

NH280

Flexible, Alternate to semi-rigid cable

Features:

- * Phase Stability
- * Low PIM

Applications:

- * Phased-array Radar
- * Interconnection in and between equipment

Electrical

Frequency:	DC-40GHz
Cut-off Frequency:	62GHz
Impedance:	50Ω
Velocity of Propagation:	70%
Shielding Effectiveness:	90dB min.
Voltage Withstand:	500V DC

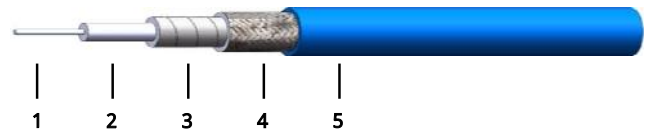
Mechanical

Bend Radius (installation):	13.0mm
Bend Radius (repeated):	26.0mm
Weight:	22g/m

Environmental

Temperature: -55~+125°C

Construction



No.	Name	Size (mm)	Material
1	Inner Conductor	0.53	Silver-plated copper
2	Dielectric	1.63	PTFE
3	Inner Shield	1.83	Silver-plated copper tape
4	Outer Shield	2.18	Silver-plated copper braid
5	Jacket	2.65	FEP

Attenuation & Power Handling

Frequency (GHz)	0.3	0.5	1	2.4	3	6	8	10	12.4	18	26.5	40
Attenuation*1 (dB/100m)	37.0	48.2	69.3	110.7	125.0	183.7	216.4	246.1	279.0	348.2	440.8	570.9
Average Power*2 (W)	187	171	119	74	66	45	38	33	30	24	19	14

[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) = 2.066929 * √F (MHz) + 0.003937 * F (MHz)

Calculate Connector Attenuation: Attenuation (dB) = 550.03 * √F (GHz)

How To Order

NH280-X-Y-Z

X: Frequency in GHz

Y: Connector type

Z: Length in meters

Examples:

To order a NH280 cable assembly, DC-18GHz, SMA male to SMA female, 0.5 meter, specify NH280-18-SSF-0.5.

Connector naming rules:

2 - 2.4mm (40GHz, VSWR 1.35)

K - 2.92mm (40GHz, VSWR 1.35)

P - SMP (26.5GHz, VSWR 1.3)

A - SSMA (26.5GHz, VSWR 1.3)

S - SMA (26.5GHz, VSWR 1.3)

G - Mini-SMP (mateable with GPPO & SSMP, 18GHz, VSWR 1.3)

N - N (18GHz, VSWR 1.25)

X - MMCX (6GHz, VSWR 1.3)

M - MCX (6GHz, VSWR 1.3)

B - BNC (4GHz, VSWR 1.4)

D - SMB (4GHz, VSWR 1.25)

Female Connector - Add 'F' after connector name

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

NH400

Flexible, Alternate to semi-rigid cable

Features:

- * Phase Stability
- * Low PIM

Applications:

- * Phased-array Radar
- * Interconnection in and between equipment

Electrical

Frequency:	DC~26.5GHz
Cut-off Frequency:	34GHz
Impedance:	50Ω
Velocity of Propagation:	70%
Shielding Effectiveness:	90dB min.
Voltage Withstand:	1500V DC

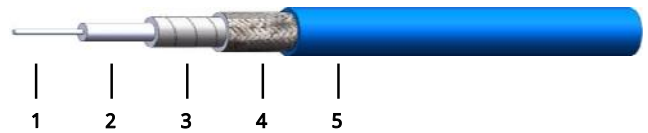
Mechanical

Bend Radius (installation):	20.0mm
Bend Radius (repeated):	40.0mm
Weight:	49g/m

Environmental

Temperature: -55~+125°C

Construction



No.	Name	Size (mm)	Material
1	Inner Conductor	0.94	Silver-plated copper
2	Dielectric	3.00	PTFE
3	Inner Shield	3.20	Silver-plated copper tape
4	Outer Shield	3.55	Silver-plated copper braid
5	Jacket	4.00	FEP

Attenuation & Power Handling

Frequency (GHz)	0.3	0.5	1	2.4	3	6	8	10	12.4	18	26.5
Attenuation*1 (dB/100m)	19.9	26.2	38.2	62.5	71.1	107.5	128.3	147.6	169.4	216.1	280.6
Average Power*2 (W)	512	423	290	177	156	103	86	75	65	51	39

[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) = 1.082677 * √F (MHz) + 0.003937 * F (MHz)

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

How To Order

NH400-X-Y-Z

X: Frequency in GHz

Y: Connector type

Z: Length in meters

Examples:

To order a NH400 cable assembly, DC-18GHz, SMA male to SMA female, 0.5 meter, specify NH400-18-SSF-0.5.

Connector naming rules:

3 - 3.5mm (26.5GHz, VSWR 1.3)

P - SMP (26.5GHz, VSWR 1.3)

A - SSMA (26.5GHz, VSWR 1.3)

S - SMA (26.5GHz, VSWR 1.3)

N - N (18GHz, VSWR 1.25)

X - MMCX (6GHz, VSWR 1.3)

M - MCX (6GHz, VSWR 1.3)

B - BNC (4GHz, VSWR 1.4)

D - SMB (4GHz, VSWR 1.25)

Female Connector - Add 'F' after connector name

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

NH160

Flexible, Alternate to semi-rigid cable

Features:

- * Phase Stability
- * Low PIM

Applications:

- * Phased-array Radar
- * Interconnection in and between equipment

Electrical

Frequency:	DC~18GHz
Cut-off Frequency:	110GHz
Impedance:	50Ω
Velocity of Propagation:	70%
Shielding Effectiveness:	90dB min.
Voltage Withstand:	300V DC

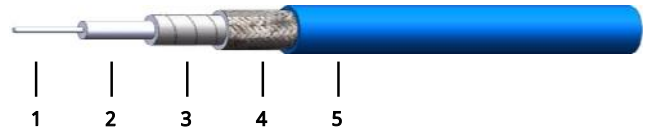
Mechanical

Bend Radius (installation):	6.0mm
Bend Radius (repeated):	16.0mm
Weight:	5g/m

Environmental

Temperature: -55~+125°C

Construction



No.	Name	Size (mm)	Material
1	Inner Conductor	0.30	Silver-plated copper
2	Dielectric	0.95	PTFE
3	Inner Shield	1.10	Silver-plated copper tape
4	Outer Shield	1.35	Silver-plated copper braid
5	Jacket	1.60	PFA

Attenuation & Power Handling

	0.3	0.5	1	3	6	10	12.4	18
Frequency (GHz)								
Attenuation*1 (dB/100m)	73.8	95.4	135.2	235.1	334.0	433.0	483.2	584.7
Average Power*2 (W)	150	116	82	47	33	26	23	19

[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) = 4.248276 * √F (MHz) + 0.000820 * F (MHz)

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

How To Order

NH160-X-Y-Z

X: Frequency in GHz

Y: Connector type

Z: Length in meters

Examples:

To order a NH160 cable assembly, DC-18GHz, SMA male to SMA female, 0.5 meter, specify NH160-18-SSF-0.5.

Connector naming rules:

G - Mini-SMP (mateable with GPPO & SSMP, 18GHz, VSWR 1.3)

P - SMP (18GHz, VSWR 1.3)

S - SMA (18GHz, VSWR 1.25)

X - MMCX (6GHz, VSWR 1.3)

M - MCX (6GHz, VSWR 1.3)

Female Connector - Add 'F' after connector name

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