



PRODUCT SPECIFICATION

1.0 SCOPE

This Product Specification covers TNC Connectors

2.0 PRODUCT DESCRIPTION

2.1 PRODUCT NAME

TNC

3.0 APPLICABLE DOCUMENTS AND SPECIFICATIONS

MIL-STD -348A

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

- 65°C TO + 95°C (Commercial)

4.3 FREQUENCY RATING

50 OHM: DC to 11 GHz Maximum

DC to 4 GHz Optimum

DC to 2 GHz Commercial

75 OHM: DC to 4 GHz Maximum

DC to 2 GHz Optimum

DC to 1 GHz Commercial

4.4 NOMINAL IMPEDANCE

50 or 75 Ohms (see sales drawing)

REVISION: A5	ECR/ECN INFORMATION: EC No: URF2012-0021 DATE: 1998/01/29	TITLE: PS-89675-1400 TNC (50 AND 75 OHM)	SHEET No. 1 of 3
DOCUMENT NUMBER: PS-89675-140	CREATED / REVISED BY: EDC/J. WIENER	CHECKED BY: DHG	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	RF High Potential Withstanding	MIL-PRF-39012, paragraph 3.23	1000 Vrms @ 5 MHz to 7.5 MHz
4	Contact Resistance	MIL-PRF-39012, paragraph 3.16 Center Contact Outer Contact	1.5 Milliohms MAX 1.0 Milliohms MAX
5	Voltage Standing Wave Ratio	MIL-PRF-39012, paragraph 3.14	1.22 Typ (Optimum Frequency of Operation)
6	RF Leakage	MIL-PRF-39012, paragraph 3.26	-60 dB Min DC to 3 GHz
7	RF Insertion Loss	MIL-PRF-39012, paragraph 3.27	.09X \sqrt{f} (GHz) dB

5.2 MECHANICAL REQUIREMENTS

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
8	Material	MIL-PRF-39012, paragraph 3.3	See Sales Drawing
9	Finish	MIL-PRF-39012, paragraph 3.3.1	See Sales Drawing
10	Design	MIL-PRF-39012, paragraph 3.4	See Sales Drawing
11	Recommended Mating Torque	MIL-PRF-39012	4-6 In-lbs (.49-.69 N-m)
12	Force to Engage	Axial Force	N/A
13	Force to Disengage	Axial Force	N/A
14	Coupling Retention	Axial Force	100 lbs (444.82 N)
15	Coupling Proof Torque	MIL-PRF-39012, paragraph 3.6	15 in-lb (1.69 N-m)

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5.2 MECHANICAL REQUIREMENTS (continued)

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
16	Mating Characteristics	MIL-PRF-39012, paragraph 3.7	Fig. 313-1 and 313-2
17	Connector Durability	MIL-PRF-39012, paragraph 3.15	500 Cycles
18	Center Contact Retention	MIL-PRF-39012, paragraph 3.12 Axial Force	6 lbs (Captivated Contacts)
19	Hermetic Seal	MIL-PRF-39012, paragraph 3.9 Helium Tracer Gas	N/A

5.3 ENVIRONMENTAL REQUIREMENTS

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
20	Vibration	MIL-PRF-39012, paragraph 3.18 Per MIL-STD-202, Method 204	Test Condition B
21	Shock	MIL-PRF-39012, paragraph 3.19 Per MIL-STD-202, Method 213	Test Condition I
22	Shock (Thermal)	MIL-PRF-39012, paragraph 3.2 Per MIL-STD-202, Method 107	Test Condition B (85°C)
23	Corrosion (Salt Spray)	MIL-PRF-39012, paragraph 3.13 Per MIL-STD-202, Method 101	Test Condition B
24	Moisture Resistance	MIL-PRF-39012, paragraph 3.21 Per MIL-STD-202, Method 106	DWV 1500 Vrms (after drying)

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