

UF Series Ultra-Flexible Phase Stable Coaxial cable

05



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.

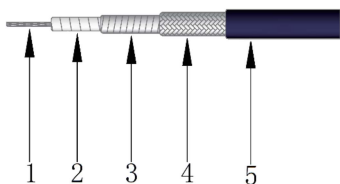
Typical Application

- 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



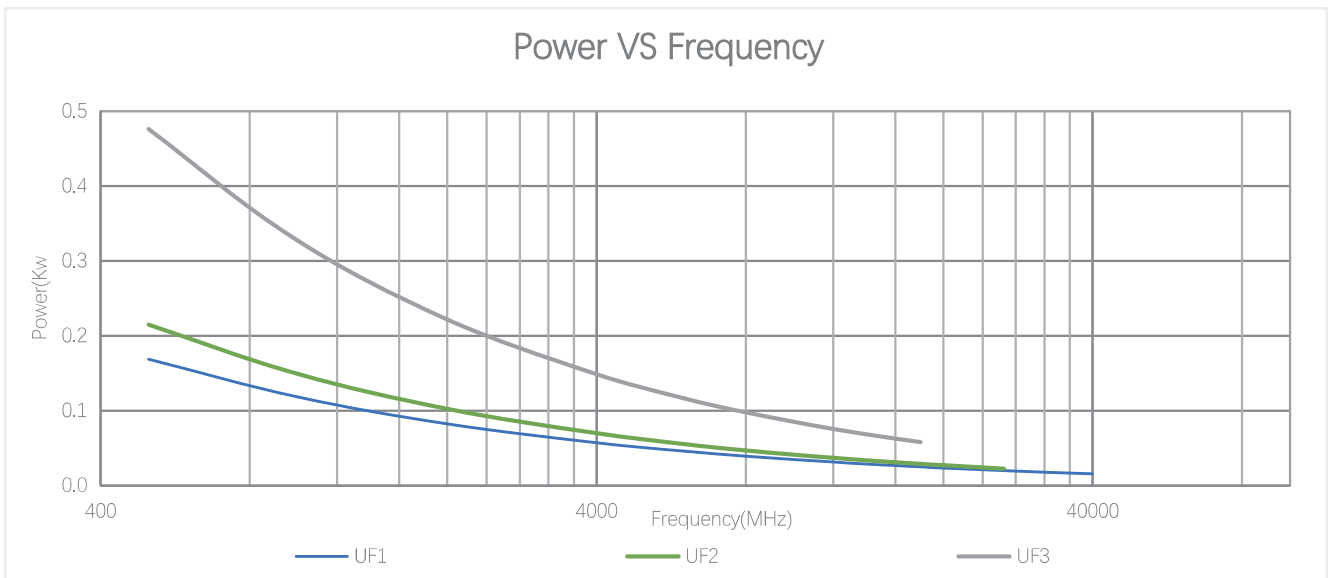
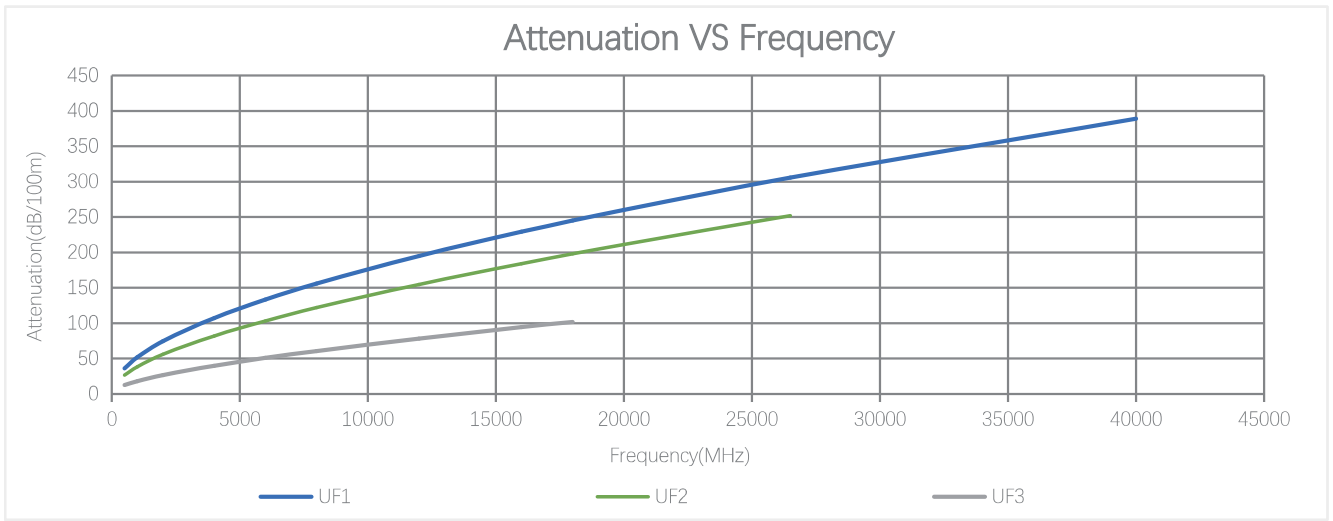


- 1—Center Conductor——Stranded silver plated copper
- 2—Dielectric——Low density PTFE
- 3—Outer Conductor——SPC(Silver Plated Copper)
- 4—Outer Shield——SPC(Silver Plated Copper)
- 5—Jacket——FEP

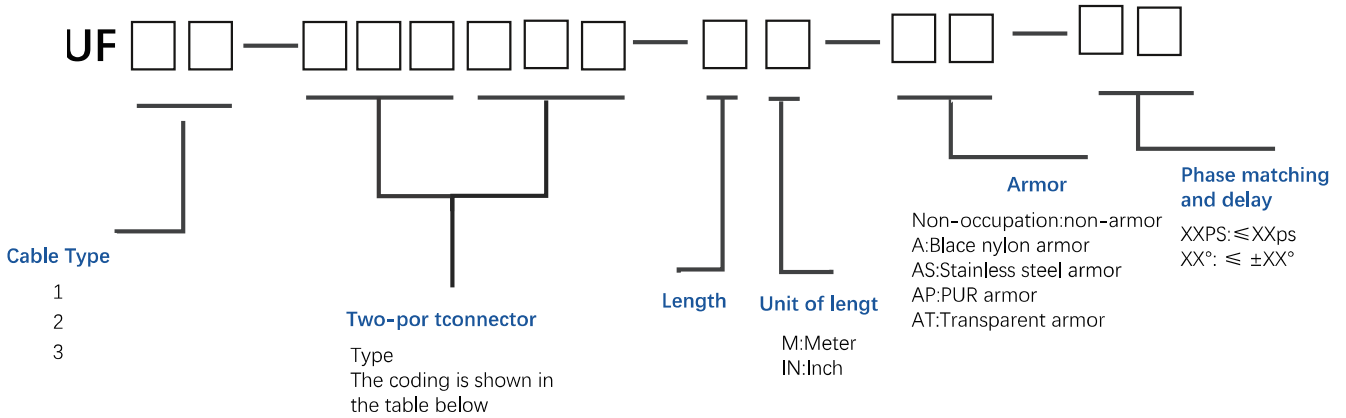
Cable Specification

Model	UF1		UF2		UF3	
Mechanical Specifications						
Center Conductor	0.72		1.02		1.88	
Dielectric	2.05		3.00		5.45	
Inner Shield	2.25		3.20		5.77	
Outer Shield	2.65		3.68		6.37	
Jacket	3.60		5.00		8.00	
Electrical Specifications						
Impedance(Ω)	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)	500		750		1350	
Static Bending Radius (mm)	18		25		40	
Dynamic Bending Radius (mm)	36		50		80	
Operating Temperature (°C)	-55~85		-55~85		-55~85	
Attenuation(+25°C Ambient)&Power Handling(+40°C Ambient;SeaLevel;VSWR 1:1)						
Frequency (MHz)	dB/100m	KW	dB/100m	KW	dB/100m	KW
500	36.30	0.169	26.68	0.215	12.47	0.610
1000	51.86	0.118	38.47	0.149	18.16	0.418
2000	74.40	0.082	55.89	0.103	26.75	0.284
4000	107.34	0.057	82.00	0.070	39.94	0.190
6000	133.45	0.046	103.22	0.056	50.91	0.149
8000	156.35	0.039	121.90	0.047	60.72	0.125
12000	195.07	0.031	154.87	0.037	78.34	0.097
16000	229.12	0.027	184.25	0.031	94.33	0.081
18000	244.88	0.025	198.03	0.029	101.91	0.075
20000	259.98	0.024	211.34	0.027		
26500	305.54	0.020	252.07	0.023		
40000	388.83	0.016				
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