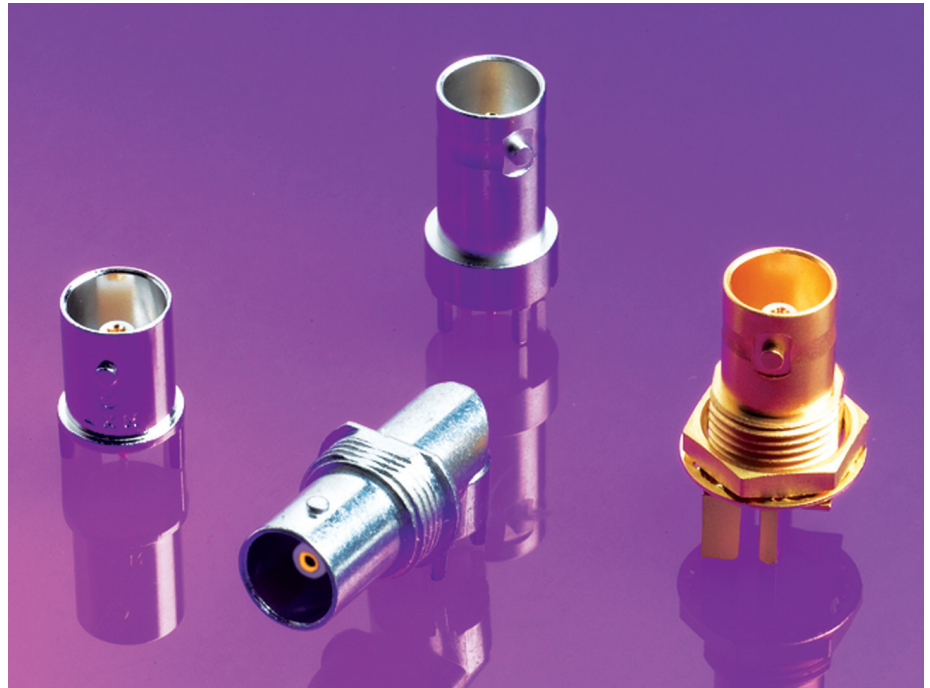




Molex offers a full line of BNC 75 Ohm connectors and cables to meet and exceed the serial-data, transmission-performance requirements of High-Definition TV (HDTV)

The demand for HDTV products is transforming the broadcast-television market and its current hardware infrastructure. The ongoing standards conversions from the Society of Motion Picture Television Engineers (SMPTE) 292M (HD-SDI -1.5 Gbps) to SMPTE 424M (3G-HD-3.0 Gbps) demand a previously unrivaled attention to hardware design detail; proper operation and signal integrity must be ensured throughout the entire broadcast-transmission line. Passive connectors and coaxial cabling encompass a significant portion of a typical broadcast transmission line. Molex offers a full line of BNC 75 Ohm connectors and cables, designed to exceed the serial data transmission performance requirements of SMPTE 424M (3G-HD).

Molex BNC 75 Ohm connectors yield Return Loss performance that exceeds industry standard requirements of SMPTE 424M and allows for sizeable future bandwidth expansion without connector hardware changes. BNC 75 Ohm connectors transmit signals at 3.0 GHz, ensuring performance standards are met and signal integrity is not compromised. Molex also offers 75 Ohm 1.0/2.3 GHz connectors to address the mobile broadcast-truck market, where truck-weight reduction is paramount. The 1.0/2.3 connectors and cables also exceed the Return Loss performance requirements of SMPTE424M. Molex provides 75 Ohm connector and cable assembly solutions to fulfill the current performance challenges of the broadcast television/video industry.



In addition to the 75 Ohm, 3.0 GHz+ connectors (Series 73171) designed for HDTV applications, Molex offers BNC connectors in both 50 and 75 Ohm impedance levels (multiple series numbers) for applications including telecommunications, video, audio and test equipment. All BNC connectors are miniature, lightweight and weatherproof. The double-stud, bayonet-coupling design of the BNC

connector yields an easy-to-use, quick-connecting and disconnecting device that accounts for its popularity. BNC connectors are manufactured to MIL-PRF-39012 requirements and are typically used in applications operating up to 4 GHz. Mini-BNC 75 Ohm connectors are also available and are 25 to 30% smaller than traditional BNC designs.

FEATURES AND BENEFITS

- Low return loss performance that exceeds industry standard requirements of SMPTE 424M which meets serial data, transmission-performance requirements of HDTV and allows for sizeable bandwidth expansion without hardware changes
- Available in right angle, vertical, edge-mount and bulkhead PCB configurations
- 75 Ohm cable assemblies and mating plugs are also available for a complete Molex solution
- mini BNC 75 Ohm for higher density and lighter weight
- Increased packaging density while still meeting SMPTE 424m
- Smaller connector still with bayonet coupling
- DIN 1.0/2.3 75 Ohm connector options
- Smallest 75 Ohm HDTV and SMPTE 424M performance
- Very high density 75 Ohm interconnects popular in truck equipment applications



■ **Television/Video/Audio Broadcasting**

- Routers
- Controllers
- Switches

■ **Other Markets**

- General 75 Ohm Transmission Applications such as Telecommunications

SMPTE Frequency Domain Requirements for BNC 75 Ohm Connectors

