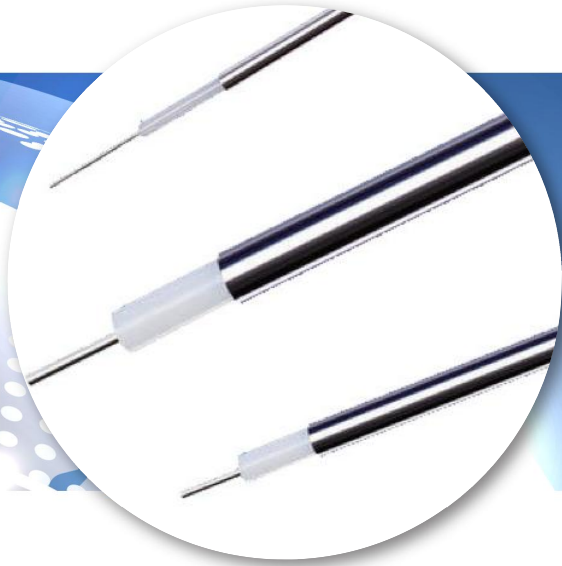


G Series Semi-Rigid Coax Cable

07



INTRODUCTION

G series features stable attenuation, good shielding, no signal crosstalk and low VSWR. Talent Microwave has strong technical strength so that can research and develop semi-rigid cable up to 110GHz and can also customize according to customer special need.

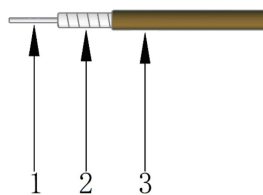
Typical Application

- Aerospace
- Plate-to-plate connection
- Instrumentation and card interconnection
- Feed network
- Cabinet jumper

Features

- Maximum operating frequency up to 67GHz
- Good shielding
- Excellent corrosion resistance
- Cost-effective



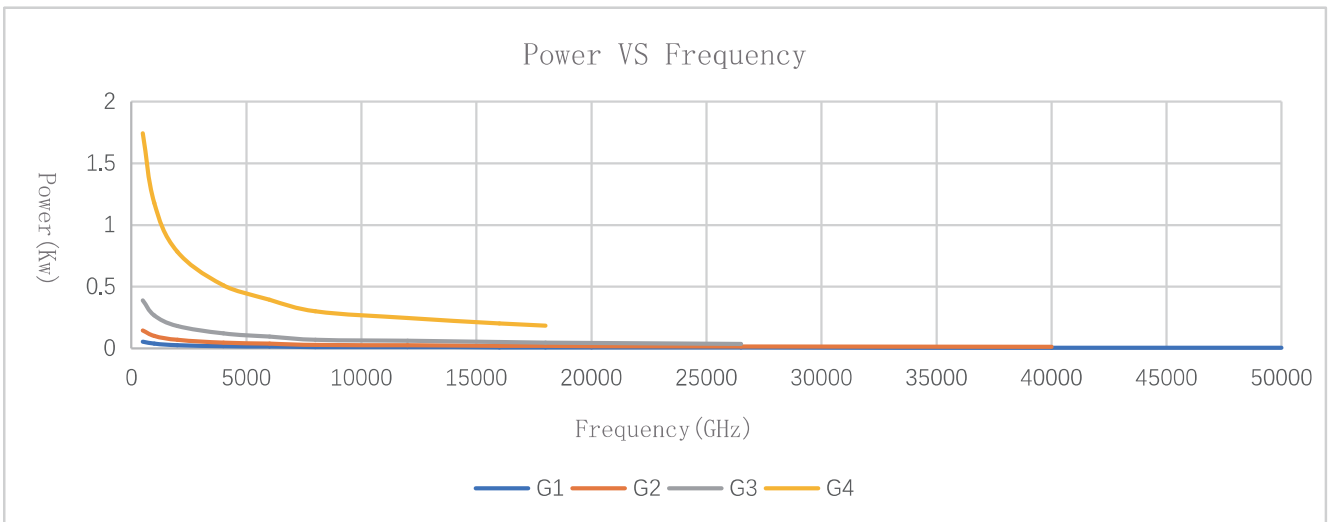
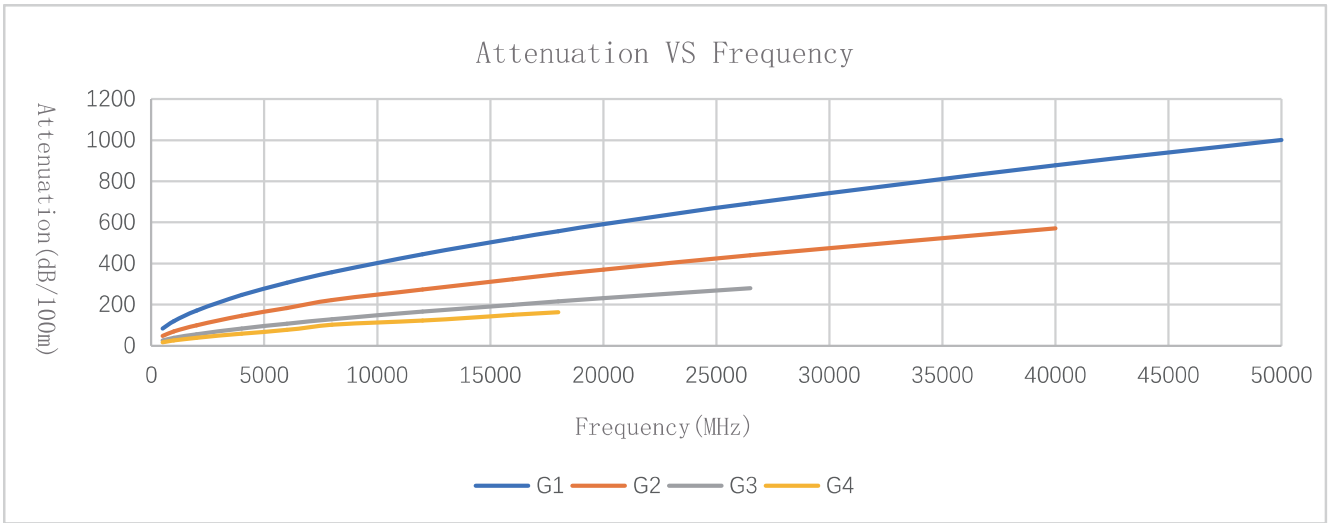


- 1—Center Conductor—SPC(Silver Plated Copper)
- 2—Dielectric—PTFE
- 3—Out conductor—Copper/Ternary Alloy

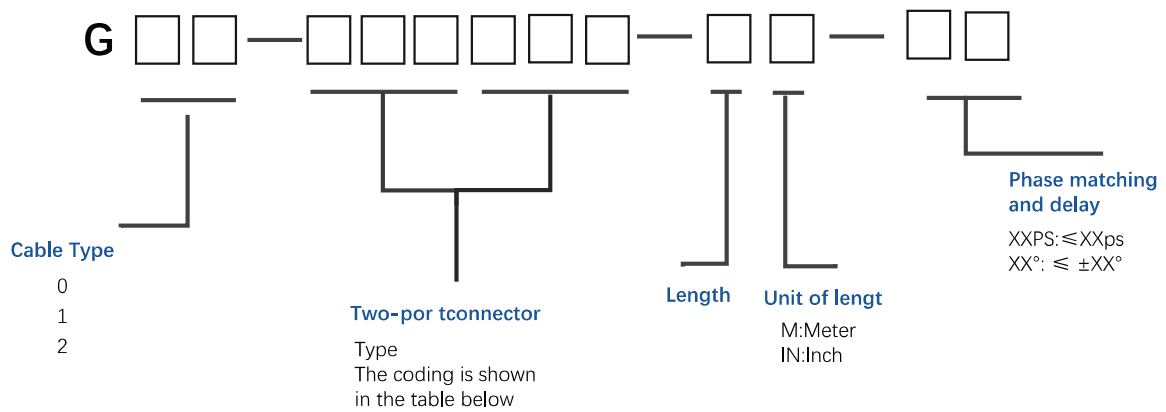
Cable Specification

Mode	G1		G2		G3		G4	
Mechanical Specifications								
Center Conductor (mm)	0.29		0.51		0.92		1.63	
Dielectric (mm)	0.94		1.68		2.98		5.31	
Outer Conductor (mm)	1.19		2.2		3.58		6.35	
Electrical Specifications								
Impedance(Ω)	50		50		50		50	
Velocity of Propagation(%)	70		70		70		70	
Shielding Effectiveness(dB)	< -120		< -120		< -120		< -120	
Time Delay (ns/m)	4.76		4.76		4.76		4.76	
Capacitance (pF/m)	96.5		95.2		96.5		95.2	
Cut-off Frequency(GHz)	108		61		34		19	
Voltage Withstand(V,DC)	450		850		1500		2000	
Static Bending Radius (mm)	6		15		18		32	
Operating Temperature (°C)	-55~200		-55~200		-55~200		-55~200	
Attenuation(+25°C Ambient)&Power Handling(+40°C Ambient;SeaLevel;VSWR 1:1)								
Frequency (MHz)	dB/100m		KW		dB/100m		KW	
500	83.94		0.0540		48.19		0.144	
1000	119.76		0.0378		69.30		0.100	
2000	171.47		0.0264		100.31		0.069	
4000	246.68		0.0184		146.47		0.047	
6000	306.07		0.0148		183.73		0.038	
8000	360.20		0.0112		223.06		0.028	
12000	445.42		0.0102		273.66		0.025	
16000	522.00		0.0087		324.44		0.021	
18000	557.35		0.0081		348.17		0.020	
20000	591.17		0.0077		371.05		0.019	
26500	692.94		0.0065		440.80		0.016	
40000	877.98		0.0052		570.87		0.012	
50000	1000.51		0.0045					
K1	3.6740161		2.0669291		1.0824		0.688976	
K2	0.0035795		0.003937		0.003937		0.003937	

Test Data



Assembly Selection Information



Optional Connectors

Connector Code	Connector Type	Operating Frequency	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