

## 0.86mm SCuNi/CuNi cryogenic Cable Assemblies

G034CNCN /SMA Male / SMA Male/DC-18 GHz

Model: G034CNCN-SMAMSMAM-L



### Features:

- Max Frequency 18 GHz
- VSWR max of 1.35

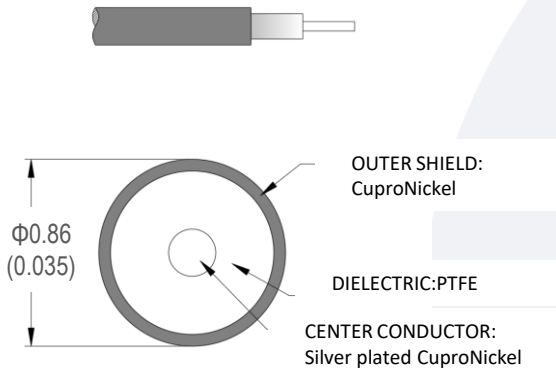
### Applications:

- 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	$\mu\text{w/k}$
Operating Temperature	10mk to +200	$^{\circ}\text{C}$
Storage Temperature	-55 to +200	$^{\circ}\text{C}$

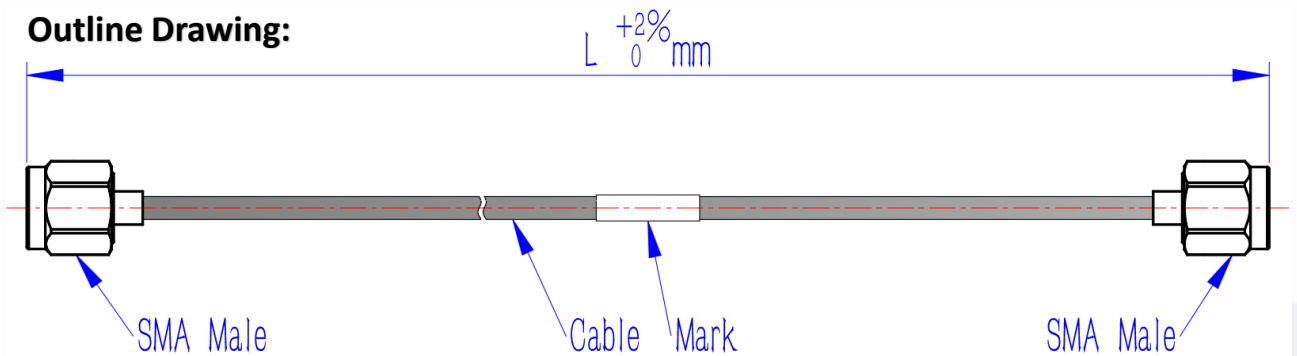
### Cable Performance By Frequency

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	SMA Straight Male	SMA Straight Male
Contact Material And Plating	Brass,Gold	Brass,Gold
Dielectric Type	PTFE	PTFE
Body Material And Plating	SS304	SS304
Insertion Loss (dB Max)	$0.05 * \sqrt{f\_GHz}$	$0.05 * \sqrt{f\_GHz}$

**Outline Drawing:**



**Ordering Information:**

Base Number	Length (Unit mm)	Custom Design Services
G034CNCN-SMAMSMAM	-L	LEAVE BLANK(NOT REQUIRED) -CB(Precision CNC Bends)