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Flexible RF Cables & Assemblies

# NB520
## LNB Series Economical Low Loss Testing Cable

Features:
* Low Insertion Loss
* High Power
* Low PIM

Applications:
* Phased-array Radar
* Satellite Communication
* Avionics
* Telecom

### Electrical

| | |
|---|---|
| Frequency: | DC~8GHz |
| Cut-off Frequency: | 22GHz |
| Impedance: | 50Ω |
| Velocity of Propagation: | 76% |
| Shielding Effectiveness: | 90dB min. |
| Voltage Withstand: | 1000V DC |
| PIM: | -155dBc |

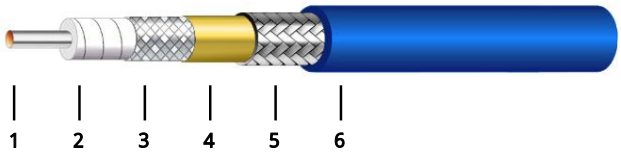
### Mechanical

| | |
|---|---|
| Bend Radius (installation): | 60.0mm |
| Bend Radius (repeated): | 120.0mm |
| Weight: | 310g/m |

### Environmental

Temperature: -55~+200℃

### Construction




| No. | Name | Size (mm) | Material |
|---|---|---|---|
| 1 | Inner Conductor | 1.29 | Stranded silver-plated copper |
| 2 | Dielectric | 3.91 | Low density PTFE |
| 3 | Inner Shield | 4.15 | Silver-plated copper tape |
| 4 | Interlayer | 4.28 | Aluminum tape |
| 5 | Outer Shield | 4.85 | Silver-plated copper braid |
| 6 | Jacket | 5.20 | FEP |

### Attenuation & Power Handling

| Frequency (MHz) | 300 | 1000 | 3000 | 6000 | 9000 | 12000 | 15000 | 18000 |
|---|---|---|---|---|---|---|---|---|
| Attenuation*1 (dB/100m) | 15,0 | 27,7 | 48,7 | 69,9 | 86,5 | 100,9 | 113,7 | 125,5 |
| Average Power*2 (W) | 1383 | 750 | 426 | 297 | 240 | 208 | 188 | 165 |

[1] VSWR:1.0; Ambient: +25C (77F)
[2] VSWR:1.0; Ambient: +40C (104F); Sea level
Calcuate Cable Attenuation: Attenuation (dB/100m) = $0.856234 * \sqrt{F\ (MHz)} + 0.000591 * F\ (MHz)$
Calcuate Connector Attenuation: Attenuation (dB) = $0.03\sqrt{F\ (GHz)}$

### How To Order

NB520-X-Y-Z
X: Frequency in GHz
Y: Connector type
Z: Length in meters

Examples:
To order a NB520 cable assembly, DC-18GHz, N male to N female, 0.5 meter, specify NB520-18-NNF-0.5.

Connector naming rules:
S - SMA (26.5GHz, VSWR 1.3)
N - N (8GHz, VSWR 1.2)
T - TNC (8GHz, VSWR 1.2)
Female Connector - Add 'F' after connector name
Right Angle - Add 'R' after connector name (VSWR increase 0.1)