

## NE141 Low PIM

Features:  
\* Low PIM

Applications:  
\* Phased-array Radar  
\* Instrument  
\* Interconnection in and between equipment

### Electrical

Frequency:	DC~26.5GHz
Cut-off Frequency:	34GHz
Impedance:	50Ω
Velocity of Propagation:	70%
Shielding Effectiveness:	165dB min.
Voltage Withstand:	500V DC

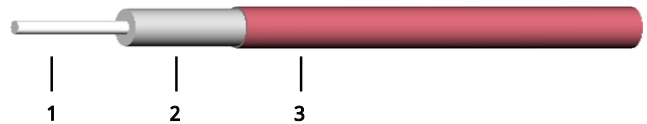
### Mechanical

Bend Radius (installation):	15mm
Weight:	46g/m

### Environmental

Temperature: -55~+125°C

### Construction



No.	Name	Size (mm)	Material
1	Inner Conductor	0.94	Silver-plated copper
2	Dielectric	2.98	PTFE
3	Outer Conductor	3.58	Ternary alloy plated seamless copper tube

### Attenuation & Power Handling

Frequency (GHz)	0.3	0.5	1	3	6	10	12.4	18	26.5
Attenuation*1 (dB/100m)	20.3	26.5	38.2	69.3	102.4	137.7	156.4	195.9	249.2
Average Power*2 (W)	1020	782	542	299	203	151	133	106	83

[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) = 1.131702 \* √F (MHz) + 0.002450 \* F (MHz)

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

### How To Order

#### NE141-X-Y-Z

X: Frequency in GHz

Y: Connector type

Z: Length in meters

Examples:

To order a NE141 cable assembly, DC-18GHz, SMA male to SMA female, 0.5 meter, specify NE141-18-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 (12GHz, 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)

Mating Connector

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**NCK-MG-141-1**

2.92mm male, Stainless steel



**NCS-MG-141-3**

SMA male, Stainless steel



**NCS-MRB-141-4**

SMA male, Right angle, Gold plated brass



**NCS-MRG-141-3**

SMA male, Right angle, Stainless steel



**NCS-FB-141-1**

SMA female, Gold plated brass



**NCS-FL2B-141-1**

SMA female, 2-hole flange mount, Brass



**NCS-FL4B-141-1**

SMA female, 4-hole flange mount, Gold-plated brass



**NCS-FHB-141-1**

SMA female, Bulk head, Brass



**NCN-MB-141-3**

N male, Nickel-plated brass



**NCN-MRB-141-1**

N male, Right angle, Nickel-plated brass



**NCN-MRB-141-2**

N male, Right angle, Gold-plated brass



**NCN-FB-141-1**

N female, Nickel-plated brass



**NCB-MB-141-1**

BNC male, Brass-plated ternary alloy



**NCN-MRB-141-1**

N male, Right angle, Nickel-plated brass

