



## 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

**FOR TECHNICAL SUPPORT: PHONE 973-347-4040 / FAX973-347-2111**

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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



## Dual PC Jacks (Threaded)

**Right Angle or Vertical Stacked:** When board space becomes a serious issue and you still need the robust, full size, BNC connectors, a dual stacked right angle or vertical version will do the trick. Assembly insertion time is cut in half as well. The Dual 364 series is available in both Valox isolated and all metal construction.

(shown with closed back option FS)



Fig. 38A



Fig. 38B



Fig. 40D



Fig. 38C

Right Angle					
Part Number	ROHS	Description	Imp.	Contact	Fig.No.
364A2595	✓	Dual Right Angle, White Valox	50Ω	Phos./Gold	38A
364A2595T	✓	Dual Right Angle, White Valox (TPX)	50Ω	Phos./Gold	38A
364A2795	✓	Dual Right Angle, White Valox	75Ω	Phos./Gold	38A
364A2795T	✓	Dual Right Angle, White Valox (TPX)	75Ω	Phos./Gold	38A
364A2595B	✓	Dual Right Angle, Black Valox	50Ω	Phos./Gold	38A
364A2795B	✓	Dual Right Angle, Black Valox	75Ω	Phos./Gold	38A
364M2595	✓	Dual Right Angle, Metal	50Ω	Phos./Gold	38B
364M2595T	✓	Dual Right Angle, Metal (TPX)	50Ω	Phos./Gold	38B
364M2795	✓	Dual Right Angle, Metal	75Ω	Phos./Gold	38B
364M2795T	✓	Dual Right Angle, Metal (TPX)	75Ω	Phos./Gold	38B
3M64M2795	✓	Dual Right Angle, Metal Mini-BNC	75Ω	Phos-Gold	38C
364KNT	✓	Knurled Nut for Dual BNC	N/A	Brass/Nickel	38D
Vertical					
Part Number	ROHS	Description	Imp.	Contact	Fig.No.
364S2595	✓	Dual Vertical, White Valox	50Ω	Phos./Gold	40D
364S2795	✓	Dual Vertical, White Valox	75Ω	Phos./Gold	40D
364S2595B	✓	Dual Vertical, Black Valox	50Ω	Phos./Gold	40D
364S2795B	✓	Dual Vertical, Black Valox	75Ω	Phos./Gold	40D
364S2595M	✓	Dual Vertical, Metal	50Ω	Phos./Gold	----
364S2795M	✓	Dual Vertical, Metal	75Ω	Phos./Gold	----
Tool					
Part Number	ROHS	Description	Imp.	Contact	Fig.No.