**HF085 (DC to 18 GHz)** 



*WithWave's Hand formable Cable Series(HF085)* are complete line of high performance flexible microwave cable assemblies. The velocity propagation *of this c*able is 70 % and they have good insertion & return loss. These cable assemblies with SMA male connectors have excellent RF performance up to 18 GHz.

#### Features

- Freq. Range: DC to 18 GHz
- Hand formable to almost any custom shape without special bending tool
- Cable: HF085, Hand formable cable
- Connector type: SMA(Male)
- 8 mm bend radius for installations
- Anti-torque nut prevents cable stress during installation



#### Application

- Replacement for custom bent 0.086" semi-rigid cables
- Telecommunication Systems
- Test & Measurement
- Test bench systems

#### Specification

Scope	Specification	HF085	
Electrical	Freq. Range (Max)	18	
	Impedance	50 $\pm$ 2 Ohms	
	VSWR *	1.30	
	Velocity of propagation( %)	Typical 70	
	Shielding Effectiveness (dB)	100	
Physical	Center Conductor (mm)	0.53	
	Insulator (mm)	1.68	
	Outer Conductor (mm)	2.17	
	Jacket (mm)	2.60	
Mechanical & Environmental	Weight (g/M)	20	
	Temperature	-40 ~+125°C	

**HF085 (DC to 18 GHz)** 



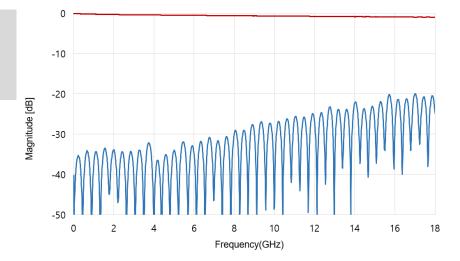
#### ■ Test Results

#### HF085 cable assembly

Part No.: HF085-SM1SM1-10inch

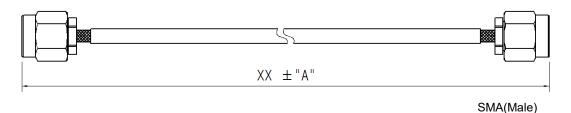
• Frequency: 10 MHz to 18 GHz

Connector : SMA(Male)Cable Length : 10 inch



### Drawing

Unit: [mm]



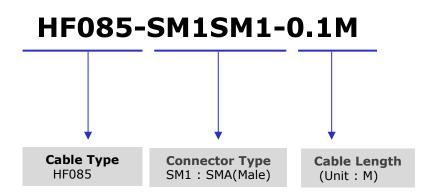
SMA(Male)

XX (Cable length)	"A" (Tolerance)
0.1M ~ 0.29M	+5.0mm / -0.0
0.3M ~ 0.99M	+15.0mm / -0.0
1.0M ~ 2.99M	+30.0mm / -0.0
3.0M ~ 9.99M	+50.0mm / -0.0
10,0M ~ 100,0M	+100.0mm / -0.0

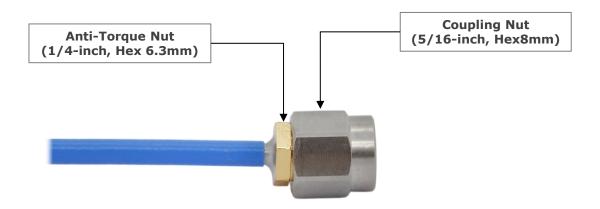
**HF085 (DC to 18 GHz)** 



Selection Guide



#### Proper cable connection using anti-torque nut



The cable connector includes a coupling nut which rotates to fasten the connector, and an anti-torque nut, which is fixed to prevent the cable from twisting during connection.

**HF085 (DC to 18 GHz)** 



### **■** Revision History

Revision	Date	Changes
Ver 1.0	2025-11-03	Released Hand formable Cable Assemblies (HF085)