

## 0.86mm NbTi-NbTi Superconducting Cable Assemblies

G034NTNT / SMA Male / SMA Male/DC-18 GHz

Model: G034NTNT-SMAMSMAM-L



### Features:

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

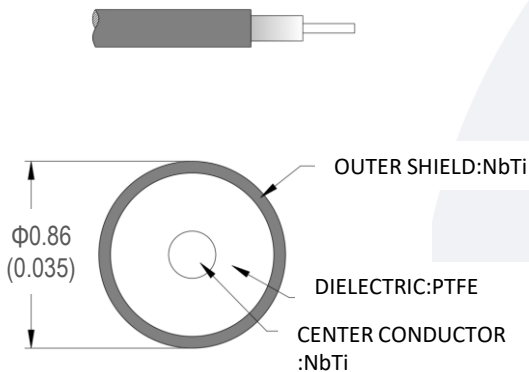
### Applications:

- 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:



### Environmental 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	10mk to +200	°C
Storage Temperature	-55 to +200	°C

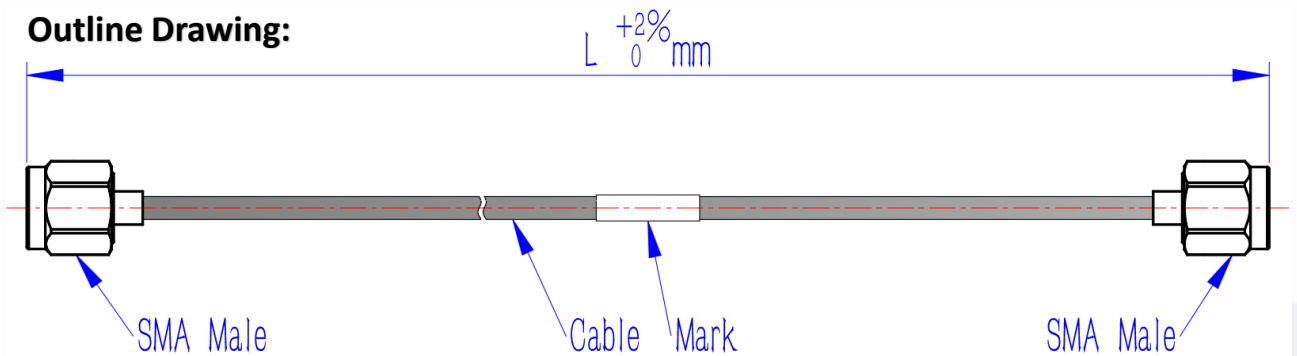
### Cable Performance By Frequency

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

**Outline Drawing:**



**Ordering Information:**

Base Number	Lenth (Unit mm)	Custom Design Services
G034NTNT-SMAMSMAM	-L	LEAVE BLANK(NOT REQUIRED) -CB(Precision CNC Bends)