

N-type Connectors

❖ N Coaxial Connectors - N Series - RF Coaxial Connectors



ISOTEC's N connectors are available in both 75 ohm and 50 ohm impedances.

The highest possible frequency is 18GHz according to the connector type.

Screw type coupling mechanisms guarantee firm and reliable connections.

In addition, clamp, crimp and semi-rigid types are available.

Standards

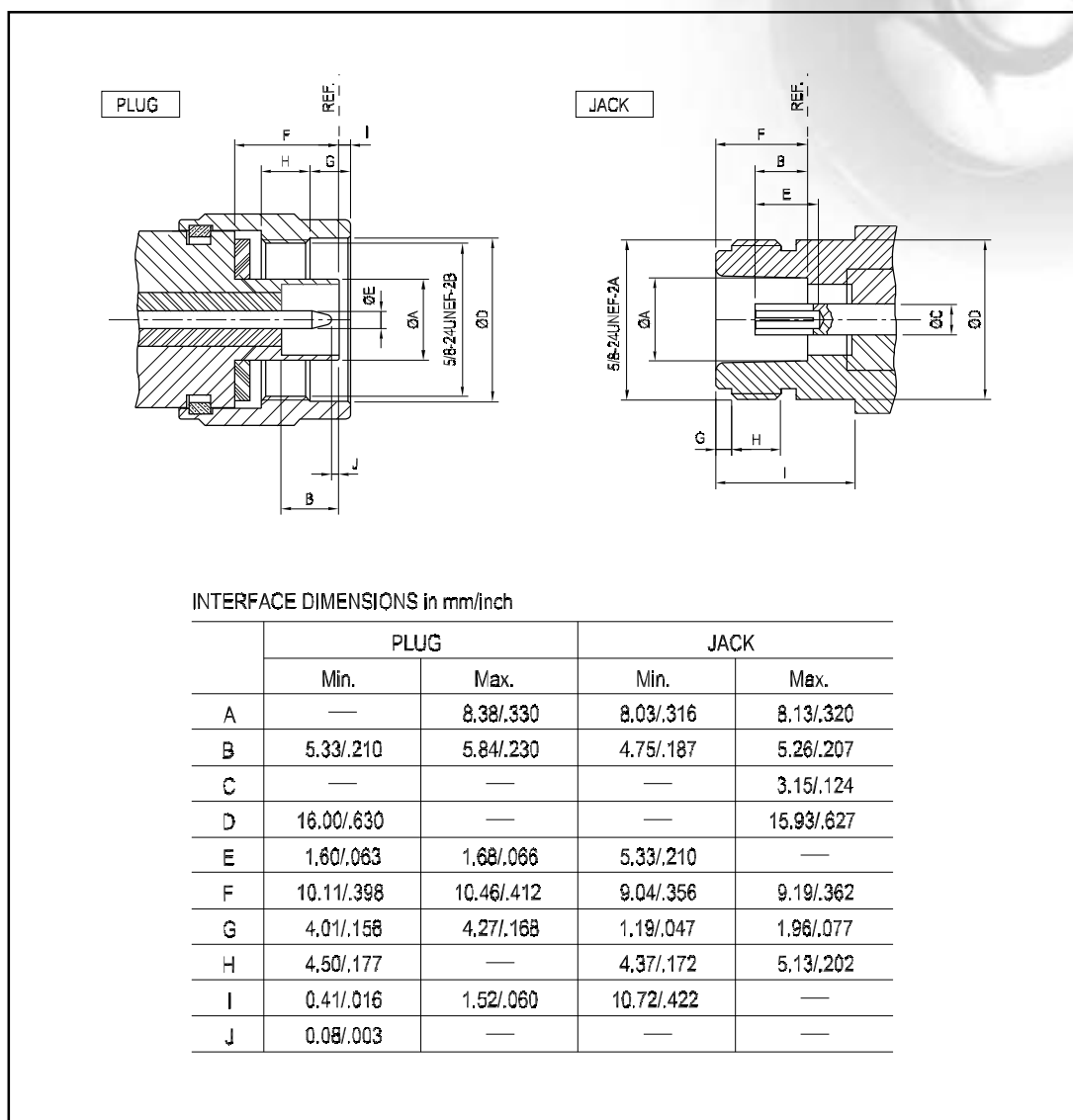
▷ MIL-C-39012

N-type Connectors

❖ Characteristics

Requirement	MIL-C-39012 Paragraph	Specification
ELECTRICAL DATA		
Impedance		50Ω , 75Ω
Frequency range		DC 11GHz, DC 1.5GHz
Contact current		DC 3.5A max.
Working voltage		1000V rms
Contact resistance	3-16	Center contacts : 2.0 mΩ Outer contacts : 0.2 mΩ
Insulation resistance	3-11	5000MΩ min.
Insertion loss	3-29	<0.15dB at 9GHz
V.S.W.R	3-15	≤1.5
RF leakage	3-28	-90dBm min. from 2~3GHz
MECHANICAL DATA		
Coupling nut torque		20Ncm-170Ncm
Coupling nut retention force		450 N
Life	3-15	500 matings.
Contact captivation	3-14	≥ 27N
ENVIRONMENTAL DATA		
Temperature range		: -65°C~+125°C
Corrosion resistance	3-14	MIL-STD-202, Method 101, Condition B.
Moisture resistance	3-23	MIL-STD-202, Method 106.
Thermal shock	3-22	MIL-STD-202, Method 107, Condition B.
Vibration	3-19	MIL-STD-202, Method 204, Condition B.
Shock	3-20	MIL-STD-202, Method 213, Condition I.
MATERIALS		
Bodies and Male contacts		Brass
Female contacts		Beryllium copper
Insulators		PTFE Teflon
Gasket		Silicone Rubber
PLATINGS		
Bodies		Nickel plated
Center contacts		Gold plated

❖ Interface Dimensions



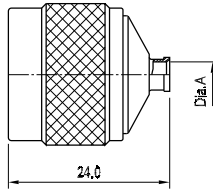
Applicable standards

▷ MIL-C-39012

N-type Connectors

❖ Semi-Rigid Cables

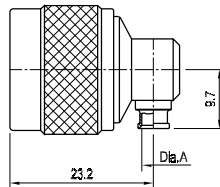
Straight Plug



for cable solder

Part number	1N-101	1N-102
Cable group	U85	U141
Dim. A	2.25(.089)	3.65(.144)

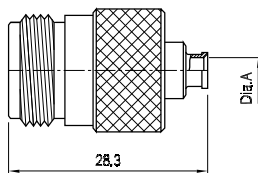
Right angle Plug



for cable solder

Part number	1N-301	1N-302
Cable group	U85	U141
Dim. A	2.25(.089)	3.65(.144)

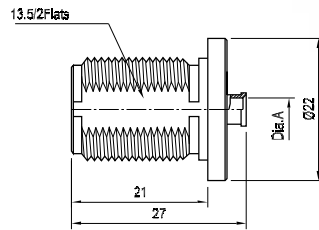
Straight Jack



for cable solder

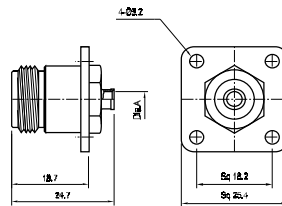
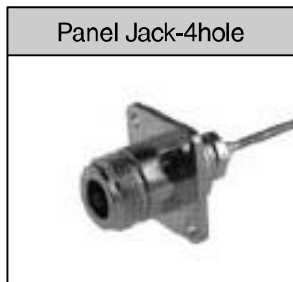
Part number	1N-201	1N-202
Cable group	U85	U141
Dim. A	2.25(.089)	3.65(.144)

❖ Semi-Rigid & Flexible Cables



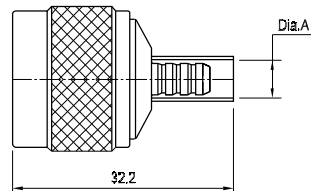
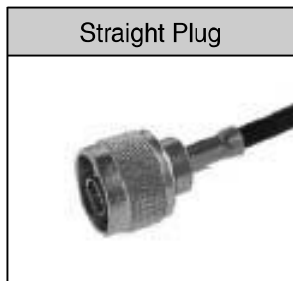
for cable solder

Part number	1N-401	1N-402
Cable group	U85	U141
Dim. A	2.25(.089)	3.65(.144)



for cable solder

Part number	1N-403	1N-404
Cable group	U85	U141
Dim. A	2.25(.089)	3.65(.144)

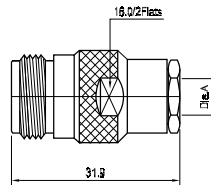
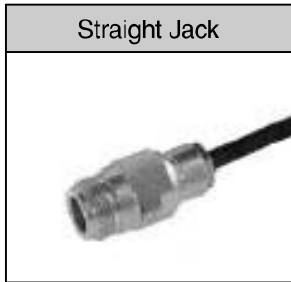


for cable crimp

Part number	1N-111	1N-112
Cable group	316	400
Dim. A	3.2(.089)	5.5(.144)

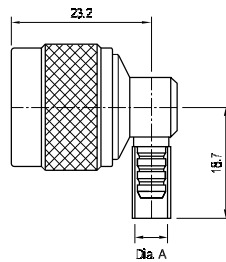
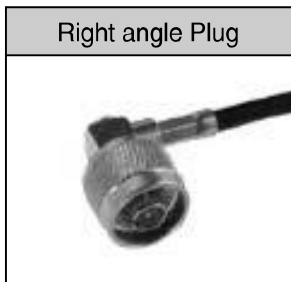
N-type Connectors

❖ Flexible Cables



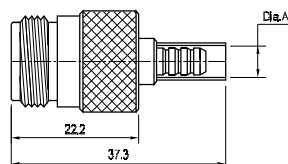
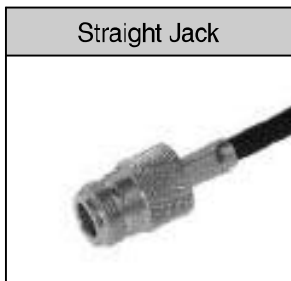
for cable clamp

Part number	1N-222	
Cable group	400	
Dim. A	5.5(.144)	



for cable crimp

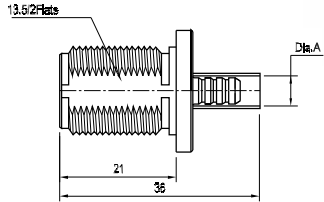
Part number	1N-311	1N-312
Cable group	316	400
Dim. A	3.2(.089)	5.5(.144)



for cable crimp

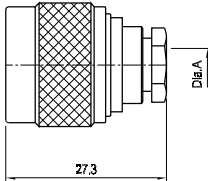
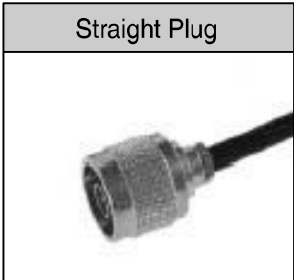
Part number	1N-211	1N-212
Cable group	316	400
Dim. A	3.2(.089)	5.5(.144)

❖ Flexible Cables



for cable crimp

Part number	1N-311	1N-312
Cable group	316	400
Dim. A	3.2(.089)	5.5(.144)



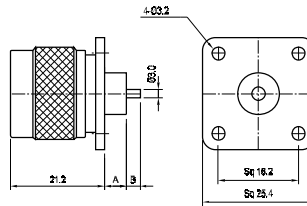
for cable clamp

Part number	1N-122
Cable group	400
Dim. A	5.5(.144)

N-type Connectors

❖ Receptacles- 50Ω

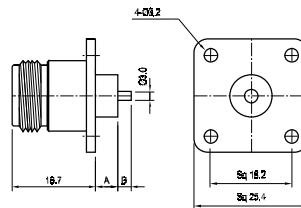
Panel Receptacle Plug-4hole



Coaxial End

Part number	1N-511
Cable group	Receptacle
Dim. A	Order

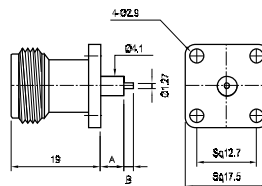
Panel Receptacle Jack-4hole



Coaxial End

Part number	1N-512
Cable group	Receptacle
Dim. A	Order

Panel Receptacle Jack-4hole

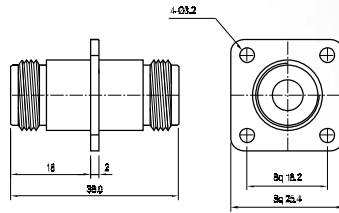


Coaxial End

Part number	1N-513
Cable group	Receptacle
Dim. A	Order

❖ Receptacles- 50Ω

Panel Adaptor Jack to Jack

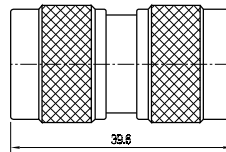


Part number	1N-811
Cable group	Adaptors

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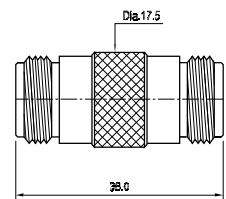
❖ Adaptors -50Ω

Plug to Plug



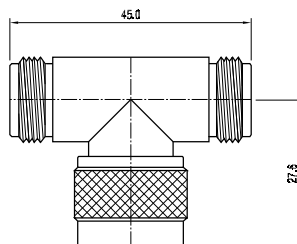
Part number	1N-801
Cable group	Adaptors

Jack to Jack



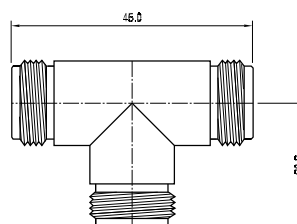
Part number	1N-802
Cable group	Adaptors

T-Adaptor 1 Plug, 2 Jacks



Part number	1N-881
Cable group	Adaptors

T-Adaptor 3 Jacks



Part number	1N-882
Cable group	Adaptors