

## NR280

### Low Loss

Features:  
 \* Low Insertion Loss  
 \* High Weatherability  
 \* UV Resistant

Applications:  
 \* Wireless Communication  
 \* Microwave Interconnect

#### Electrical

Frequency:	DC~5.8GHz
Cut-off Frequency:	63GHz
Impedance:	50Ω
Velocity of Propagation:	66%
Shielding Effectiveness:	90dB min.
Voltage Withstand:	500V DC

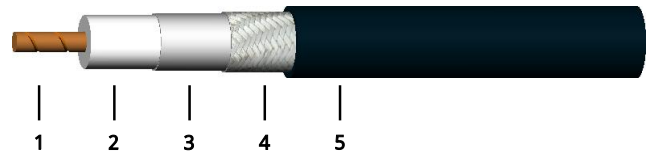
#### Mechanical

Bend Radius (installation):	6.4mm
Bend Radius (repeated):	28.0mm
Weight:	10g/m

#### Environmental

Temperature:	-40~+85°C
Outdoor Life:	20 or 10 years

#### Construction



No.	Name	Size (mm)	Material
1	Inner Conductor	0.46	Copper-clad steel
2	Dielectric	1.52	PE
3	Outer Conductor	1.65	Double-edged aluminum foil
4	Outer Shield	2.11	Tin-plated copper braid
5	Jacket	2.80	PE or PVC

#### Attenuation & Power Handling

	0.03	0.05	0.15	0.22	0.45	0.9	1.5	1.8	2	2.5	5.8
Frequency (GHz)											
Attenuation*1 (dB/100m)	12.9	16.7	29.4	35.8	52.0	75.1	99.0	109.3	115.8	131.1	211.4
Average Power*2 (W)	230	180	100	83	57	39	29	27	25	22	13

[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) = 2.3261155 \* √F (MHz) + 0.0059055 \* F (MHz)

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

#### How To Order

##### NR280-X-Y-Z

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

##### Examples:

To order a NR280 cable assembly, DC-5.8GHz, SMA male to SMA female, 1.5 meters, specify NR280-5.8-SSF-1.5.

##### Connector naming rules:

- 3 - 3.5mm (6GHz, VSWR 1.35)
- S - SMA (6GHz, VSWR 1.35)
- N - N (6GHz, VSWR 1.35)
- X - MMCX (6GHz, VSWR 1.35)
- M - MCX (6GHz, VSWR 1.35)
- B - BNC (4Hz, VSWR 1.4)
- D - SMB (4GHz, VSWR 1.35)

Female Connector - Add 'F' after connector name

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