

# ND086

## Hand Formable

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| <b>Features:</b><br>* Hand formable<br>* Quick and easy assembly | <b>Applications:</b><br>* Instrumentation<br>* Laboratory test<br>* Interconnection |
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### Electrical

Frequency:	DC-40GHz
Cut-off Frequency:	61GHz
Impedance:	50Ω
Velocity of Propagation:	70%
Shielding Effectiveness:	100dB min.
Voltage Withstand:	1000V DC

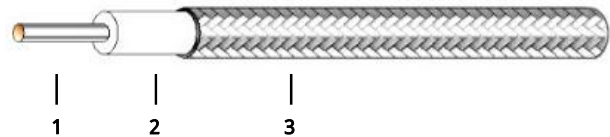
### Mechanical

Bend Radius (installation):	10mm
Bend Radius (repeated):	20mm
Weight:	20g/m

### Environmental

Temperature: -55~+150°C

### Construction



No.	Name	Size (mm)	Material
1	Inner Conductor	0.53	Silver-plated copper
2	Dielectric	1.65	PTFE
3	Inner Shield	2.17	Tin-plated copper braid

### Attenuation & Power Handling

Frequency (GHz)	0.1	0.3	0.5	1	2	4	6	12	18	26.5	40
Attenuation*1 (dB/100m, typ.)	21.7	38.2	49.8	71.9	104.6	153.8	193.8	291.6	373.6	476.6	622.6
Average Power*2 (W)	237	135	103	72	49	33	27	18	14	11	8

[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) = 2.115000 \* √F (MHz) + 0.004990 \* F (MHz)

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

### How To Order

#### ND086-X-Y-Z

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

#### Examples:

To order a ND086 cable assembly, DC-18GHz, SMA male to SMA female, 0.5 meter, specify ND086-18-SSF-0.5.

#### Connector naming rules:

- 2 - 2.4mm (40GHz, VSWR 1.8, typ.)
- K - 2.92mm (40GHz, VSWR 1.8, typ.)
- G - Mini-SMP (mateable with GPPO & SSMP, 40GHz, VSWR 1.8, typ.)
- P - SMP (26.5GHz, VSWR 1.7, typ.)
- A - SSMA (26.5GHz, VSWR 1.7, typ.)
- S - SMA (26.5GHz, VSWR 1.7, typ. / 18GHz, VSWR 1.35 typ.)
- N - N (18GHz, VSWR 1.35, typ.)
- X - MMCX (6GHz, VSWR 1.3, typ.)
- M - MCX (6GHz, VSWR 1.3, typ.)
- B - BNC (4GHz, VSWR 1.4, typ.)
- D - SMB (4GHz, VSWR 1.25, typ.)

Female Connector - Add 'F' after connector name

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

### Mating Connector

**NCG-FB-086-1**

SSMP female, Beryllium copper



**NCG-FRB-086-2**

SSMP female, Right angle, Beryllium copper



**NCK-MG-086-3**

2.92mm male, Stainless steel



**NCK-FB-086-1**

2.92mm female, Brass



**NCK-FL2G-A220-1**

2.92mm female, 2-hole flange mount, Stainless steel

**NCK-FL4G-A220-1**

2.92mm female, 4-hole flange mount, Stainless steel

**NCP-FB-086-3**

SMP female, Beryllium copper

**NCP-FRB-086-1**

SMP female right angle, Beryllium copper



**NCP-FRB-086-2**

SMP female right angle, Beryllium copper



**NCA-MG-086-2**

SSMA male, Stainless steel

**NCA-FHB-086-1**

SSMA female bulk head, Brass

**NCS-FL2B-086-1**

SMA female, 2-hole flange mount, Brass

**NCS-FL4B-086-1**

SMA female, 4-hole flange mount, Gold plated beryllium copper

**NCS-FHB-086-2**

SMA female bulk head, Gold plated brass



**NCN-MB-086-1**

N male, Nickel plated brass



**NCN-FB-086-1**

N female, Nickel plated brass



**NCX-MB-086-1**

MMCX male, Gold plated brass



**NCX-MRB-086-1**

MMCX male right angle, Gold plated brass



**NCX-FB-086-1**

MMCX female, Gold plated brass

**NCM-MB-086-1**

MCX male, Gold plated brass



**NCM-MRB-086-2**

MCX male right angle, Gold plated brass/beryllium copper



**NCM-FB-086-1**

MCX female, Gold plated brass

## Semiflex RF Cables & Assemblies

### NCS-MB-086-4

SMA male, Gold plated brass



### NCS-MG-086-3

SMA male, Stainless steel



### NCS-MRG-086-1

SMA male right angle, Stainless steel



### NCS-MRB-086-1

SMA male right angle, Gold plated brass



### NCS-FB-086-2

SMA female, Gold plated brass



### NCB-MB-086-1

BNC male, Ternary alloy plated brass



### NCD-MB-086-1

SMB male, Gold plated brass

### NCD-MRB-086-1

SMB male right angle, Gold plated brass

### NCD-FB-086-1

SMB female, Gold plated brass

### NCD-FRB-086-1

SMB female right angle, Gold plated brass