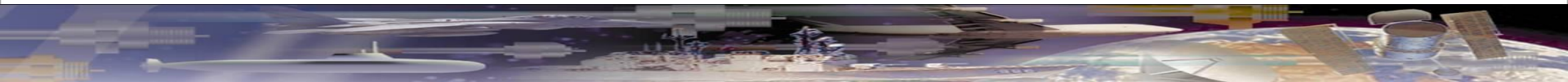


# **Mlcable Inc.**

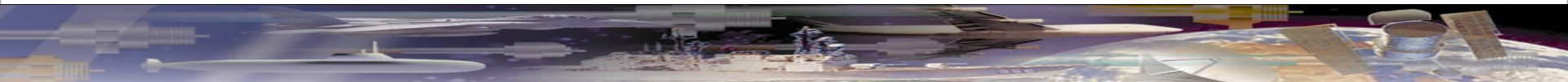
**Microwave & Millimeter Wave  
Coaxial Cable Assemblies**



# Product Catalogue

- A Series-** Harbour Ultra Low Loss Flexible Cable Assembly with Excellent Phase Stability vs. Flexure & Temp.
- B Series-** Other Ultra Low Loss Flexible Cable Assemblies with Excellent Phase Stability vs. Flexure & Temp.
- C Series-** Low Loss Flexible Cable Assembly with Good Phase Stability vs. Flexure
- D Series-** RG Cable Assemblies
- E Series-** Semi Rigid Cable Assemblies
- F Series-** Conformable Cable Assemblies
- G Series-** Ripple Copper Cable Assemblies
- H Series-** LMR Cable Assemblies

**A Series- Harbour Ultra Low Loss Flexible Cable Assembly with Excellent Phase Stability vs. Flexure & Temp.**



# Low loss Phase Stability vs. temp.& Flexure Cable Assemblies

## DC-18GHz A02-01-01-1M Tested Data

**Frequency Range: DC to 18GHz**

**Insertion Loss, max.: 1.27 dB**

**VSWR, max.: 1.20:1**

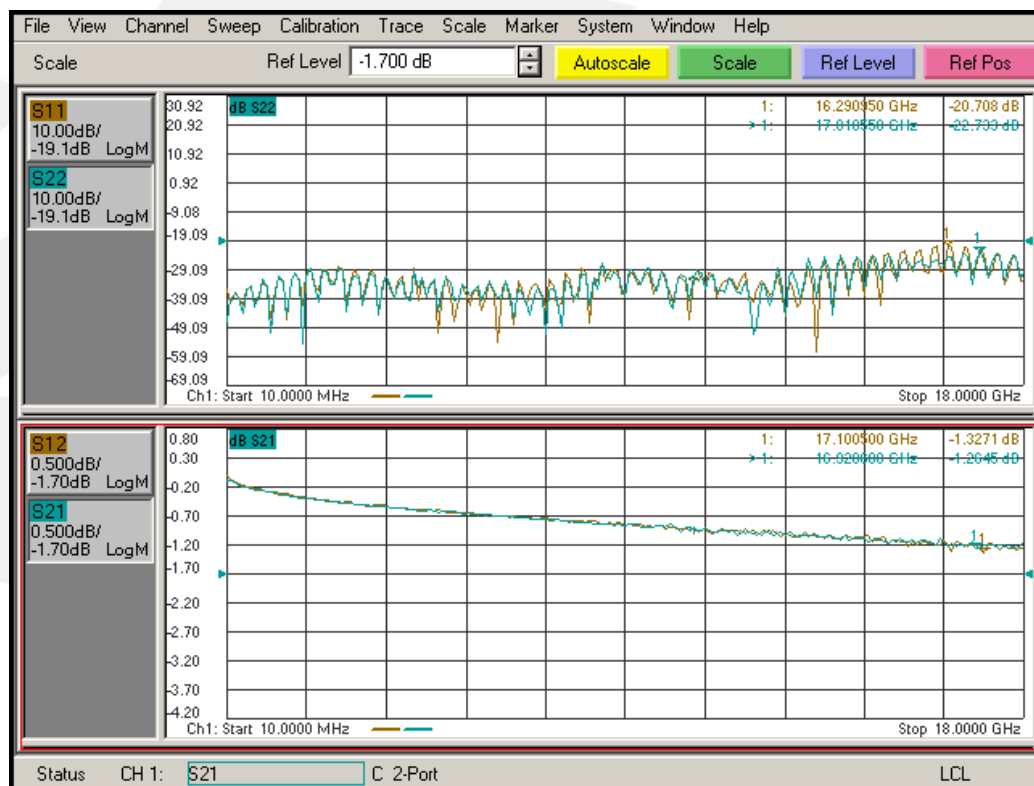
**Phase Stability vs. Flexure:**

**$\pm 3.6^\circ$  @ 18GHz**

**Bend Radius: 38mm**

**Phase Stability vs. Temp. Max.:**

**250 PPM@+22 °C ~+100 °C**



# Low loss Phase Stability vs. temp. &

## Flexure Cable Assemblies

### DC-18GHz A03-01-01-1M Tested Data

**Frequency Range: DC to 18GHz**

**Insertion Loss, max: 1.25 dB**

**VSWR, max: 1.12:1**

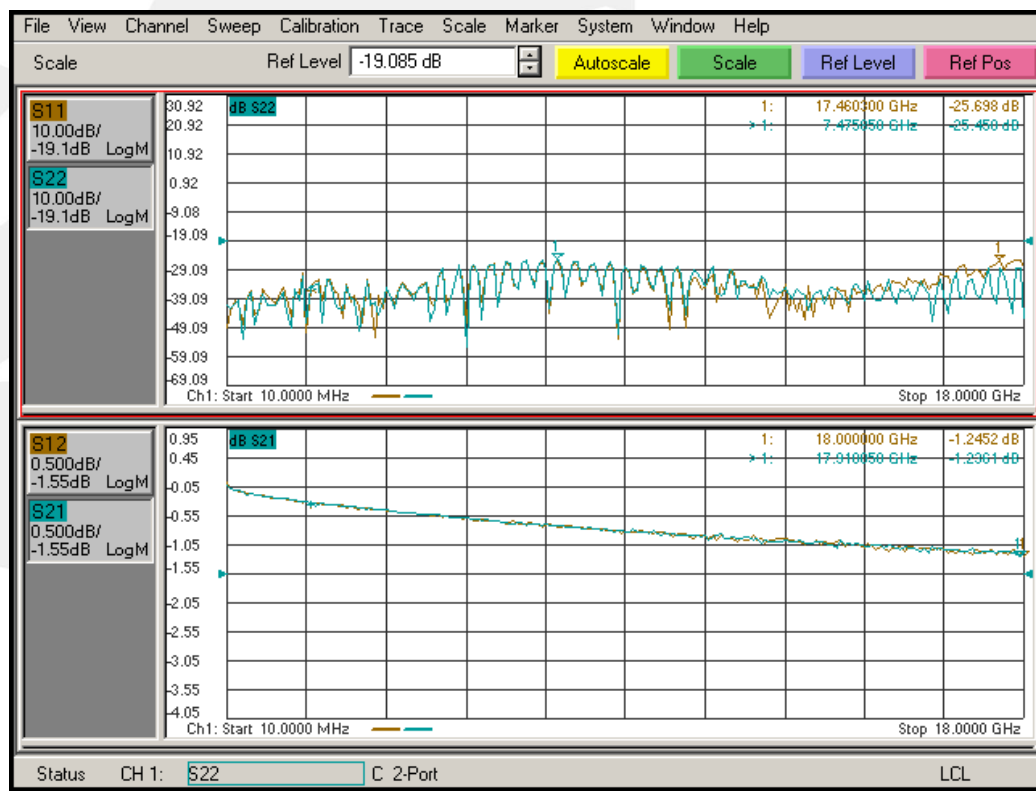
**Phase Stability vs. Flexure:**

**$\pm 3.6^\circ$  @ 18GHz**

**Bend Radius: 64mm**

**Phase Stability vs. Temp. Max.:**

**250 PPM @ +22 °C ~ +100 °C**



## Low loss Phase Stability vs. temp.& Flexure Cable Assemblies

### DC-18GHz A04-01-01-1M Tested Data

Frequency Range: DC to 18GHz

Insertion Loss, max: 1.0dB

VSWR, max: 1.31:1

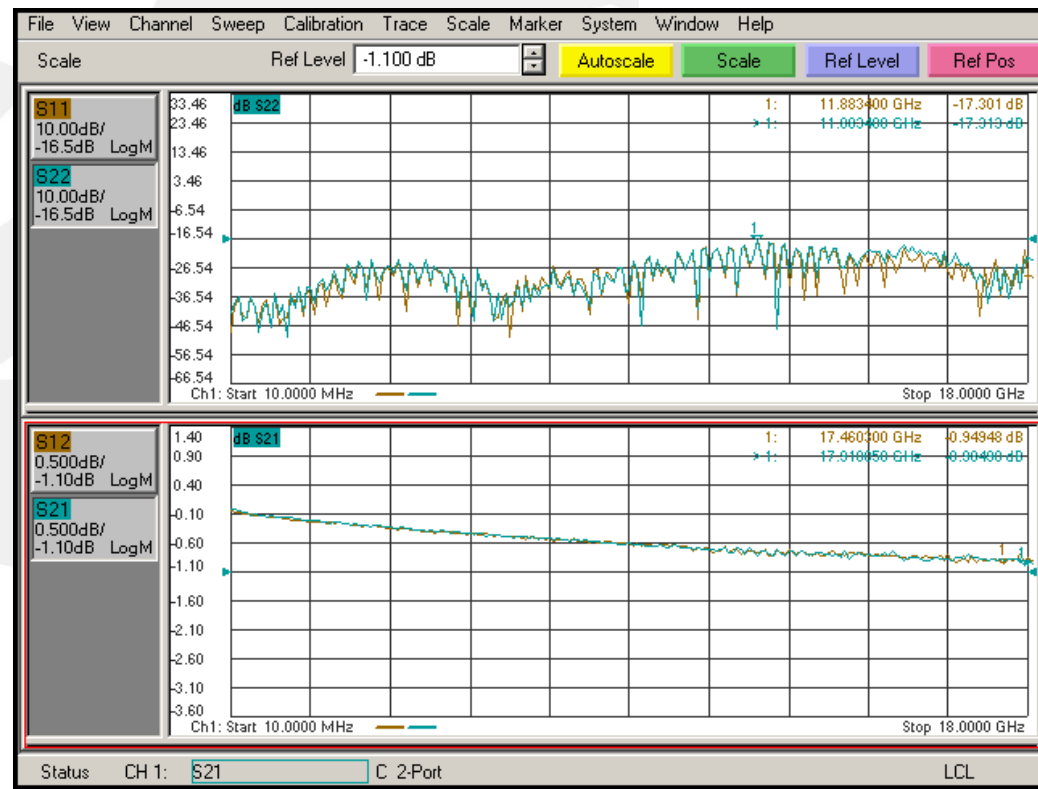
Phase Stability vs. Flexure:

$\pm 5.4^\circ$  @ 18GHz

Bend Radius: 89mm

Phase Stability vs. Temp. Max.:

250 PPM @ +22 °C ~ +100 °C



# Low loss Phase Stability vs. temp.&

## Flexure Cable Assemblies

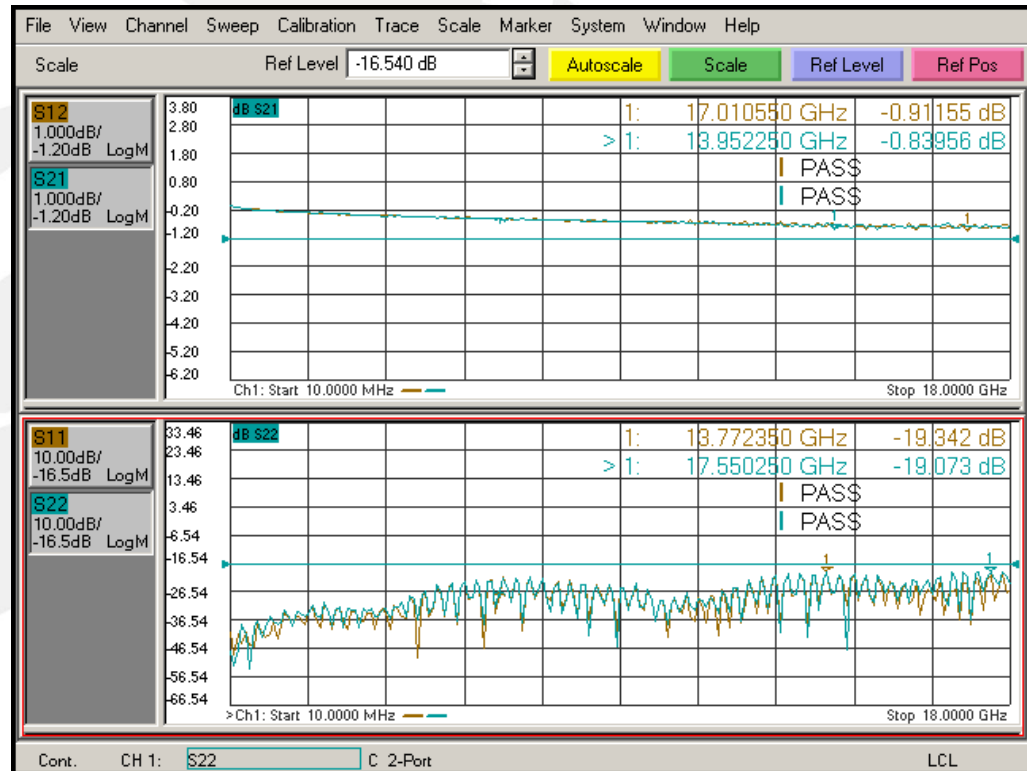
### DC-18GHz A04I-01-01-1M Tested Data

<b>Frequency Range: DC to 18GHz</b>
<b>Insertion Loss: 0.91 dB</b>
<b>VSWR, max.: 1.25:1</b>

**Phase Stability vs. Flexure:**  
 $\pm 5.4^\circ$  @ 18GHz

**Bend Radius: 76mm**

**Phase Stability vs. Temp. Max.:**  
 250PPM@+22 °C ~+100 °C



# Low loss Phase Stability vs. temp.&

## Flexure Cable Assemblies

### DC-32GHz A05-47-47-1M Tested Data

**Frequency Range: DC to 32GHz**

**Insertion Loss, max: 2.1 dB**

**VSWR, max: 1.33:1**

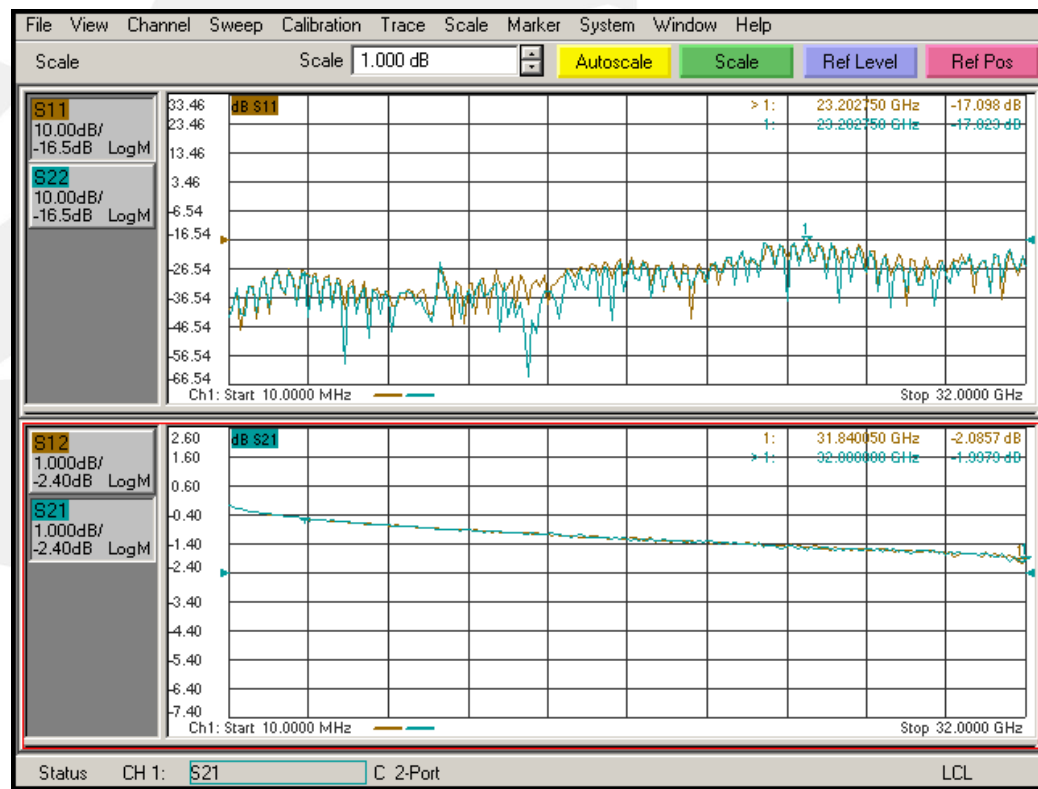
**Phase Stability vs. Flexure:**

**$\pm 6.4^\circ$  @ 32GHz**

**Bend Radius: 38mm**

**Phase Stability vs. Temp. Max.:**

**250 PPM @ +22 °C ~ +100 °C**



## Low loss Phase Stability vs. temp.& Flexure Cable Assemblies

### DC-18GHz A07-01-01-1M Tested Data

Frequency Range: DC to 18GHz

Insertion Loss, max: 1.1dB

VSWR, max: 1.23:1

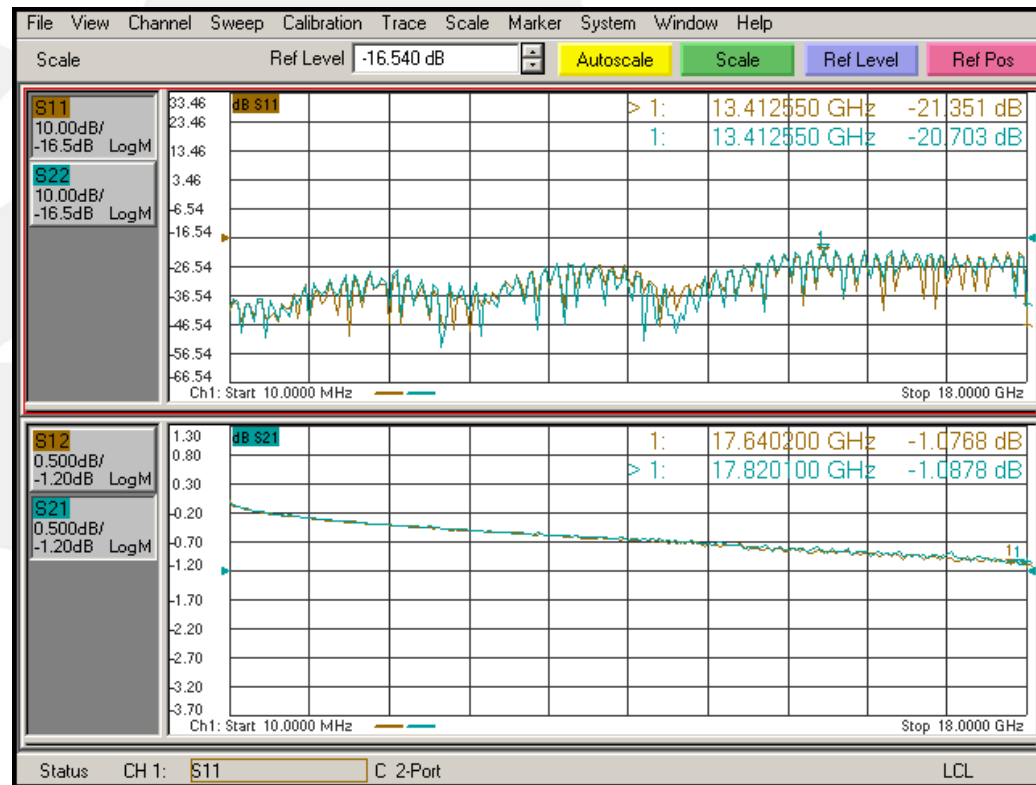
Phase Stability vs. Flexure:

$\pm 2^\circ$  @ 3GHz

Bend Radius: 89mm

Phase Stability vs. Temp. Max.:

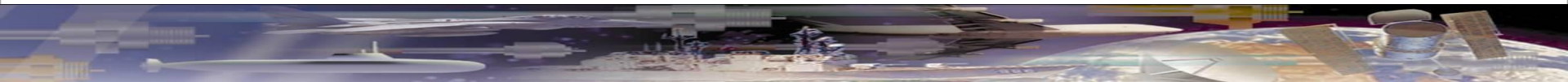
900 PPM @ +22 °C ~ +100 °C



## **Low loss Phase Stability vs. temp.& Flexure Cable Assemblies**

A08 is Harbour 32055MI, with performance and dimensions equivalent to Astrolab 32055.

A09 is Harbour 32051MI, with performance and dimensions equivalent to Astrolab 32051.



**Micable Inc.**

**ISO9001:2008 CERTIFIED**

**High performance cable assemblies with stainless steel connectors**



USA manufacturing technique  
Advanced production & test equipments  
Cable & connectors from world's leading RF & Microwave manufacturers

**Micable is your quality fast and low cost solution !**

Product series	Models <sup>1</sup>	Insert Loss Typ.	Return Loss Typ.	Phase Stability vs Flexure *1GHz	Phase Stability vs Temp. max. ppm @ +22°C TO +85°C	FOB Unit Price US\$(1-9pc)
Low Loss Flexible cable assembly with good Phase Stability vs. Flexure	C02-01-01-3FT	1.91dB@18GHz	22dB@18GHz	± 0.05		49.95
Ultra Low Loss Flexible cable assembly with good Phase Stability vs. Flexure & Temperature	A02-01-01-3FT	1.24dB@18GHz	21dB@18GHz	± 0.20	220	69.95
Millimeter Wave Ultra Low Loss Flexible cable assembly with good Phase Stability vs. Flexure & Temperature	B01-40-40-3FT	2.8dB@40GHz	19dB@40GHz	± 0.20	400	134.55

**Notes:**

- \*1 "01" means SMA MALE straight connector, "40" means 2.92mm MALE straight connector, "3FT" means 3 feet long cable.
2. Custom designed assemblies are available.

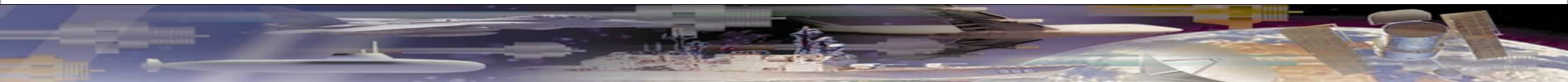
**Seeking world-wide agents**



affiliated with **SSI**  
Micable Inc.  
Tel: 86 501-87382856  
Email: sales@micable.cn  
Website: www.micable.cn

USA Distributor Center:  
SSI Cable Corporation  
Tel: (360)426-5719  
Email: bsmith@sscable.com

**B Series- Other Ultra Low Loss Flexible Cable Assemblies with Excellent Phase Stability vs. Flexure & Temp.**



## Low loss Phase Stability vs. temp.& Flexure Millimeter Wave Cable Assemblies

### DC-40GHz B01-40-40-1M Tested Data

Frequency Range: DC to 40 GHz

Insertion Loss, max: 2.97 dB

VSWR, max: 1.23:1

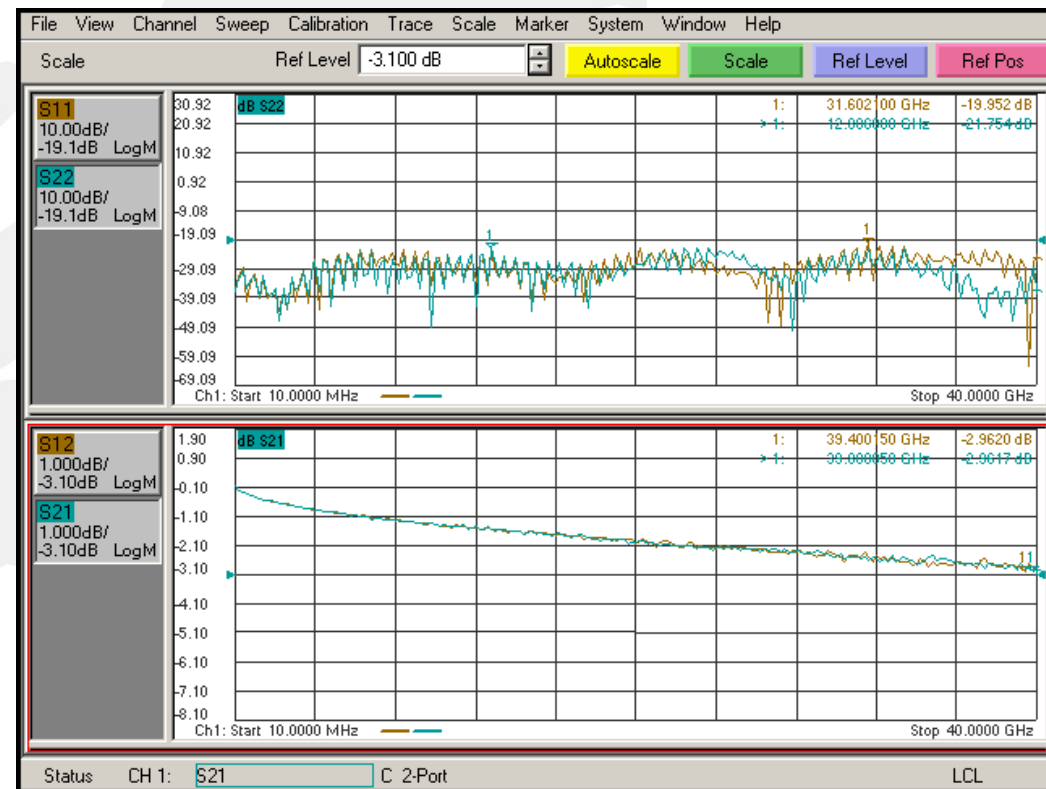
Phase Stability vs. Flexure:

$\pm 8^\circ$  @40GHz

Bend Radius: 51mm

Phase Stability vs. Temp. Max.:

550 PPM@-40 °C ~+85 °C



## Low loss Phase Stability vs. temp.& Flexure Millimeter Wave Cable Assemblies

### DC-18GHz B05-01-01-3M Tested Data

Frequency Range: DC to 18 GHz

Insertion Loss, max: 2.17dB

VSWR, max: 1.26:1

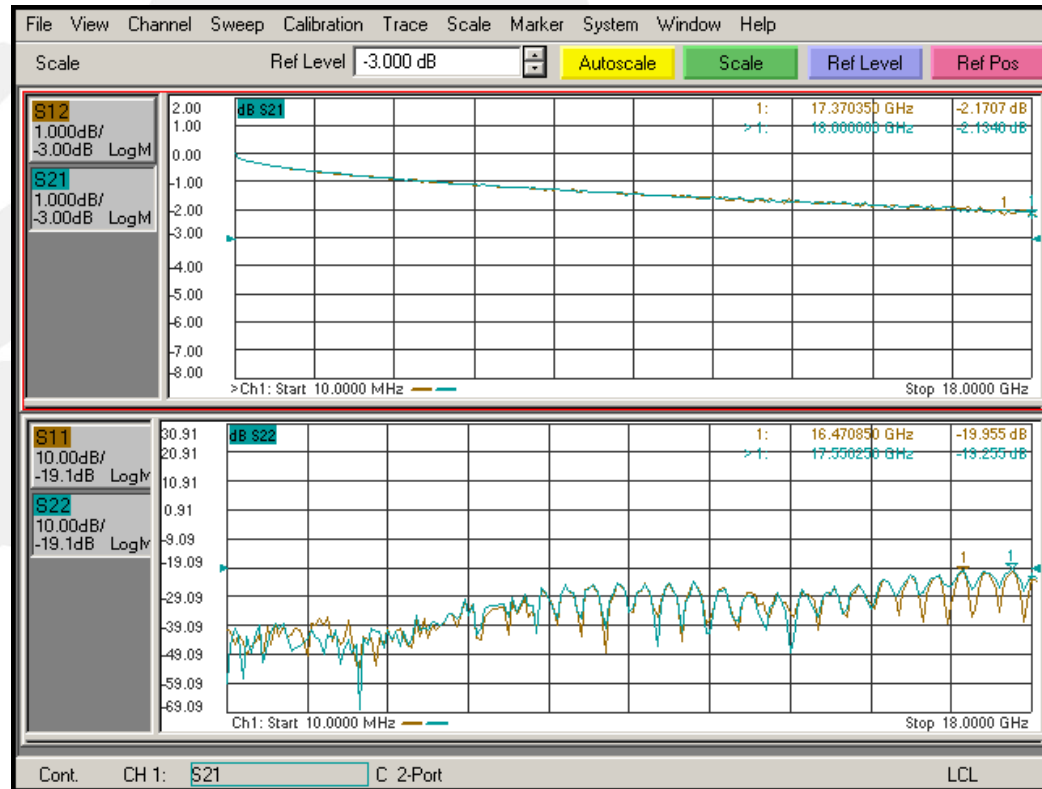
Phase Stability vs. Flexure:

$\pm 3^\circ$  @ 18GHz

Bend Radius: 76.2mm

Phase Stability vs. Temp. Max.:

550 PPM @ -40 °C ~ +85 °C



## Low loss Phase Stability vs. temp.& Flexure Millimeter Wave Cable Assemblies

### DC-18GHz B07-01-07-3M Tested Data

<b>Frequency Range: DC to 18 GHz</b>
<b>Insertion Loss, max: 1.95 dB</b>
<b>VSWR, max: 1.30:1</b>

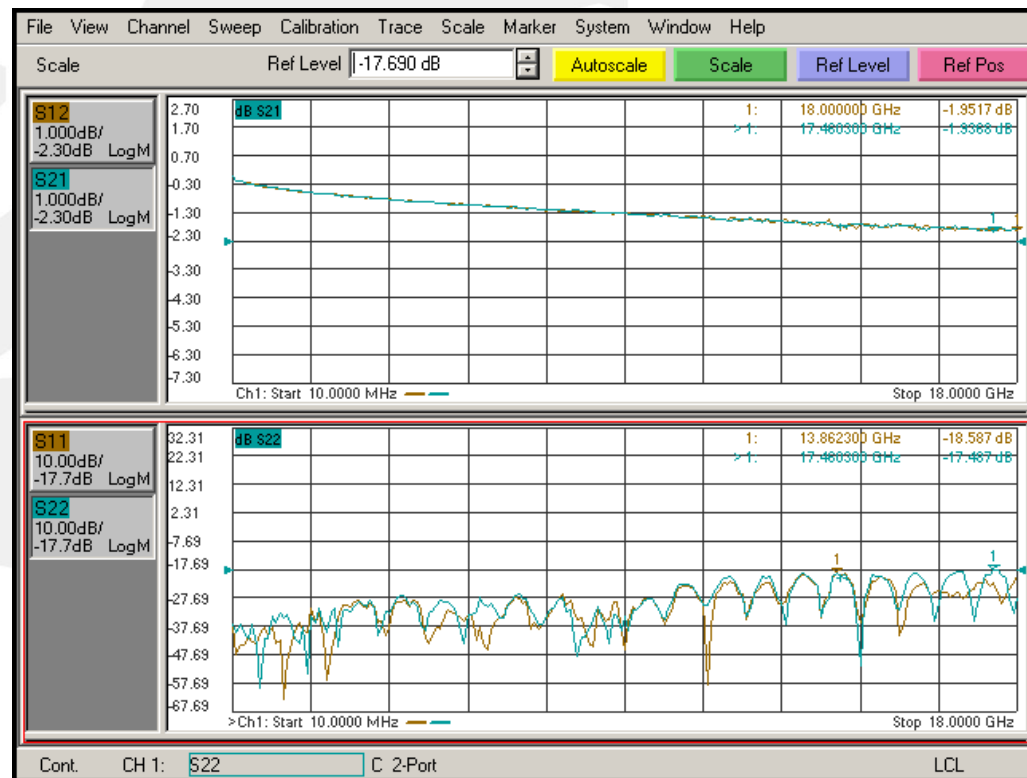
**Phase Stability vs. Flexure:**

**$\pm 3.5^\circ$  @18GHz**

**Bend Radius: 81mm**

**Phase Stability vs. Temp. Max.:**

**550 PPM@-40 °C ~+85 °C**



## Low loss Phase Stability vs. temp.& Flexure Millimeter Wave Cable Assemblies

### DC-18GHz B10-01-01-1M Tested Data

Frequency Range: DC to 18 GHz

Insertion Loss, max: 1.35 dB

VSWR, max: 1.15:1

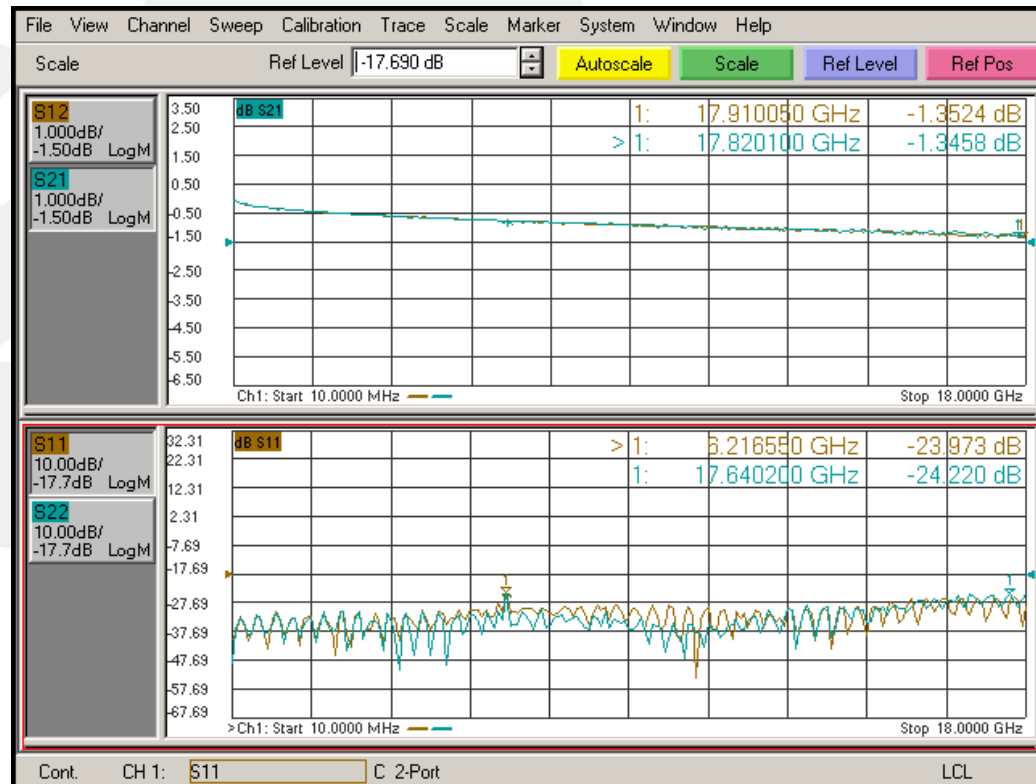
Phase Stability vs. Flexure:

$\pm 3.6^\circ$  @ 18GHz

Bend Radius: 51mm

Phase Stability vs. Temp. Max.:

250 PPM @ -+22 °C ~ +100 °C



# Low loss Phase Stability vs. temp.& Flexure Millimeter Wave Cable Assemblies

## DC-18GHz B11-01-01-1M Tested Data

**Frequency Range: DC to 18GHz**

**Insertion Loss: 1.13 dB**

**VSWR, max.: 1.28:1**

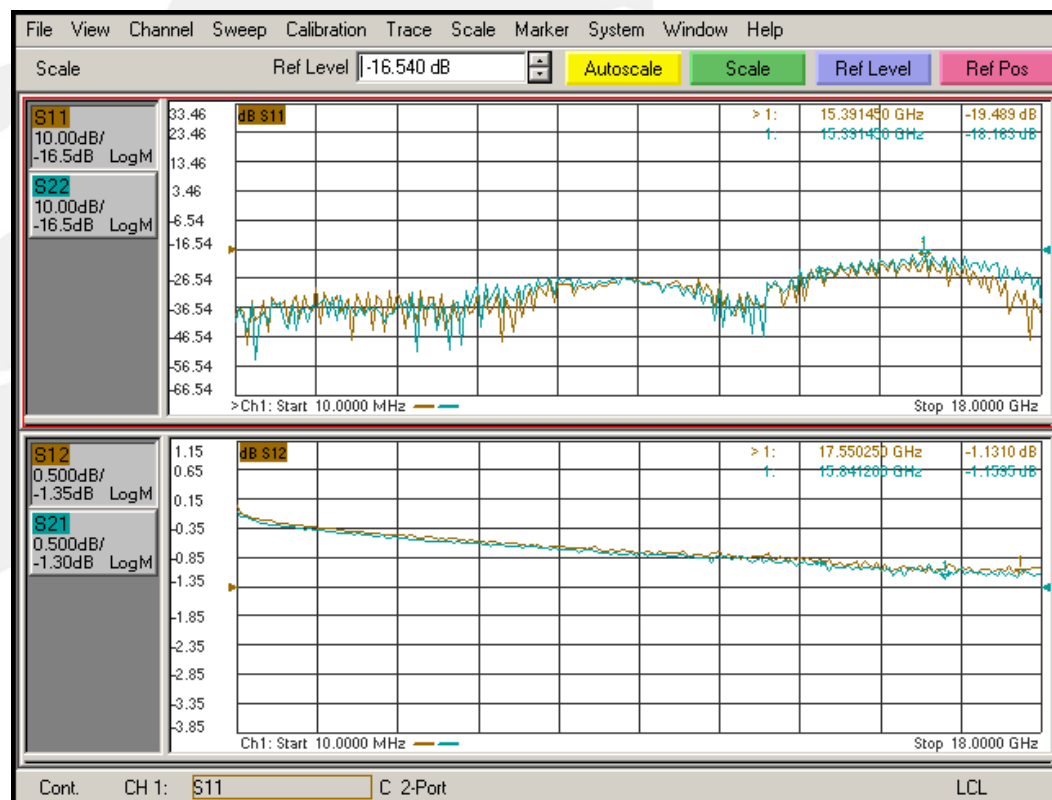
**Phase Stability vs. Flexure:**

**:  $\pm 5.4^\circ$  @ 18GHz**

**Bend Radius: 51mm**

**Phase Stability vs. Temp. Max.:**

**550PPM@-40°C ~ +85 °C**



## Low loss Phase Stability vs. temp.& Flexure Millimeter Wave Cable Assemblies

### DC-18GHz B12-01-01-1M Tested Data

Frequency Range: DC to 18GHz

Insertion Loss, max: 1.95 dB

VSWR, max: 1.23:1

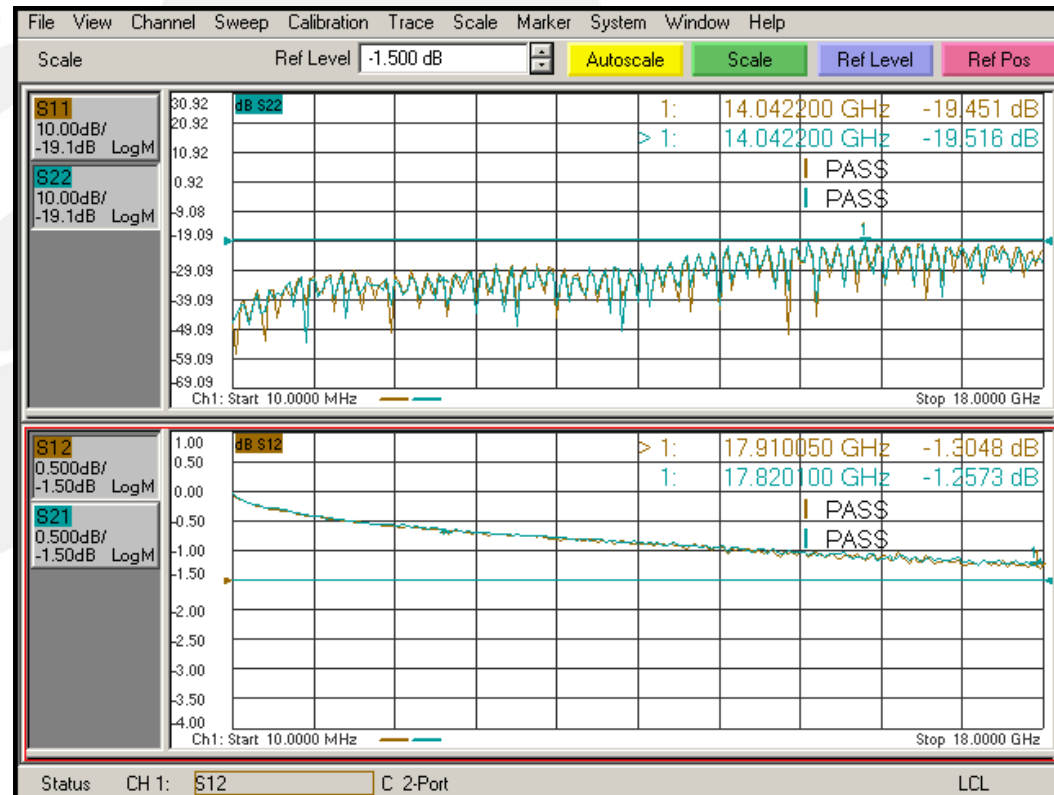
Phase Stability vs. Flexure:

$\pm 3^\circ$  @ 18GHz

Bend Radius: 51mm

Phase Stability vs. Temp. Max.:

550 PPM @ -40 °C ~ +85 °C



**C Series- Low Loss Flexible Cable Assembly with Good Phase Stability vs. Flexure**



## Phase Stability vs. Flexure tested Cable Assemblies

### DC-18GHz C02-01-01-1M Tested Data

Frequency Range: DC to 18 GHz

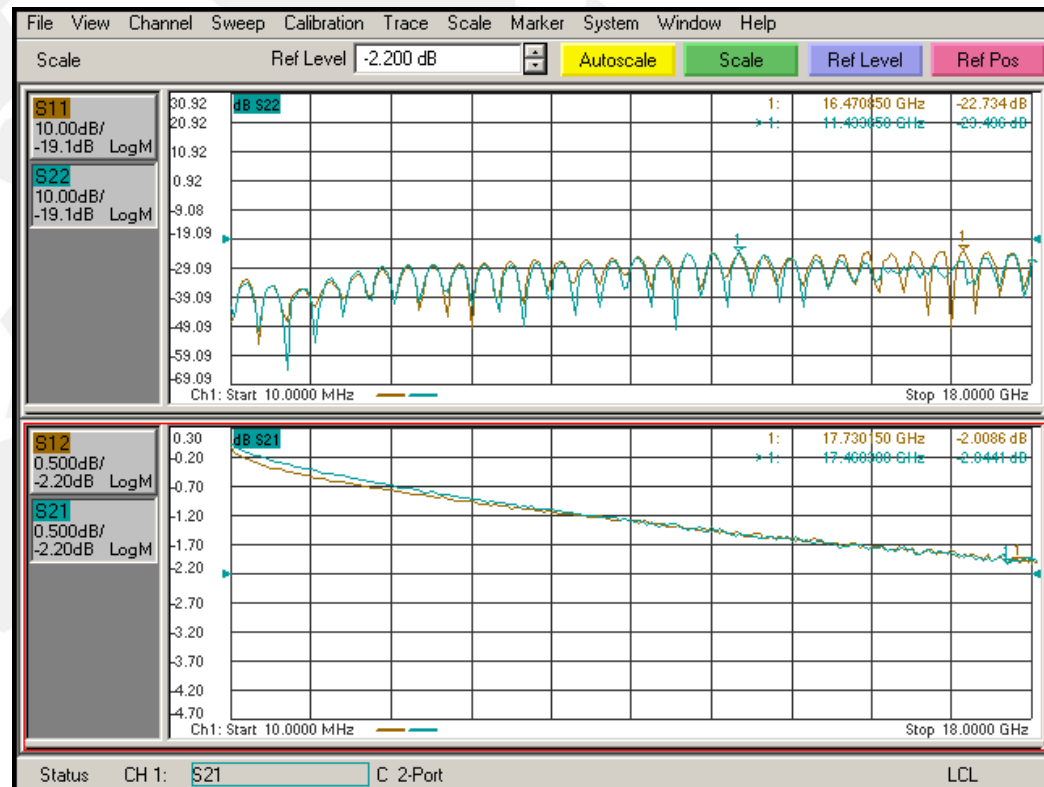
Insertion Loss, max: 2.1dB

VSWR, max: 1.16:1

Phase Stability vs. Flexure:

$\pm 0.9^\circ$  @18GHz

Bend Radius: 26mm



## Phase Stability vs. Flexure tested Cable Assemblies

### DC-18GHz C03-40-40-1M Tested Data

Frequency Range: DC to 40GHz

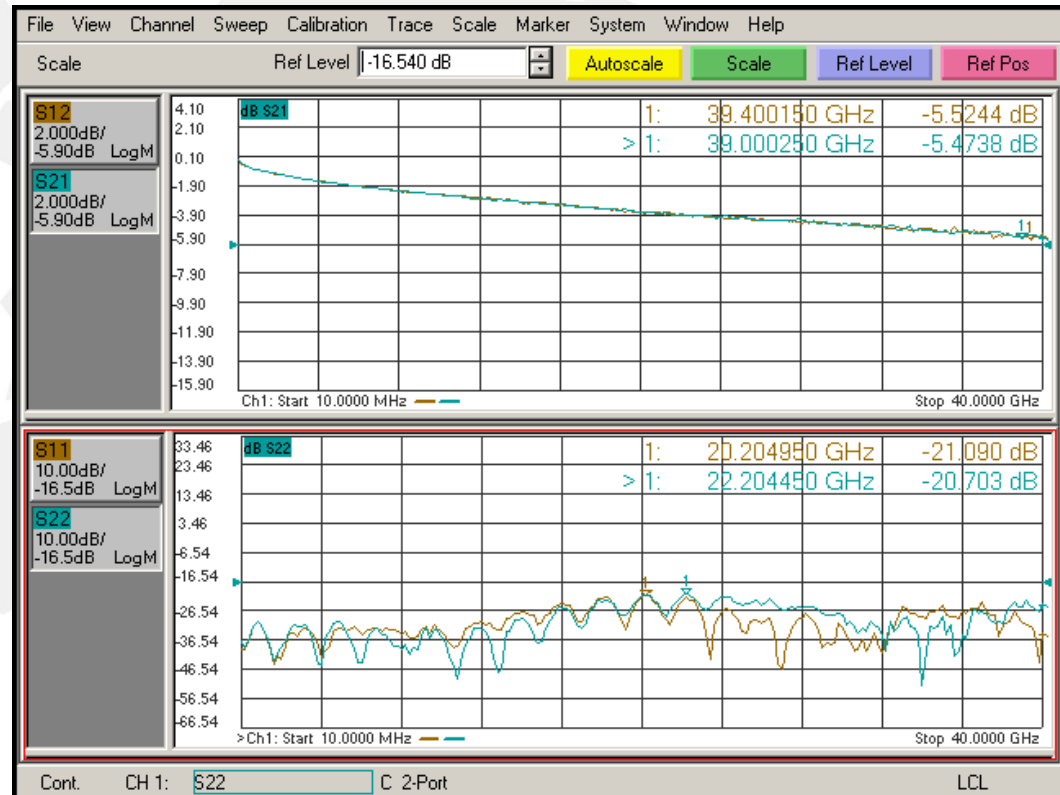
Insertion Loss, max: 5.52dB

VSWR, max: 1.20:1

Phase Stability vs. Flexure:

$\pm 0.9^\circ$  @18GHz

Bend Radius: 26mm



## Phase Stability vs. Flexure tested Cable Assemblies

### DC-18GHz C09-01-01-0.9M Tested Data

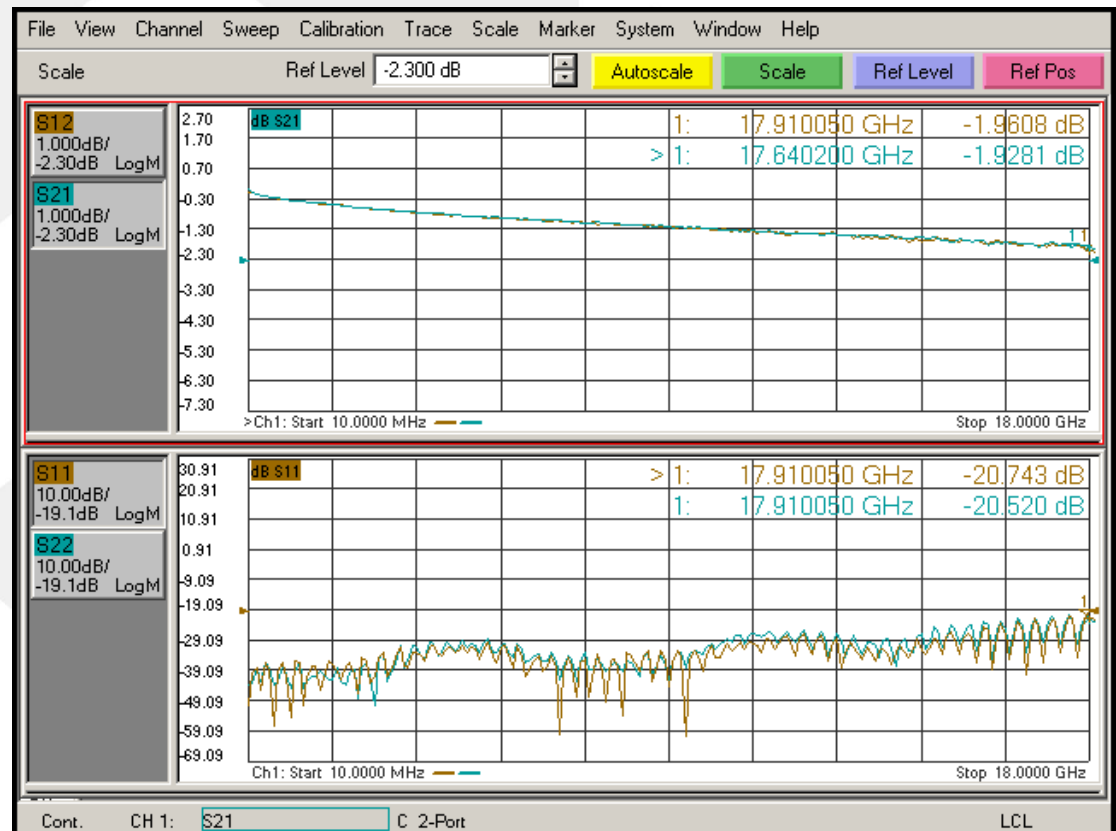
Frequency Range: DC to 18 GHz

Insertion Loss: 1.96dB

VSWR, max: 1.21:1

Phase Stability vs. Flexure:  
 $\pm 6^\circ$  @18GHz

Bend Radius : 26mm



## Phase Stability vs. Flexure tested Cable Assemblies

### DC-18GHz C10-01-01-1M Tested Data

Frequency Range: DC to 18 GHz

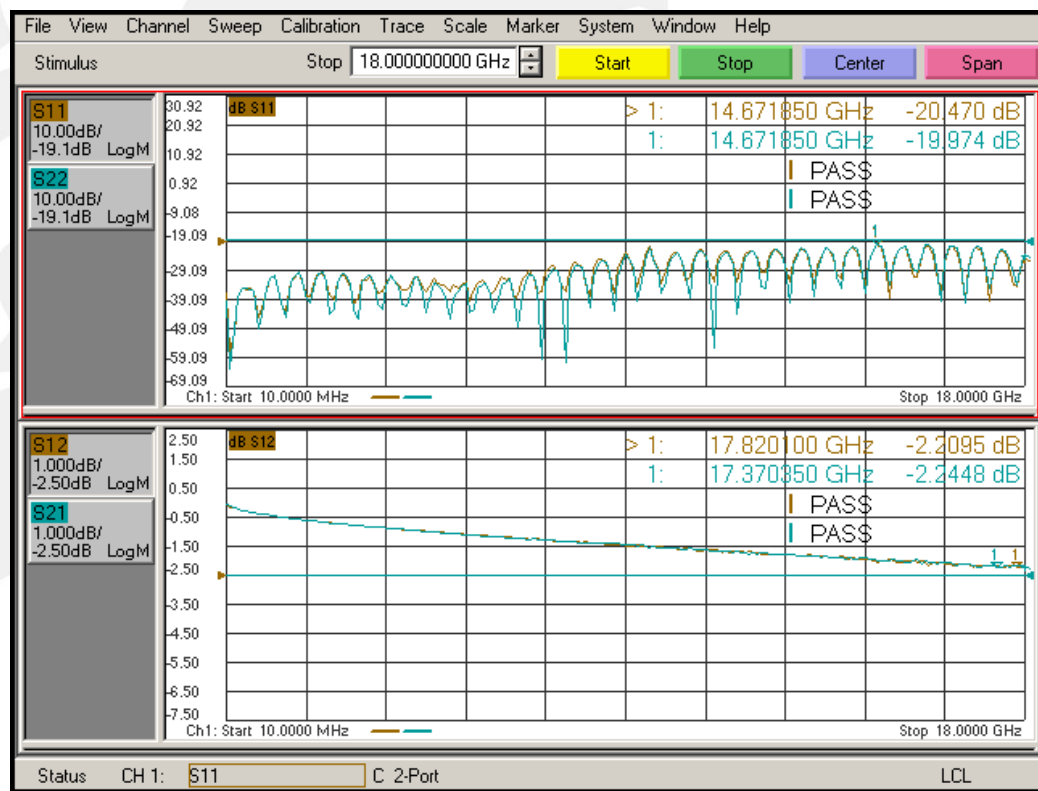
Insertion Loss: 2.24dB

VSWR, max: 1.22:1

Phase Stability vs. Flexure:

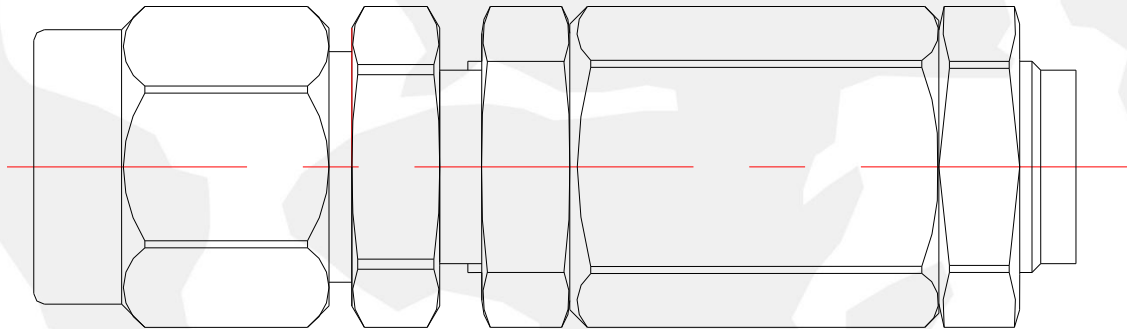
$\pm 1.5^\circ$  @18GHz

Bend Radius: 26mm



## Phase Adaptable Cable Assembly

To meet customers' special requirement for radar application, we developed phase adaptable cable assemblies, including the connectors for semi-rigid, conformable, C02 and C03 cables. The phase adaptable range is over  $\pm 90^\circ$  @18GHz.



## Special Cable Assemblies with VA Armor

- Features :
1. Very flexible and light weight
  2. Good abrasion & cut through resistance
  3. Torque resistant and adds pull strength
  4. Waterproof



## Special Cable Assemblies with VA Armor

We design 3 special types of cables for VA armor .

**B13:** similar performance with B01, customized for VA armor.

**C12:** similar performance with C10, customized for VA armor.

**C13:** similar performance with C03, customized for VA armor.



**Micable Inc.**

ISO9001:2008 CERTIFIED



**C10 series**



## DC-26.5Hz high performance test cable assemblies

### Advantages & Features:

- Excellent phase stability vs. flexure
- Perfect flexibility and good touch
- Double shielded
- Stainless steel connectors of enhanced protective construction
- Upgraded strain relief design for extended service life

### Applications:

- Superior replacements for test cables of original instrument
- Volume quantity test of production line
- Test at R&D labs
- Test for environmental & temperature chamber
- Radio frequency related fields

C10 Series is the reliable and economy cable assemblies of high performance, extensively applied in varied tests of broadband and connections. C10 series is designed with a special enhanced protective construction, featuring the super strain relief with proven extended service life and higher stability for bending, connecting and disconnecting over and over again.

**Micable is your quality fast and low cost solution !**

affiliated with 

Micable Inc.  
Tel: 86 591-87362856  
Email: sales@micable.cn  
Website: www.micable.cn

Seeking world-wide agents 

USA Distributor Center:  
SSI Cable Corporation  
Tel: (380)426-5719  
Email: bsmith@ssicable.com

**D Series- RG Cable Assemblies**



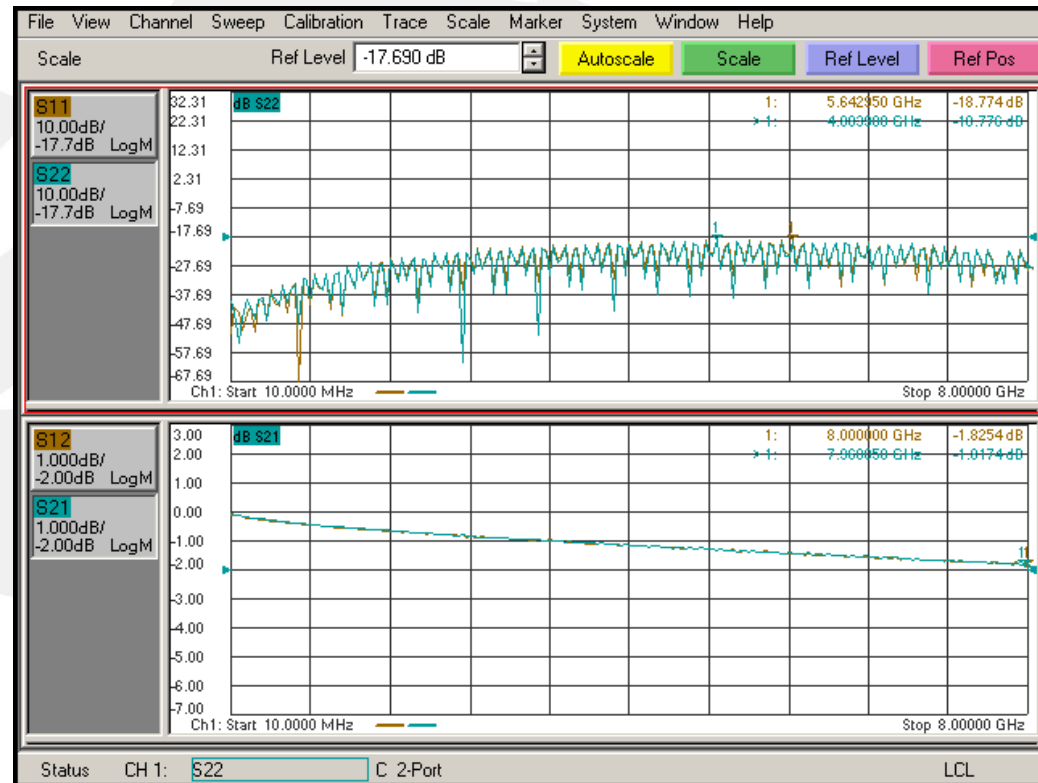
## D02 Series Cable Assemblies

### D02-01-07-1M Tested Data

Frequency Range: DC to 8 GHz

Insertion Loss: 1.83 dB

VSWR, max. : 1.26:1



## **D06 Series Cable Assemblies**

### **D06-57 Series Cable Assemblies**

Suitable for the mobile phone test, till now they have been widely used by OPPO and ZTE. Picture below is D06-02-57-0.2M cable assembly



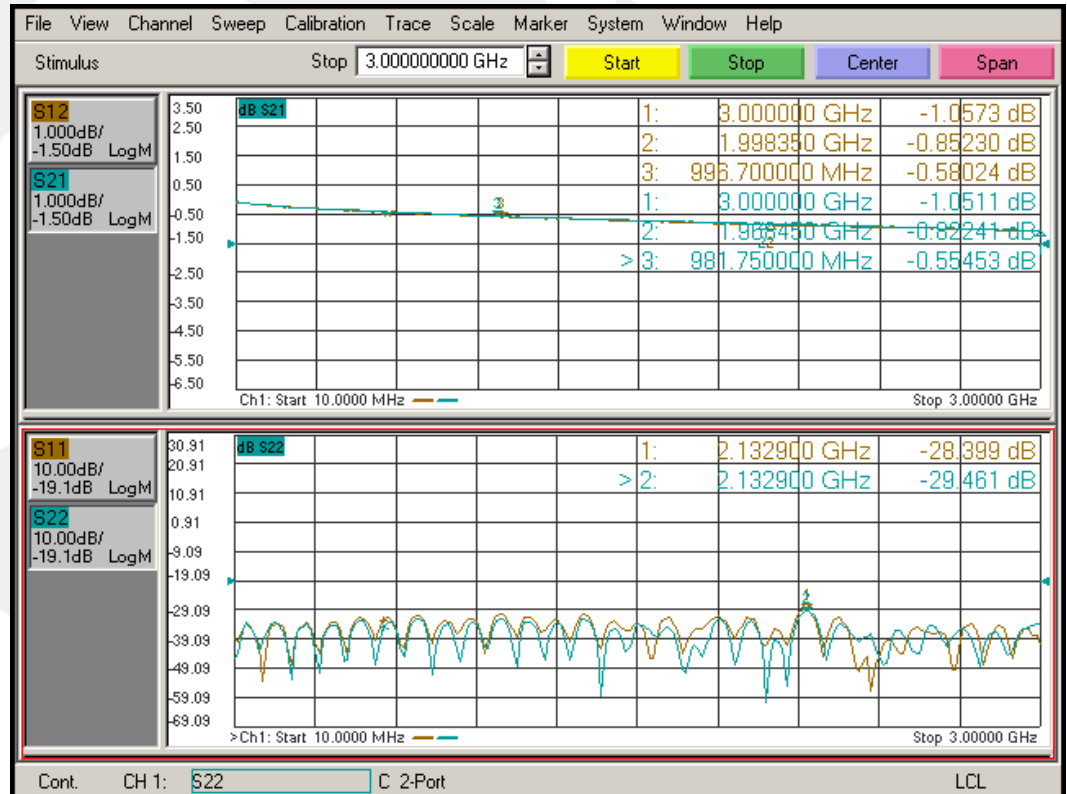
# D10 Series Cable Assemblies

## D10-01-07-1M Tested Data

Frequency Range: DC to 3 GHz

Insertion Loss: 1.06 dB

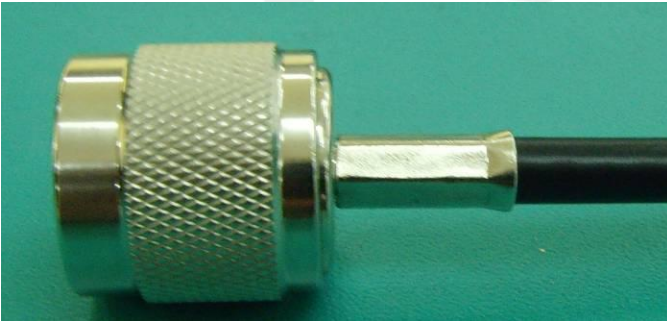
VSWR, max. : 1.08:1



## **D10 Series Cable Assemblies**



**Mlcable N male connector to RG223**



**The standard N Male connector to RG223**

**Mlcable's connector has high reliability and good VSWR up to 3 GHz compared with the traditional connector in the market**

**E Series- Semi Rigid Cable Assemblies**



## 086 Ordinary semi-rigid cable assemblies

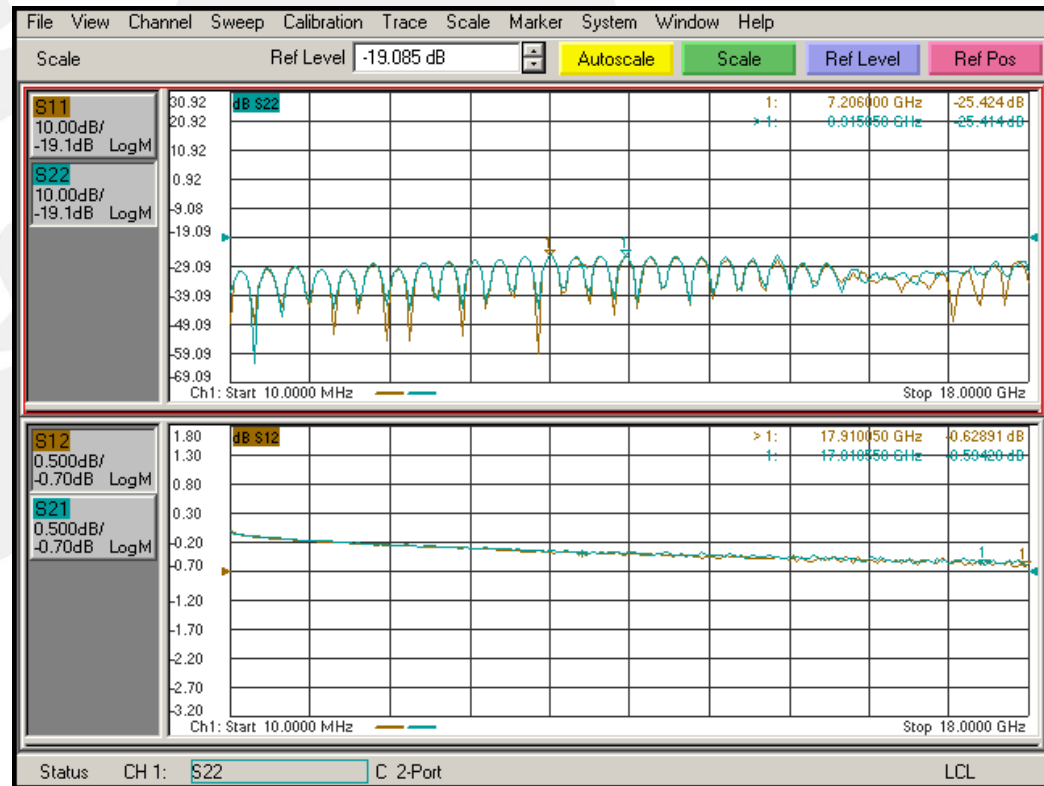
### E02-01-01-0.2M Tested Data

Frequency Range: DC to 18GHz

Insertion Loss, max.: 0.63 dB

VSWR, max.: 1.12:1

E02 cable insertion loss:  
3.25dB/m@18GHz



## 141 Ordinary semi-rigid cable assemblies

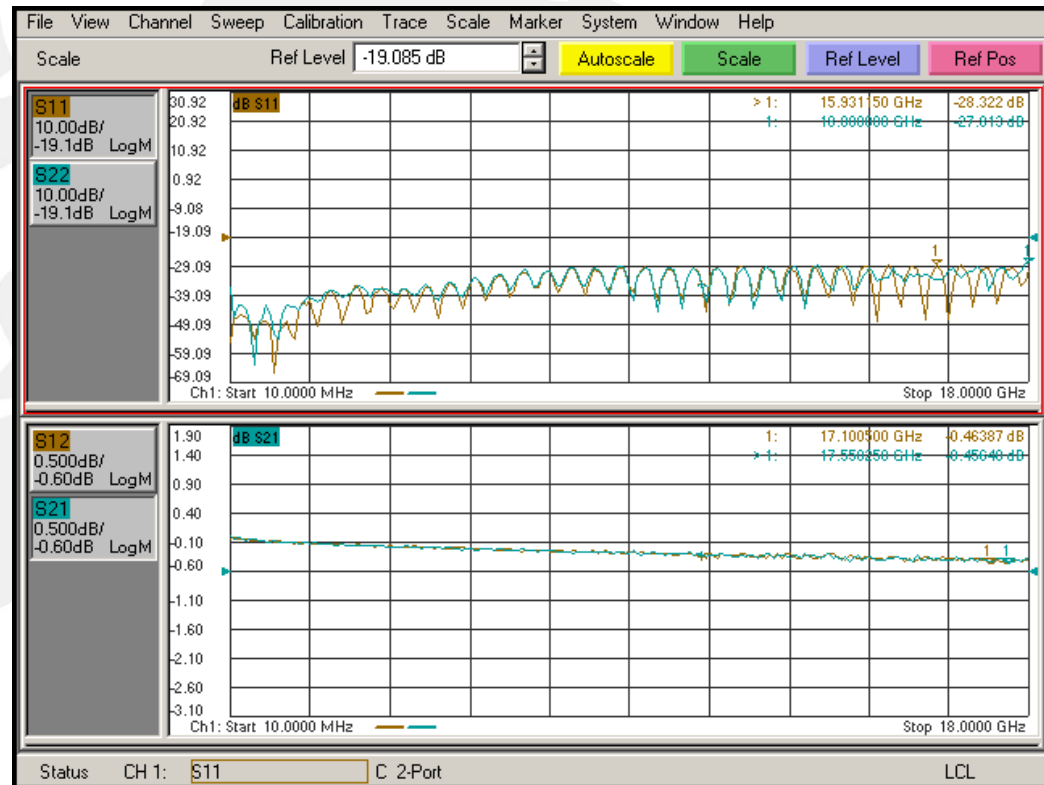
### E03-01-01-0.2M Tested Data

Frequency Range: DC to 18GHz

Insertion Loss, max.: 0.46 dB

VSWR, max.: 1.10:1

E03 cable insertion loss:  
2.09dB/m@18GHz

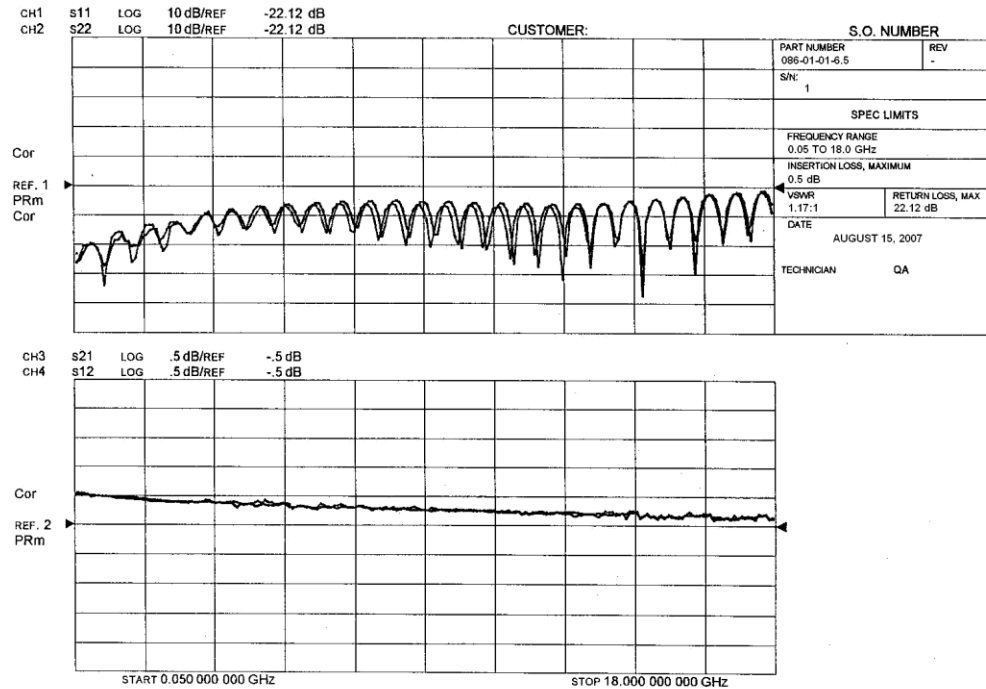


## 086 Low loss semi-rigid cable assemblies

### E05-01-01-0.17M Tested Data

<b>Frequency Range: DC to 18GHz</b>
<b>Insertion Loss, max.: 0.5 dB</b>
<b>VSWR, max.: 1.17:1</b>

**E05 cable insertion loss:  
2.5dB/m@18GHz**



## 141 Ultra low loss semi-rigid cable assemblies

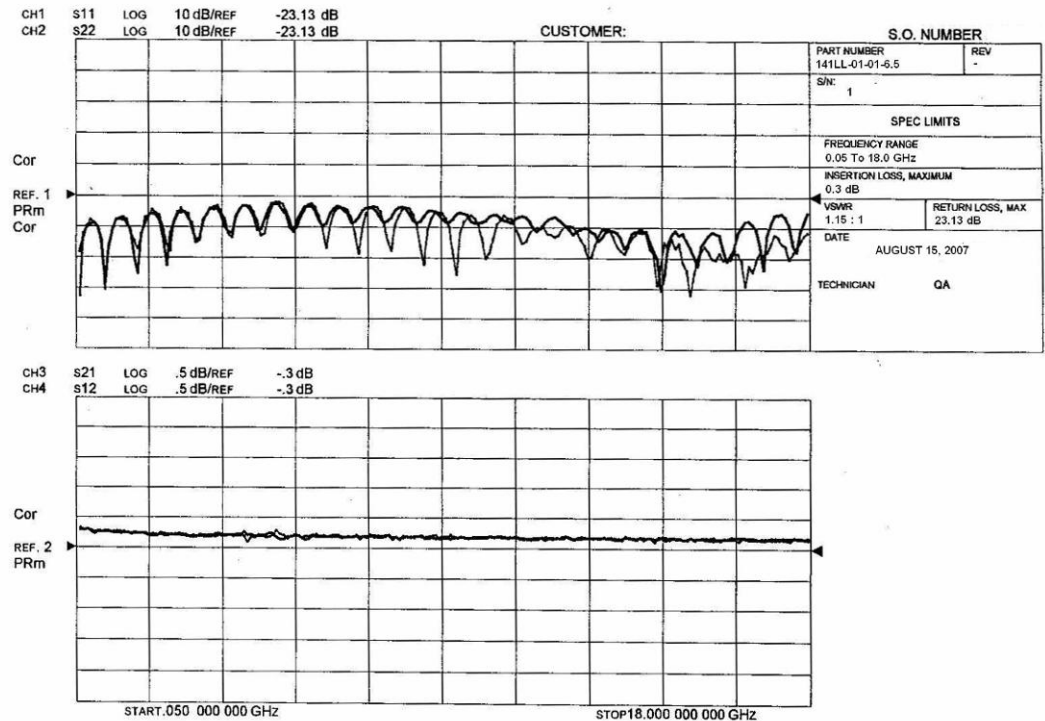
### E06-01-01-0.17M Tested Data

**Frequency Range: DC to 18GHz**

**Insertion Loss, max.: 0.3 dB**

**VSWR, max.: 1.15:1**

**E06 cable insertion loss:  
1.34dB/m@18GHz**



**Micable Inc.**

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**High performance cable assemblies  
with stainless steel connectors**



*Whatever you need for your radar system*



- Phase matching
- Phase tracking
- Phase stability vs. flexibility & temperature
- Low loss and high power
- 3 dimensional bending for semi-rigid cable

***Micable is your quality fast and low cost solution !***

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Tel: 86 591-87382856  
Email: sales@micable.cn  
Website: www.micable.cn

**Seeking world-wide agents**



USA Distributor Center:  
SSI Cable Corporation  
Tel: (360)426-5719  
Email: bsmith@sscable.com

**F Series- Conformable Cable Assemblies**

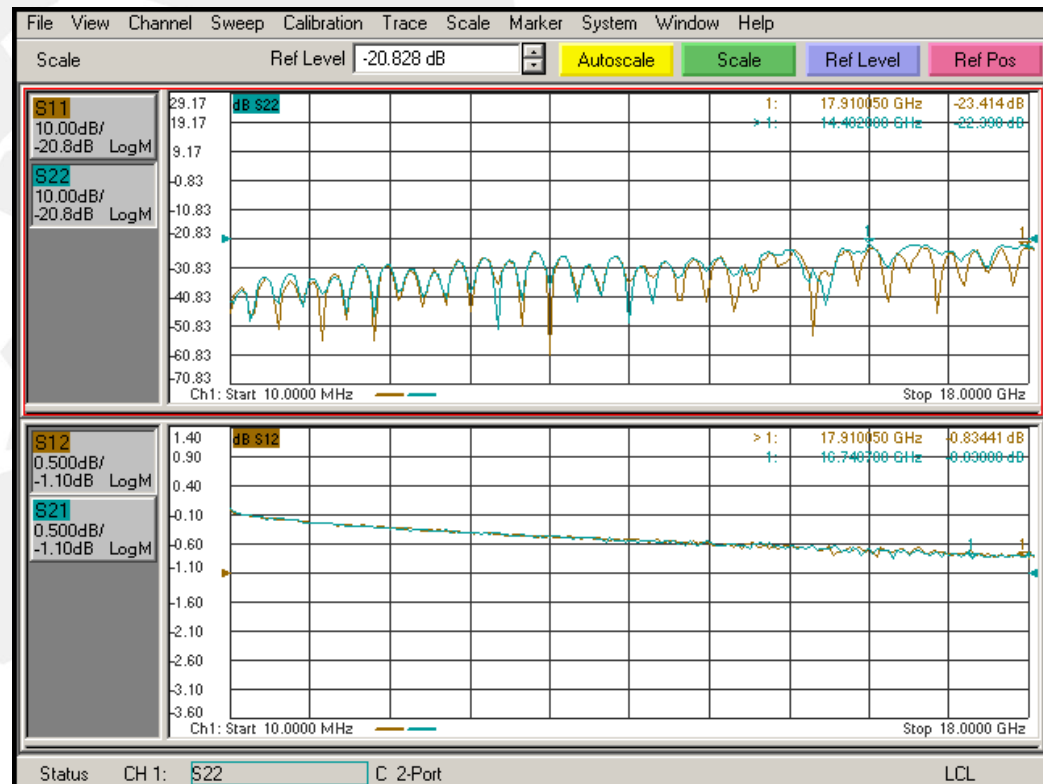


## 086 ordinary conformable cable assemblies DC-18GHz F01-01-01-0.2M Tested Data

Frequency Range: DC to 18GHz

Insertion Loss, max.: 0.84 dB

VSWR, max.: 1.17:1

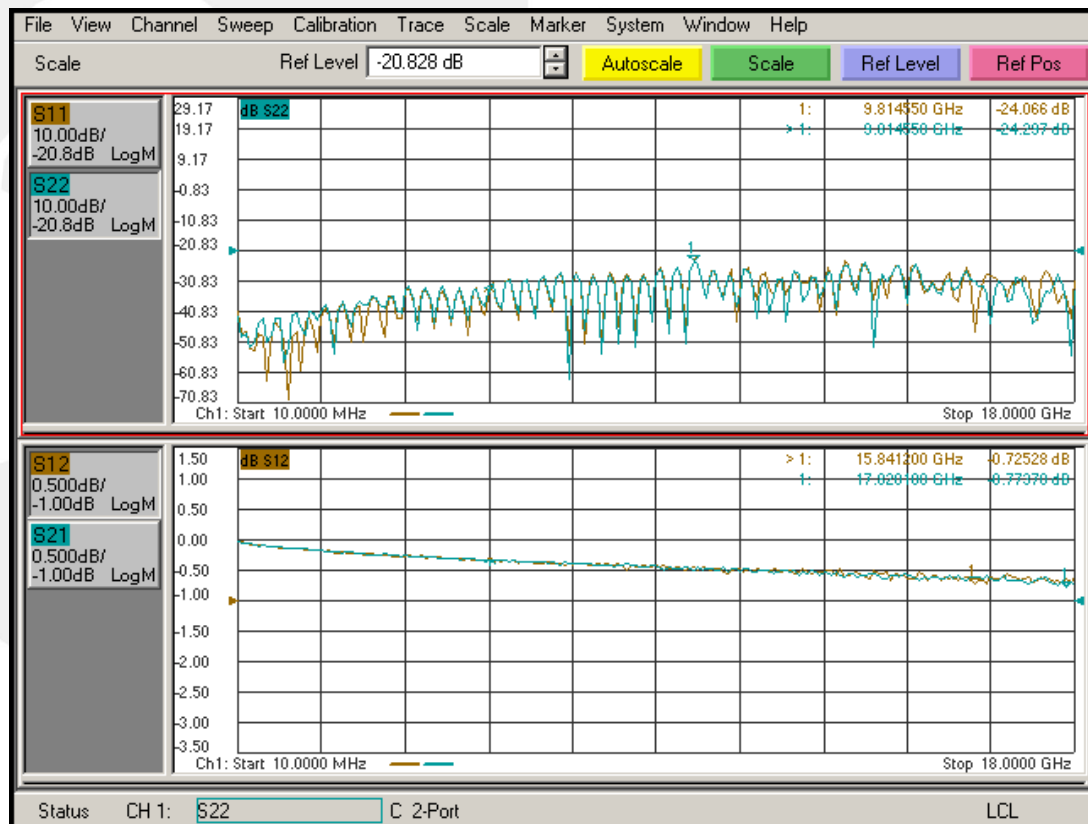


## 141 ordinary conformable cable assemblies DC-18GHz F02-01-01-0.3 Tested Data

Frequency Range: DC to 18GHz

Insertion Loss, max.: 0.77 dB

VSWR, max.: 1.14:1



**G Series- Embossing Copper Cable Assemblies**



## High Three Order Intermodulation Cable Assemblies

**G02-49-49-1M /IM3 Tested Data**

**3/8" Corrugated Copper,**

**7/16 male both end**

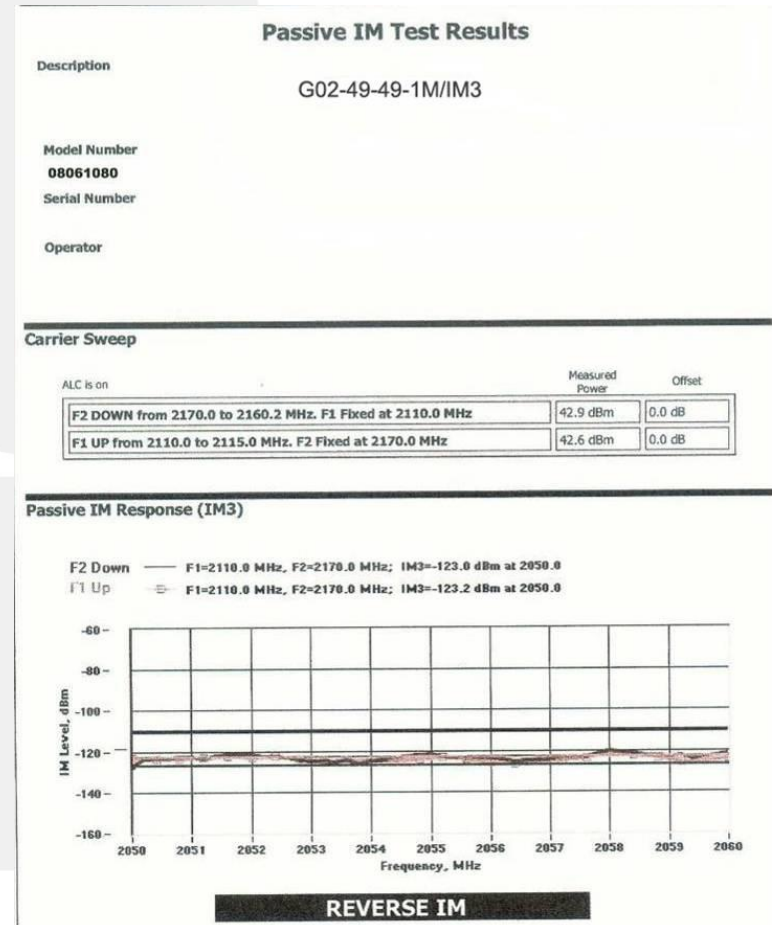
**VSWR $\leq$ 1.15@3GHz**

**VSWR $\leq$ 1.3@3GHz**

**IM3  $\leq$  -123dBm**

**Tested Condition, 2 $\times$  43dBm 2 $\times$  20W,**

**2110MHz/2170MHz**



**H Series- LMR Cable Assemblies**



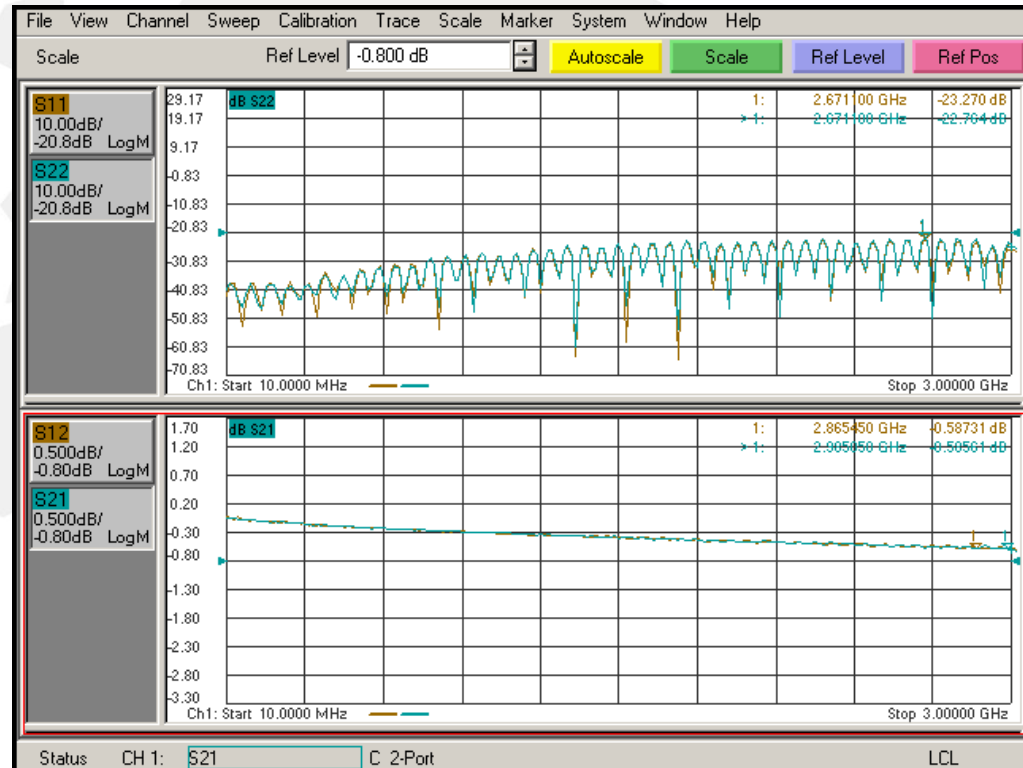
## LMR Series Cable Assemblies

**H05(LMR400)-07-07-2M**  
**Tested Data**

**Frequency Range: DC to 3 GHz**

**Insertion Loss: 1.06 dB**

**VSWR, max. : 1.08:1**





**THE END**

**Thank you!**