

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

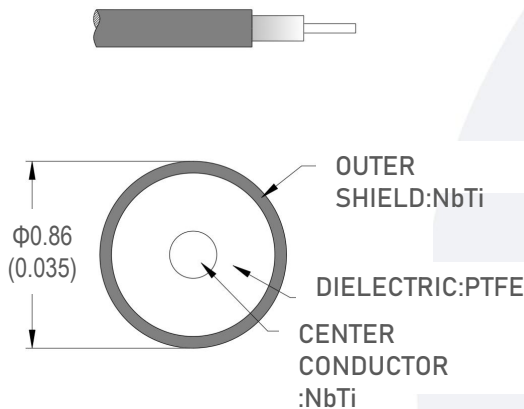
Applications:

- 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:



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

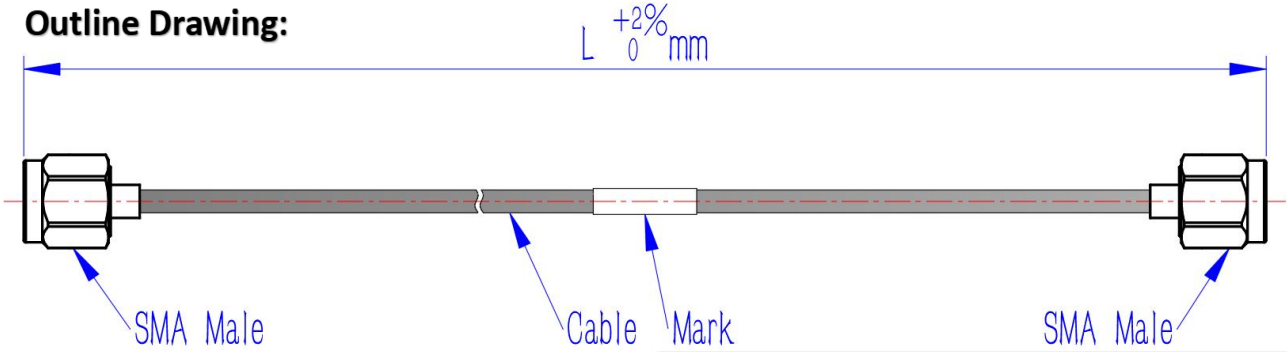
Cable Performance By Frequency

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 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)	$0.05 * \text{Sqrt}(f_GHz)$	$0.05 * \text{Sqrt}(f_GHz)$

Outline Drawing:



Ordering Information:

Base Number	Lenth (Unit mm)	Custom Design Services
G034NTNT-SMAMSMAM	-L	LEAVE BLANK(NOT REQUIRED) -Loop (Stress relief loop)