



PRODUCT SPECIFICATION

1.0 SCOPE

This Product Specification covers 3 GHz optimized BNC 75 Ohm Jack and Plug connectors.

2.0 PRODUCT DESCRIPTION

2.1 BNC JACK AND PLUG 75 OHM.

3.0 APPLICABLE DOCUMENTS AND SPECIFICATIONS

N/A

4.0 RATINGS

4.1 VOLTAGE

500 Vrms at Sea Level
125 Vrms at 70,000 Feet

4.2 TEMPERATURE

Rating: - 65°C TO + 165°C

4.3 FREQUENCY RATING

0 to 3.0 GHz (recommended)
0 to 4.0 GHz (maximum)

4.4 NOMINAL IMPEDANCE

75 Ohms

REVISION: A1	ECR/ECN INFORMATION: EC No: URF2009-0495 DATE: 2003/09/25	TITLE: BNC JACK/PLUG 75 OHM 3 GHz BNC-J/P	SHEET No. 1 of 3
DOCUMENT NUMBER: PS-89675-202	CREATED / REVISED BY: JDW	CHECKED BY: TEF	APPROVED BY: GMH



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5.0 PERFORMANCE

5.1 ELECTRICAL REQUIREMENTS

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
1	Insulation Resistance	MIL-PRF-39012, paragraph 3.11	>=5000 Megohms
2	Dielectric Withstanding Voltage	MIL-PRF-39012, paragraph 3.17	1500 Vrms
3	Contact Resistance	MIL-PRF-39012, paragraph 3.16 Center Contact Initial Center Contact After Environment Outer Contact Outer Cable Conductor to Body	1.5 Milliohms 2.0 Milliohms 0.2 Milliohms N/A
4	Return Loss	MIL-PRF-39012, paragraph 3.14	-20 dB TYP to 3 GHz
5	RF Leakage	MIL-PRF-39012, paragraph 3.26	-55 dB to 4 GHz
6	RF Insertion Loss	MIL-PRF-39012, paragraph 3.27	0.3 dB Max to 3 GHz

5.2 MECHANICAL REQUIREMENTS

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
7	Material	MIL-PRF-39012, paragraph 3.3	See Sales Drawing
8	Finish	MIL-PRF-39012, paragraph 3.3.1	See Sales Drawing
9	Design	MIL-PRF-39012, paragraph 3.4	See Sales Drawing
10	Recommended Mating Torque		N/A
11	Force to Engage and Disengage	MIL-PRF-39012, paragraph 3.5.1 Axial Force Radial Force	3 lbs max 2.5 in-lbs max
12	Coupling Proof Torque	MIL-PRF-39012, paragraph 3.6	N/A

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5.2 MECHANICAL REQUIREMENTS (continued)

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
13	Mating Characteristics	MIL-PRF-39012, paragraph 3.7	N/A
14	Connector Durability	MIL-PRF-39012, paragraph 3.15	500 Cycles
15	Center Contact Retention	MIL-PRF-39012, paragraph 3.12 Axial Force Radial Torque	4.0 lbs N/A
16	Cable Retention	MIL-PRF-39012, paragraph 3.24 Axial Force	N/A
17	Hermetic Seal	MIL-PRF-39012, paragraph 3.9 Helium Tracer Gas	N/A

5.3 ENVIRONMENTAL REQUIREMENTS

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
18	Vibration	MIL-PRF-39012, paragraph 3.18 Per MIL-STD-202, Method 204	Test Condition B
19	Shock	MIL-PRF-39012, paragraph 3.19 Per MIL-STD-202, Method 213	Test Condition G
20	Shock (Thermal)	MIL-PRF-39012, paragraph 3.2 Per MIL-STD-202, Method 107	Test Condition B
21	Corrosion (Salt Spray)	MIL-PRF-39012, paragraph 3.13 Per MIL-STD-202, Method 101	Test Condition B
22	Moisture Resistance	MIL-PRF-39012, paragraph 3.21 Per MIL-STD-202, Method 106	Test Condition B
23	Corona Level	MIL-PRF-39012, paragraph 3.22	375 Vrms@70,000 Feet

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