



## 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 $\Omega$         |                    |                    |
| Insulation Resistance   | 500 M $\Omega$ 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

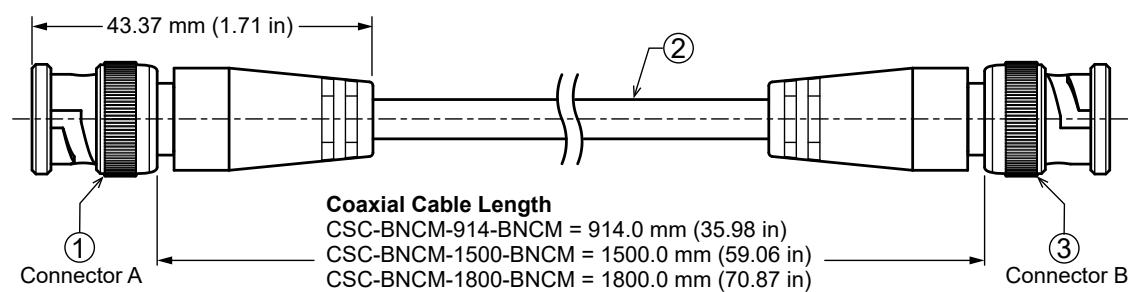


Figure 1. Product Dimensions for the CSC-BNCM-ccc-BNCM Cable Assembly

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)<br>CSC-BNCM-1500-BNCM = 76.8 g (2.71 oz)<br>CSC-BNCM-1800-BNCM = 86.8 g (3.10 oz) |                                     |

COAXIAL CABLE SPECIFICATIONS

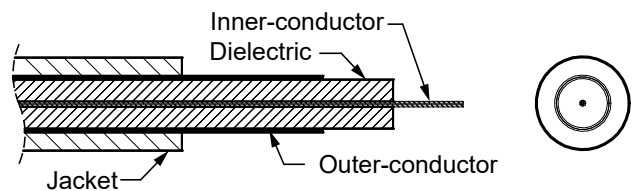


Figure 2. Coaxial Cable Cutaway Diagram

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 $\Omega$ /km @20 °C |              |              |                |                |                 |
| Nominal Impedance          | 50 $\pm$ 5 $\Omega$      |              |              |                |                |                 |
| Attenuation (dB/1M)        | 1.0 MHz<br>14            | 10 MHz<br>48 | 30 MHz<br>81 | 100 MHz<br>160 | 200 MHz<br>230 | 2000 MHz<br>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.

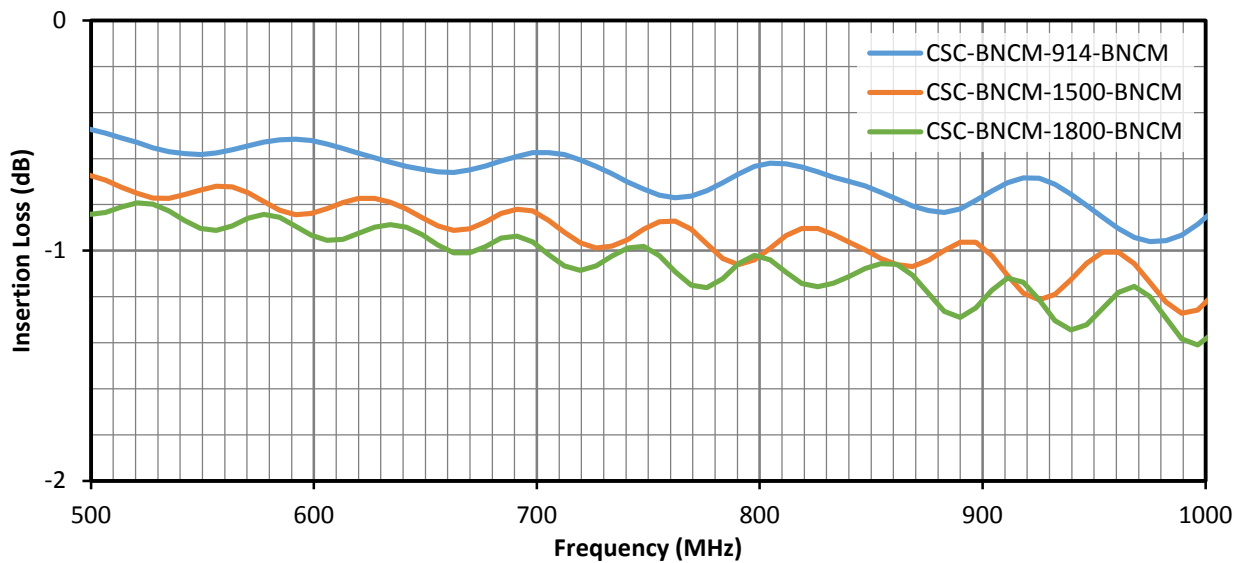


Figure 3. Insertion Loss for the CSC-BNCM-ccc-BNCM Cable Assemblies

## 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.

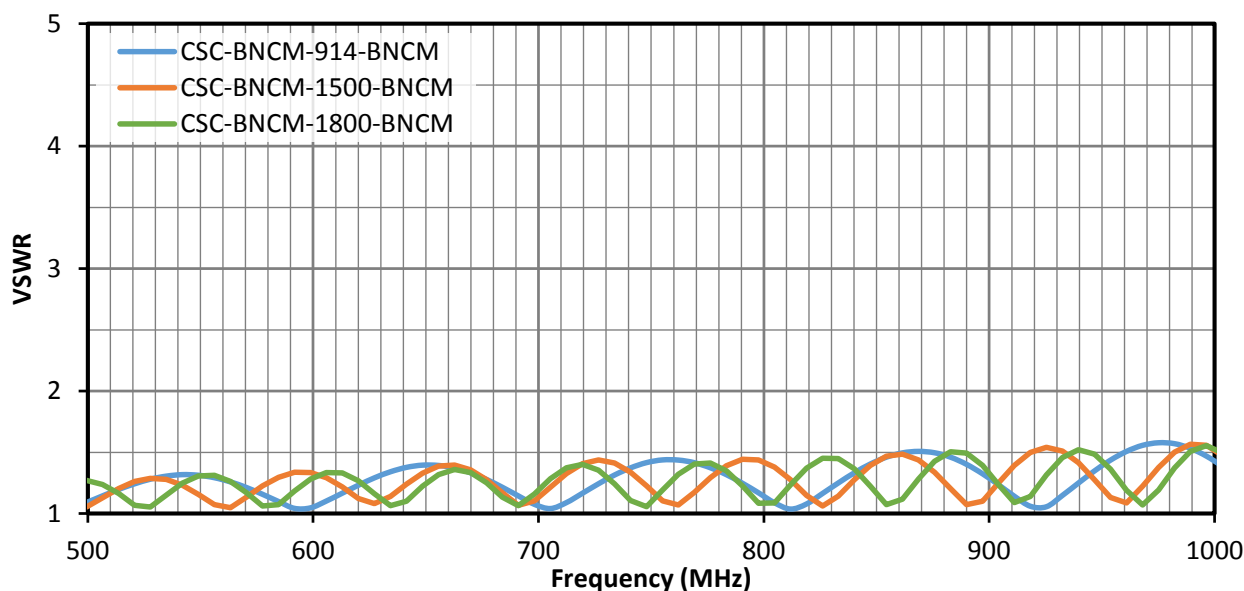


Figure 4. Insertion Loss for the CSB-RGFB-102-UFFR Cable Assembly

## 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.

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

**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  $P_T$  and the power transmitted to the load after the insertion of the component  $P_R$ .

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

### TE TECHNICAL SUPPORT CENTER

|                   |                       |
|-------------------|-----------------------|
| USA:              | +1 (800) 522-6752     |
| Canada:           | +1 (905) 475-6222     |
| Mexico:           | +52 (0) 55-1106-0800  |
| Latin/S. America: | +54 (0) 11-4733-2200  |
| Germany:          | +49 (0) 6251-133-1999 |
| UK:               | +44 (0) 800-267666    |
| France:           | +33 (0) 1-3420-8686   |
| Netherlands:      | +31 (0) 73-6246-999   |
| China:            | +86 (0) 400-820-6015  |

### te.com

TE Connectivity, TE, TE connectivity (logo), Linx and Linx Technologies are trademarks owned or licensed by the TE Connectivity Ltd. family of companies. All other logos, products and/or company names referred to herein might be trademarks of their respective owners.

The information given herein, including drawings, illustrations and schematics which are intended for illustration purposes only, is believed to be reliable. However, TE Connectivity makes no warranties as to its accuracy or completeness and disclaims any liability in connection with its use. TE Connectivity's obligations shall only be as set forth in TE Connectivity's Standard Terms and Conditions of Sale for this product and in no case will TE Connectivity be liable for any incidental, indirect or consequential damages arising out of the sale, resale, use or misuse of the product. Users of TE Connectivity products should make their own evaluation to determine the suitability of each such product for the specific application.

TE Connectivity warrants to the original end user customer of its products that its products are free from defects in material and workmanship. Subject to conditions and limitations TE Connectivity will, at its option, either repair or replace any part of its products that prove defective because of improper workmanship or materials. This limited warranty is in force for the useful lifetime of the original end product into which the TE Connectivity product is installed. Useful lifetime of the original end product may vary but is not warranted to exceed one (1) year from the original date of the end product purchase.

©2022 TE Connectivity. All Rights Reserved.

10/22    Original

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[TE Connectivity:](#)

[CSC-BNCM-1500-BNCM](#)