R Series
Semi-Flex RF Coaxial Cable

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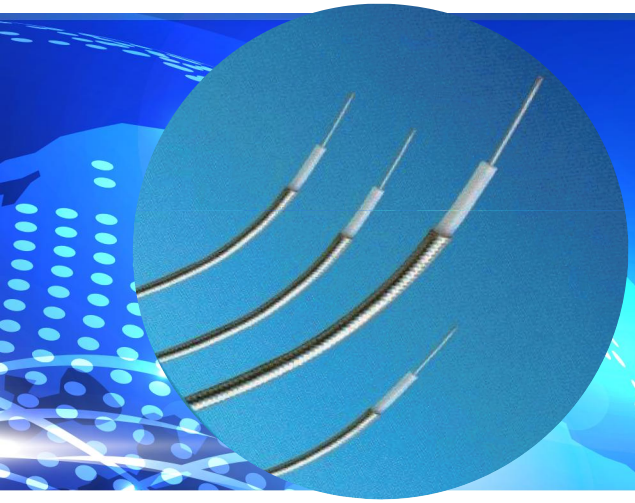


R SERIES: SEMI-FLEX RF COAXIAL CABLE

This cable features a high-density tin-plated round wire braid outer conductor, achieving near-100% shielding coverage for superior EMI suppression and extended operational frequency range. Its tin-plated braid design enables excellent bend formability, making it ideal for applications requiring repeated flexing and a cost-effective replacement for semi-rigid cables.

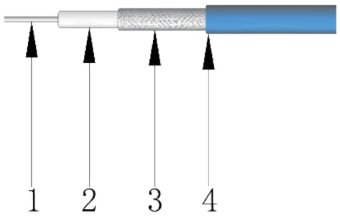
Cable Structure,Inner Conductor Silver-plated copper for low-loss signal transmission.Dielectric: Solid PTFE for stable impedance. Outer Conductor:High-density tin-plated round wire braid (95% minimum coverage).Tin plating enhances bend durability and corrosion resistance.Shielding Effectiveness: >100 dB EMI suppression (MIL-DTL-17 tested). Optional Jackets: PVC, FEP, or PFA for material-specific environmental resistance.

Typical Applications

- Test & Measurement
- 5G base station jumpers, DAS (Distributed Antenna Systems).
- Aerospace
- Industrial

Product Features

- Operating frequency up to 50GHz
- Bend Formability
- High Tensile Strength
- >100 dB EMI Suppression
- -55°C to +155°C

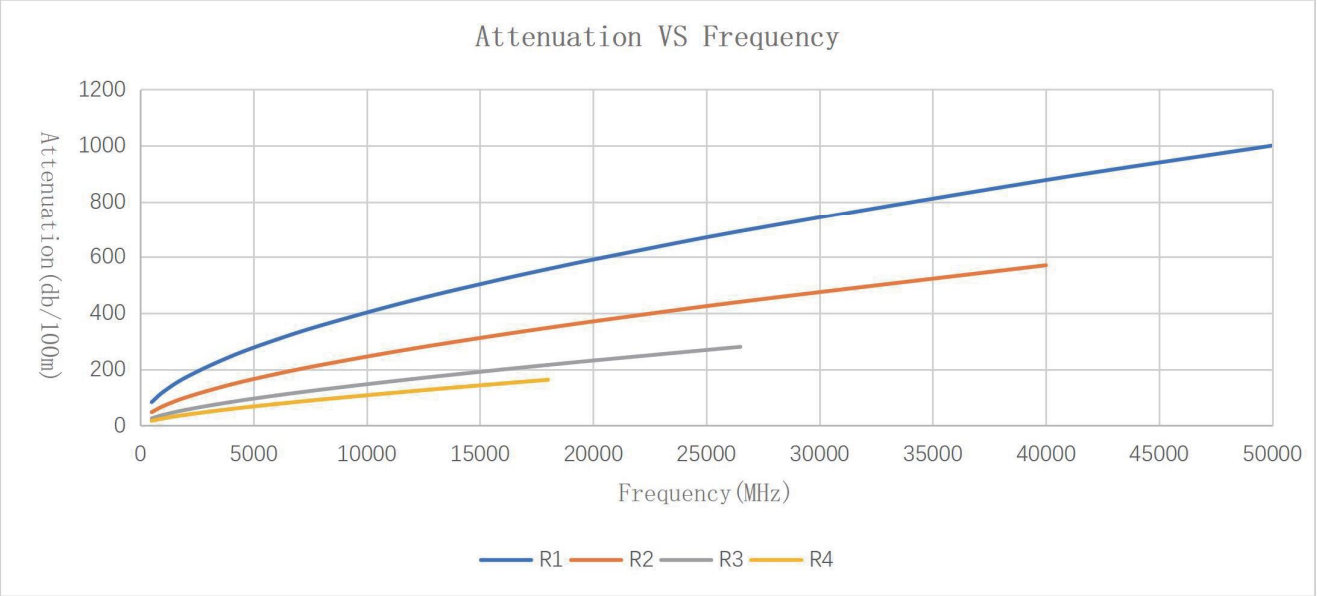


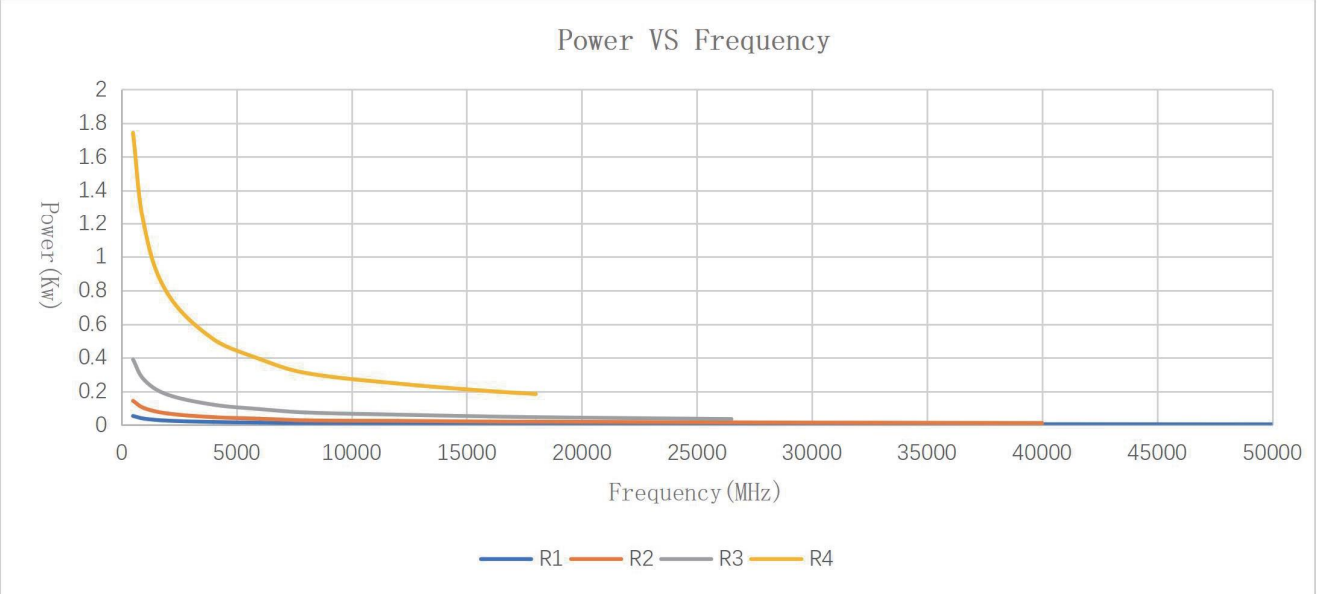
1-Center Conductor——SPC
2-Dielectric——PTFE
3-Outer Conductor——Knit+Wicking
4-Jacket——FEP （Optional）

▶Cable Specification

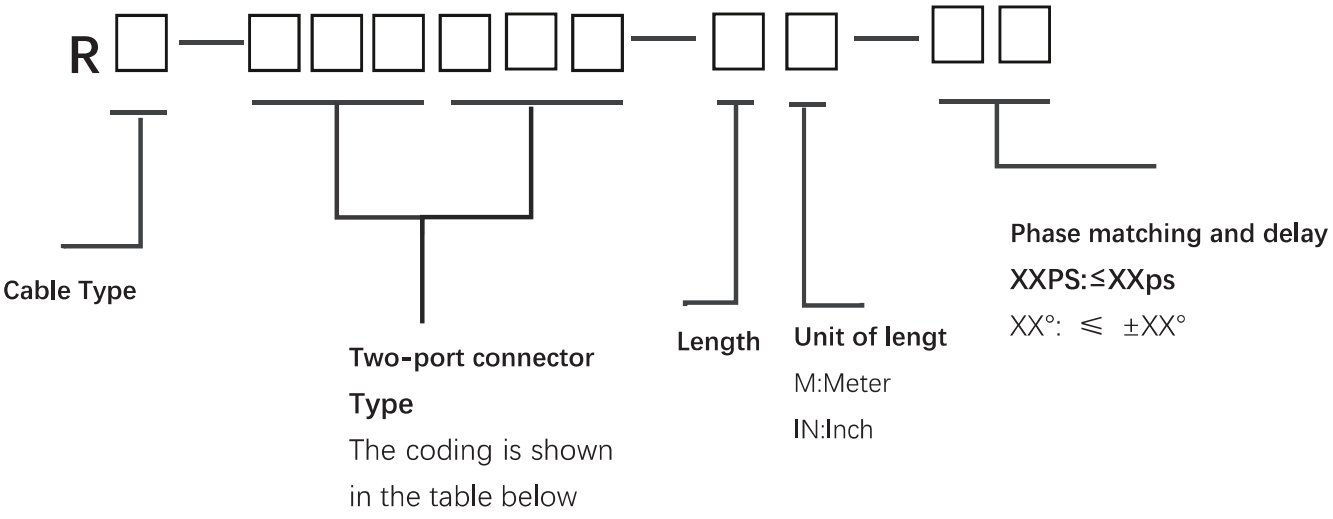
Model	R1		R2		R3		R4	
Mechanical Specifications								
Center Conductor	0.29		0.51		0.92		1.65	
Dielectric	0.94		1.68		2.98		5.25	
Outer Conductor	1.19		2.17		3.55		6.30	
Jacket	1.60		2.50		4.20		7.00	
Electrical Specifications								
Impedance(Ω)	50		50		50		50	
Velocity of Propagation(%)	70		70		70		70	
Shielding Effectiveness（dB)	< -100		< -100		< -100		< -100	
Time Delay（ns/m)	4.76		4.76		4.76		4.76	
Capacitance（pF/m)	96.5		95.2		96.5		98	
Cut-off Frequency(GHz)	108		61		34		19	
Voltage Withstand(V,DC)	450		850		1500		2600	
Static Bending Radius (mm)	6		11		18		32	
Operating Temperature (℃)	-55~150		-55~150		-55~150		-55~150	
Attenuation(+25℃ Ambient)&Power Handling(+40℃ Ambient;SeaLevel;VSWR 1:1)								
Frequency（MHz)	dB/100m	KW	dB/100m	KW	dB/100m	KW	dB/100m	KW
500	83.94	0.054	48.19	0.144	26.17	0.390	17.37	0.897
1000	119.76	0.038	69.30	0.100	38.17	0.267	25.72	0.606
2000	171.47	0.026	100.31	0.069	56.28	0.181	38.69	0.402
4000	246.68	0.018	146.47	0.047	84.20	0.121	59.32	0.263
6000	306.07	0.015	183.73	0.038	107.46	0.095	76.99	0.202
8000	357.25	0.011	216.37	0.032	128.31	0.080	93.12	0.167
12000	445.42	0.010	273.66	0.025	165.81	0.062	122.72	0.127
16000	522.00	0.009	324.44	0.021	199.91	0.051	150.14	0.104
18000	557.35	0.008	348.17	0.020	216.09	0.047	163.30	0.095
20000	591.17	0.008	371.05	0.019	231.81	0.044		
26500	692.94	0.007	440.80	0.016	280.53	0.036		
40000	877.98	0.005	570.87	0.012				
50000	1000.51	0.005						
K1	3.6740161		2.0669291		1.0824		0.688976	
K2	0.0035795		0.003937		0.003937		0.003937	

▶Test Data


Attenuation VS Frequency
Attenuation(db/100m)
1200
1000
800
600
400
200
0
0
5000
10000
15000
20000
25000
30000
35000
40000
45000
50000
Frequency(MHz)
R1
R2
R3
R4


Power VS Frequency
Power(Kw)
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
0
5000
10000
15000
20000
25000
30000
35000
40000
45000
50000
Frequency(MHz)
R1
R2
R3
R4

▶Assembly Selection Information



▶Optional Connectors

Connector Code	Connector Type	Operating Frequency	R1	R2	R3	R4	VSWR（Max）
1.85M	1.85mm Male	DC-40GHz		●			
2.92M	2.92mm Male	DC-40GHz	●	●			1.30
2.92F	2.92mm Female	DC-40GHz	●	●			1.30
SSMAM	SSMA Male	DC-40GHz		●			1.30
3.5M	3.5mm Male	DC-27GHz			●		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
SMPF	SMP Female	DC-40GHz		●			1.25
SSMPF	SSMP Female	DC-40GHz		●			1.25