

# QB1500

## Stable Loss, VSWR, Phase vs Flexing

**Features:**

- \* Low Insertion Loss
- \* High Power
- \* Low PIM

**Applications:**

- \* Phased-array Radar
- \* Satellite Communication
- \* Avionics
- \* Telecom

**Electrical**

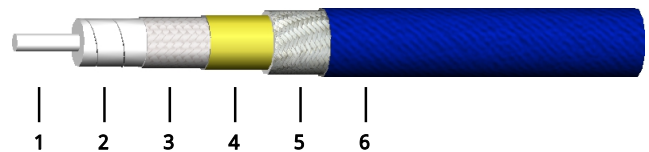
Frequency:	DC-6GHz
Cut-off Frequency:	10GHz
Impedance:	50Ω
Velocity of Propagation:	76%
Shielding Effectiveness:	90dB min.
Voltage Withstand:	4000V DC
PIM:	-155dBc

**Mechanical**

Bend Radius (installation):	76.0mm
Bend Radius (repeated):	150.0mm
Weight:	400g/m

**Environmental**

Temperature: -55~+200°C

**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	12.82	Silver-plated copper tape
4	Interlayer	12.95	Aluminum tape
5	Outer Shield	13.67	Silver-plated copper braid
6	Jacket	14.70	FEP

**Attenuation & Power Handling**

Frequency (GHz)	0.1	0.3	0.5	1	2	3	4	5	6
Attenuation*1 (dB/100m)	3.1	5.5	7.1	10.3	14.8	18.5	21.6	24.5	27.2
Average Power*2 (W)	13440	7650	5870	4080	2818	2260	1928	1703	1537

[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) =  $0.304208 * \sqrt{F} \text{ (MHz)} + 0.000591 * F \text{ (MHz)}$ 

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

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**QCN-MG-B1500-1**

N male, Stainless steel

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