

NZ500 Ultra-Flexible

Features:

- * Ultra-Flexible
- * Corrosion Resistance

Applications:

- * Phased-array Radar
- * Laboratory Test
- * Small & Complicated Interconnection Occasion

Electrical

Frequency:	DC~26.5GHz
Cut-off Frequency:	35GHz
Impedance:	50Ω
Velocity of Propagation:	76%
Shielding Effectiveness:	90dB min.
Voltage Withstand:	1000V DC
Phase Stable:	550PPM
Mechanical Phase Stable:	±3°
Amplitude Stability:	±0.1dB

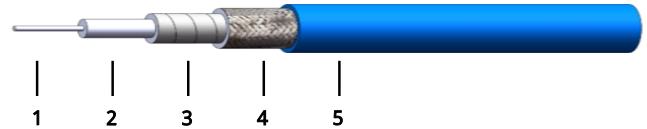
Mechanical

Bend Radius (installation):	20.0mm
Bend Radius (repeated):	50.0mm
Weight:	50g/m

Environmental

Temperature:	-55~+85°C
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Construction



No.	Name	Size (mm)	Material
1	Inner Conductor	1.02	Stranded Silver-plated copper
2	Dielectric	3.00	Low density PTFE
3	Inner Shield	3.20	Silver-plated copper tape
4	Outer Shield	3.78	Silver-plated copper braid
5	Jacket	5.00	PUR

Attenuation & Power Handling

Frequency (GHz)	0.3	0.5	1	3	6	10	12.4	18	26.5
Attenuation*1 (dB/100m)	20.4	26.7	38.5	69.8	103.2	139.0	157.9	198.0	252.1
Average Power*2 (W)	280	215	149	82	55	41	36	29	23

[1] VSWR:1.0; Ambient: +25°C (77°F)

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

Calculate Cable Attenuation: Attenuation (dB/100m) = $1.136600 * \sqrt{F} \text{ (MHz)} + 0.002530 * F \text{ (MHz)}$

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

How To Order

NZ500-X-Y-Z

X: Frequency in GHz

Y: Connector type

Z: Length in meters

Examples:

To order a NZ500 cable assembly, DC-18GHz, SMA male to SMA female, 0.5 meter, specify NZ500-18-SSF-0.5.

Connector naming rules:

3 - 3.5mm (26.5GHz, VSWR 1.3)

S - SMA (26.5GHz, VSWR 1.3)

N - N (18GHz, VSWR 1.25)

Female Connector - Add 'F' after connector name

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



Ultra-Flexible RF Cables & Assemblies

Mating Connector

NCS-MG-Z500-1

SMA male, Stainless steel

NCS-FG-Z500-1

SMA female, Stainless steel

NCN-MG-Z500-1

N male, Stainless steel

