

QR700

Low Loss

Features:

- * Low Insertion Loss
- * High Weatherability
- * UV Resistant

Applications:

- * Wireless Communication
- * Microwave Interconnect

Electrical

Frequency:	DC~5.8GHz
Cut-off Frequency:	24.5GHz
Impedance:	50Ω
Velocity of Propagation:	83%
Shielding Effectiveness:	90dB min.
Voltage Withstand:	2000V DC

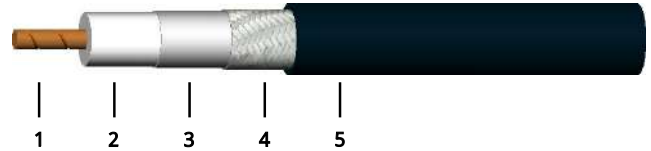
Mechanical

Bend Radius (installation):	25.0mm
Bend Radius (repeated):	76.0mm
Weight:	80g/m

Environmental

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

Construction



No.	Name	Size (mm)	Material
1	Inner Conductor	1.78	Copper
2	Dielectric	4.83	Foam PE
3	Outer Conductor	4.98	Double-edged aluminum foil
4	Outer Shield	5.72	Tin-plated copper braid
5	Jacket	7.60	PE or PVC

Attenuation & Power Handling

Frequency (GHz)	0.03	0.05	0.15	0.22	0.45	0.9	1.5	1.8	2	2.5	5.8
Attenuation* ¹ (dB/100m)	3.5	4.6	8.0	9.7	14.1	20.2	26.4	29.1	30.8	34.7	55.0
Average Power* ² (W)	2090	1620	920	760	520	360	280	250	240	210	130

[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) = $0.6397638 * \sqrt{F \text{ (MHz)}} + 0.0010827 * F \text{ (MHz)}$

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

How To Order

QR700-X-Y-Z

X: Frequency in GHz

Y: Connector type

Z: Length in meters

Examples:

To order a QR700 cable assembly, DC-5.8GHz, SMA male to SMA female, 1.5 meters, specify QR700-5.8-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)