



Specifications for BNC Connectors

BNC style connectors are miniature, light-weight, weatherproof interconnecting devices characterized by their two-stud, quick disconnect bayonet lock coupling arrangement. Their design functions satisfactorily from DC to 11 GHz in static applications, or from DC to 4GHz in applications involving vibration. The connectors typically yield a low VSWR (reflected signal) to 4GHz. Primary applications include radio telecommunications, broadcast equipment, medical equipment, computer, Precision Video, High definition studio broadcast, video switching and test instrumentation where frequent coupling and de-coupling are necessary. Bomar's BNCs are available in an extensive variety of configurations and cable sizes and are impedance matched to either 50 ohm or 75 ohm.

MATERIALS

Connector Parts	Material	Equivalent Standard
Connector Body and Parts	Brass	ISOCuZn38Pb2 Body Part
Male Contact Pin	Brass	QQ-B-626
Commercial Grade	Zinc Alloy/Brass	-----
Outer Contact	Brass	QQ-B-750
Socket Contact	Beryllium Copper	QQ-C-530 / MIL-H-7199
-----	Phosphor Copper	CuBe2
Crimp Ferrule	Annealed Copper	QQ-C-576
Insulators, Standard Versions	Teflon	L-P403 / BS4271
-----	Delrin	Grade B
Rubber Gaskets	Silicone Rubber	ASTM-E1418PSI
Plating	Nickel (Silver Optional)	MIL-G-45204

ELECTRICAL

Requirement	Performance		Test † Specification
Impedance	50Ω **	75Ω **	** See V-Bite for 3GHz 75 ohm
Frequency Range	0-4GHz	0-1 GHz	-----
VSWR	1.30 Max.		MIL-C-39012
RF Insertion Loss	0.2 db Min. at 3 GHz		MIL-C-39012
RF Leakage	-55 db Min. at 3 GHz		MIL-C-39012
Test Voltage (At Sea Level)	1500V rms		MIL-STD-202
Working Voltage (At Sea Level)	500V rms		MIL-STD-202
Insulation Resistance	5000 Meg ohms Min.		MIL-STD-202
Contact Resistance	3 Milli ohms Max.		MIL-C-39012

Mechanical & Environmental

Requirement	Performance	Test † Specification
Durability	500 Insertions & Extractions Min.	MIL-C-39012
Shock	50 G	MIL-STD-202
Vibration	20 G from 80-2000 Hz	MIL-STD-202
Cable Retention (Cable Types)	60 lbs. Minimum Pull Test	MIL-C-39012
Coupling Nut	60 lbs. Maximum	MIL-C-39012
Temperature Range	Teflon: -55 to +199 C	-----
	Delrin: -40 to +85 C	-----
Moisture Resistance	Continuous Test	MIL-STD-202
Salt Spray	48 Hours	MIL-STD-202

†Products are made to conform to the Mil standard but are for commercial applications and are not QPL

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3 Piece Crimp

Part Number (Male)	RoHS	(I.D.) **	Fig. No.	RG/U Cable
310A205A	<input checked="" type="checkbox"/>	.200 In.	Fig. 1	6, 21 AWG Center Conductor
310A205A18	<input checked="" type="checkbox"/>	.200 In.	Fig. 1	6 CATV, 18 AWG Center Conductor
310A205F	<input checked="" type="checkbox"/>	.124 In.	Fig. 1	58A/U, 58C/U Stranded, 141, Thin PVC
310A205FS	<input checked="" type="checkbox"/>	.124 In.	Fig. 1	58/U Solid Conductor
310A205FV	<input checked="" type="checkbox"/>	.125 In.	Fig. 2	58/U Thin-Net Plenum
310A205FV2	<input checked="" type="checkbox"/>	.125 In.	Fig. 2	Mini 59, RGB Cable (23 AWG)
310A205FV3	<input checked="" type="checkbox"/>	.125 In.	Fig. 2	Mini 59, RGB Cable (26 AWG)
310A204G	<input checked="" type="checkbox"/>	.150 In.	Fig. 1	59, 62, 210



Fig.1



Fig.2



Coax Crimp Tools

Professional grade hex-crimp tools for coaxial connectors are available in ratchet and non-ratcheting types, both provide dependable service. Ratchet tools feature replaceable dies. Included is a convenient release mechanism to unlatch the ratchet in the event of an improper crimp. Each too also crimps the contact pin to the conductor.

Part Number	Description
BD10100	Hex Crimp Ratchet for "F" Types, RG59, RG6
BDHD100	Hex Crimp Ratchet for Belden 8281
BDHD200	Hex Crimp Ratchet for BNC/TNC RG58,59,62 and MV
BDHD100	Hex Crimp Ratchet for Mini-RG59
BD11012	Hex Crimp Ratchet for "N" Crimp RG11, RG213, RG214
BDHD100	Hex Crimp Ratchet for BNC/TNC RG6, RG59