

QR280 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

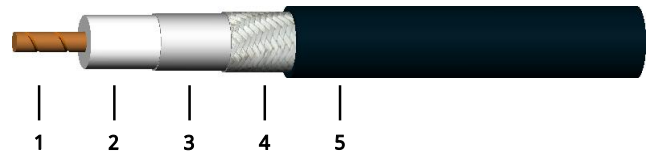
Mechanical

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) = $2.3261155 * \sqrt{F} (\text{MHz}) + 0.0059055 * F (\text{MHz})$

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

How To Order

QR280-X-Y-Z

X: Frequency in GHz

Y: Connector type

Z: Length in meters

Examples:

To order a QR280 cable assembly, DC-5.8GHz, SMA male to SMA female, 1.5 meters, specify QR280-5.8-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)