



# PRODUCT SPECIFICATION

## 1.0 SCOPE

This Product Specification covers Type N connectors (Plug and Jack, 50 and 75 Ohm). In the event of a discrepancy between this product specification and a specific sales drawing the sales drawing always takes precedence.

## 2.0 PRODUCT DESCRIPTION

### 2.1 PRODUCT NAME

Type N

## 3.0 APPLICABLE DOCUMENTS AND SPECIFICATIONS

3.1 N/A

## 4.0 RATINGS

### 4.1 VOLTAGE

1000 Vrms

### 4.2 TEMPERATURE

Rating: - 55°C TO + 165°C

### 4.3 FREQUENCY RATING

DC to 11 GHz (50 Ohm)

DC to 6 GHz (75 Ohm)

### 4.4 NOMINAL IMPEDANCE

50 or 75 Ohms per sales drawing

REVISION: <b>A</b>	ECR/ECN INFORMATION: EC No: <b>URF2009-0672</b> DATE: <b>2009 / 05 / 12</b>	TITLE: <b>N PLUG, JACK 50 AND 75 OHM</b>	SHEET No. <b>1 of 3</b>
DOCUMENT NUMBER: <b>PS-89675-322</b>	CREATED / REVISED BY: <b>JDW</b>	CHECKED BY: <b>SSS</b>	APPROVED BY: <b>JDW</b>



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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 Min.
2	Dielectric Withstanding Voltage	MIL-PRF-39012, paragraph 3.17	1500 Vrms
3	RF High Potential Withstanding	MIL-PRF-39012, paragraph 3.23	1500 Vrms @ 5 MHz
4	Contact Resistance	MIL-PRF-39012, paragraph 3.16 Center Contact Outer Contact	1.50 Milliohms Max 0.20 Milliohms Max
5	Voltage Standing Wave Ratio	MIL-PRF-39012, paragraph 3.14	1.15 TYP
6	RF Leakage	MIL-PRF-39012, paragraph 3.26	> 128 dB up to 1 GHz
7	RF Insertion Loss	MIL-PRF-39012, paragraph 3.27	< .05 + .04 X $\sqrt{f}$ (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		6 in-lbs Maximum
12	Force to Engage	MIL-PRF-39012, paragraph 3.5, Axial Force	N/A
13	Force to Disengage	MIL-PRF-39012, paragraph 3.5, Axial Force	N/A
14	Coupling Proof Torque	MIL-PRF-39012, paragraph 3.6	15 in-lbs

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## 5.2 MECHANICAL REQUIREMENTS (continued)

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
15	<b>Coupling Nut Retention Force</b>	MIL-PRF-39012, paragraph 3.25	100 lbs
16	<b>Mating Characteristics</b>	MIL-PRF-39012, paragraph 3.7 Insertion Force Withdrawal Force	2.0 lbs Max 2.0 oz Min
17	<b>Connector Durability</b>	MIL-PRF-39012, paragraph 3.15	500 Cycles Min
18	<b>Center Contact Retention</b>	MIL-PRF-39012, paragraph 3.12 Axial Force Radial Torque	6 lbs Min N/A

## 5.3 ENVIRONMENTAL REQUIREMENTS

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

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