

NTF Ultra-Flexible

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| Features: * Ultra-Flexible * Corrosion Resistance | Applications: * Phased-array Radar * Laboratory Test * Small & Complicated Interconnection Occasion |
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Electrical

| | |
|--------------------------|------------|
| Frequency: | DC~26.5GHz |
| Cut-off Frequency: | 35GHz |
| Impedance: | 50Ω |
| Velocity of Propagation: | 76% |
| Shielding Effectiveness: | 90dB min. |
| Voltage Withstand: | 1000V DC |

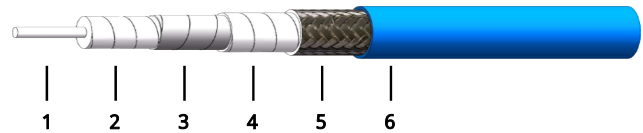
Mechanical

| | |
|-----------------------------|--------|
| Bend Radius (installation): | 20.8mm |
| Bend Radius (repeated): | 52.0mm |
| Weight: | 60g/m |

Environmental

Temperature: -55~+85°C

Construction



| No. | Name | Size (mm) | Material |
|-----|-----------------|-----------|----------------------------|
| 1 | Inner Conductor | 1.02 | Silver plated copper |
| 2 | Dielectric | 3.07 | Low density PTFE |
| 3 | Inner Shield | 3.27 | Silver-plated copper tape |
| 4 | Interlayer | 3.55 | PTFE |
| 5 | Outer Shield | 4.12 | Silver-plated copper braid |
| 6 | Jacket | 5.2 | PUR |

Attenuation & Power Handling

| Frequency (GHz) | 0.3 | 0.5 | 1 | 3 | 6 | 10 | 12.4 | 18 | 26.5 |
|-------------------------|------|------|------|------|-------|-------|-------|-------|-------|
| Attenuation*1 (dB/100m) | 20.5 | 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 * √F (MHz) + 0.002530 * F (MHz)

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

How To Order

NTF-X-Y-Z

X: Frequency in GHz

Y: Connector type

Z: Length in meters

Examples:

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

Connector naming rules:

S - SMA (26.5GHz, VSWR 1.3)

N - N (18GHz, VSWR 1.3)

Female Connector - Add 'F' after connector name

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

NTF Mating Connector

NCS-MG-Z500W-1

SMA male, Stainless steel

NCN-MG-Z500W-1

N male, Stainless steel

NCS-FG-Z500W-1

SMA female, Stainless steel