

NA500

Ultra Low Loss & Phase Stable

- | | |
|---|---|
| Features:
* Low Insertion Loss
* High Phase Stability
* High Power
* Low PIM | Applications:
* Phased-array Radar
* Satellite Communication
* Avionics |
|---|---|

Electrical

Frequency:	DC~26.5GHz
Cut-off Frequency:	29GHz
Impedance:	50Ω
Velocity of Propagation:	83%
Shielding Effectiveness:	90dB min.
Voltage Withstand:	1500V DC
PIM:	-155dBc
Phase Stability:	750PPM@-55°C~+85°C max.

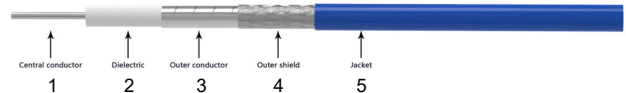
Mechanical

Bend Radius (installation):	26.0mm
Bend Radius (repeated):	52.0mm
Weight:	67g/m

Environmental

Temperature: -55~+165°C

Construction



No.	Name	Size (mm)	Material
1	Inner Conductor	1.45	Silver-plated copper
2	Dielectric	3.99	Low density PTFE
3	Inner Shield	4.19	Silver-plated copper tape
4	Outer Shield	4.60	Silver-plated copper braid
5	Jacket	5.20	PFA

Attenuation & Power Handling

	0.1	0.3	0.5	1	2	4	6	8	12	18	26.5
Frequency (GHz)											
Attenuation*1 (dB/100m)	7.4	12.8	16.5	23.5	33.3	47.5	58.6	68.0	83.9	103.9	127.6
Average Power*2 (W)	2934	1688	1305	919	646	453	368	317	256	207	169

[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) = 0.730000 * √F (MHz) + 0.000328 * F (MHz)

Calculate Connector Attenuation: Attenuation (dB) = 0.03 * √F (GHz)

How To Order

NA500-X-Y-Z

- X: Frequency in GHz
- Y: Connector type
- Z: Length in meters

Examples:

To order a NA500 cable assembly, DC-26.5GHz, SMA male to SMA female, 0.8 meter, specify NA500-26.5-SSF-0.8.

Connector naming rules:

- 3 - 3.5mm (26.5GHz, VSWR 1.3)
- S - SMA (26.5GHz, VSWR 1.3)
- N - N (18GHz, VSWR 1.25)
- T - TNC (18GHz, VSWR 1.25)

Female Connector - Add 'F' after connector name

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

Mating Connector

NCK-MG-A500-1

2.92mm male, Stainless steel

NC3-MG-A500-2

3.5mm male, Stainless steel

NC3-FG-A500-2

3.5mm female, Stainless steel

NCS-MG-A500-2

3.5mm male, Stainless steel

NCS-MRG-A500-2

SMA male, Right angle, Stainless steel

NCS-FG-A500-2

SMA female, Stainless steel



NCS-FHG-A500-1

SMA female, Bulk head, Stainless steel

NCN-MG-A500-4

N male, Stainless steel

NCN-MRG-A500-1

N male, Right angle, Stainless steel

NCN-FG-A500-1

N female, Stainless steel

NCT-MG-A500-2

TNC male, Stainless steel

