CSC-BNCM-ccc-BNCM

BNC Plug to BNC Plug Cable Assembly

The CSC-BNCM-ccc-BNCM cable assembly provides a BNC plug (male pin) to BNC plug (male pin) connection with the option of 914 mm, 1500 mm, or 1800 mm lengths of RG-58C/U coaxial cable.

Operating from 0 Hz to 1 GHz, the CSC-BNCM- ccc-BNCM cable assembly combines superior performance, compact size, and a convenient twist-lock mating interface to provide a reliable, easy-to-use cable assembly. Additionally, all Linx coaxial cables and connectors meet RoHS lead free standards and are tested to meet requirements for corrosion resistance, vibration, mechanical and thermal shock.

FEATURES

- 0 Hz to 1 GHz operation
- BNC plug (male pin) connection
  - Nickel plated brass construction
  - Gold plated brass center contact
  - Bayonet-style (push-twist) connection
  - RG-58C/U 50 ohm coaxial cable

APPLICATIONS

- Audio/Video
- Broadcasting
- Test Equipment
- Surveillance Systems
- Ethernet
- Industrial, Commercial, Enterprise

TABLE 1. ELECTRICAL SPECIFICATIONS

Parameter	Value		
Insertion Loss (dB max)	CSC-BNCM-914-BNCM	CSC-BNCM-1500-BNCM	CSC-BNCM-1800-BNCM
	1.0	1.3	1.4
VSWR (max)	1.6		
Impedance	50 Ω		
Insulation Resistance	500 MΩ min.		

ORDERING INFORMATION

Part Number	Description
CSC-BNCM-914-BNCM	BNC plug (male pin) to BNC plug (male pin) on 914.0 mm (35.98 in) of RG-58C/U coaxial cable
CSC-BNCM-1500-BNCM	BNC plug (male pin) to BNC plug (male pin) on 1500.0 mm (59.06 in) of RG-58C/U coaxial cable
CSC-BNCM-1800-BNCM	BNC plug (male pin) to BNC plug (male pin) on 1800.0 mm (70.87 in) of RG-58C/U coaxial cable

Available from Linx Technologies and select distributors and representatives.

PRODUCT DIMENSIONS

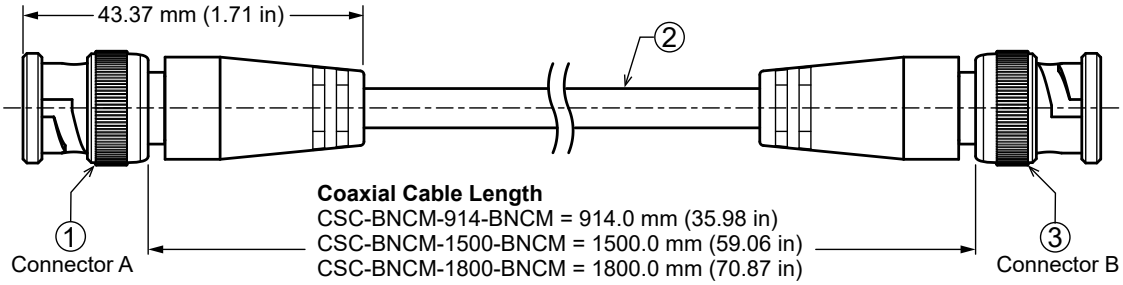

Figure 1. Product Dimensions for the CSC-BNCM-ccc-BNCM Cable Assembly

TABLE 2. CABLE ASSEMBLY COMPONENTS

Item #	Description	Material	Finish
1	Connector, BNC plug (male pin)	Brass	Nickel
2	RG-58C/U coaxial cable	RG-58C/U	Black
3	Connector, BNC plug (male pin)	Brass	Nickel

TABLE 3. CABLE ASSEMBLY MECHANICAL SPECIFICATIONS

Parameter	Connector A BNC plug (male pin)	Connector B BNC plug (male pin)
Fastening Type	Bayonet-style Coupling (Push/Twist)	Bayonet-style Coupling (Push/Twist)
Connector Durability	500 cycles min.	500 cycles min.
Weight	CSC-BNCM-914-BNCM = 56.5 g (2.00 oz) CSC-BNCM-1500-BNCM = 76.8 g (2.71 oz) CSC-BNCM-1800-BNCM = 86.8 g (3.10 oz)	

COAXIAL CABLE SPECIFICATIONS

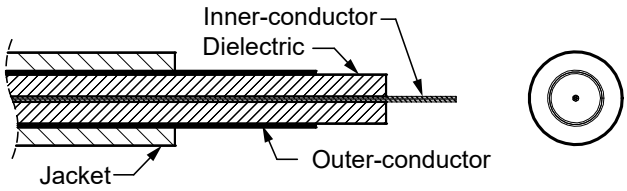

Figure 2. Coaxial Cable Cutaway Diagram

TABLE 4. COAXIAL CABLE MATERIAL SPECIFICATIONS FOR RG-58C/U

Parameter	Material	Dimensions
Inner-Conductor	Silver plated copper, 19 strand, 21 AWG	Ø0.085 mm (0.003 in)
Dielectric	PE, Natural	Ø2.95 mm (0.12 in)
Outer-Conductor	Silver plated copper braid, 112/0.10	Ø3.05 mm (0.12 in)
Jacket	PVC, black	Ø5.0 mm (0.02 in) ±0.10 mm

TABLE 5. COAXIAL CABLE ELECTRICAL AND PHYSICAL SPECIFICATIONS FOR RG-58C/U

Parameter	Value					
Conductor Resistance	46.9 Ω/km @20 °C					
Nominal Impedance	50 ± 5 Ω					
Attenuation (dB/1M)	1.0 MHz 14	10 MHz 48	30 MHz 81	100 MHz 160	200 MHz 230	2000 MHz 900
Minimum Inside Bend radius	50.8 mm (2.00 in)					

INSERTION LOSS

Figure 3 shows the Insertion Loss for the CSC-BNCM-ccc-BNCM cable assemblies. Insertion loss is the loss of signal power (gain) resulting from the insertion of a device in a transmission line.

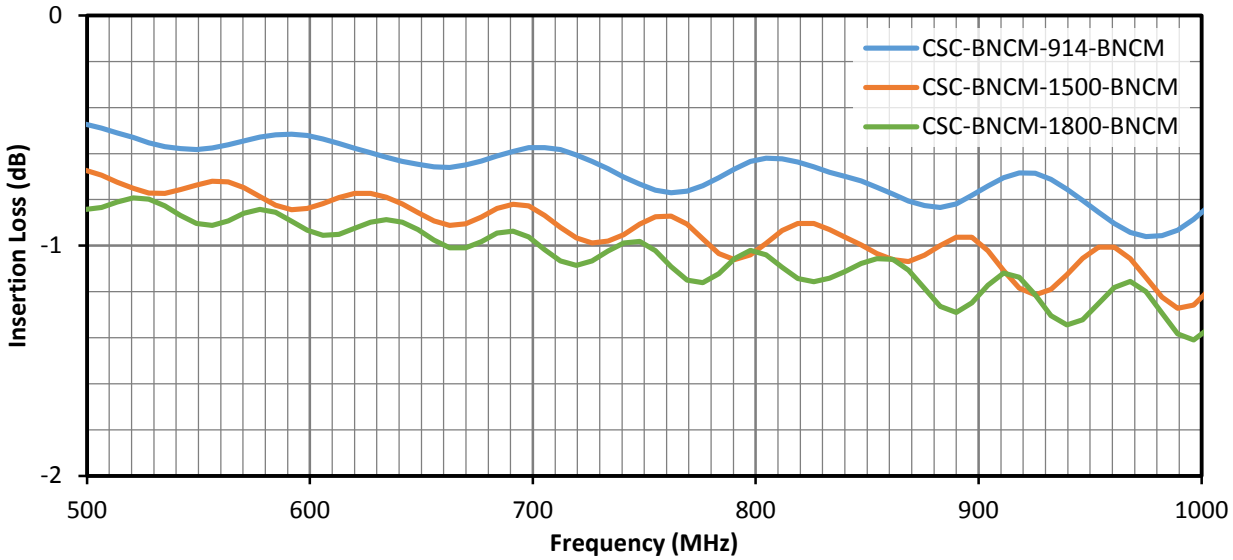

Figure 3. Insertion Loss for the CSC-BNCM-ccc-BNCM Cable Assemblies

VSWR

Figure 4 provides the voltage standing wave ratio (VSWR) across the cable assembly's bandwidth for the CSC-BNCM-ccc-BNCM cable assemblies. VSWR describes how efficiently power is transmitted through the cable assembly. A lower VSWR value indicates better performance at a given frequency.

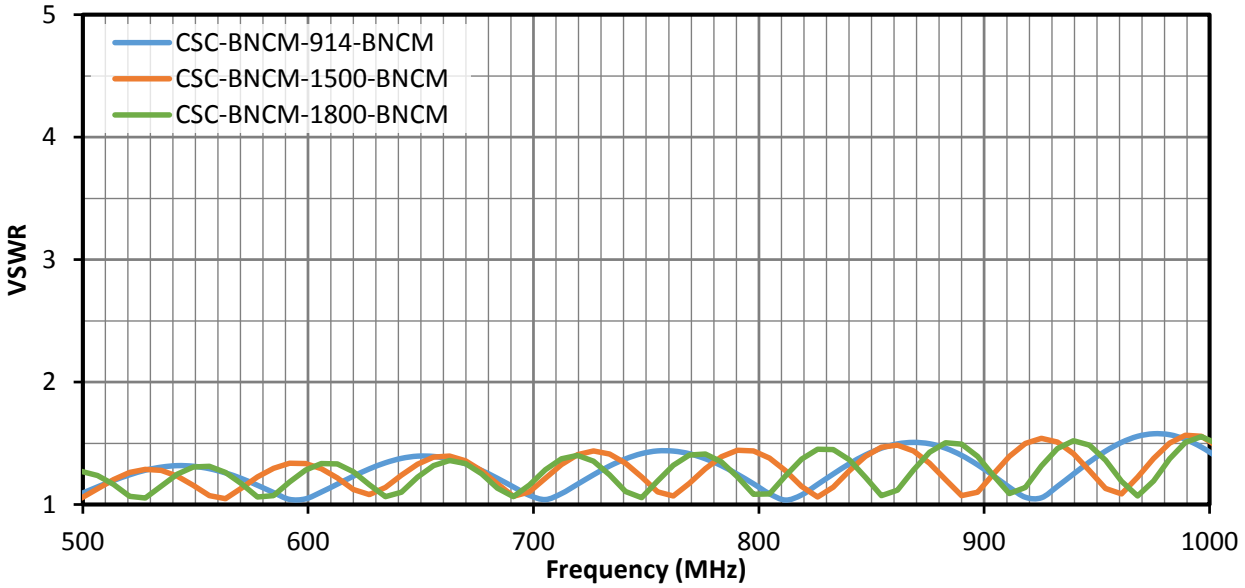

Figure 4. Insertion Loss for the CSB-RGFB-102-UFFR Cable Assembly

PACKAGING INFORMATION

The CSC-BNCM-ccc-BNCM cable assembly is packaged in a clear plastic bag, in quantities of 10. Distribution channels may offer alternative packaging options.

CABLE ASSEMBLY DEFINITIONS AND USEFUL FORMULAS

VSWR - Voltage Standing Wave Ratio. VSWR is a unitless ratio that describes how efficiently power is transmitted through the cable assembly. A lower VSWR value indicates better performance at a given frequency. VSWR is easily derived from Return Loss.

$$\text{VSWR} = \frac{10^{\left[\frac{\text{Return Loss}}{20}\right]} + 1}{10^{\left[\frac{\text{Return Loss}}{20}\right]} - 1}$$

Insertion Loss - The loss of signal power (gain) resulting from the insertion of a device in a transmission line. Insertion loss can be derived from the power transmitted to the load before the insertion of the component PT and the power transmitted to the load after the insertion of the component PR_R.

$$Insertion\ Loss\ (\text{dB}) = 10 \log_{10} \frac{P_T}{P_R}$$

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