

NT110

Phase & Loss Stable, Long Flex Life

Features:

- * Low Insertion Loss
- * High Phase Stability
- * High Power
- * High Durability

Applications:

- * Laboratory Test
- * Avionics
- * Phased-array Radar
- * Satellite Communication

Electrical

Frequency:	DC~110GHz
Impedance:	50Ω
Velocity of Propagation:	80%
Shielding Effectiveness:	90dB min.
Voltage Withstand:	400V DC

Mechanical

Unarmored Bend Radius	10mm/20mm min.
(installation/repeated):	
Armored Bend Radius	30mm/50mm min.
(installation/repeated):	
Bending Life Cycle:	50,000

Environmental

Temperature:	-55~+125°C
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No.	Name	Size (mm)	Material
1	Inner Conductor	0.31	Silver-plated copper
2	Dielectric	0.88	Low density PTFE
3	Inner Shield	1	Silver-plated copper tape
4	Interlayer	1.2	Low density PTFE
5	Outer Shield	1.45	Silver-plated copper braid
6	Jacket	1.85	FEP
7~9	Armor (optional)	2.7	Composite
10		3.84	PTFE

Tolerance: ±0.2mm [±0.008in]

Construction

Attenuation & Power Handling

Frequency (GHz)	26.5	40	50	67	71	77	79	81	86	92	96	110
Attenuation*1 (dB/100m)	612	760	857	1003	1035	1081	1096	1111	1148	1191	1220	1314
Average Power*2 (W)	19	15	13	11	11	10	10	10	10	9	9	8

[1] VSWR:1.0; Ambient: +25°C (77°F); Raw cable

[2] VSWR:1.0; Ambient: +40°C (104°F); Sea level

Calculate Cable Attenuation: Attenuation (dB/100m) = $3.557846 * \sqrt{F} \text{ (MHz)} + 0.0012207 * F \text{ (MHz)}$

Calculate Connector Attenuation: Attenuation (dB) = $0.03 * \sqrt{F} \text{ (GHz)}$

How To Order

NT110W-X-Y-Z

W: Armor: P, without armor: blank

X: Frequency In GHz

Y: Connector type

Z: Length in meters

Examples:

To order a NT110 test cable assembly with armor,
DC-110GHz, 1.0mm male to 1.0mm female, 0.5 meter, specify
NT110P-110-11F-0.5.

Connector naming rules:

1 - 1.0mm (110GHz, VSWR 1.5)

Female Connector - Add 'F' after connector name

Right Angle - Add 'R' after connector name (VSWR increase 0.1)