

## NE020 Low PIM

Features:  
\* Low PIM

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

### Electrical

Frequency: DC-40GHz  
Cut-off Frequency: 110GHz  
Impedance: 50Ω  
Velocity of Propagation: 70%  
Shielding Effectiveness: 165dB min.  
Voltage Withstand: 100V DC

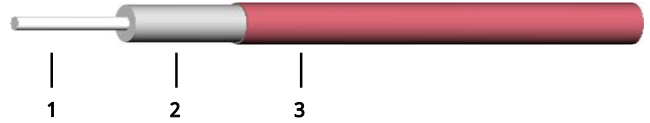
### Mechanical

Bend Radius (installation): 1.27mm  
Weight: 2g/m

### Environmental

Temperature: -55~+125°C

### Construction



No.	Name	Size (mm)	Material
1	Inner Conductor	0.127	Silver-plated copper
2	Dielectric	0.432	PTFE
3	Outer Conductor	0.580	Ternary alloy plated seamless copper tube

### Attenuation & Power Handling

Frequency (GHz)	0.3	0.5	1	3	6	10	12.4	18	26.5	40
Attenuation*1 (dB/100m)	130	170	240	420	600	780	870	1060	1300	1620
Average Power*2 (W)	99	77	54	31	22	17	15	12	10	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) =  $7.5016 * \sqrt{F} \text{ (MHz)} + 0.0029 * F \text{ (MHz)}$

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

### How To Order

#### NE020-X-Y-Z

X: Frequency in GHz

Y: Connector type

Z: Length in meters

Examples:

To order a NE020 cable assembly, DC-18GHz, SMA male to SMA female, 0.5 meter, specify NE020-18-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 (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)