

NBR360

Narrow Bend Multi-Shielded Flexible Cable

Features:

- * Low Insertion Loss
- * High Phase Stability
- * High Power
- * High Durability
- * Bend from connector end
- * Eliminating the use of right angle connectors
- * Robust with multi-interlayer

Applications:

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



Electrical

Frequency:	DC~40 GHz
Impedance:	50Ω
Velocity of Propagation:	76%
Shielding Effectiveness:	90dB min.
Voltage Withstand:	1000V
DC Phase Stability ^{*1} :	±6°
Amplitude Stability ^{*1} :	±0.1dB

[1] 26mm radius, 360° bending

Mechanical

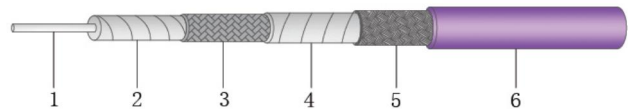
Unarmored Bend Radius	
Static / Repeated:	12mm / 26mm min.
Weight:	31g/m
Bending Life Cycle:	100,000
Mating Life Cycle ^{*2} :	5,000
Mechanical Phase Stability:	<±6° @ 40GHz
Amplitude Stability vs Shaking:	<±0.1dB

[2] For connectors 2,92mm, SMA only.

Environmental

Temperature: -55 125 °C

Construction



No.	Name	Size (mm)	Material
1	Inner Conductor	0.91	Silver-plated copper
2	Dielectric	2.72	Low density PTFE
3	Inner Shield	2.79	Silver-plated copper tape
4	Interlayer	2.95	Aluminum foil
5	Outer Shield	3.20	Stainless steel wire
6	Jacket	3.62	FEP

Tolerance: ±0.2mm [±0.008in]

Attenuation & Power Handling

Frequency (MHz)	1000	2000	4000	8000	12000	14000	16000	18000	26500	31000	36000	40000
Attenuation*1 (dB/100m)	39,8	56,7	80,9	115,9	143,4	155,6	167,0	177,8	218,8	238,1	258,3	273,6
Average Power*2 (W)	290,0	223,0	129,0	86,0	65,6	58,9	52,5	51,1	39,5	34,8	29,4	26,8

[3] VSWR:1.0; Ambient: +25 C (77 C); Raw cable

[4] VSWR:1.0; Ambient: +40 C (104 C); Sea level

Calculate Cable Attenuation: Attenuation (dB/100m) = $\sqrt{1.23811} \cdot F \text{ (MHz)} + 0.00065 \cdot F \text{ (MHz)}$

How To Order

NBR360-X-Y-Z

X: Frequency In GHz

Y: Connector type

Z: Length in meters

Examples:

To order a NBR360 test cable assembly, DC-40GHz,
2.92mm male to 2.92mm male, 0.5 meter,specify
NBR360-40-KK-0.5.

Available Connectors

Connectors	Type	Orientation	Max Freq.(GHz)	VSWR Max
SMA(M)	S	Straight	26.5	1.35
SSMP(M)	G	Straight	26.5	1.35
2.92mm(M)	K	Straight	40.0	1.40
2.40mm(M)	2	Straight	50.0	1.40
1.85 (M)	V	Straight	67.0	1.45