

0.86mm SCuNi/CuNi cryogenic Cable Assemblies

G034CNCN 12 channel /SSMP Female/ SSMP Female/DC-18 GHz

Model: G034CNCN12-SMAMSMAM-L

Features:

- Max Frequency 18 GHz
- VSWR max of 1.35

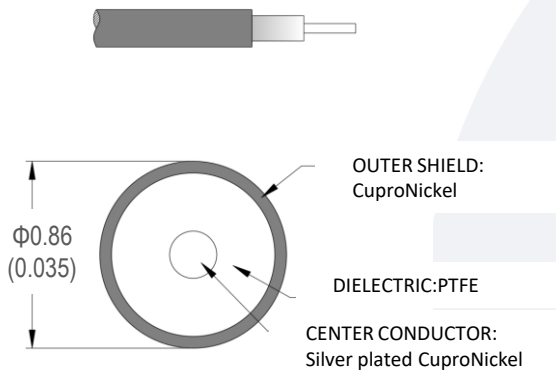
Applications:

- Dilution refrigerators/Cryogenic devices
- Quantum Computing
- Vacuum Chambers

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency Range	DC		18	GHz
VSWR		1.25	1.35	:1
Shielding Effectiveness	90			dB
Capacitance			95.2	pF/m
Impedance		50		ohm

Cable Cross Section:



Environmental And Physical Characteristics:

Description	Parameter	Units
Cable Diameter	0.86	mm
Min. Bending Radius	3.2	mm
Thermal conductivity@4-20K	31	$\mu\text{w}/\text{k}$
Operating Temperature	10mK To +200	$^{\circ}\text{C}$
Storage Temperature	-55 to +200	$^{\circ}\text{C}$
Of Channels	12	

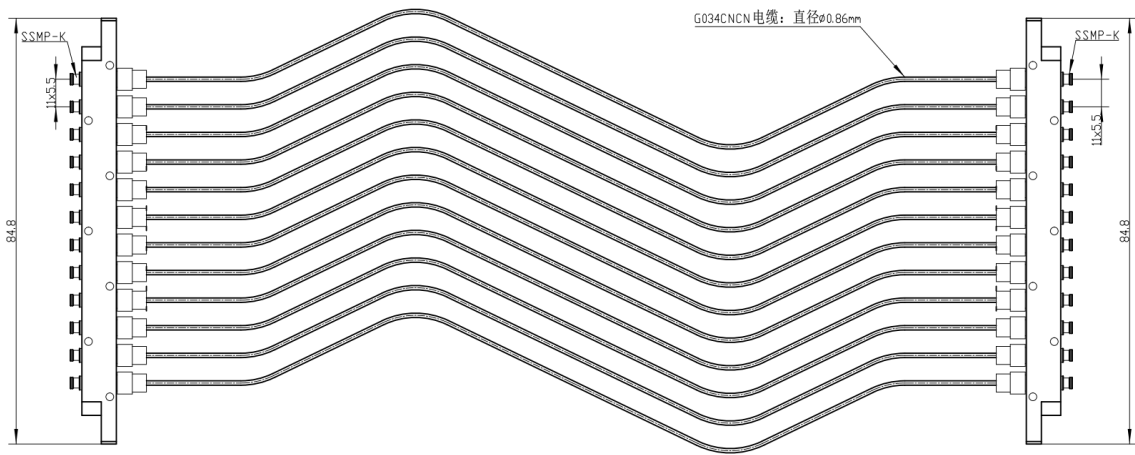
Cable Performance By Frequency

Frequency	0.5 GHz	1 GHz	5 GHz	10 GHz	20 GHz
Insertion Loss (dB/m)@300K	2.1	3.0	6.7	9.5	13.4
Insertion Loss (dB/m)@4K	1.0	1.5	3.2	4.6	6.5

Connectors:

Description	Connector 1	Connector 2
Type	SSMP Straight Female	SSMP Straight Female
Contact Material And Plating	Brass,Gold	Brass,Gold
Dielectric Type	PTFE	PTFE
Body Material And Plating	Beryllium bronze	Beryllium bronze
Packaging case	Oxygen-free copper	Oxygen-free copper
Insertion Loss (dB Max)	$0.05 * \sqrt{f_GHz}$	$0.05 * \sqrt{f_GHz}$

Outline Drawing: Unit:mm



Ordering Information:

Base Number	Length (Unit mm)	Custom Design Services
G034CNCN12-SSMPFSSMPF	-L	LEAVE BLANK (NOT REQUIRED) -CB (Precision CNC Bends)