

### NR600

#### Low Loss

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

Applications:  
 \* Wireless Communication  
 \* Microwave Interconnect

#### Electrical

|                          |           |
|--------------------------|-----------|
| Frequency:               | DC~5.8GHz |
| Cut-off Frequency:       | 30GHz     |
| Impedance:               | 50Ω       |
| Velocity of Propagation: | 83%       |
| Shielding Effectiveness: | 90dB min. |
| Voltage Withstand:       | 1500V DC  |

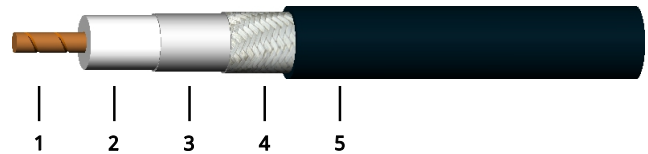
#### Mechanical

|                             |        |
|-----------------------------|--------|
| Bend Radius (installation): | 20.0mm |
| Bend Radius (repeated):     | 65.0mm |
| Weight:                     | 50g/m  |

#### Environmental

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

#### Construction



| No. | Name            | Size (mm) | Material                   |
|-----|-----------------|-----------|----------------------------|
| 1   | Inner Conductor | 1.42      | Copper                     |
| 2   | Dielectric      | 3.81      | Foam PE                    |
| 3   | Outer Conductor | 3.94      | Double-edged aluminum foil |
| 4   | Outer Shield    | 4.52      | Tin-plated copper braid    |
| 5   | Jacket          | 6.00      | 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) | 4.4  | 5.7  | 10.0 | 12.2 | 17.5 | 25.1 | 32.8 | 36.1 | 38.1 | 42.9 | 67.5 |
| Average Power*2 (W)     | 1490 | 1150 | 660  | 540  | 380  | 260  | 200  | 180  | 170  | 150  | 100  |

[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) = 0.8038058 \* √F (MHz) + 0.0010827 \* F (MHz)

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

#### How To Order

##### NR600-X-Y-Z

X: Frequency in GHz

Y: Connector type

Z: Length in meters

##### Examples:

To order a NR600 cable assembly, DC-5.8GHz, SMA male to SMA female, 1.5 meters, specify NR600-5.8-SSF-1.5.

##### Connector naming rules:

- S - SMA (6GHz, VSWR 1.35)
- N - N (6GHz, VSWR 1.35)
- T - TNC (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)

**Mating Connector**

---

**NCS-MCB-R600-2**

SMA male, Crimping type,  
Ternary alloy plated brass

**NCS-FCB-R600-1**

SMA female, Crimping type,  
Brass



**NCN-MCB-R600-2**

N male, Crimping type,  
Brass

**NCB-MCB-R600-3**

BNC male, Crimping type,  
Brass