

50 Ohm Cable and PCB Connectors



Product Description

Winchester's Bomar brand 900 Series 50 Ohm SMA Connectors can be used in a wide range of applications including Test and Measurement, Mil-Aero, Satellite, and Wireless Communication Equipment.

Our 900 Series 50 Ohm SMA Connectors are designed in accordance with MIL-STD 348 and feature a .250-36 threaded coupling interface designed or a frequency range of DC to 18 GHz.

Male cable plug connectors are available in straight and right-angle designs for popular flexible and semi-rigid cables.

Printed Circuit Board (PCB) connectors are available in straight and right-angle through-hole solder, and also in our unique E-Snap® Edge-Mount design.



· Threaded coupling ensures connector will not decouple in vibration-intensive applications



 Straight crimp plug center contact features a retention barb which snaps into the insulator to prevent the pin contact from backing out of the connector.



• E-Snap® Edge-Mount connectors provide superior RF performance versus traditional right-angle connects, as a straight contact provides the best transmission path



Specifications

Electrical

Impedance: 50 Ohms Polarity: Standard

Frequency (GHz):

Flexible Cable 0 to 12.5 GHz
Semi-Rigid 0 to 18 GHz
VSWR: Straight 1.15 Max
Right-Angle 1.2 Max

Dielectric

Withstanding Voltage:

 $\begin{array}{ll} & \text{Flexible} & 1000 \text{ VRMS} \\ & \text{Semi-Rigid} & 1500 \text{ VRMS} \\ & \text{Contact Resistance:} & \text{Center} \leq 2 \text{ m}\Omega \end{array}$

Outer ≤ 2 mΩ

 $\begin{array}{ll} \mbox{Insulation Resistance:} & 5000 \ \mbox{m}\Omega \ \mbox{Min} \\ \mbox{Temperature Range:} & -65\ \mbox{C to } +165\ \mbox{C} \end{array}$

Mechanical

Coupling Mating Torque: 7-15 in-lbs.

Cable Retention:

Flexible 60 lbs. Min
Semi-Rigid 80 lbs. Min
Center Contact: Solder / Crimp
Connector Durability: 500 Cycles Min

Material

Insulator Material: PTFE Body Material: Brass

Body Finish: Nickel or Gold
Contact Material: Male Brass
Female BECU

Contact Finish: Gold RoHS Compliant: Yes

Part Numbering

Bomar Part Number	Straight and Right-Angle Cable Plugs	Crimp Tool	Hex Size
910A204M	Straight Plug for RG174, RG316, LMR100	BDHD200	Solder / .128
910A204F	Straight Plug for RG58, RG58A, RG141, LMR195	BDHD200	Solder / .213
910A204P	Straight Plug for RG55, RG142, RG223, RG400	BDHD200	Solder / .213
910A704HV	Straight Plug RG402 (use cable for center contact)	Solder	Solder
910A704B	Straight Plug RG402 Cable (with center contact supplied)	Solder	Solder
910A704A	Straight Plug RG405 Cable (with center contact supplied)	Solder	Solder
913A204M	Right-Angle Plug for RG174, RG316, LMR100	BDND200	Solder / .128
913A204F	Right-Angle Plug for RG58, RG58A, RG141, LMR195	BDHD200	Solder / .213
913A204P	Right-Angle Plug for RG55, RG142, RG223, RG400	BDHD200	Solder / .213
913A704B	Right-Angle Plug for RG402	Solder	Solder
913A704A	Right-Angle Plug for RG405	Solder	Solder

Bomar Part Number	Printed Circuit Board Connectors	PCB Thickness	Packaging
961A514	Vertical, SMA, Jack, 0.155" Solder Tail	0.062"	Single
964A595	Right-Angle, SMA, Jack, 0.155" Solder Tail	0.062"	Single
960A514	Vertical, SMA, Plug, 0.155" Solder Tail	0.062"	Single
963A595	Right-Angle, SMA, Plug, 0.155" Solder Tail	0.062"	Single
961E504	E-Snap® Edge-Mount, SMA, Jack	0.062"	Single
962E504	E-Snap® Edge-Mount, SMA, Plug	0.062"	Single
961E504HF	High Frequency E-Snap® Jack (26.5 GHz)	0.062"	Single

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Winchester Interconnect: 910A204M 961A514 961E504