QB1500

Stable Loss, VSWR, Phase vs Flexing

Features:
* Low Insertion Loss
* High Power
* Low PIM

Applications:
* Phased-array Radar
* Satellite Communication
* Avionics
* Telecom

Electrical

Frequency:	DC~6GHz
Cut-off Frequency:	8GHz
Impedance:	50Ω
Velocity of Propagation:	76%
Shielding Effectiveness:	90dB min.
Voltage Withstand:	4000V DC
PIM:	-155dBc

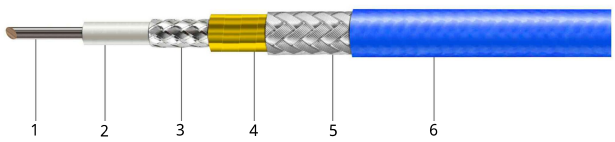
Mechanical

Bend Radius (installation):	74.0mm
Bend Radius (repeated):	147.0mm
Weight:	432g/m

Environmental

Temperature:	-55~+200℃

Construction



No.	Name	Size (mm)	Material
1	Inner Conductor	4.40	Stranded silver-plated copper
2	Dielectric	12.50	Low density PTFE
3	Inner Shield	12.74	Silver-plated copper tape
4	Interlayer	12.85	Aluminum tape
5	Outer Shield	13.60	Silver-plated copper braid
6	Jacket	14.70	FEP

Attenuation & Power Handling

Frequency (GHz)	0.1	0.3	0.5	0.8	1	2	3	5	6
Attenuation*1 (dB/100m)	3.1	5.4	7.1	9.1	10.2	14.8	18.4	24.5	27.1
Average Power*2 (W)	14724	8384	6433	5031	4472	3088	2477	1866	1684

[1] VSWR:1.0; Ambient: +25℃ (77℉)

[2] VSWR:1.0; Ambient: +40℃ (104℉); Sea level

Calcuate Cable Attenuation: Attenuation (dB/100m) = $0.304208 * \sqrt{F\ (MHz)} + 0.000591 * F\ (MHz)$

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

How To Order

QB1500-X-Y-Z

X: Frequency in GHz

Y: Connector type

Z: Length in meters

Examples:

To order a QB1500 cable assembly, DC-6GHz, 7/16 male to 7/16 female, 0.5 meter, specify QB1500-6-77F-0.5.

Connector naming rules:

N - N (6GHz, VSWR 1.25)

7 - 7/16 DIN (L29) (6GHz, VSWR 1.25)

Female Connector - Add ‘F’ after connector name

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

QB1500 Mating Connector

QCN-MG-B1500-1
N male, Stainless steel

QC7-MB-B1500-1
7/16 male, Ternary alloy plated brass