

BNC RF Connectors and Assemblies

molex[®]

BNC Radio Frequency (RF) Connectors and Assemblies transmit signals up to 12 GHz and exceed performance requirements of serial-data transmission for high-speed, high-definition TV (HDTV), HD video and broadcast applications

Features and Benefits

Low return-loss performance that exceeds the Society of Motion Picture Television Engineers (SMPTE) standards

Surpasses serial data, transmission-performance requirements for high-speed, high-definition (HD) video and broadcast. Allows for sizeable future bandwidth expansion without hardware changes

75 Ohm connectors capable of 12 GHz signal transmission with the best impedance matching in the industry

Provides cutting-edge performance. Minimizes signal reflection to support ultra HD video applications

Right-angle, vertical, through-hole and bulkhead PCB configurations

Provides a variety of options for design flexibility

BNC plug style assemblies available with 75 Ohm Belden 1694A cables

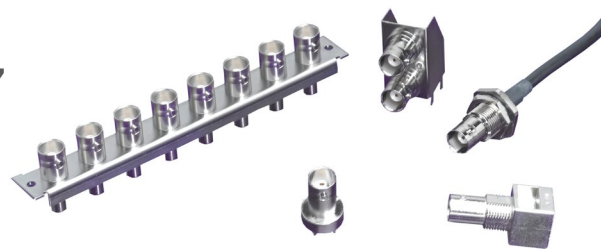
Offers a complete radio frequency (RF) solution from single supplier, eliminating assembly time

Available in 50 and 75 Ohms

Meets the connector needs for a variety of RF applications

Meets MIL-PRF-39012 requirements

Appropriate for aerospace / defense applications



BNC RF Connectors

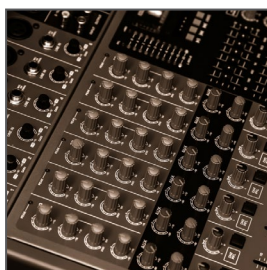


BNC RF 75 Ohm 12 GHz Connector

Applications

Consumer

High-Speed, High Definition TV(HDTV)
HD Video and Broadcast Applications
Professional Cameras
Servers
Recorders
Monitors
Switchers
Controllers



Broadcast Control Panel



Professional Camera



Monitor

Networking / Telecommunications

Aerospace / Defense

BNC RF Connectors and Assemblies



Specifications

REFERENCE INFORMATION

Packaging: Tray or Bag
Mates With: 73171-6690 BNC Plug STR
Use With: 75 Ohm Belden 1694A cables
Designed In: Millimeters
RoHS: Yes

MECHANICAL

Coupling Nut Retention Force (Axial): 444.82N
Force to Engage/Disengage:
Engagement Force (Typical)
Axial – 13.345N
Radial – 11.12N
Disengagement Force
Axial – 13.345N
Radial – 11.12N

ELECTRICAL

Nominal Impedance: 50 and 75 Ohms
Frequency Rating:
50 Ohms: DC to 10 GHz (max.)
DC to 4 GHz (Optimum)
DC to 2 GHz (Commercial)
75 Ohms: 12 GHz
DC to 4 GHz (max.)
DC to 2 GHz (Optimum)
DC to 2 GHz (Commercial)
Insertion Loss (max.): 12 GHz – 0.5 dB
Return Loss (max.): 0 to 6 GHz – 30 dB
6 to 8 GHz – 25dB
8 to 12 GHz – 20 dB
Voltage (max.): 1000V – 50 and 75 Ohms
12 GHz Design
Center Contact Resistance: 1.5 Milliohms
Outer Contact Resistance: 1.0 Milliohms
Dielectric Withstanding Voltage: 1,500 Vrm
Insulation Resistance: 5,000 Megohms

PHYSICAL

50 Ohms
Body: Brass or Zinc Alloy
Plating: Nickel
Center Contact: Phosphor Bronze
Plating: Gold
Insulator: Teflon
75 Ohms 3 GHz
Body: Zinc Alloy or Brass
Plating: Nickel or Gold
Center Contact: Beryllium Copper, Phosphor Bronze or Brass
Plating: Gold
Insulator: Teflon
75 Ohms 12 GHz
Body: Brass
Plating: Tin
Contact: Beryllium Copper or Brass
Plating: Gold
Insulator: Teflon
Operating Temperature: -65 to +165°C
-65 to +95°C (Commercial)

Ordering Information

BNC RF Jacks, 75 Ohms, 12 GHz

Series No.	Description	Impedance (Ohms)	Frequency	Body	Plating
73171-6610	Right-Angle Jack w/ Jam Nut and Washer	75	12 GHz	Brass	Tin
73171-6611	Right-Angle Jack w/ Low-Profile Jam Nut and Washer				
73171-6612	Right-Angle Jack w/o Jam Nut and Washer				
73171-6590	Straight Jack				

BNC RF Jacks and Plugs, 50 and 75 Ohms

Series No.	Description	Impedance (Ohms)	Frequency	Style
73171	BNC Straight, Edge-Mount, Right-Angle Jacks and Plugs	50, 75	DC to 4 GHz DC to 10 GHz DC to 2 GHz 3 GHz	Miniature

75 Ohm Cable Assemblies

Series No.	Description
Call Molex	75 Ohm Belden 1694A terminated BNC plug style cable assemblies

www.molex.com/link/bncrfconnectors.html