

### ND141-1

#### Hand Formable

**Features:**

- \* Hand formable
- \* Quick and easy assembly

**Applications:**

- \* Instrumentation
- \* Laboratory test
- \* Interconnection

#### Electrical

Frequency:	DC~20GHz
Cut-off Frequency:	34.4GHz
Impedance:	50Ω
Velocity of Propagation:	70%
Shielding Effectiveness:	100dB min.
Voltage Withstand:	1500V DC

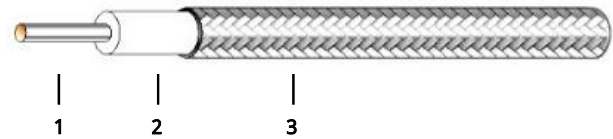
#### Mechanical

Bend Radius (installation):	8.2 mm
Bend Radius (repeated):	40.5 mm
Weight:	50g/m

#### Environmental

Temperature:	-55~+150°C
--------------	------------

#### Construction



No.	Name	Size (mm)	Material
1	Inner Conductor	0.94	Silver-plated copper
2	Dielectric	2.98	PTFE
3	Inner Shield	3.55	Tin-plated copper braid

#### Attenuation & Power Handling

Frequency (MHz)	300	500	1000	2000	3000	5000	8000	18000	20000
Attenuation*1 (dB/100m)	16,8	21,8	31,0	44,2	54,4	70,9	90,7	139,6	147,7
Average Power*2 (W)	551	437	351	191	135	125	110	100	96

[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) =  $0.9610401 * \sqrt{F} \text{ (MHz)} + 0.00059 * F \text{ (MHz)}$

Calculate Connector Attenuation: Attenuation (dB) =  $0.03 * \sqrt{F} \text{ (GHz)}$

#### How To Order

##### ND141-1-X-Y-Z

X: Frequency in GHz Y:

Connector type

Z: Length in meters

Examples:

To order a ND141-1 cable assembly, DC-18GHz, SMA male to SMA female, 0.5 meter, specify ND141-1-18-SSF-0.5.

Connector naming rules:

3 - 3.5mm (6GHz, VSWR 1.2)

P - SMP (6GHz, VSWR 1.2)

A - SSMA (6GHz, VSWR 1.2)

S - SMA (6GHz, VSWR 1.2)

N - N (6GHz, VSWR 1.2)

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)