

UHF Series

Description

UHF coaxial connectors are general purpose units developed for use in Low frequency systems applications up to 300MHz.

Applications

- CB Radios
- Antennas
- Public Address Systems

Features

With the use of optional reducing adapters, UHF connectors are designed to accommodate a wide range of popular coaxial cables. The solder termination types require no special assembly tools. Crimp termination types, which provide a lower cost installation method, are also available.

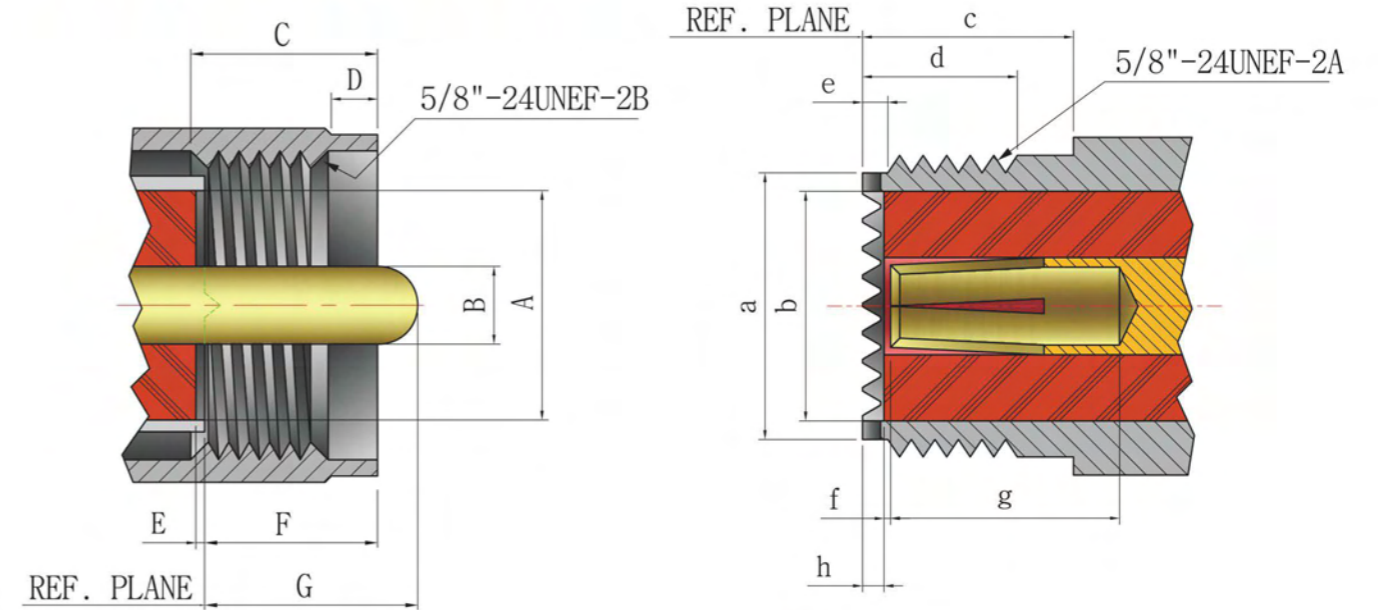


Specification

UHF 0-300MHz

UHF coaxial connectors were one of the first RF connector series to be developed. They are a general purpose, non-constant impedance connector which operate from DC to 300 MHz. The 5/8"-24 thread coupling and clamp, crimp, twist-on and solder termination provide the UHF with the flexibility that have kept it one of the most popular coaxial connectors over the years. Among the many application of this low cost, low frequency device are antenna connections for CB radios, public address systems, audio, video, mobile radio and test equipment.

Interface Mating Dimensions

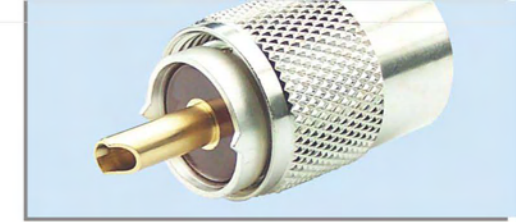


PLUG

Letter	Milimeters (inches)	
	Minimum	Maximum
A	11.56(.455)	12.22(.481)
B	3.912(.154)	4.013(.158)
C	8.76(.345)	—
D	1.19(.047)	4.27(.168)
E	0.00	—
F	—	9.91(.390)
G	—	11.1(.437)

JACK

Letter	Milimeters (inches)	
	Minimum	Maximum
a	14.00(.551)	14.25(.561)
b	11.56(.455)	12.22(.481)
c	11.1(.437)	—
d	7.87(.310)	—
e	1.19(.047)	1.96(.077)
f	0.03(.0012)	—
g	11.76(.463)	—
h	1.02(.040)	—



Electrical

Impedance	Non-constant
Frequency Range	0 to 300 GHz
VSWR	≤ 1.5
RF Leakage	≥ 90 dB
Dielectric Withstanding Voltage	2000 V rms
Voltage Rating	≥ 750 V rms (depending on cable)
Center Contact Resistance	≤ 5 mΩ
Outer Contact Resistance	≤ 5 mΩ
Insulation Resistance	≥ 5 GΩ

Mechanical

Mating	5/8-24 UNEF Screw-on Coupling
Connector Durability	≥ 500 Cycles (for beryllium copper female contact only)
Cable Retention Force	≥ 12.1 lbs (for RG316) ≥ 28.7 lbs (for RG58) ≥ 94.5 lbs (for RG213)

Environmental

Temperature Range	-25° C to 70° C
Corrosion (Salt Spray)	MIL-STD-202, Method 101, Cond. B
Vibration	MIL-STD-202, Method 204, Cond. B
Thermal Shock	MIL-STD-202, Method 107, Cond. B
Mechanical Shock	MIL-STD-202, Method 213, Cond. G

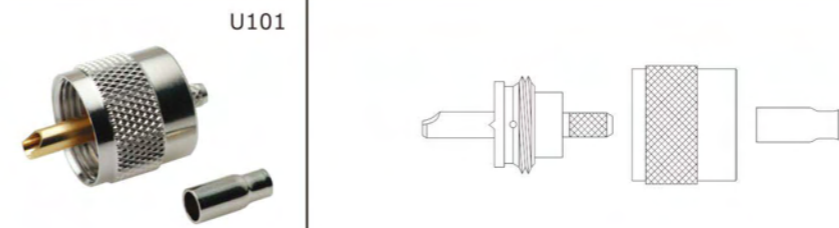
Material

Parts Name	Material	Plating
Body	Brass	Nickel or Silver
Center Contact	Male: Brass Female: Brass or Phosphor Bronze	Nickel, Silver or Gold Nickel, Silver or Gold
Insulator	PTFE, Delrin or Bakelite	None
Gasket	Rubber	None
Crimp Ferrule	Annealed Copper	Same as Body


Note: Other Material/Finish is Available on Request.

Crimp Termination for Flexible Cable

UHF Straight Crimp Plug

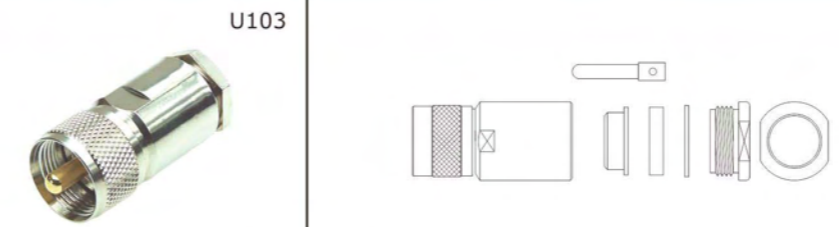
	U101	Hand Tool	See Appendix B
		Cable	RG8/U, 8/X, 58/U, 174/U, 213/U, 316/U, LMR300
		Cable Assembly Instruction	See Appendix A

UHF Accessory

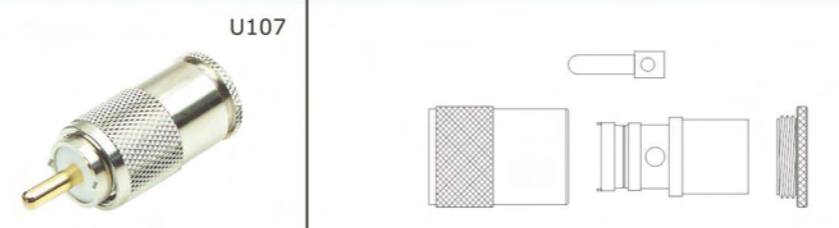
	U900	Hand Tool	See Appendix B
		Cable	RG58/U
		Cable Assembly Instruction	Nil

Clamp Termination for Flexible Cable

UHF Clamp Plug

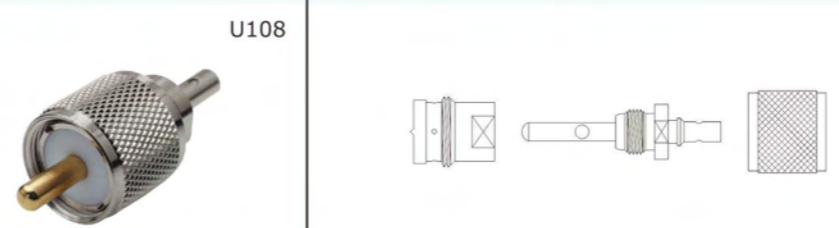
	U103	Hand Tool	Nil
		Cable	8D, 10D, 12D
		Cable Assembly Instruction	See Appendix A Code L

UHF Clamp Plug

	U107	Hand Tool	Nil
		Cable	8D, 10D, 12D
		Cable Assembly Instruction	See Appendix A

Solder Termination for Flexible Cable

UHF Plug

	U108	Hand Tool	Nil
		Cable	1.5D, 3D, 5D
		Cable Assembly Instruction	See Appendix A



Solder Termination for Flexible Cable

UHF Solder Plug

		Hand Tool	Nil
		Cable	3D, 5D, 8D
		Cable Assembly Instruction	See Appendix A Code P

UHF R/A Jack

		Hand Tool	Nil
		Cable	1.5D, 3D, 5D, 8D, 10D
		Cable Assembly Instruction	See Appendix A Code N

Clamp Termination for Flexible Cable

UHF Clamp Plug

		Hand Tool	Nil
		Cable	3D, 5D, 8D, 10D
		Cable Assembly Instruction	See Appendix A

Twist-on Termination for Flexible Cable

UHF Twist-on Plug, (PL-259)

		Hand Tool	Nil
		Cable	RG8/U, 8/X, 58/U, 213/U, LMR240, LMR300
		Cable Assembly Instruction	See Appendix A Code P

UHF Reducer for U102

		Hand Tool	Nil
		Cable	RG58,59
		Cable Assembly Instruction	Nil



Bulkhead Receptacle, Solder Pot Terminal

UHF Bulkhead Jack

		Hand Tool	Nil
		Cable	Nil
		Mounting Hole	Refer to S-CONN's Drawing

UHF Jack, Panel Type

		Hand Tool	Nil
		Cable	Nil
		Cable Assembly Instruction	Nil

Cap

Protective Cap for UHF Jack

		Hand Tool	Nil
		Cable	Nil
		Cable Assembly Instruction	Nil