

# NA550

## Ultra Low Loss & Phase Stable

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| <b>Features:</b><br>* Low Insertion Loss<br>* High Phase Stability<br>* High Power<br>* Low PIM | <b>Applications:</b><br>* Phased-array Radar<br>* Satellite Communication<br>* Avionics |
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### Electrical

Frequency:	DC~18GHz
Cut-off Frequency:	27GHz
Impedance:	50Ω
Velocity of Propagation:	83%
Shielding Effectiveness:	90dB min.
Voltage Withstand:	2000V DC
PIM:	-155dBc
Phase Stability:	750PPM@-55°C~+85°C max.

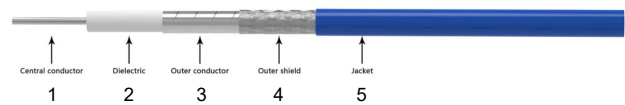
### Mechanical

Bend Radius (installation):	28.0mm
Bend Radius (repeated):	56.0mm
Weight:	93g/m

### Environmental

Temperature: -55~+165°C

### Construction



No.	Name	Size (mm)	Material
1	Inner Conductor	1.60	Silver-plated copper
2	Dielectric	4.30	Low density PTFE
3	Inner Shield	4.50	Silver-plated copper tape
4	Outer Shield	5.10	Silver-plated copper braid
5	Jacket	5.60	PFA

### Attenuation & Power Handling

Frequency (GHz)	0.1	0.3	0.5	1	3	6	10	12.4	18
Attenuation*1 (dB/100m)	7.0	12.2	15.7	22.3	38.8	55.0	71.2	79.5	96.1
Average Power*2 (W)	3248	1873	1450	1024	589	415	320	287	237

[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) = 0.701472 \* √F (MHz) + 0.000110 \* F (MHz)

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

### How To Order

#### NA550-X-Y-Z

X: Frequency in GHz

Y: Connector type

Z: Length in meters

#### Examples:

To order a NA550 cable assembly, DC-18GHz, SMA male to N female, 0.8 meter, specify NA550-18-SNF-0.8.

#### Connector naming rules:

3 - 3.5mm (18GHz, VSWR 1.25)

S - SMA (18GHz, VSWR 1.25)

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)