

0.86mm NbTi-NbTi Superconducting Cable Assemblies

G034NTNT 12 channel /SSMP Female/ SSMP Female /DC-18 GHz

Model: G034NTNT12-SSMPFSSMPF-L

Features:

- Max Frequency 18 GHz
- VSWR max of 1.30
- Non-magnetic

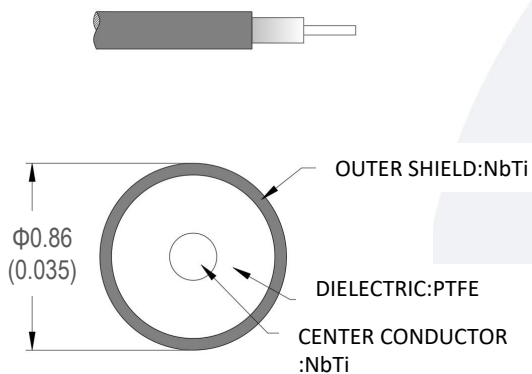
Applications:

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

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency Range	DC		18	GHz
VSWR		1.25	1.3	:1
Shielding Effectiveness	90			dB
Capacitance			96.2	pF/m
Impedance		50		ohm

Cable Cross Section:



Envrionmental And Physical Characteristics:

Description	Parameter	Units
Cable Diameter	0.86	mm
Min. Bending Radius	3.2	mm
Thermal conductivity@4K	4.63E-06	W.cm/K
Operating Temperature	To +200	°C
Storage Temperature	-55 to +200	°C
Of Channels	24	

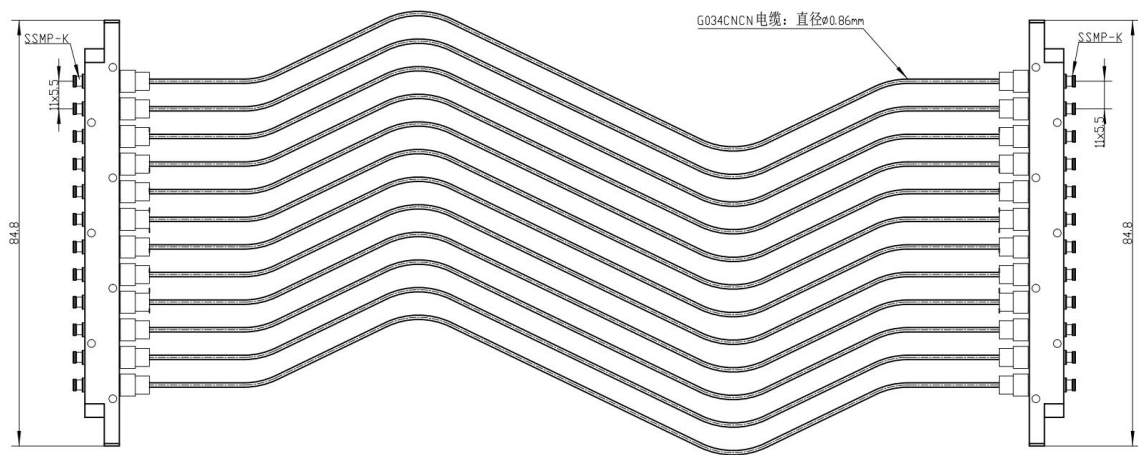
Cable Performance By Frequency

Frequency	1 GHz	5 GHz	10 GHz	18 GHz
Insertion Loss (dB/m)@300K	9.6	21.5	34.2	48
Insertion Loss (dB/m)@4K	< 0.5	< 0.5	< 0.5	< 0.5

Connectors:

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

Outline Drawing: Unit mm



Ordering Information:

Base Number	Lenth (Unit mm)	Custom Design Services
G034NTNT12-SSMPFSSMPF	-L	LEAVE BLANK(NOT REQUIRED) -Loop (Stress relief loop)