

NBR250

Narrow Bend Multi-Shielded Fle

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

A
*
*
*
*
*



High Performance Test Cable Assemblies

Electrical

Frequency:	DC~50 GHz
Impedance:	50Ω
Velocity of Propagation:	75%
Shielding Effectiveness:	90dB min.
Voltage Withstand:	1000V
DC Phase Stability ^{*1} :	±7°
Amplitude Stability ^{*1} :	±0.08dB

[1] 26mm radius, 360° bending

Mechanical

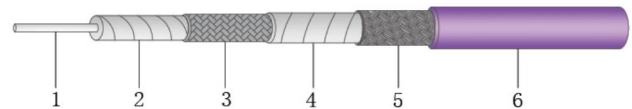
Unarmored Bend Radius	
Static / Repeated:	8mm / 20mm min.
Weight:	15g/m
Bending Life Cycle:	100,000
Mating Life Cycle ^{*2} :	5,000
Mechanical Phase Stability:	<±6° @ 40GHz, <±8° @ 50GHz
Amplitude Stability vs Shaking:	<±0.2dB

[2] For connectors 1,85mm, 2.4mm, 2.92mm, SMA only.

Environmental

Temperature: -55 125 °C

Construction



No.	Name	Size (mm)	Material
1	Inner Conductor	0.51	Silver-plated copper
2	Dielectric	1.65	Low density PTFE
3	Inner Shield	1.82	Silver-plated copper tape
4	Interlayer	1.90	Aluminum foil
5	Outer Shield	2.12	Stainless steel wire
6	Jacket	2.50	FEP

Tolerance: ±0.2mm [±0.008in]

Attenuation & Power Handling

Frequency (MHz)	1000	2000	4000	8000	12000	14000	16000	18000	26500	31000	36000	40000	45000	50000
Attenuation*1 (dB/100m)	82,9	118,0	168,4	241,2	298,3	323,6	347,2	369,7	454,6	494,7	536,5	568,2	606,0	642,1
Average Power*2 (W)	163,0	113,0	75,3	52,0	41,6	38,0	35,5	33,0	26,0	24,8	22,4	20,0	18,5	17,5

[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) = $\sqrt{2.58011} * F \text{ (MHz)} + 0.0013 * F \text{ (MHz)}$

How To Order

NBR250-X-Y-Z

X: Frequency In GHz

Y: Connector type

Z: Length in meters

Available Connectors

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

Examples:

To order a NBR250 test cable assembly, DC-40GHz,

2.92mm male to 2.92mm male, 0.5 meter,specify

NBR250-40-KK-0.5.