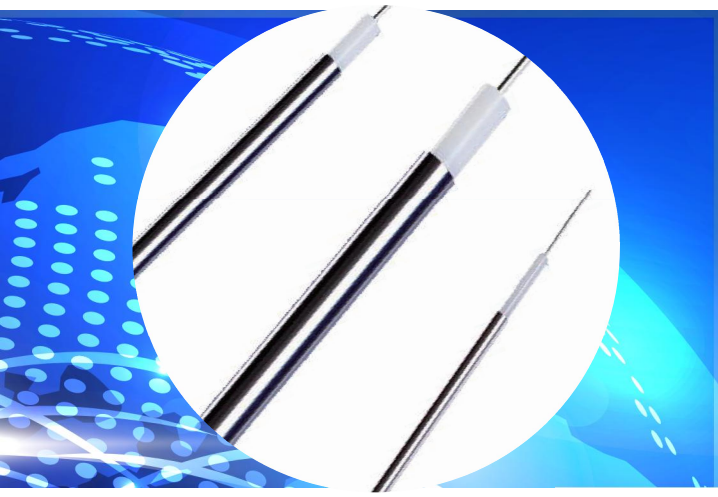
G Series
Semi-Rigid RF Coaxial Cable

07



G SERIES: SEMI-RIGID RF COAXIAL CABLE

Building upon the UF Series design, this cable incorporates enhanced dielectric materials to achieve lower attenuation and improved temperature-phase stability, making it ideal for applications demanding ultra-low signal loss and precise phase performance under varying temperatures.
Abrasion-Resistant TPU, IP68-rated for dust/water resistance,Resists oils, UV radiation, and extreme temperatures (-55℃ to +85℃).Flame-retardant (UL94 V-0) and hydrolysis-resistant.

Typical Applications

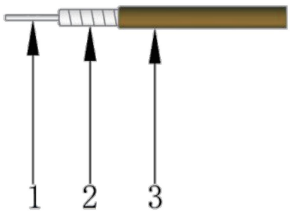
- High-Frequency Test & Measurement
- Medical & Life Sciences
- Aerospace & Defense
- 5G/6G & IoT

Product Features

- Operating frequency up to 40GHz
- Unmatched Flexibility
- Ultra-Low Signal Loss
- Temperature-Phase Stability
- Environmental Robustness





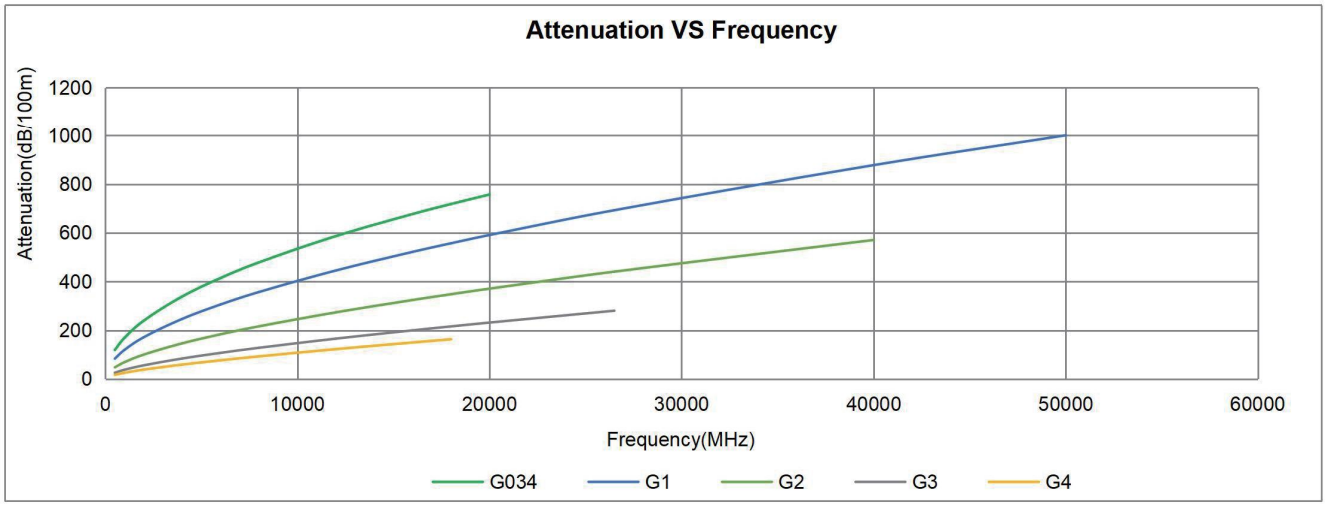


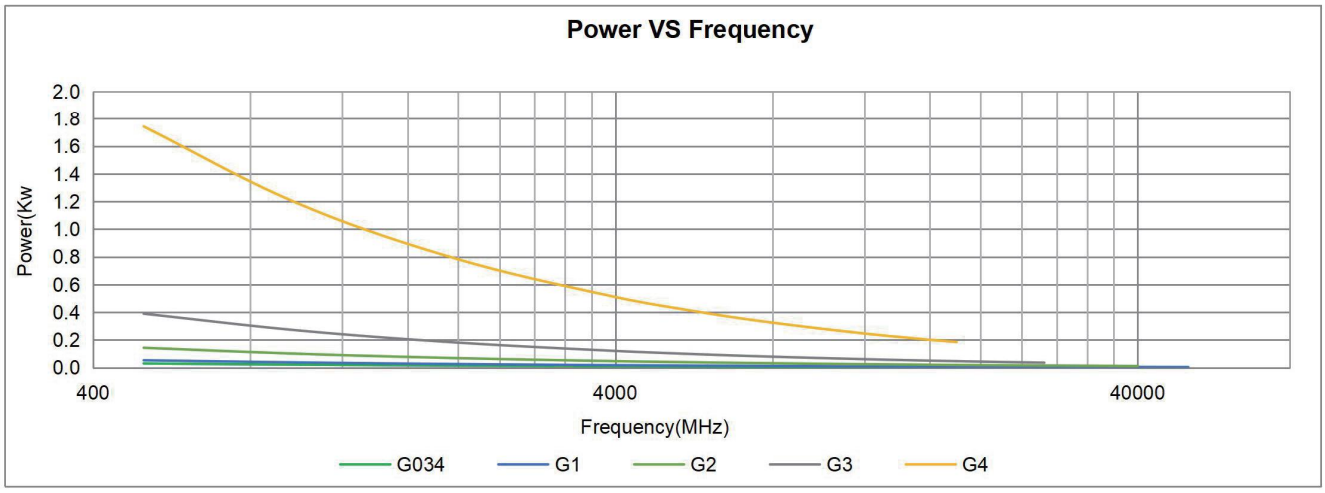
1-Center Conductor——SCCS/SPC
2-Dielectric——PTFE
3-Outer Conductor ——SPC/Ternary alloy

▶Cable Specification

Model	G034		G1		G2		G3		G4	
Mechanical Specifications										
Center Conductor	0.20		0.29		0.51		0.92		1.63	
Dielectric	0.66		0.94		1.68		2.98		5.31	
Outer Conductor	0.86		1.19		2.20		3.58		6.35	
Electrical Specifications										
Impedance(Ω)	50		50		50		50		50	
Velocity of Propagation(%)	70		70		70		70		70	
Shielding Effectiveness(dB)	< -110 (0-1GHz)		< -165		< -165		< -165		< -165	
Time Delay (ns/m)	4.76		4.76		4.76		4.76		4.76	
Capacitance (pF/m)	98		96.5		95.2		96.5		96.1	
Cut-off Frequency(GHz)	154		108		61		34		19	
Voltage Withstand(V,DC)	330 (1 min)		450		850		1500		2600	
Static Bending Radius (mm)	5		5		10		15		30	
Operating Temperature (℃)	-55~125		-55~200		-55~200		-55~200		-55~200	
Attenuation(+25°C Ambient)&Power Handling(+40°C Ambient;SeaLevel;VSWR 1:1)										
Frequency (MHz)	dB/100 m	KW	dB/100 m	KW	dB/100 m	KW	dB/100 m	KW	dB/100 m	KW
500	119.68	0.031	83.94	0.054	48.19	0.144	26.17	0.390	17.37	1.743
1000	169.25	0.022	119.76	0.038	69.30	0.100	38.17	0.267	25.72	1.177
2000	239.38	0.015	171.47	0.026	100.31	0.069	56.28	0.181	38.69	0.783
4000	338.57	0.011	246.68	0.018	146.47	0.047	84.20	0.121	59.32	0.510
6000	414.69	0.009	306.07	0.015	183.73	0.038	107.46	0.095	76.99	0.393
8000	478.87	0.008	357.25	0.011	216.37	0.032	128.31	0.080	93.12	0.325
12000	586.56	0.006	445.42	0.010	273.66	0.025	165.81	0.062	122.72	0.247
16000	677.37	0.005	522.00	0.009	324.44	0.021	199.91	0.051	150.14	0.202
18000	718.49	0.005	557.35	0.008	348.17	0.020	216.09	0.047	163.30	0.185
20000	757.38	0.005	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	5.351381		3.6740161		2.0669291		1.0824		0.688976	
K2	0.000029		0.0035795		0.003937		0.003937		0.003937	

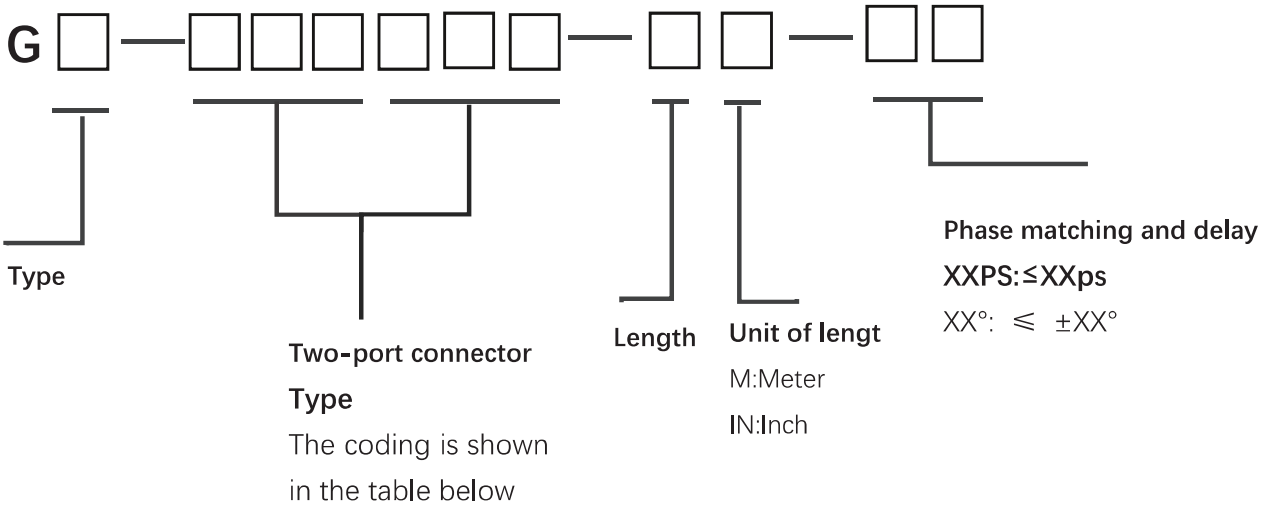
▶Test Data


Attenuation VS Frequency
Attenuation(dB/100m)
1200
1000
800
600
400
200
0
0
10000
20000
30000
40000
50000
60000
Frequency(MHz)
G034
G1
G2
G3
G4


Power VS Frequency
Power(Kw
2.0
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
400
4000
40000
Frequency(MHz)
G034
G1
G2
G3
G4



▶Assembly Selection Information



Optional Connectors

Connector Code	Connector Type	Operating Frequency	G034	G1	G2	G3	G4	VSWR（Max）
1.0M	1.0mm Male	DC-110GHz		●				1.50
1.0F	1.0mm Female	DC-110GHz		●				1.50
1.85M	1.85mm Male	DC-67GHz		●	●			1.30
1.85F	1.85mm Female	DC-67GHz		●	●			1.30
2.4M	2.4mm Male	DC-50GHz		●	●			1.30
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
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