

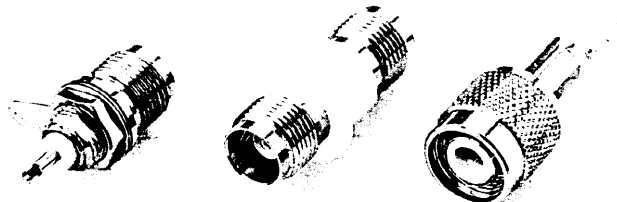
TNC Connectors

Product Facts

- Lightweight miniature connector operating between DC to 11 GHz
- Threaded couplings to ensure positive engagement under vibration and shock application
- Wide variety of mounting styles and cable options
- Crimp and solder clamp termination options allow design flexibility
- Available in nickel/gold and silver/silver plating options for specific applications

The Greenpar TNC RF connector family 7/16-28 threaded couplings, provides low noise levels and optimum stability, and can withstand the shock and vibration often present in hostile environments.

Available in 50 & 75 Ohm versions, these connectors feature numerous styles including cable plugs and jacks and adaptor connectors. These connectors accept a wide range of coaxial cables and are intermateable with industry standard connectors designed to MIL-C-39012 specifications.



Related Product Data

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- Method of Termination - Page 5
- Theory and Application - Page 6
- Greenpar® Connector Selection Guide - Page 7
- TNC Connector Specification - Page 42
- Tooling - Page 43-49
- Cable Preparation Details - Pages 112-117
- Cable Assembly Instructions - Pages 118-123
- Packaging** - All connectors are packaged individually. Also available in tray & bulk. See Part N° Selection Tables

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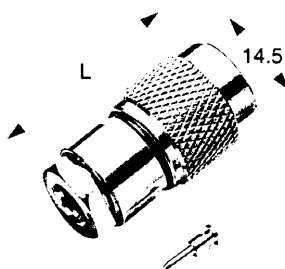
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TNC Connector Specifications

TNC 50 & 75 Ohm

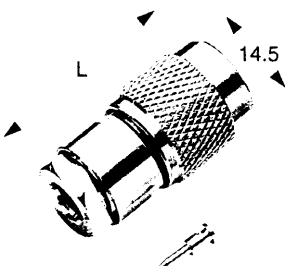
Characteristics	Hex Crimp 50 Ohm	Hex Crimp 75 Ohm	Solder Clamp 50 Ohm	Solder Clamp 75 Ohm
Electrical				
Impedance, Nom (ohms)	50	75	50	75
Working Voltage (Volts RMS)	500 Max. at Sea Level			
Contact Resistance (Milliohms)	Centre 1.5 Max Outer 1.0 Max			
Initial Insulation Resistance (Megohms)	5000 Min			
Dielectric Withstand Voltage (VAC)	1500 RMS Max			
RF Insertion Loss Max (dB)	0.2 Max. at 3 GHz			
Frequency Range (GHz)	0 to 11.0	0 to 2.0	0 to 11.0	0 to 2.0
VSWR in Frequency Range @ 4 GHz	Straight 1.30 Max (50Ω) Right Angle 1.35 Max (50Ω)			
Mechanical				
Mating Style	7/16" - 28 Threaded Coupling			
Coupling Nut Retention Min. (N)	445 Min			
Cable Retention (N)	RG158/141/142/223-170N RG59/62A/210-170N RG174/188/316-85N			
Durability (Cycles)	500 Matings			
Environmental				
Temperature Range Operating (°C)	-65°C to 165°C			
Vibration	MIL-STD-202 Method 204 Test Cond. B			
Salt Spray	MIL-STD-202 Method 101 Test Cond. B			
Thermal Shock	MIL-STD-202 Method 107 Test Cond. B			
Material				
Connector Body	Brass			
Connector Body Plating	Nickel or Silver			
Centre Contact Male	Brass			
Centre Contact Male Plating	Gold or Silver			
Centre Contact Female	Brass, Phosphor Bronze or Beryllium Copper			
Centre Contact Female Plating	Gold or Silver			
Insulation	Teflon			
Gasket	Silicon Rubber - White			
Crimp Ferrule	Annealed Copper			
Crimp Ferrule Plating	As Per Body Plating			

TNC Straight Plugs Solder 50 & 75 Ohm



TNC Straight Plugs Solder 50 Ohm

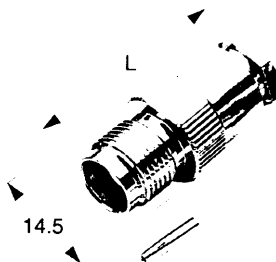
Connector Cable Range	Termination Type	Centre Contact Plating	Body Plating	Dielectric	Part No.	Dim. L	Hand Tool Part No.	Interchangeable Die set	Assembly Instruction
RG174A/U, 188A/U, 316/U, URM95	Solder/Clamp	Silver	Silver	Teflon	1-1478023-0	27.6	-	-	411-3253
	Solder/Clamp	Gold	Nickel	Teflon	1-1478024-0	27.6	-	-	
RG58C/U, 141A/U, URM43, 76 BELDEN 9907	Solder/Clamp	Silver	Silver	Teflon	1-1337466-0	27.6	-	-	411-3252
	Solder/Clamp	Gold	Nickel	Teflon	1-1337612-0	27.6	-	-	
PSF 1/4M, RG8A/U, S13/U, URM67	Solder/Clamp	Silver	Silver	Teflon	cs0	40.8	-	-	-
	Solder/Clamp	Gold	Nickel	Teflon	cs0	40.8	-	-	
RG9B/U, 214/U, URM91	Solder/Clamp	Silver	Silver	Teflon	cs0	40.8	-	-	-
	Solder/Clamp	Gold	Nickel	Teflon	cs0	40.8	-	-	



TNC Straight Plugs Solder 75 Ohm

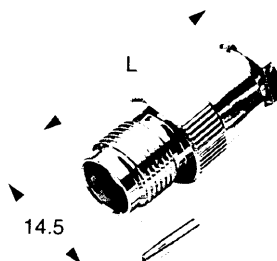
Connector Cable Range	Termination Type	Centre Contact Plating	Body Plating	Dielectric	Part No.	Dim. L	Hand Tool Part No.	Interchangeable Die set	Assembly Instruction
RG174A/U, 188A/U, 316/U, URM95	Solder/Clamp	Silver	Silver	Teflon	cs0	27.4	-	-	-
	Solder/Clamp	Gold	Nickel	Teflon	cs0	27.4	-	-	
RG58C/U, 141A/U, URM43, 76 BELDEN 9907	Solder/Clamp	Silver	Silver	Teflon	cs0	27.4	-	-	-
	Solder/Clamp	Gold	Nickel	Teflon	cs0	27.4	-	-	

TNC Straight Jack Solder 50 & 75 Ohm



TNC Straight Jack Solder 50 Ohm

Connector Cable Range	Termination Type	Centre Contact Plating	Body Plating	Dielectric	Part No.	Dim. L	Hand Tool Part No.	Interchangeable Die set	Assembly Instruction
RG174A/U, 188A/U, 316/U, URM95	Solder/Clamp	Silver	Silver	Teflon	1-1478017-0	29.0	-	-	411-3272
	Solder/Clamp	Gold	Nickel	Teflon	1-1478018-0	29.0	-	-	
RG58C/U, 141A/U, URM43, 76, BELDEN	Solder/Clamp	Silver	Silver	Teflon	1-1337467-0	29.0	-	-	411-3252
	Solder/Clamp	Gold	Nickel	Teflon	1-1337617-0	29.0	-	-	



TNC Straight Jack Solder 75 Ohm

Connector Cable Range	Termination Type	Centre Contact Plating	Body Plating	Dielectric	Part No.	Dim. L	Hand Tool Part No.	Interchangeable Die set	Assembly Instruction
RG179B/U, 187A/U, URM111	Solder/Clamp	Silver	Silver	Teflon	cso	28.6	-	-	-
	Solder/Clamp	Gold	Nickel	Teflon	cso	28.6	-	-	
RG59B/U, 62A/U, 140/U, 210/U, URM90	Solder/Clamp	Silver	Silver	Teflon	1-1478205-0	28.6	-	-	411-3252
	Solder/Clamp	Gold	Nickel	Teflon	cso	28.6	-	-	

TNC Sockets 50 & 75 Ohm

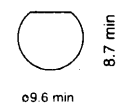
TNC Bulkhead Sockets 50 Ohm

Centre Contact Plating	Body Plating	Dielectric	Dimensions		Part Number		Maximum Panel Thickness
			L	W	Without Solder Tag	With Solder Tag	
Silver	Silver	Teflon	27.0	12.5	CSO	1-1337469-0	2.5
Gold	Nickel	Teflon	27.0	12.5	CSO	1-1337468-0	2.5
Silver	Nickel	Teflon	27.0	12.5	CSO	CSO	2.5



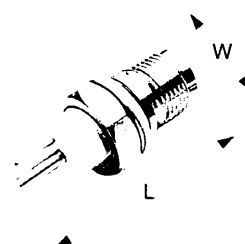
TNC Bulkhead Sockets 75 Ohm

Centre Contact Plating	Body Plating	Dielectric	Dimensions		Part Number		Maximum Panel Thickness
			L	W	Without Solder Tag	With Solder Tag	
Silver	Silver	Teflon	27.0	12.5	CSO	1-1337469-1	2.5
Gold	Nickel	Teflon	27.0	12.5	CSO	CSO	2.5
Silver	Nickel	Teflon	27.0	12.5	CSO	CSO	2.5



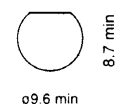
TNC Insulated Bulkhead Sockets 50 Ohm

Centre Contact Plating	Body Plating	Dielectric	Dimensions		Part Number	Maximum Panel Thickness
			L	W		
Gold	Nickel	ABS	29.8	12.6	CSO	3.2
Silver	Nickel	ABS	29.8	12.6	CSO	3.2

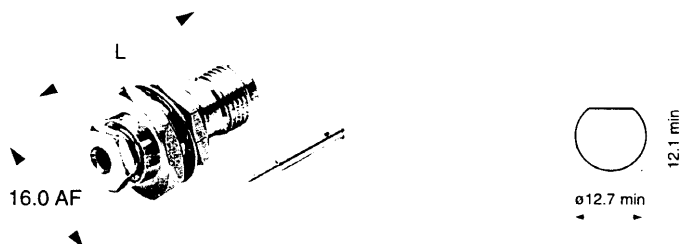


TNC Insulated Bulkhead Sockets 75 Ohm

Centre Contact Plating	Body Plating	Dielectric	Dimensions		Part Number	Maximum Panel Thickness
			L	W		
Gold	Nickel	ABS	29.8	12.6	CSO	3.2
Silver	Nickel	ABS	29.8	12.6	CSO	3.2

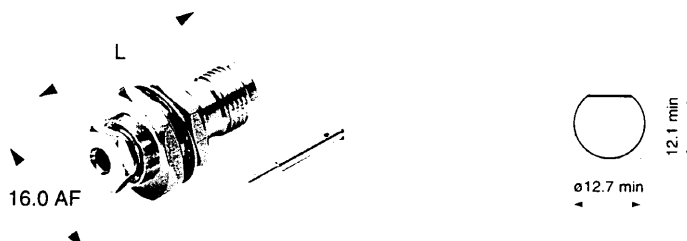


TNC Bulkhead Jack Solder 50 & 75 Ohm



TNC Bulkhead Jack Solder 50 Ohm

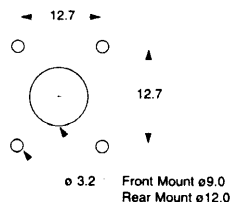
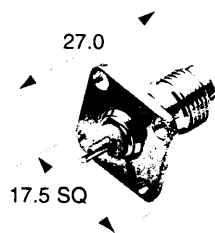
Connector Cable Range	Termination Type	Centre Contact Plating	Body Plating	Dielectric	Part No.	Dim. L	Hand Tool Part No.	Interchangeable Die set	Assembly Instruction
RG174A/U, 188A/U, 316/U, URM95	Solder/Clamp	Silver	Silver	Teflon	1-1478019-0	28.7	-	-	411-3272
	Solder/Clamp	Gold	Nickel	Teflon	1-1478020-0	28.7	-	-	
RG58C/U, 141A/U, URM43, 76, BELDEN 9907	Solder/Clamp	Silver	Silver	Teflon	1-1478021-0	28.7	-	-	411-3252
	Solder/Clamp	Gold	Nickel	Teflon	1-1478022-0	28.7	-	-	



TNC Bulkhead Jack Solder 75 Ohm

Connector Cable Range	Termination Type	Centre Contact Plating	Body Plating	Dielectric	Part No.	Dim. L	Hand Tool Part No.	Interchangeable Die set	Assembly Instruction
RG179B/U, 187A/U, URM111	Solder/Clamp	Silver	Silver	Teflon	cso	28.7	-	-	-
	Solder/Clamp	Gold	Nickel	Teflon	cso	28.7	-	-	
RG59B/U, 62A/U, 140/U, 210/U, URM90	Solder/Clamp	Silver	Silver	Teflon	1-1478206-0	28.7	-	-	411-3252
	Solder/Clamp	Gold	Nickel	Teflon	cso	28.7	-	-	

TNC Sockets 50 & 75 Ohm

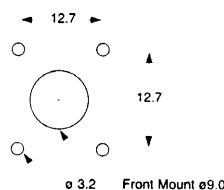
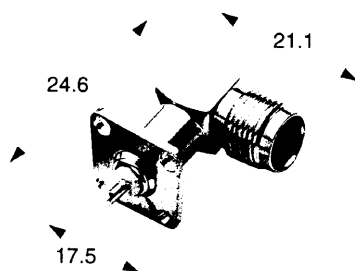


TNC Panel Sockets 50 Ohm

Centre Contact Plating	Body Plating	Dielectric	Part Number
Silver	Silver	Teflon	1-1337472-0
Gold	Nickel	Teflon	CSO

TNC Panel Sockets 75 Ohm

Centre Contact Plating	Body Plating	Dielectric	Part Number
Silver	Silver	Teflon	CSO
Gold	Nickel	Teflon	CSO



TNC Elbow Panel Sockets 50 Ohm

Centre Contact Plating	Body Plating	Dielectric	Part Number
Silver	Silver	Teflon	CSO
Gold	Nickel	Teflon	CSO

TNC Elbow Panel Sockets 75 Ohm

Centre Contact Plating	Body Plating	Dielectric	Part Number
Silver	Silver	Teflon	CSO
Gold	Nickel	Teflon	CSO