

Product Searches

- [7/16](#)
- [1.0/2.3](#)
- [1.6/5.6](#)
- [AFI](#)
- [AMC](#)
- [BNC / RP-BNC](#)
- [C](#)
- [FAKRA SMB](#)
- [FME](#)
- [HN](#)
- [MCX](#)
- [Mini BNC](#)
- [Mini-UHF](#)
- [Mini 75 Ohm](#)
- [SMB](#)
- [MMCX](#)
- [Precision \(APC\)](#)
- [QMA](#)
- [QWS](#)
- [SC](#)
- [SMA / RP-SMA](#)
- [SMB](#)
- [SMC](#)
- [SMP](#)
- [SSMB](#)
- [TNC / RP-TNC](#)
- [Triax](#)
- [Twin BNC](#)
- [Twinax](#)
- [Type F](#)
- [Type G](#)
- [Type N](#)
- [UHF](#)
- -----
- [Adapters](#)
- [Cable Assemblies](#)
- [Tools](#)
- [Accessories](#)
- -----
- [Product Search](#)
- -----
- [Inventory Search](#)

product details

← back



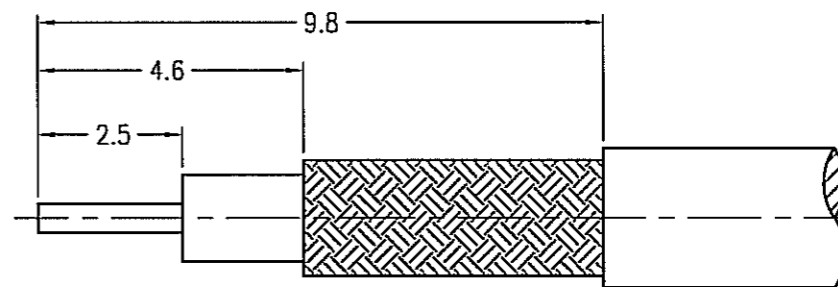
Please note: Images are for reference only

Amphenol Part Number:	919-NM101P-51S
Description:	Non-Magnetic Straight Plug for RG-316
Product Series:	MCX
Product Type:	Connectors » Cable
Body Plating:	White Bronze
Connector Body Style:	Straight
Contact Plating:	Gold
Gender:	Plug
Impedance:	50 Ohm
Non Magnetic:	Yes
RoHS Compliant:	Yes

NOTES:

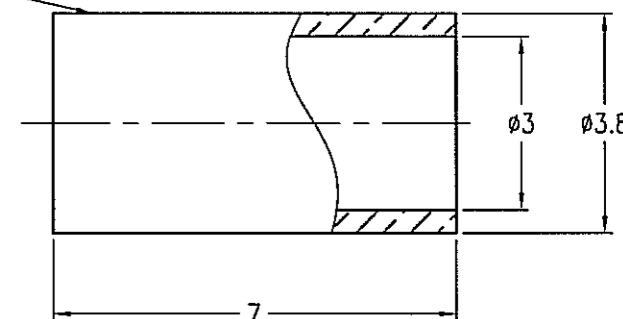
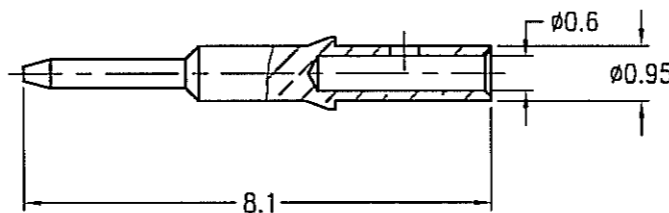
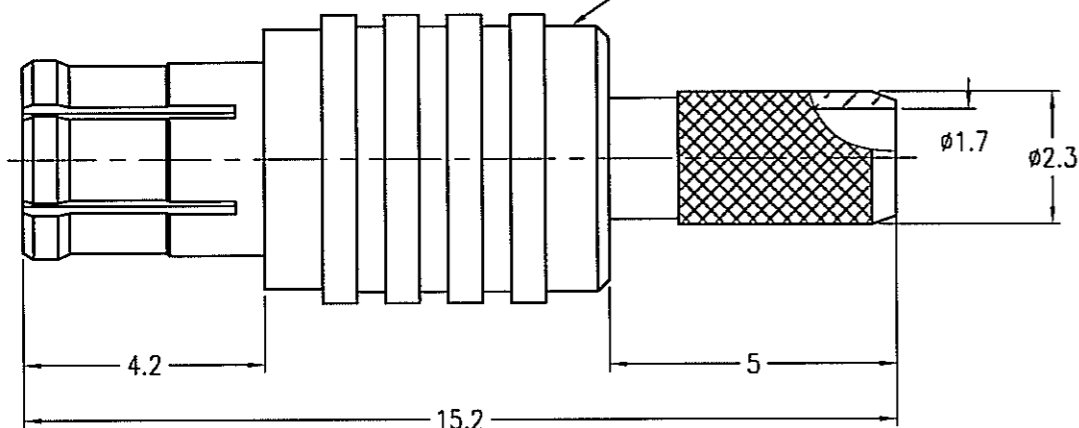
1. MATERIALS AND FINISHES(PLATING THICKNESS IN MICRO-INCHES):
 BODY - BERYLLIUM COPPER, WHITE BRONZE PLATING (COPPER -TIN -ZINC)
 CONTACT - BERYLLIUM COPPER, GOLD PLATING
 INSULATOR - TEFLON
 FERRULE - COPPER, WHITE BRONZE PLATING (COPPER -TIN -ZINC)
2. ELECTRICAL:
 A. IMPEDANCE: 50 OHM
 B. FREQUENCY RANGE: DC 0-6 GHz
 C. VSWR(RETURN LOSS): 1.3 MAX.
 D. DIELECTRIC WITHSTANDING VOLTAGE: 1000 VRMS, MIN.
3. MECHANICAL:
 A. DURABILITY: 500 CYCLES MIN.
 B. TEMPERATURE RANGE: - 40°C to +155°C
4. CRIMPED FERRULE
5. HEX CRIMP SIZE .128"
 CRIMPED CONTACT PIN
 SQ CRIMP SIZE 0.7(mm)
 OR SOLDER

919-NM101P-51S		REVISIONS			
PART NO.	REV	DESCRIPTION	DATE	ECO	APPR
THIRD ANGLE PROJ.	A	RELEASE TO MFG.	8/8/06	46108	CISSY



RECOMMENDED
CABLE STRIPPING DIM'S

THESE SURFACES MARKED "NM"
TO SIGNIFY NON-MAGNETIC CONNECTORS



CUSTOMER OUTLINE DRAWING

ALL OTHER SHEETS ARE FOR INTERNAL USE ONLY

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN METRIC AND TOLERANCES ARE:
 0.5 - 5mm ±0.1mm 6 - 30mm ±0.2mm 30 - 120mm ± 0.3mm ANGLES ±1°

NOTICE - These drawings, specifications, or other data (1) are, and remain the property of Amphenol Corp. (2) must be returned upon request; and (3) are confidential and not to be disclosed to any person other than those to whom they are given by Amphenol Corp. The furnishing of these drawings, specifications, or other data by Amphenol Corp., or to any other person to anyone for any purpose is not to be regarded by implication or otherwise in any manner licensing, granting rights or permitting such holder or any other person to manufacture, use or sell any product, process or design, patented or otherwise, that may in any way be related to or disclosed by said drawings, specifications, or other data.

MATERIAL	
REFERENCE	MCX1121A1-NT30G-316U-50
FINISH	

DRAWN	CISSY	DATE	08-Aug-06
ENGINEER	GEFFERY	DATE	08-Aug-06
APPROVED	<i>[Signature]</i>	DATE	8-8-06
CAD FILE			

TITLE		
MCX CRIMP PLUG NON MAGNETIC (FOR RG-174/U,188A/U,316/U)		
SCALE: 6/1	SHEET	1 OF 1
DWG SIZE	CODE ID	REV
B	74868	A

Amphenol RF	
Danbury CT USA, Tainan Taiwan, Shenzhen China www.amphenolrf.com	
DRAWING NO.	
ITEM NO.	
PART NO.	919-NM101P-51S

Description

MCX connectors conform to the European CECC 22220 Spec and was introduced in the 1980's.

While the MCX uses identical inner contact and insulator dimensions as the SMB, the outer diameter of the plug is .140" which is 30% smaller than the SMB. This series provides designers with options where weight and physical space is limited.

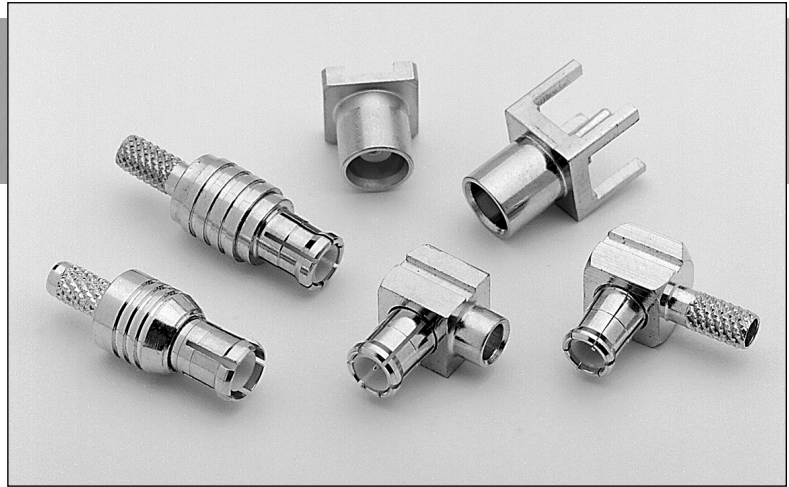
MCX provides broadband capability though 6GHz with a snap-on connector design. A range of connectors are available including PC board and cable connectors.

Features/Benefits

- Broadband performance with low reflection DC to 6 GHz. Low cost combined with high quality.
- Quick connect/disconnect snap-on mating reduces installation time.
- Accommodates a wide range of miniature RG flexible coaxial cables including semi-rigid cable provides customer flexibility in their design and manufacturing with a durable connector.

Application

- Antenna
- Automotive
- Base Station
- Components
- GPS
- Head End Equipment
- Instrumentation
- PC/LAN
- Radios
- Telecom
- WLAN



50 Ohm Coaxial Connectors

Specifications	18
Straight & Right Angle Crimp	19
Straight Solder & PCB	20-21

75 Ohm Coaxial Connectors

Specifications	22
Plugs	23
Receptacles PCB	23

ELECTRICAL

Impedance	50 ohms
Frequency range	0-6 GHz
Voltage rating	335 VRMS
Dielectric withstanding voltage	1000 Volts
VSWR	1.00 @ 2.5GHz (straight) 1.10 @ 2.5GHz (rt. angle)
Contact resistance	Center contact: 5 milliohms; Outer contact: 1.0 milliohms;
Insulation resistance	5000 megohms min.
Insertion loss:	0.10 dB @ 1 GHz

MECHANICAL

Mating	50 ohm snap-on coupling, per CECC 22220
Engagement forces	engagement 4.5 lbs (20N) max. disengagement 2.3 lbs (10N) min.
Connector affixment to cable	Braid and jacket: hex crimp.
Cable affixment to center contact	Solder
Contact captivation	All types, except as noted
Connector durability	500 mating and unmating cycles min.

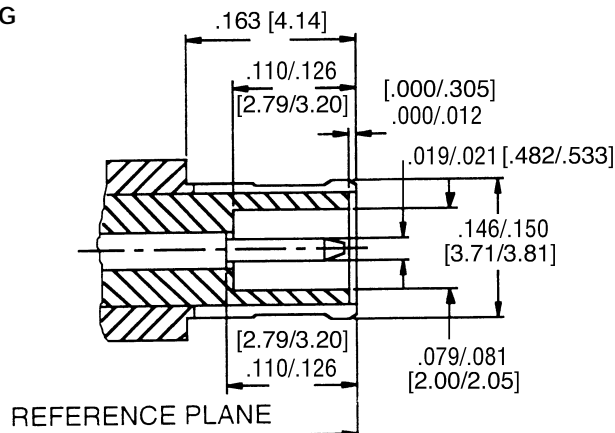
MATERIAL

Body, Metal Parts Finish	Brass per QQB-626 Nickel or Gold
Center contacts gold plated (30 u" gold)	Male: Brass per QQB626 Female: Beryllium copper per QQC 530 heat treated per MIL H 7199
Insulators	PTFE
Gasket	Silicone Rubber
Crimp ferrules	Seamless copper tubing alloy
Finish	Nickel or Gold

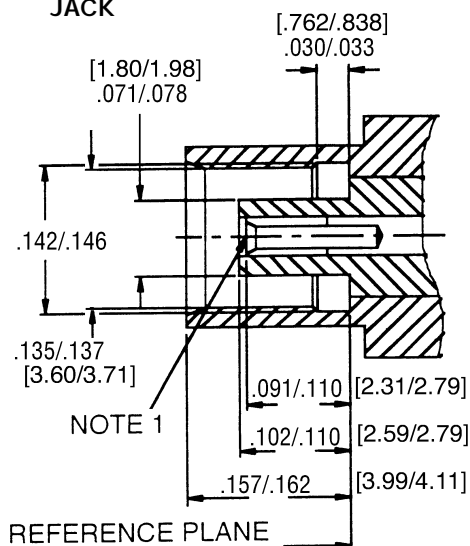
ENVIRONMENTAL

Temperature range	-65°C to + 165°C
Thermal shock	MIL-STD-202 method 107 (test cond. B) except high temperatures @ 200°C
Vibration	MIL-STD-202 method 204, snap-on (test cond. B)
Shock	MIL-STD-202 method 213, snap-on (test cond. B)
Corrosion	MIL-STD-202 method 101 (test cond. B) 5% salt solution.

PLUG



JACK



NOTE:

1. I.D. to meet VSWR and contact resistance when mated with .48/.53mm diameter pin

