

# UF Series Ultra-Flexible Phase Stable Coaxial cable

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## INTRODUCTION

UF series uses special structure and process which makes the product ultra flexible on the basis of ensuring the electrical performance. This series can be widely used in repeated bending and high requirement for flexibility.

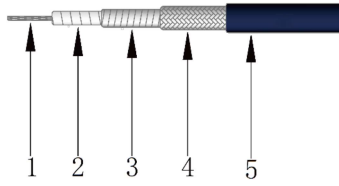
### Typical Application

- Vehicle radar and communication system
- Commercial antenna
- Millimeter wave base station
- Test setup

### Features

- Maximum operating frequency up to 40GHz Excellent shielding
- Ultra flexible
- Field environment



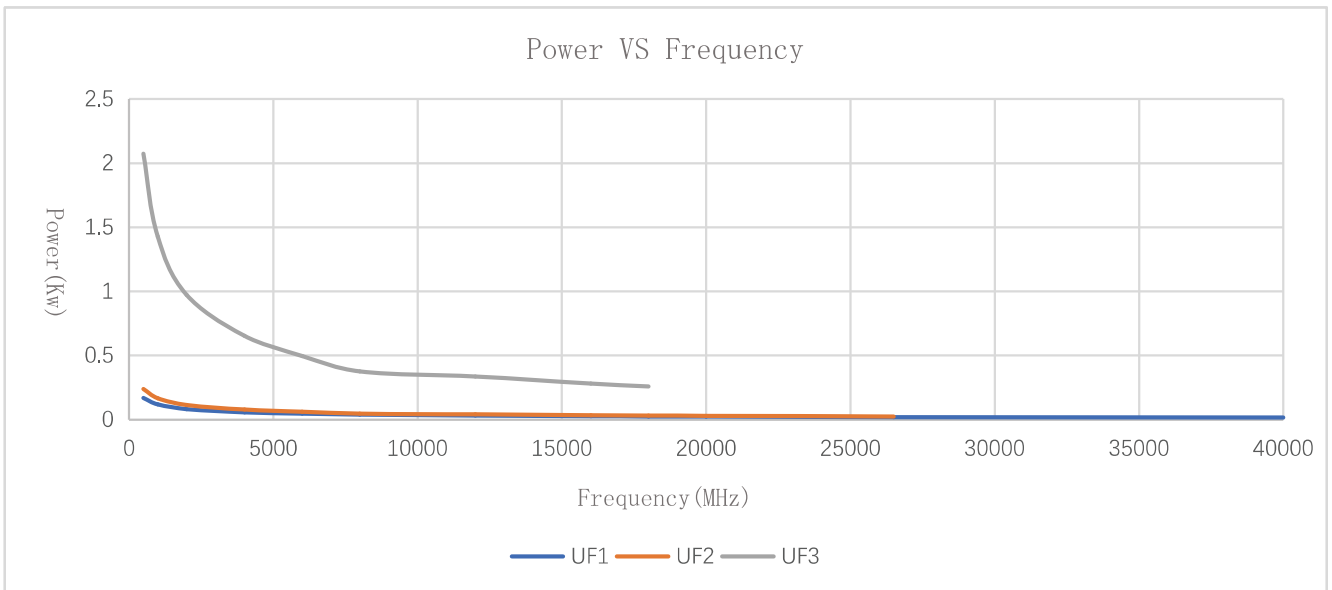
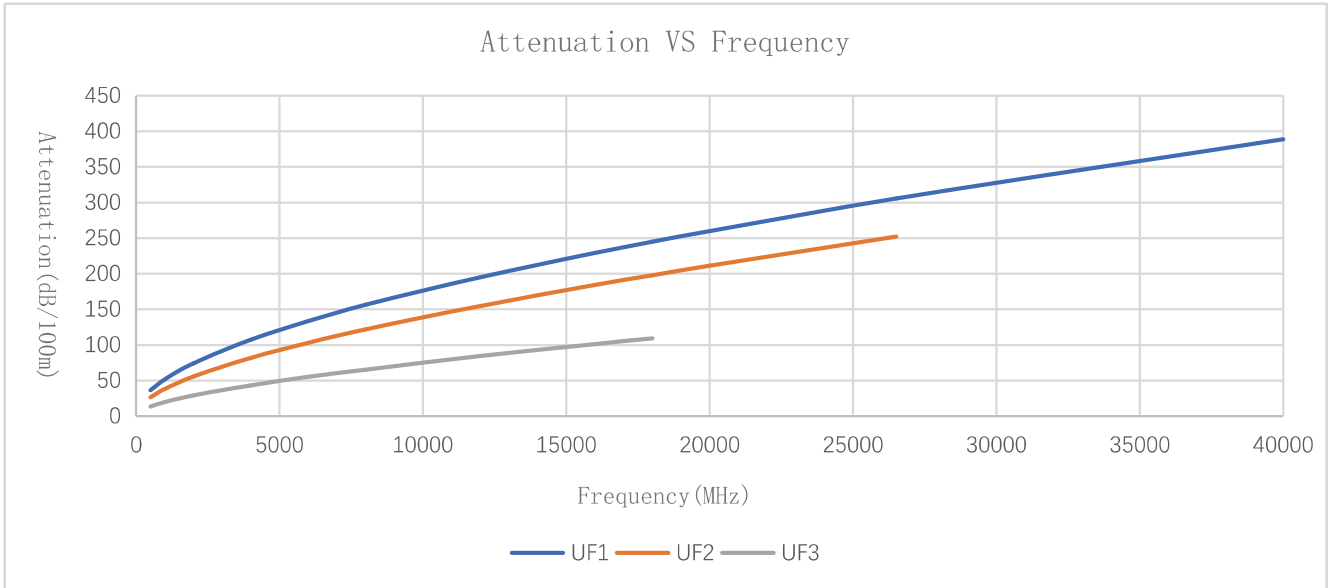


- 1—Center Conductor——SPC
- 2—Dielectric——Low density PTFE
- 3—Outer Conductor——SPC
- 4—Outer Shield——SPC
- 5—Jacket ----PUR

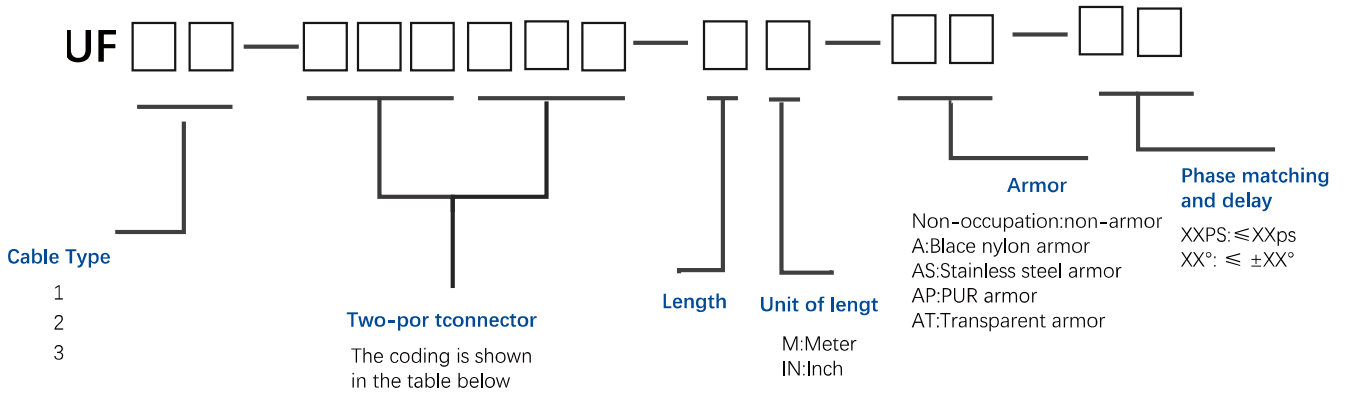
## Cable Specification

Model	UF1		UF2		UF3	
<b>Mechanical Specifications</b>						
Center Conductor	0.72		1.02		1.88	
Dielectric	2.05		3.07		5.50	
Inner Shield	2.25		3.27		5.74	
Outer Shield	2.65		3.78		6.31	
Jacket	3.60		5.00		8.00	
<b>Electrical Specifications</b>						
Impedance( $\Omega$ )	50		50		50	
Velocity of Propagation(%)	76		76		76	
Shielding Effectiveness (dB)	< -90		< -90		< -90	
Time Delay (ns/m)	4.38		4.38		4.38	
Capacitance (pF/m)	89.4		85		87.7	
Cut-off Frequency(GHz)	53		36		20	
Voltage Withstand(V,DC)	550		850		1500	
Static Bending Radius (mm)	14		20		32	
Dynamic Bending Radius (mm)	36		50		64	
Operating Temperature (°C)	-55~85		-55~85		-55~85	
<b>Attenuation(+25°C Ambient)&amp;Power Handling(+40°C Ambient;SeaLevel;VSWR 1:1)</b>						
Frequency (MHz)	dB/100m	KW	dB/100m	KW	dB/100m	KW
500	36.30	0.1700	26.68	0.240	13.72	2.073
1000	51.86	0.1190	38.47	0.166	19.93	1.427
2000	74.40	0.0829	55.89	0.115	29.24	0.973
4000	107.34	0.0575	82.00	0.078	43.47	0.654
6000	133.45	0.0462	103.22	0.062	55.23	0.515
8000	156.35	0.0316	121.96	0.046	65.38	0.337
12000	195.07	0.0316	154.87	0.041	84.46	0.337
16000	229.12	0.0269	184.25	0.035	101.39	0.281
18000	244.88	0.0252	198.03	0.032	109.40	0.260
20000	259.98	0.0237	211.34	0.030		
26500	305.54	0.0202	252.07	0.025		
40000	388.83	0.0159				
K1	1.582929		1.1366		0.517315	
K2	0.001806		0.00253		0.001806	

**Test Data**



## Assembly Selection Information



## Optional Connectors

Connector Code	Connector Type	Operating Frequency	UF1	UF2	UF3	VSWR (Max)
2.92M	2.92mm Male	DC-40GHz	●			1.30
2.92F	2.92mm Female	DC-40GHz	●			1.30
SMAM	SMA Male	DC-27GHz		●	●	1.25
SMAWM	SMA Male Right Angle	DC-18GHz		●	●	1.25
SMAF	SMA Female	DC-27GHz		●	●	1.25
NM	N Male	DC-18GHz		●	●	1.25
NF	N Female	DC-18GHz		●	●	1.25
TNCM	TNC Male	DC-12GHz		●	●	1.25
SCM	SC Male	DC-6GHz			●	1.25
DINM	7/16 Male	DC-6GHZ			●	1.25