

N SERIES Coaxial Connectors

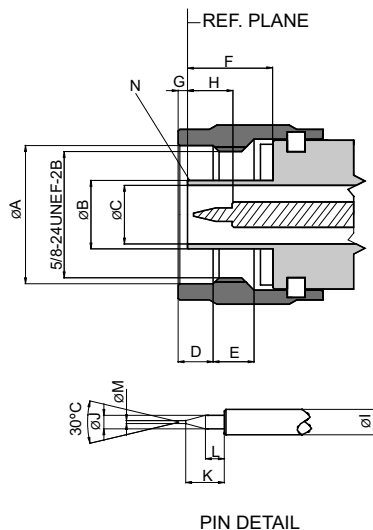
FEATURES

The type N coaxial connector continues to maintain its popularity for microwave applications. This standard size coaxial connector has experienced improved design over the years. Designed for use in all systems where very good R.F. and mechanical performance is critical whether it be at low or high frequencies, particularly used on panels leading from the miniature types on the inside of the equipment.

N connectors are available with 50 Ω or 75 Ω impedance. The useful frequency range extends to 11GHz, depending on the connector and cable type. The screw type coupling mechanism provides a sturdy and reliable connection. Inner conductors of 75 Ω have a smaller diameter than those of 50 Ω . Therefore 50 Ω and 75 Ω connectors should not be mated with each other.

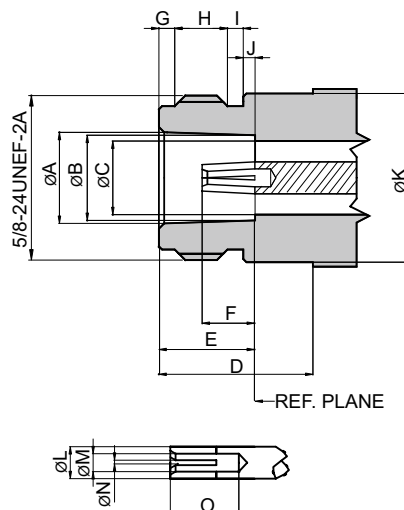
50 Ω INTERFACE MATING DIMENSIONS

PLUG:



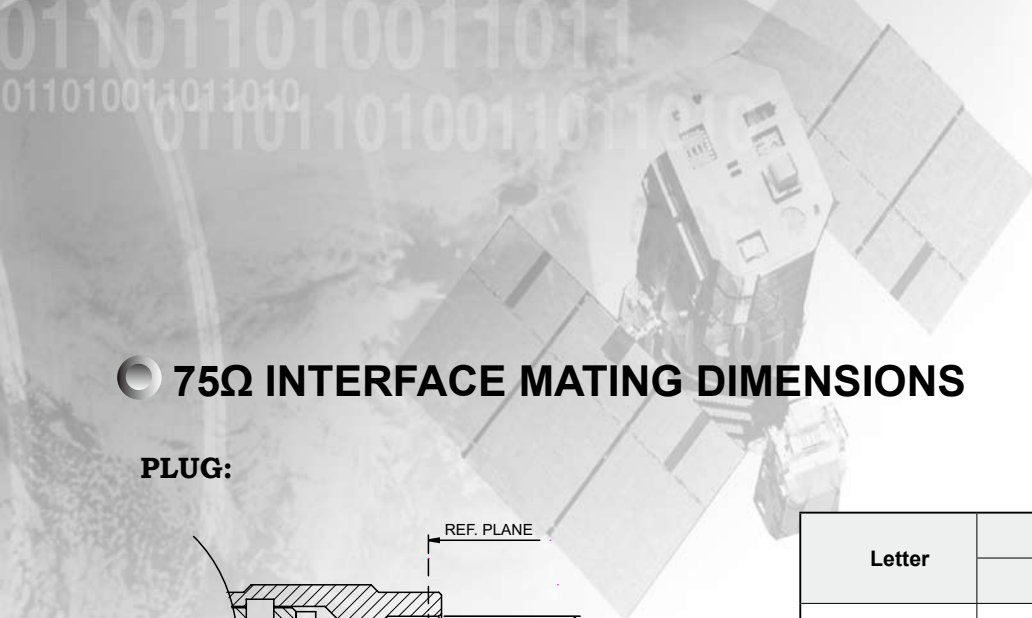
Letter	Millimeters(Inch)	
	Minimum	Maximum
A	16.00(.630)	—
B	7.98(.3140)	8.04(.3165)
C	6.99(.2753)	7.01(.2759)
D	4.01(.158)	4.27(.168)
E	4.50(.177)	5.00(.197)
F	9.19(.362)	9.45(.372)
G	0.28(.011)	1.30(.051)
H	5.28(.208)	5.36(.211)
I	3.03(.1194)	3.05(.1200)
J	1.64(.0644)	1.67(.0658)
K	4.52(.178)	
L	1.78(.070)	2.03(.080)
M	0.25(.010)	0.76(.030)
N	0.13(.005)	0.20(.008)

JACK:



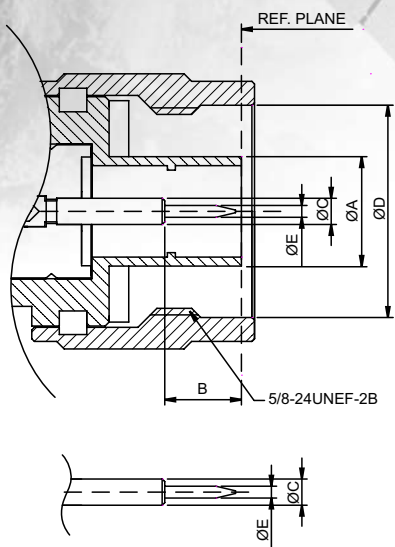
Letter	Millimeters(Inch)	
	Minimum	Maximum
A	8.53(.336)	8.74(.344)
B	8.05(.317)	8.10(.319)
C	6.99(.2753)	7.01(.2759)
D	11.23(.442)	—
E	9.07(.357)	9.17(.361)
F	5.18(.204)	5.26(.207)
G	1.19(.047)	1.96(.077)
H	4.57(.180)	5.59(.220)
I	1.02(.040)	2.03(.080)
J	0.51(.020)	1.02(.040)
K	—	15.93(.627)
L	3.03(.1194)	3.05(.1200)
M	1.8(.0709)	1.86(.0731)
N	0.24(.0095)	0.32(.0125)
O	9.4(.370)	—

Note: N connectors meet the interface requirements of MIL-STD-348A



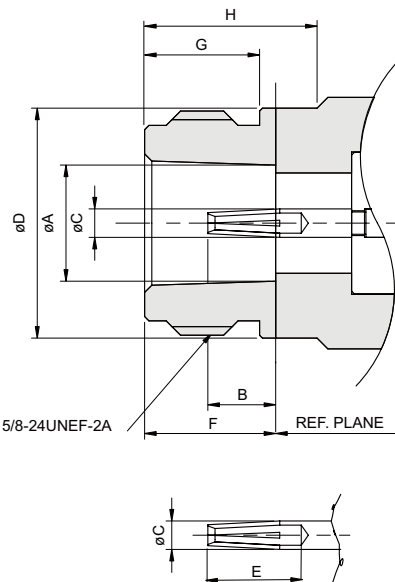
75Ω INTERFACE MATING DIMENSIONS

PLUG:



Letter	Millimeters(Inch)	
	Minimum	Maximum
A	–	8.38(.330)
B	5.33(.210)	5.84(.230)
C	–	2.00(.079)
D	16.00(.630)	–
E	1.00(.039)	1.05(.041)

JACK:



Letter	Millimeters(Inch)	
	Minimum	Maximum
A	8.03(.316)	8.13(.320)
B	4.75(.187)	5.26(.207)
C	–	2.00(.079)
D	–	15.93(.627)
E	5.33(.210)	–
F	9.04(.356)	9.19(.362)
G	6.76(.266)	–
H	10.72(.422)	–

TECHNICAL DATA

Electrical Data	50Ω N	75Ω N
Dielectric Withstanding Voltage (at sea level, in V rms, 50Hz)	1500	
Working Voltage (at sea level, in V rms, 50Hz)	≤1000	
Impedance	50 Ω	75Ω
Frequency Range	DC up to 11 GHz	DC up to 1.5 GHz
Insulation Resistance	≥5000MΩ	
Contact Resistance Inner Conductor	≤1mΩ	
Contact Resistance Outer Conductor	≤1mΩ	

Mechanical Data (50Ω & 75Ω)	
Recommended Coupling Nut Torque	6 to 10 in.-lbs
Coupling Proof Torque	15 in.-lbs
Coupling Nut Retention Force	≥101.2 lbs
Contact Captivation	≥6.3 lbs
Durability(matings)	≥500

Environmental Data (50Ω & 75Ω)	
Temperature Range	-65°C...+165°C
Thermal Shock	MIL-STD-202, Method 107, Condition B
Moisture Resistance	MIL-STD-202, Method 106
Corrosion	MIL-STD-202, Method 101, Condition B