

T110 Series (1mm Male-ST to 1mm Male-ST)

Armored Test Cable Assembly, 50ohms, DC-110GHz



T110-1Y-1Y-"L" (L: Length)

Maximum Ratings

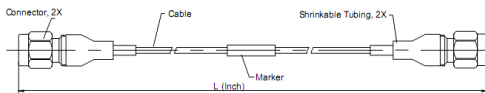
Operating Temperature -55°C to +85°C

Storage Temperature -55°C to +85°C

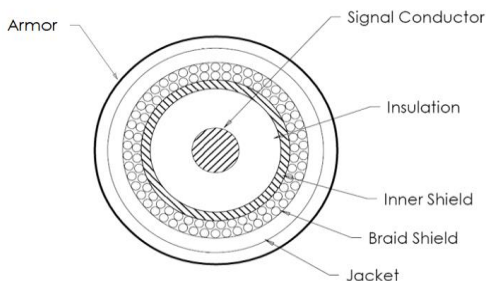
Permanent damage may occur if any of these limits are exceeded

Cable Diameter		3mm
Velocity of Propagation		78.7%
Shielding Effectiveness		>100dB
Power Handling at 20°C	18 GHz	11W
	26.5 GHz	8W
	40 GHz	7W
	50 GHz	6W
	67 GHz	5W
	110 GHz	3W
Min. Bending Radius		25mm

Outline Drawing



Cable Cross Section



Cable Construction	
Inner Conductor	SPC, Solid
Dielectric	Foamed PTFE
Inner Shield	Silver-Plated Copper Strip
Outer Shield	Silver-Plated Copper Braid
Jacket	FEP
Armor	SUS316 Stainless Steel

Connectors	
• Nut, Stainless steel, Passivated	
• Body, Stainless steel, Passivated	
• Center contacts, Beryllium Copper, Gold plated	
• Dielectric, PEI	

Product Guarantee*

Micable will repair or replace your cable assembly if it fails within six months after shipment. This guarantee excludes product damage from misuse or abuse

Features

- Rugged armor offers excellent protection against compression, tesion, abrasion and mechanical injuries
- Low loss with 15dB/m @ 110GHz
- VSWR <1.45:1 @ 110GHz
- Excellent shielding effectiveness >100 dB
- Excellent phase stability vs temperature 400ppm@-40~+70°C
- Very stable performance during bending and shaking
 - Amplitude Stability: <±0.1dB@110GHz
 - Phase Stability vs. Flexure: ±8°@110GHz(When wrapped 360° around a 30mm radius mandrel)

Applications

- Connections of module to module or rack to rack
- Various test systems
- Temperature cycle test in chamber
- Military and commercial miniature wave equipent

Electrical Specifications at 25°C

Freq. (GHz)	Length (Inch)	Insertion Loss (dB@GHz)								VSWR (@GHz)							
		DC - 40		40-50		50-67		67-110		DC - 40		40-50		50-67		67-110	
		Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.
DC-110	4	1.1	1.3	1.2	1.5	1.6	1.9	2.2	2.6	1.26	1.30	1.31	1.35	1.37	1.40	1.41	1.45
	6	1.5	1.7	1.7	2.0	2.0	2.4	2.9	3.3								
	9	2.0	2.3	2.2	2.6	2.8	3.2	4.0	4.5								
	12	2.6	2.9	2.9	3.3	3.6	4.0	5.1	5.6								

Typical Performance Data (T110-1Y-1Y-12)

Frequency(GHz)	VSWR	Insertion Loss (dB)
0.01	1.02	0.05
1	1.05	0.34
2	1.07	0.52
3	1.09	0.68
4	1.06	0.77
5	1.13	0.86
6	1.09	0.99
8	1.16	1.13
10	1.11	1.31
12	1.15	1.42
14	1.17	1.58
16	1.23	1.67
18	1.20	1.78
26.5	1.25	2.12
30	1.21	2.25
40	1.26	2.54
50	1.31	2.83
60	1.25	3.27
67	1.37	3.54
110	1.41	5.07

