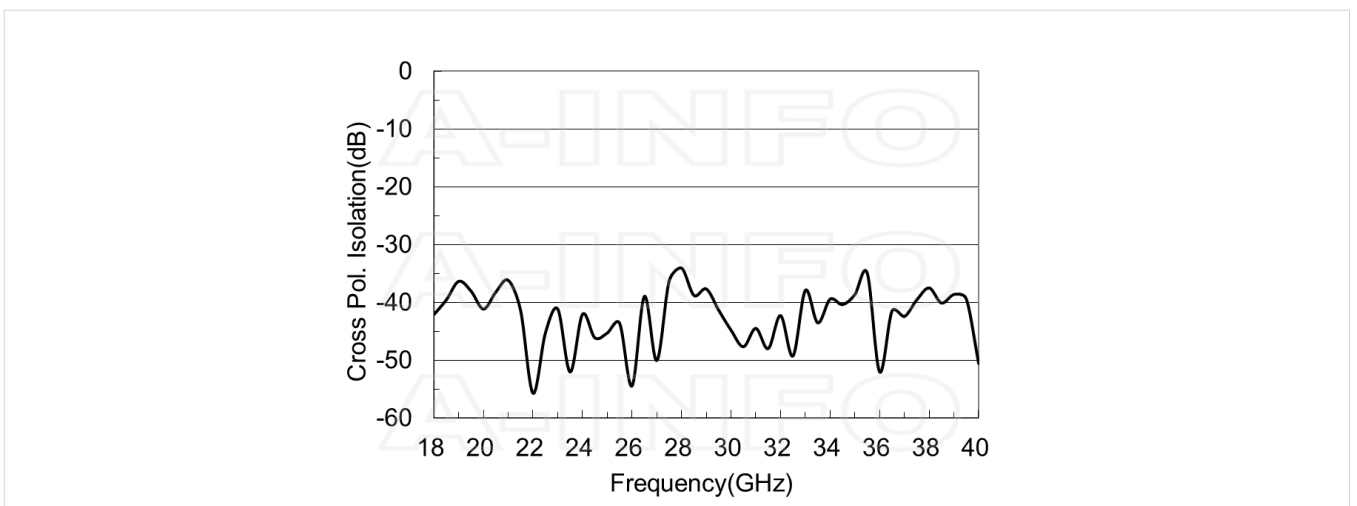
### Antenna Factor



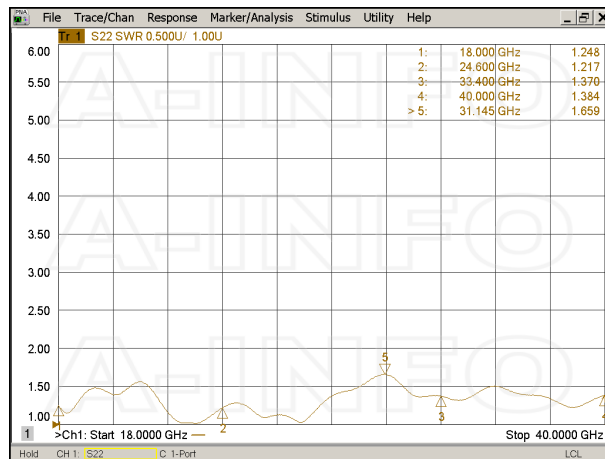
### Antenna Factor (Table)

| Frequency(GHz) | Gain(dBi) | Antenna Factor(dB/m) |
|----------------|-----------|----------------------|
| 18.0           | 10.14     | 45.17                |
| 20.0           | 10.54     | 45.70                |
| 22.0           | 11.55     | 45.51                |
| 24.0           | 11.93     | 45.88                |
| 26.0           | 11.68     | 46.83                |
| 28.0           | 12.01     | 47.14                |
| 30.0           | 11.84     | 47.91                |
| 32.0           | 12.72     | 47.59                |
| 34.0           | 13.45     | 47.39                |
| 36.0           | 13.24     | 48.09                |
| 38.0           | 14.00     | 47.81                |
| 40.0           | 14.42     | 47.83                |

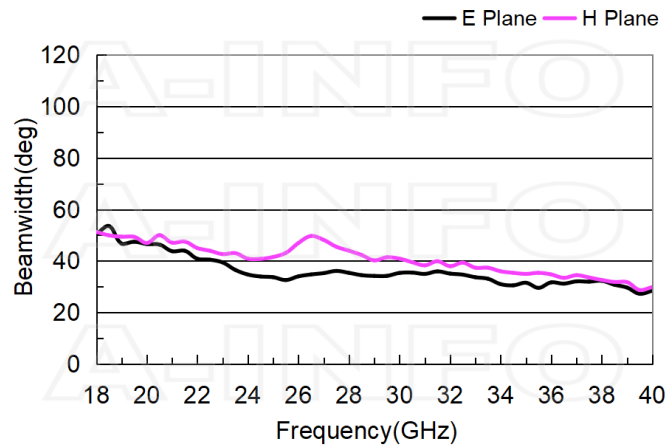
### Cross Polarization Isolation



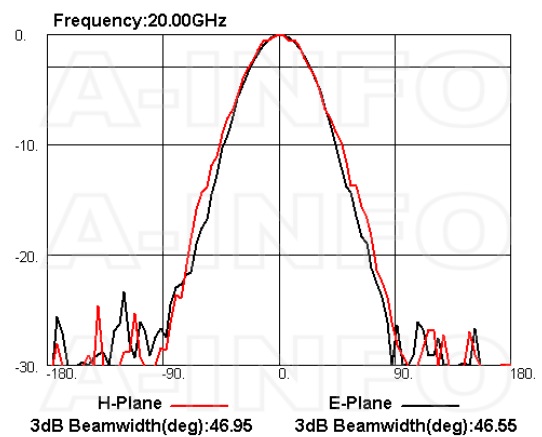
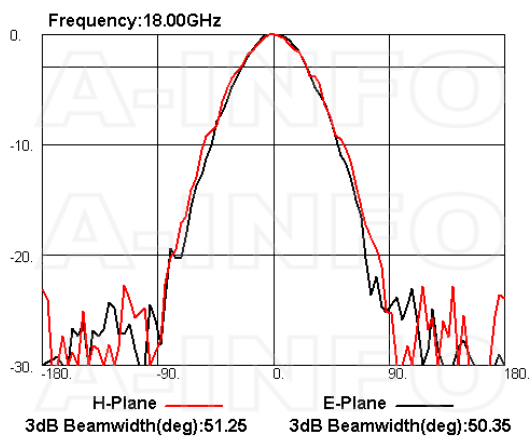
## VSWR

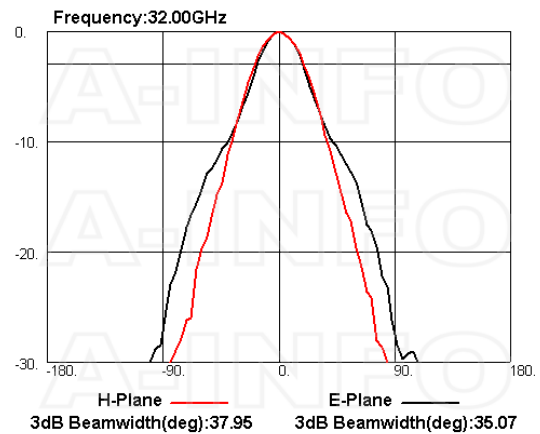
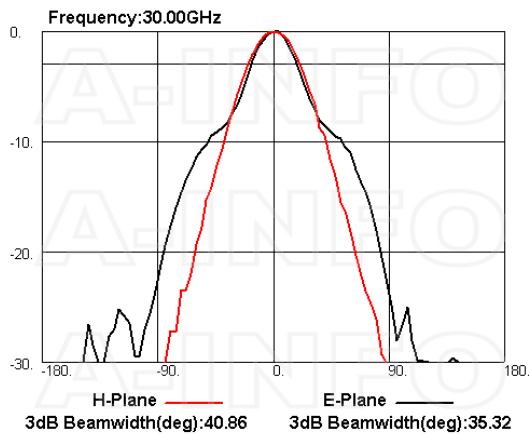
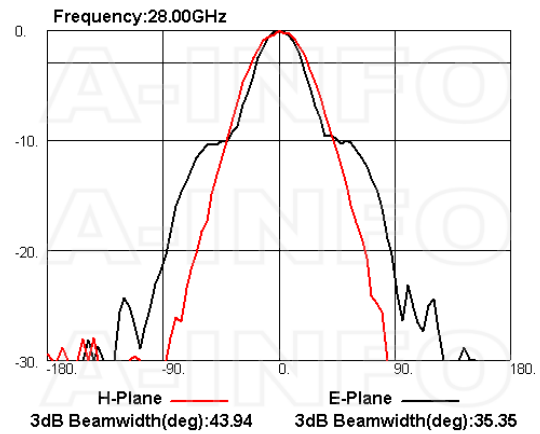
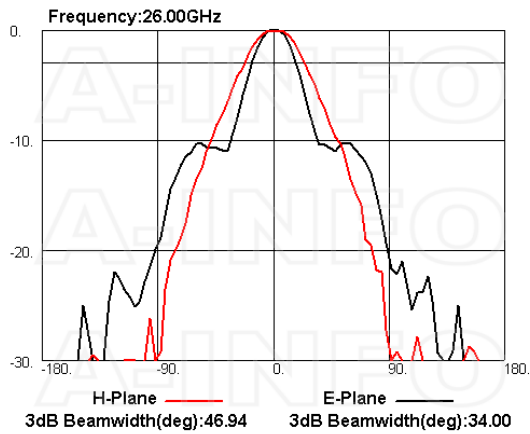
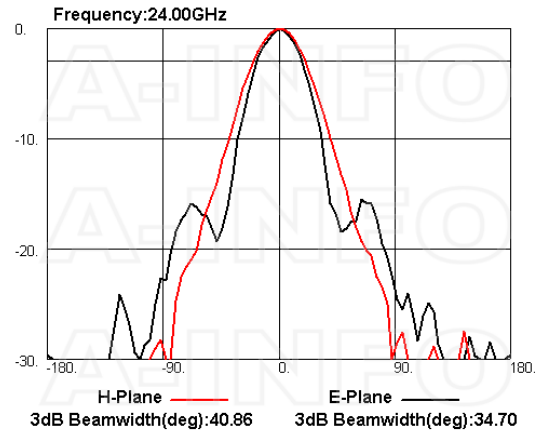
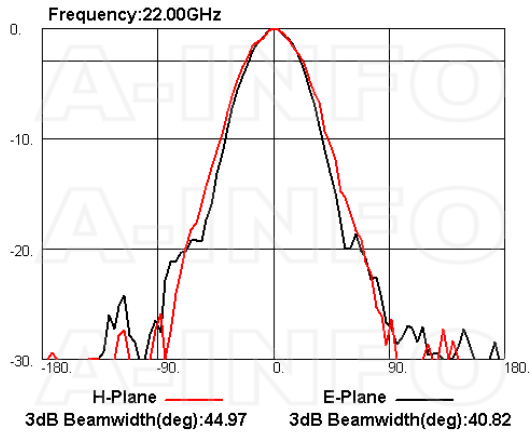


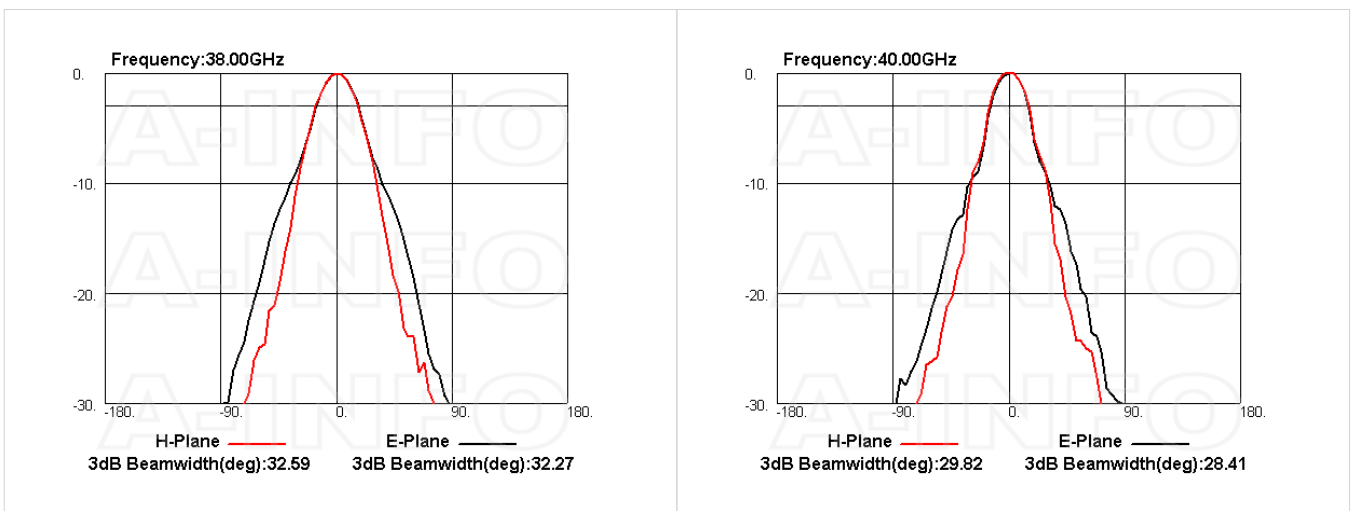
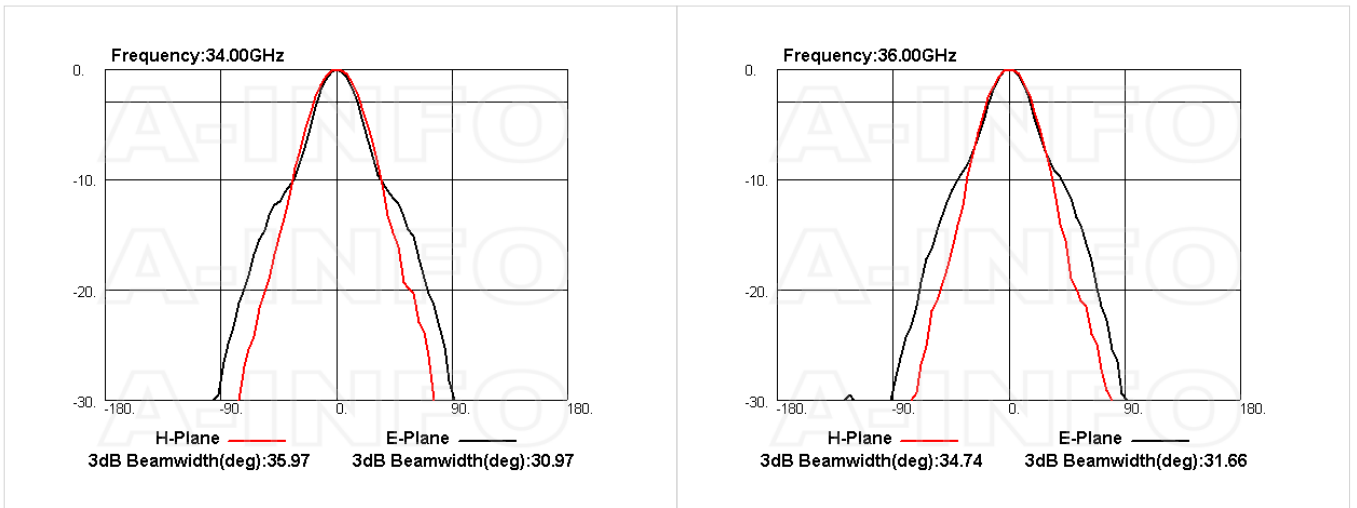
## Beamwidth



## Pattern







## Related Products



LB-180400-10-C-MB Round Type Mounting Bracket



LB-180400-10-C-MBL L Type Mounting Bracket



Tripod\_15Kg Al Alloy Tripod



3033HL Wooden Tripod



3033QM Wooden Tripod  
Metalfree



2.4M-2.4M-A050-500 Flexible  
Cable Assembly 500mm DC-  
40GHz 2.4mm Male to 2.4mm  
Male



2.4M-2.4M-A050-1000 Flexible  
Cable Assembly 1000mm DC-  
40GHz 2.4mm Male to 2.4mm  
Male



2.4M-2.4M-A050-1500 Flexible  
Cable Assembly 1500mm DC-  
40GHz 2.4mm Male to 2.4mm  
Male



2.4M-2.4M-A050-2000 Flexible  
Cable Assembly 2000mm DC-  
40GHz 2.4mm Male to 2.4mm  
Male



2.4M-2.4M-A050-3000 Flexible  
Cable Assembly 3000mm DC-  
40GHz 2.4mm Male to 2.4mm  
Male



2.4M-2.4M-A050-5000 Flexible  
Cable Assembly 5000mm DC-  
40GHz 2.4mm Male to 2.4mm  
Male



2.4M-2.4M-A050-10000 Flexible  
Cable Assembly 10000mm DC-  
40GHz 2.4mm Male to 2.4mm  
Male



2.4M-2.4M-B020-300 Flexible  
Cable Assembly 300mm DC-  
50GHz 2.4mm Male to 2.4mm  
Male



2.4M-2.4M-B020-500 Flexible  
Cable Assembly 500mm DC-  
50GHz 2.4mm Male to 2.4mm  
Male



2.4M-2.4M-B020-1000 Flexible  
Cable Assembly 1000mm DC-  
50GHz 2.4mm Male to 2.4mm  
Male



2.4M-2.4M-B020-1500 Flexible  
Cable Assembly 1500mm DC-  
50GHz 2.4mm Male to 2.4mm  
Male



2.4M-2.4M-B020-2000 Flexible  
Cable Assembly 2000mm DC-  
50GHz 2.4mm Male to 2.4mm  
Male



2.4M-2.4M-B020-3000 Flexible  
Cable Assembly 3000mm DC-  
50GHz 2.4mm Male to 2.4mm  
Male



2.4M-2.4M-B020-5000 Flexible  
Cable Assembly 5000mm DC-  
50GHz 2.4mm Male to 2.4mm  
Male



2.4M-2.4M-B020-10000 Flexible  
Cable Assembly 10000mm DC-  
50GHz 2.4mm Male to 2.4mm  
Male



2.4M-2.4F-B020S-500 Flexible Cable Assembly 500mm DC-50GHz 2.4mm Male to 2.4mm Female



2.4M-2.4F-B020S-1000 Flexible Cable Assembly 1000mm DC-50GHz 2.4mm Male to 2.4mm Female



2.4M-2.4F-B020S-1500 Flexible Cable Assembly 1500mm DC-50GHz 2.4mm Male to 2.4mm Female



2.4M-2.4F-B020S-2000 Flexible Cable Assembly 2000mm DC-50GHz 2.4mm Male to 2.4mm Female



2.4M-2.4F-B020S-3000 Flexible Cable Assembly 3000mm DC-50GHz 2.4mm Male to 2.4mm Female



2.4M-2.4F-B020S-5000 Flexible Cable Assembly 5000mm DC-50GHz 2.4mm Male to 2.4mm Female

## About this Datasheet

|   |  |  |
|---|--|--|
| <ul style="list-style-type: none"> <li>● <b>Product Information</b><br/>Product Link:<br/><a href="https://www.ainfoinc.com/lb-180400-10-c-e2-4f-multi-octave-horn-antenna-18-40-ghz-10db-gain-endlaunch-2-4mm-female">https://www.ainfoinc.com/lb-180400-10-c-e2-4f-multi-octave-horn-antenna-18-40-ghz-10db-gain-endlaunch-2-4mm-female</a><br/>Data subject to change without notice.<br/>© A-INFO INC. 2024. All Rights Reserved</li> </ul> | <ul style="list-style-type: none"> <li>● <b>Contact Us</b><br/>Address:<br/>60 Tesla, Irvine, CA 92618, USA<br/>Website:<br/><a href="http://www.ainfoinc.com">www.ainfoinc.com</a><br/>Email:<br/><a href="mailto:sales@ainfoinc.com">sales@ainfoinc.com</a></li> </ul> | <ul style="list-style-type: none"> <li>● <b>Phone &amp; Fax</b><br/>Phone:<br/>+1-949-639-9688<br/>+1-949-639-9608<br/>Fax:<br/>+1-949-639-9670</li> </ul> |
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