

Introduction

Product Facts

- **Designed and Manufactured to meet MIL-C-39012 Requirements**
- **Wide Range of Connectors available in 50 and 75 Ohm Impedance**
- **The range offers connectors to suit from DC-11 GHz Operation**
- **Mounting style of PCB, Panel and Bulkhead available in many Ranges**
- **Available in Multiple Plating Options of Nickel/Gold, Silver/Silver and Gold/Gold**
- **Cable terminations can be Crimp, Solder Clamp or Pressure Sleeve Methods**
- **Full Range of Connector Crimp Dies and Hand Tools is available**



This catalog will help you select the appropriate Greenpar® RF connector products to meet your requirements.

To this end, we have included a comprehensive range of Greenpar coaxial products in this one volume. To aid you in the selection process itself, we have included Connector Selection and Theory and Application sections.

Greenpar RF connectors are furnished in a wide variety of styles and configurations to suit almost any design requirement. For cable connectors, Greenpar offers a choice of tooling to meet your exact production needs.

This combination of Greenpar connectors and matching tooling guarantees trouble free terminations at the lowest applied cost.

The Tyco Design Approach

Superior RF connector performance is achieved when full consideration is given to all design factors. With coaxial cable connectors, Tyco specialises in compression crimping to provide predictable, repeatable performance at the lowest applied cost. For more demanding RF and field serviceable applications, solder clamp designs are also included in the product ranges.

RF connectors are designed and manufactured to ensure compatibility with connectors manufactured to the MIL-C-39012 specifications. These commercial products offer equivalent performance at a substantial cost savings.

For complete product information, please order Catalog 1308830

Connector Guide

Theory and Application

Flexible (braided) Coaxial Cable is by far the most common type of closed transmission line due to its flexibility. It is a coaxial cable, meaning that both the signal and the ground conductors are on the same center axis. The outer conductor is generally made from fine braided wire; hence the name “braided coaxial cable”. This type of cable is used in practically all applications requiring complete shielding of the center conductor. The effectiveness of the shielding depends upon the weave of the braid and the number of layers. Tyco manufactures connectors for many popular RG types ranging from RG178B/U to RG214/U.

Connector Types



BNC connectors offer easy connect and disconnect using bayonet couplings and overlapping dielectrics. They are most useful for frequently coupled and uncoupled RF connections with frequencies up to 4 GHz for 50 Ω connectors and 2 GHz for 75 Ω connectors. BNC connectors find applications in cabled networks, instrumentation, and computer peripheral interconnections in 50 Ω , and broadcast, video and CCTV systems in 75 Ω .



TNC connectors utilise the same interface characteristics as the BNC connector but have a threaded coupling nut for extra stability. The tighter fit provided by this screw-on connection improves interface reliability allowing the TNC connectors to operate up to 11 GHz and in higher vibration environments.



N connectors have threaded coupling nuts and have an air dielectric interface, are low cost and are available in 50 Ω impedance. These connectors operate to 11 GHz and are commonly used in cable based local area networks (LANs), medium power transmitters and test equipment.



SMB connectors feature a snap-on coupling for fast connection. A self centring outer spring and overlapping dielectric allows easy snap-on and excellent performance even in moderate vibration environments. Typical applications for SMB connectors are inter-board connections of RF or digital signals.

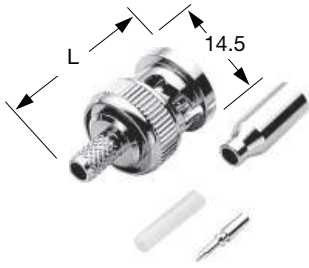


SMC connectors are similar to SMB versions, but use a screw-on connection for increased bandwidth (up to 10 GHz) and greater mechanical stability. These products are used primarily in high vibration environments.

Connector Selection Guide

Product	Nominal Impedance (Ohms)	Maximum Frequency (GHz)	Temperature Rating	Coupling Mechanism	Maximum Peak Voltage	Durability Cycles	Connector Body Finish
BNC Hex Crimp 50 Ω	50	4.0	-65 °C to +165 °C	Bayonet	500	500	Nickel or Silver
BNC Solder Crimp 50 Ω	50	4.0	-65 °C to +165 °C	Bayonet	500	500	Nickel or Silver
BNC Solder Clamp 50 Ω	50	4.0	-65 °C to +165 °C	Bayonet	500	500	Nickel or Silver
BNC Hex Crimp 75 Ω	75	2.0	-65 °C to +165 °C	Bayonet	500	500	Nickel or Silver
BNC Solder Crimp 75 Ω	75	2.0	-65 °C to +165 °C	Bayonet	500	500	Nickel or Silver
BNC Solder Clamp 75 Ω	75	2.0	-65 °C to +165 °C	Bayonet	500	500	Nickel or Silver
BNC Twist On	50	4.0	-65 °C to +165 °C	Bayonet	500	500	Nickel or Silver
BNC Twist On	75	2.0	-65 °C to +165 °C	Bayonet	500	500	Nickel or Silver
TNC Hex Crimp 50 Ω	50	11.0	-65 °C to +165 °C	Threaded	500	500	Nickel or Silver
TNC Solder Clamp 50 Ω	50	11.0	-65 °C to +165 °C	Threaded	500	500	Nickel or Silver
TNC Hex Crimp 75 Ω	75	2.0	-65 °C to +165 °C	Threaded	500	500	Nickel or Silver
TNC Solder Clamp 75 Ω	75	2.0	-65 °C to +165 °C	Threaded	500	500	Nickel or Silver
N Hex Crimp 50Ω	50	11.0	-65 °C to +165 °C	Threaded	500	500	Nickel or Silver
N Solder Clamp 50 Ω	50	11.0	-65 °C to +165 °C	Threaded	500	500	Nickel or Silver
SMB Hex Crimp 50 Ω	50	4.0	-65 °C to +165 °C	Snap On	250	500	Nickel or Gold
SMB Solder Crimp 50 Ω	50	4.0	-65 °C to +165 °C	Snap On	250	500	Nickel or Gold
SMB Solder Clamp 50 Ω	50	4.0	-65 °C to +165 °C	Snap On	250	500	Nickel or Gold
SMC Hex Crimp 50 Ω	50	10.0	-65 °C to +165 °C	Threaded	250	500	Nickel or Gold
SMC Solder Crimp 50 Ω	50	10.0	-65 °C to +165 °C	Threaded	250	500	Nickel or Gold
SMC Solder Clamp 50 Ω	50	10.0	-65 °C to +165 °C	Threaded	250	500	Nickel or Gold

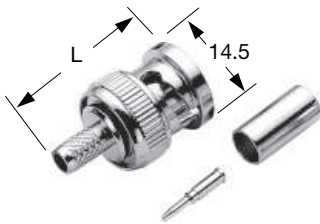
BNC Connectors



BNC Straight Plug Crimp, RG174, 50 Ohm

Center Contact Plating	Body Plating	Dimension L (mm)	Part Number	Package Quantity
Gold	Nickel	23.6	1-1337534-0	50
Silver	Silver	23.6	1-1337430-0	50

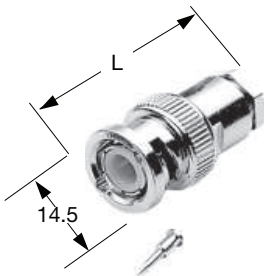
Tool: Hand Tool Frame, Part No. 9-1478240-0; Die Set: Part No. 9-1478245-0.



BNC Straight Plug Crimp, RG58, 50 Ohm

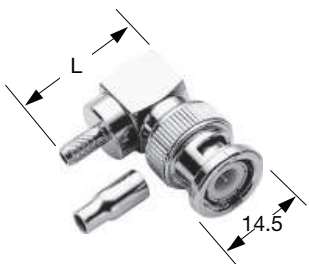
Center Contact Plating	Body Plating	Dimension L (mm)	Part Number	Package Quantity
Gold	Nickel	23.6	1-1337426-0	50
Silver	Silver	23.6	1-1337427-0	50

Tool: Hand Tool Frame, Part No. 9-1478240-0; Die Set: Part No. 9-1478245-0.



BNC Straight Plug Solder, RG58, 50 Ohm

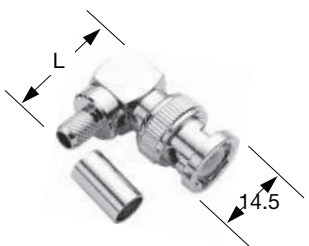
Center Contact Plating	Body Plating	Dimension L (mm)	Part Number	Package Quantity
Gold	Nickel	27.4	1-1337420-0	50
Silver	Silver	27.4	1-1337421-0	50



BNC Elbow Plug Crimp, RG174, 50 Ohm

Center Contact Plating	Body Plating	Dimension L (mm)	Part Number	Package Quantity
Gold	Nickel	29.0	1-1337546-0	50

Tool: Hand Tool Frame, Part No. 9-1478240-0; Die Set: Part No. 9-1478245-0.

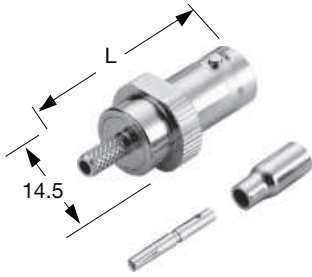


BNC Elbow Plug Crimp, RG58, 50 Ohm

Center Contact Plating	Body Plating	Dimension L (mm)	Part Number	Package Quantity
Gold	Nickel	29.0	1-1337544-0	50
Silver	Silver	22.5	1-1337437-0	50

Tool: Hand Tool Frame, Part No. 9-1478240-0; Die Set: Part No. 9-1478242-0.

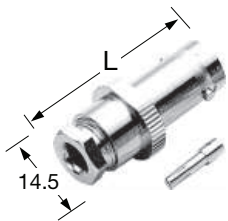
BNC Connectors (continued)



BNC Straight Jack Crimp, RG58, 50 Ohm

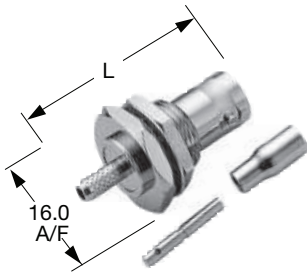
Center Contact Plating	Body Plating	Dimension L (mm)	Part Number	Package Quantity
Gold	Nickel	31.7	1-1337441-0	50
Silver	Silver	31.7	1-1337442-0	50

Tool: Hand Tool Frame, Part No. 9-1478240-0; Die Set: Part No. 9-1478242-0.



BNC Straight Jack Solder, RG58, 50 Ohm

Center Contact Plating	Body Plating	Dimension L (mm)	Part Number	Package Quantity
Gold	Nickel	28.6	1-1337536-0	50
Silver	Silver	28.6	1-1337423-0	50



BNC Bulkhead Jack Crimp, RG174, 50 Ohm

Center Contact Plating	Body Plating	Dimension L (mm)	Part Number	Package Quantity
Gold	Nickel	31.5	1-1337548-0	50

Tool: Hand Tool Frame, Part No. 9-1478240-0; Die Set: Part No. 9-1478245-0.

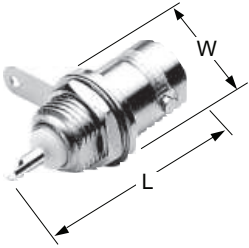


BNC Bulkhead Jack Crimp, RG58, 50 Ohm

Center Contact Plating	Body Plating	Dimension L (mm)	Part Number	Package Quantity
Gold	Nickel	31.5	1-1337433-0	50
Silver	Silver	31.5	1-1337434-0	50

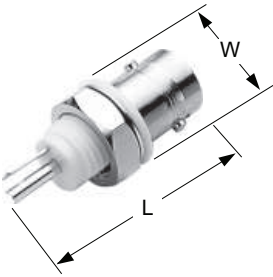
Tool: Hand Tool Frame, Part No. 9-1478240-0; Die Set: Part No. 9-1478242-0.

BNC Connectors (continued)



BNC Bulhead Socket, 50 Ohm

Center Contact Plating	Body Plating	Dimension L (mm)	Part Number	Package Quantity
Gold	Nickel	27.0	1-1337448-0	50
Silver	Silver	27.0	1-1337450-0	50



BNC Insulated Bulkhead Socket, 50 Ohm

Center Contact Plating	Body Plating	Dimension L (mm)	Part Number	Package Quantity
Gold	Nickel	29.8	1-1337452-0	50



BNC Through Termination, 50 Ohm

Center Contact Plating	Body Plating	Dimension L (mm)	Part Number	Package Quantity
Silver	Silver	57.8	1-1478207-0	50



BNC Through Termination, 75 Ohm

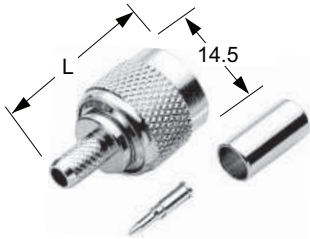
Center Contact Plating	Body Plating	Dimension L (mm)	Part Number	Package Quantity
Silver	Silver	57.8	1-1337492-0	50



BNC Plug Cap and Chain

Center Contact Plating	Body Plating	Dimension L (mm)	Part Number	Package Quantity
-	Nickel	-	1-1337524-0	50

TNC Connectors



TNC Straight Plug Crimp, RG174, 50 Ohm

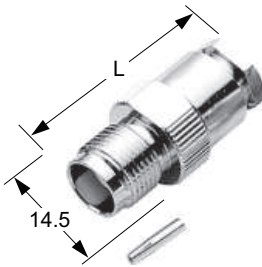
Center Contact Plating	Body Plating	Dimension L (mm)	Part Number	Package Quantity
Gold	Nickel	23.3	1-1337611-0	50

Tool: Hand Tool Frame, Part No. 9-1478240-0; Die Set: Part No. 9-1478245-0.



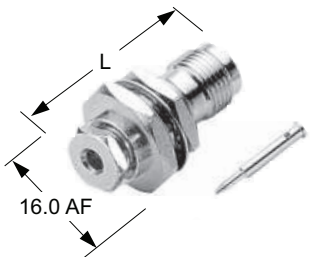
TNC Straight Plug Solder, RG58, 50 Ohm

Center Contact Plating	Body Plating	Dimension L (mm)	Part Number	Package Quantity
Gold	Nickel	27.6	1-1337612-0	50
Silver	Silver	27.6	1-1337466-0	50



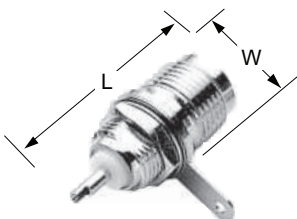
TNC Straight Jack Solder, RG58, 50 Ohm

Center Contact Plating	Body Plating	Dimension L (mm)	Part Number	Package Quantity
Silver	Silver	29.0	1-1337467-0	50



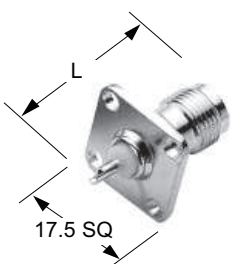
TNC Straight Bulkhead Jack Solder, RG58, 50 Ohm

Center Contact Plating	Body Plating	Dimension L (mm)	Part Number	Package Quantity
Silver	Silver	28.7	1-1478021-0	50



TNC Bulkhead Socket, 50 Ohm

Center Contact Plating	Body Plating	Dimension L (mm)	Part Number	Package Quantity
Silver	Silver	27.0	1-1337469-0	50



TNC Panel Socket, 50 Ohm

Center Contact Plating	Body Plating	Dimension L (mm)	Part Number	Package Quantity
Silver	Silver	27.0	1-1337472-0	50

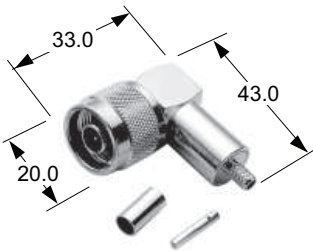
Type N Connectors



Type N Straight Plug Crimp, RG58, 50 Ohm

Center Contact Plating	Body Plating	Dimension L (mm)	Part Number	Package Quantity
Silver	Silver	31.0	1-1337416-0	25

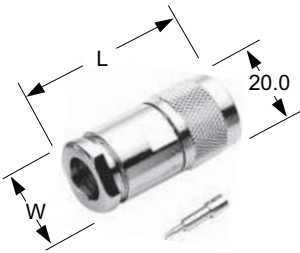
Tool: Hand Tool Frame, Part No. 9-1478240-0; Die Set: Part No. 9-1478242-0.



Type N Elbow Plug Crimp, RG58, 50 Ohm

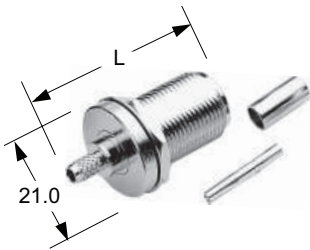
Center Contact Plating	Body Plating	Dimension (mm)	Part Number	Package Quantity
Gold	Nickel	-	1-1337627-0	25
Silver	Silver	-	1-1337413-0	25

Tool: Hand Tool Frame, Part No. 9-1478240-0; Die Set: Part No. 9-1478242-0.



Type N Straight Plug Solder, RG58, 50 Ohm

Center Contact Plating	Body Plating	Dimension L (mm)	Part Number	Package Quantity
Silver	Silver	33.8	1-1337409-0	25



Type N Bulkhead Jack Solder, RG58, 50 Ohm

Center Contact Plating	Body Plating	Dimension L (mm)	Part Number	Package Quantity
Gold	Nickel	42.8	1-1337640-0	25

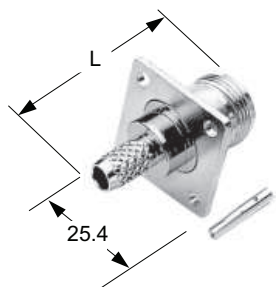


Type N Bulkhead Jack Crimp, RG58, 50 Ohm

Center Contact Plating	Body Plating	Dimension L (mm)	Part Number	Package Quantity
Silver	Silver	37.4	1-1337625-0	25

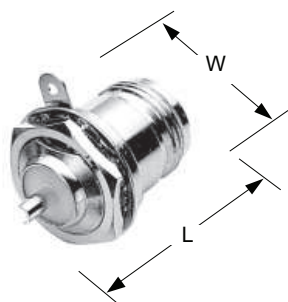
Tool: Hand Tool Frame, Part No. 9-1478240-0; Die Set: Part No. 9-1478242-0.

Type N Connectors (continued)



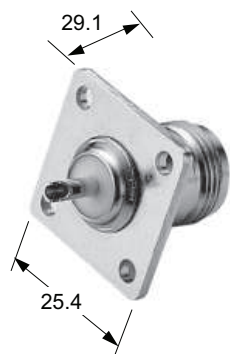
Type N Panel Jack Crimp, RG58, 50 Ohm

Center Contact Plating	Body Plating	Dimension L (mm)	Part Number	Package Quantity
Silver	Silver	30.0	1-1478212-0	25



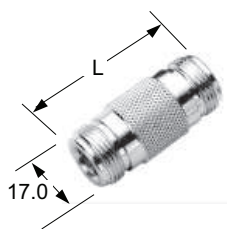
Type N Bulkhead Socket, 50 Ohm

Center Contact Plating	Body Plating	Dimension L (mm)	Part Number	Package Quantity
Silver	Silver	30.5	1-1337417-0	25



Type N Panel Socket, 50 Ohm

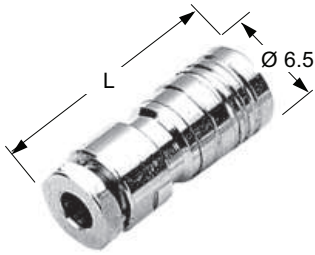
Center Contact Plating	Body Plating	Dimension L (mm)	Part Number	Package Quantity
Silver	Silver	–	1-1337418-0	25



Type N Straight Adaptor Jack, 50 Ohm

Center Contact Plating	Body Plating	Dimension L (mm)	Part Number	Package Quantity
Gold	Nickel	36.5	1-1337624-0	25

SMB Connectors



SMB Straight Plug Solder, RG174, 50 Ohm

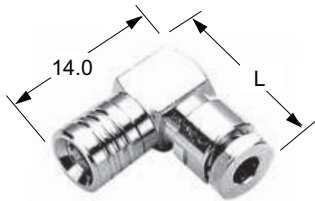
Center Contact Plating	Body Plating	Dimension L (mm)	Part Number	Package Quantity
Gold	Gold	21.8	1-1337475-0	100



SMB Straight Plug Crimp, RG174, 50 Ohm

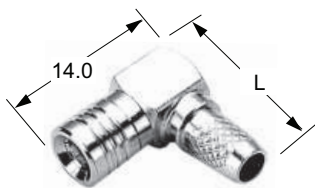
Center Contact Plating	Body Plating	Dimension L (mm)	Part Number	Package Quantity
Gold	Gold	15.7	1-1337597-0	100

Tool: Hand Tool Frame, Part No. 9-1478240-0; Die Set: Part No. 9-1478248-0.



SMB Elbow Plug Solder, RG174, 50 Ohm

Center Contact Plating	Body Plating	Dimension L (mm)	Part Number	Package Quantity
Gold	Gold	11.3	1-1478008-0	100



SMB Elbow Plug Crimp, RG174, 50 Ohm

Center Contact Plating	Body Plating	Dimension L (mm)	Part Number	Package Quantity
Gold	Gold	11.3	1-1337478-0	100

Tool: Hand Tool Frame, Part No. 9-1478240-0; Die Set: Part No. 9-1478248-0.

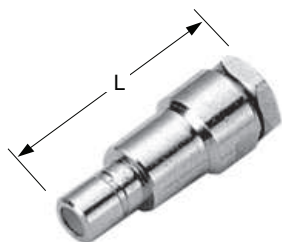


SMB Straight Jack Crimp, RG174, 50 Ohm

Center Contact Plating	Body Plating	Dimension L (mm)	Part Number	Package Quantity
Gold	Gold	16.1	1-1337477-0	100

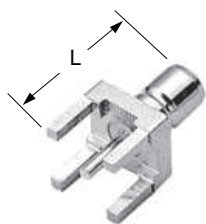
Tool: Hand Tool Frame, Part No. 9-1478240-0; Die Set: Part No. 9-1478248-0.

SMB Connectors (continued)



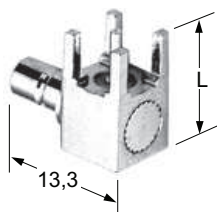
SMB Straight Jack Solder, RG174, 50 Ohm

Center Contact Plating	Body Plating	Dimension L (mm)	Part Number	Package Quantity
Gold	Gold	21.9	1-1337464-0	100



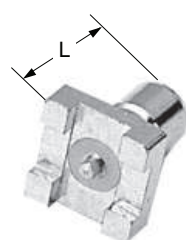
SMB Straight PCB Socket, 50 Ohm

Center Contact Plating	Body Plating	Dimension L (mm)	Part Number	Package Quantity
Gold	Gold	11.4	1-1337482-0	100



SMB Elbow PCB Socket, 50 Ohm

Center Contact Plating	Body Plating	Dimension L (mm)	Part Number	Package Quantity
Gold	Gold	11.0	1-1337481-0	100



SMB Surface Mount Straight PCB Socket, 50 Ohm

Center Contact Plating	Body Plating	Dimension L (mm)	Part Number	Package Quantity
Gold	Gold	7.7	1-1337604-0	100



SMB Bulkhead Socket, 50 Ohm

Center Contact Plating	Body Plating	Dimension L (mm)	Part Number	Package Quantity
Gold	Gold	14.2	1-1337480-0	100