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UHF female Crimp On for RG-174, RG-188, RG-188A/U, RG-316, RG-316/U Double Shield, LMR-100A, Belden 7805R, Belden 8216, Belden 83269, Belden 83284, Belden 84316, and other 0.100 Inch OD Coaxial Cable.



Technical Data Sheet

This UHF Female Crimp Connector is one of several thousand RF products available from Max-Gain Systems, Inc. This connector has a crimp on interface with the coax selected.

This connector is made from a Solid Brass body that is precision machined and plated with Silver for superior performance and value. This UHF Female Crimp Connector has a PTFE dielectric and a silver plated brass center pin. The UHF Female interface (also known as a PL-259 connection) is by far the most popular connection type used in Amateur Radio. This RF connector fits (but not limited to) RG-174, RG-188, RG-188A/U, RG-316, RG-316/U Double Shield, LMR-100A, Belden 7805R, Belden 8216, Belden 83269, Belden 83284, Belden 84316, and other 0.100 Inch OD Coaxial Cable.

Material Specifications

UHF male, Crimp-On, Cable End Connector for .100 Coax		Part Number 7506-UHF-174
Description	Material	Plating
Ferrule	Brass	Silver
Pin	Brass	Silver
Shell	Brass	Silver
Insulator	PTFE	White
Body	Brass	Silver

Mechanical Specifications

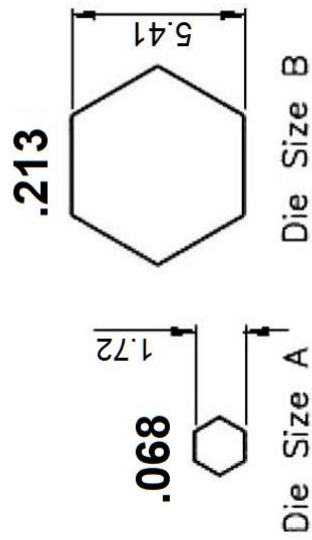
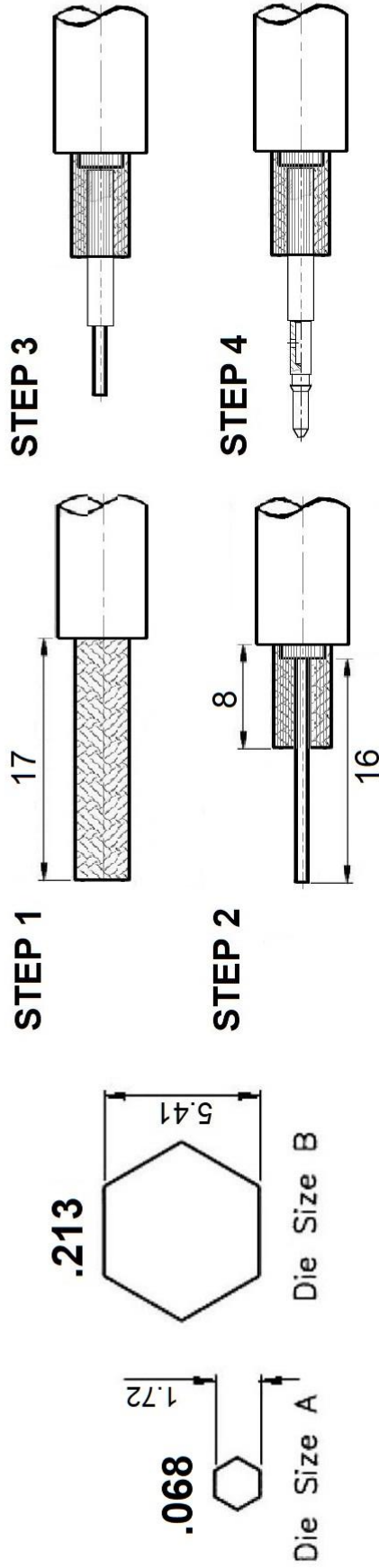
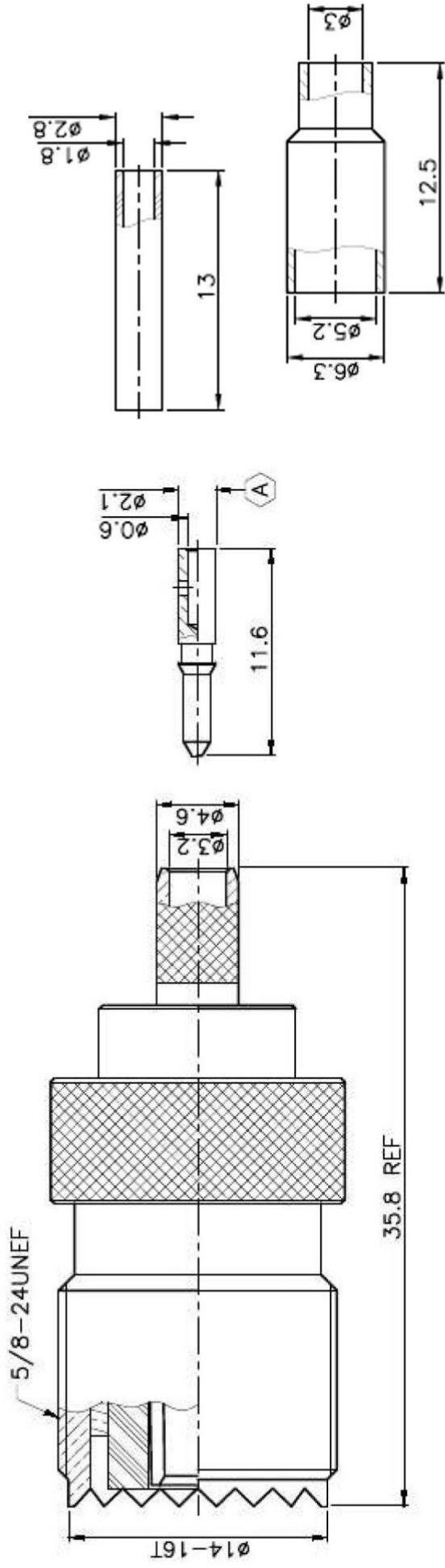
Size	Dimension
Length	1.49 in (36.7 mm)
Width	0.65 in (16.5 mm)
Height	0.65 in (16.5 mm)
Weight	1.1 oz (30 g)

Environmental Specifications

Temperature	Spec
Operating Range	-65 to +165 deg C

Compliance Certifications (see product page for current documentation)

Availability Click the following link (or enter part number in the “SEARCH” bar at the top of any page of the website) to obtain additional part information including price, inventory and certifications: <https://mgs4u.com/product/uhf-female-crimp-connector-for-0-100-inch-od-coax-7506-uhf-174/>



RECOMMENDED
CABLE STRIPPING DIM'S

MGS MAX-GAIN SYSTEMS, INC.

Max-Gain Systems, Inc.
150 Dodd Street SE, Marietta, GA. 30060
Phone: (770) 973-6251 | Fax: (678) 401-3854
Website: www.mgs4u.com | E-Mail: sales@mgs4u.com

NO.	DESCRIPTION	MATERIAL	FINISH	QTY	UNIT: mm	SCALE: .	PART NO	DATE
							APPROVED	DATE
							CHECKED	DATE
							DRAWN	DATE

TITLE: UHF female Crimp On for RG-174, RG-316, LMR-100A, and other 0.100 Inch OD Coax

DRAWING NO: 7506-UHF-174
FILE NO :

UNLESS OTHERWISE SPECIFIED TOLERANCES
0.5-5 = ±0.2
5-30 = ±0.4
30-120 = ±0.6
120-315 = ±1
315-1000 = ±1.6
1000-2000 = ±2.4

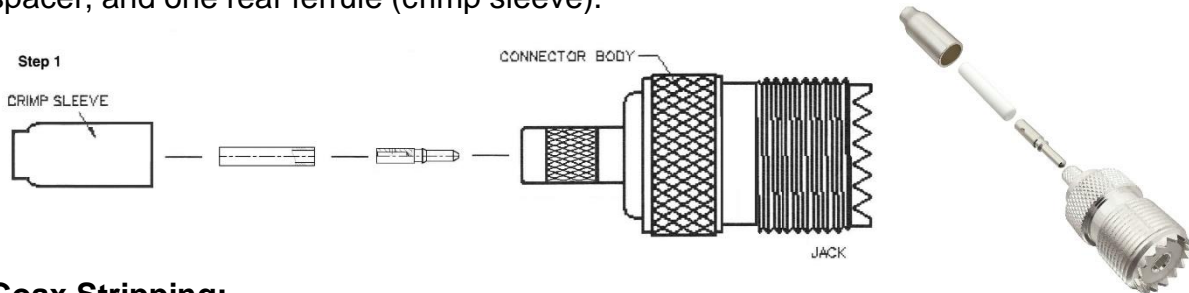
FERRULE	BRASS	SILVER			
PIN	BRASS	SILVER			
PIN	BRASS	SILVER	1		
INSULATOR BODY	TEFLON	WHITE	1		
	BRASS	SILVER	1		
	MATERIAL	FINISH			

Installation Guide

We will begin by installing the UHF female crimp-on connector on a piece of coax. This process is the same for all the types of coaxial cable that fit this UHF crimp-on connector. These connectors fit on a wide range of coax types, including: RG-174, RG-188, RG-188A/U, RG-316, RG-316/U Double Shield, LMR-100A, Belden 7805R, Belden 8216, Belden 83269, Belden 83284, Belden 84316, and other 0.100 Inch OD Coaxial Cable.

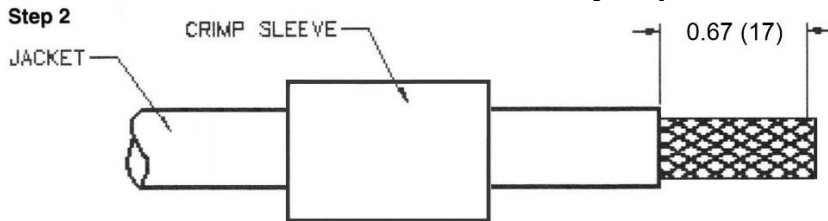
Identify all connector parts (4 Parts):

Each connector consists of one body assembly (jack), one center pin, one dielectric spacer, and one rear ferrule (crimp sleeve).

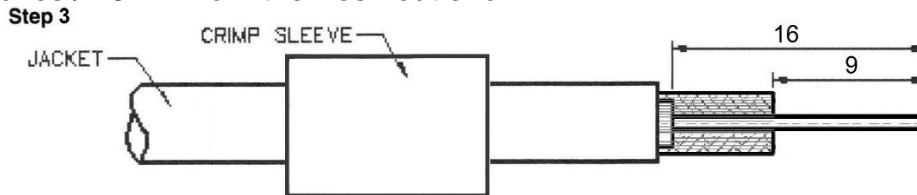


Coax Stripping:

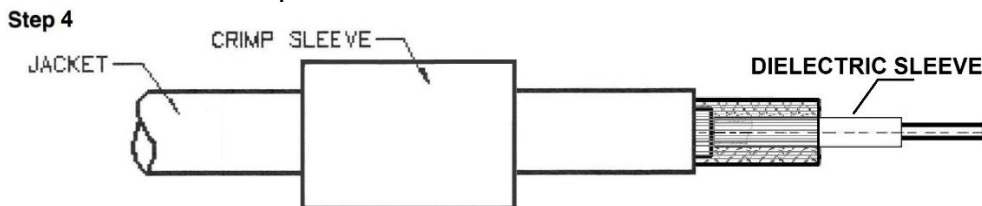
First cut your coaxial cable to the desired length and then strip the black jacket back approximately 17mm (0.67") and **make sure to put the ferrule (crimp sleeve) of the connector on the coaxial cable BEFORE you proceed.**



Trim back the braid 0.35 inches / 9mm from the fresh cut end. Comb out the braid and fan it out to you can get to the dielectric. Trim back the dielectric approximately 0.63 inches / 16mm from the fresh cut end.

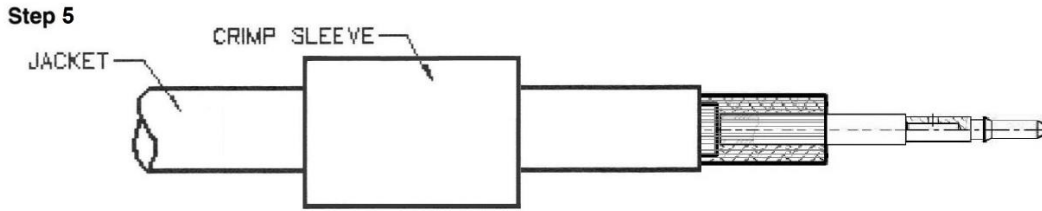


Place the dielectric spacer onto center conductor.



Install Pin:

Place the center pin onto the center conductor. There is a solder hole on the side of the pin for installing with a small amount of solder OR you can crimp the center pin at the base of the dielectric spacer.



Crimping and Soldering Install:

Soldering Guide (preferred):

This soldering guide is for soldering Max-Gain Systems, Inc. UHF crimp-on connectors. These are approximate measurements for our UHF crimp-on connectors, which adhere to industry standards for this type connector. If you choose to use this guide for connectors sold by others who do NOT adhere to these standards, the measurements could be off and result in a poor installation.

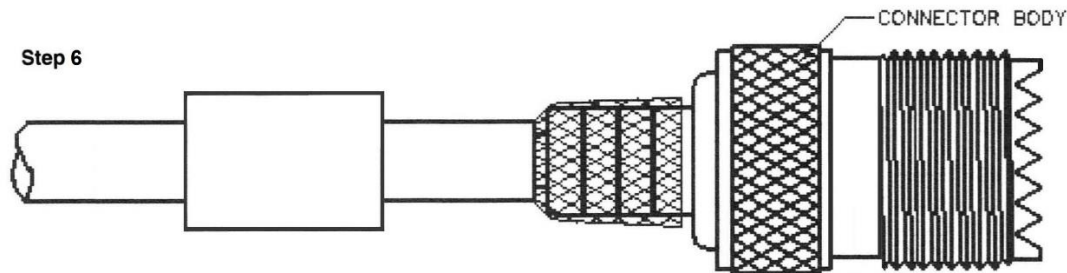
Start by rotating the center pin so that the solder hole is facing up. Apply heat to the center pin by placing your soldering iron underneath the pin. Before proceeding, allow sufficient time for the soldering iron tip to reach full operating temperature and clean the tip of the iron by wiping it with a damp sponge. Now apply the solder to the hole that should be facing up. The heat rises and heats up the pin faster than positioning the iron above the pin. When the pin is heated the solder will start to flow into the pin. It only takes a very little bit of solder to make a good connection.

Crimping Guide:

The center pin is crimpable by using the 0.068" hex die from your 7505-DIE-174 ratcheting crimper die to crimp the smaller tapered portion of the center pin. This crimp die is available by itself or as a kit with a ratcheting crimp handle.

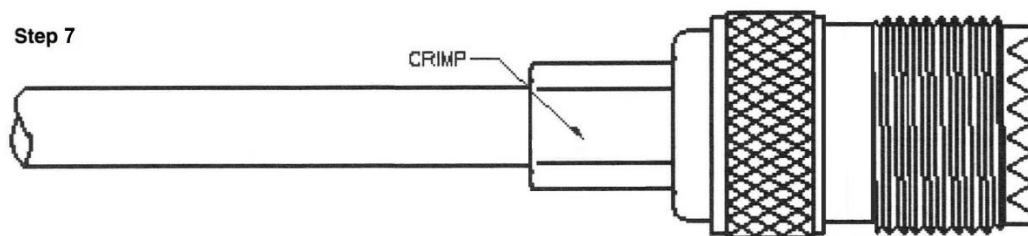
DIE Only	Die and Tool Kit
P/N: 7505-DIE-174	P/N: 7505-HANDLE-174
	

Now we begin by placing the body of the connector onto the end of the coax. Be sure the center pin seats all the way inside the body of the connector. There is a receptacle inside the connector for this pin to be fully seated. The braid should be folded back forward over the knurled section of the connector body. The braid needs to be on the outside of the connector and not tucked under it. This could lead to a short.



Crimping The Ferrule:

Slide the ferrule (placed on the coax at the beginning of Step 2) over the braid and completely up against the connector body. Using the 0.213" hex die from the 7505-DIE-174 installed into the 7505-HANDLE ratcheting crimp handle, crimp the ferrule at the location shown in the picture below (on the ferrule, but right up against the main body of the connector).



Final Testing:

When this is completed, as a final test, you should always check resistance from the center pin to the body with an ohmmeter in a low resistance scale. After verifying that there are no braid – to – center pin shorts on the other end of the coaxial cable, you should see infinite resistance (open). This completes your UHF female crimp-on connector installation, and the connector is ready for use!