



SMA Female Connector Clamp/Solder Attachment
for RG55, RG58, RG141, RG142, RG223, RG303,
RG400, PE-C195, PE-P195, LMR-195

RF Connectors
Technical Data Sheet

PE4031

Configuration

- SMA Female Connector
- MIL-STD-348
- 50 Ohms
- Straight Body Geometry
- RG55, RG58, RG141, RG142, RG223, RG303, RG400, PE-C195, PE-P195, LMR-195 Interface Type
- Clamp/Solder Attachment

Features

- Gold Plated Contact
- Contact plating according to MIL-G-45204

Applications

- General Purpose Test
- Custom Cable Assemblies

Description

Pasternack's PE4031 SMA female connector with clamp/solder attachment for RG55, RG58, RG141, RG142, RG223, RG303, RG400, PE-C195, PE-P195 and LMR-195 is part of our full line of RF components available for same-day shipping.

Our SMA female connector PE4031 datasheet specifications and drawing with dimensions are shown below in this PDF. Pasternack's broad catalog of RF, microwave and millimeter wave connectors allows designers to configure and customize their signal connections however they like. Whether the need is to provide an I/O for a board design, or simply create a custom cable assembly configuration, Pasternack has the right connector for the job. Pasternack can also expertly build your custom cable assemblies for you and ship same-day.

Mechanical Specifications

Size	
Length	0.705 in [17.91 mm]
Width/Dia.	0.312 in [7.92 mm]
Weight	0.009 lbs [4.08 g]

Material Specifications

Description	Material	Plating
Contact		Gold MIL-G-45204
Insulation	PTFE	
Body	Brass	Nickel QQ-N-290

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Female Connector Clamp/Solder Attachment for RG55, RG58, RG141, RG142, RG223, RG303, RG400, PE-C195, PE-P195, LMR-195 PE4031](#)



SMA Female Connector Clamp/Solder Attachment
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RG400, PE-C195, PE-P195, LMR-195

Environmental Specifications

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

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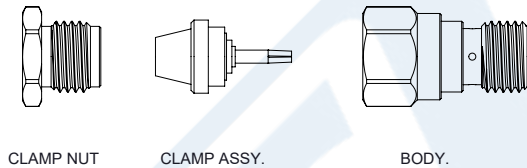


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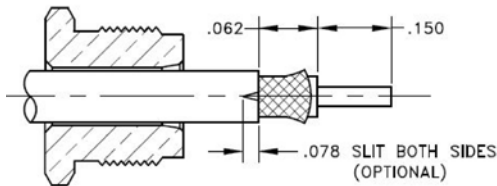
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Assembly Instruction

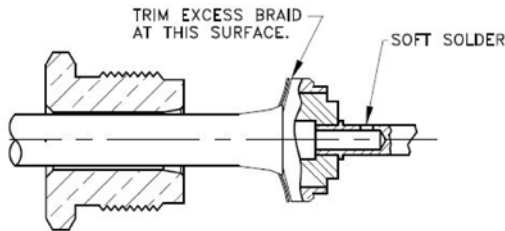


CABLE ASSEMBLY INSTRUCTIONS.

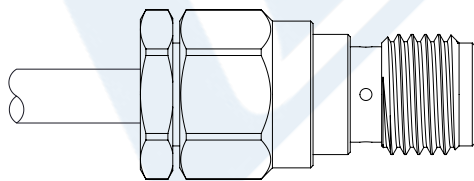


1. SLIDE NUT ONTO CABLE AS SHOWN. CUT CABLE SQUARE. TRIM CABLE TO DIMENSIONS SHOWN BEING CAREFUL NOT TO NICK THE BRAID OR CENTER CONDUCTOR. ROTATE DIELECTRIC TO FLARE BRAID.

NOTE: TWO SLITS IN THE JACKET 180° APART AS SHOWN MAY BE NEEDED TO PRESS JACKET TO SHOULDER.



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3. INSERT THE ASSEMBLY INTO THE REAR BODY. HOLD THE NUT STATIONARY AND TIGHTEN THE BODY TO 15 IN LBS.

TIGHTEN →

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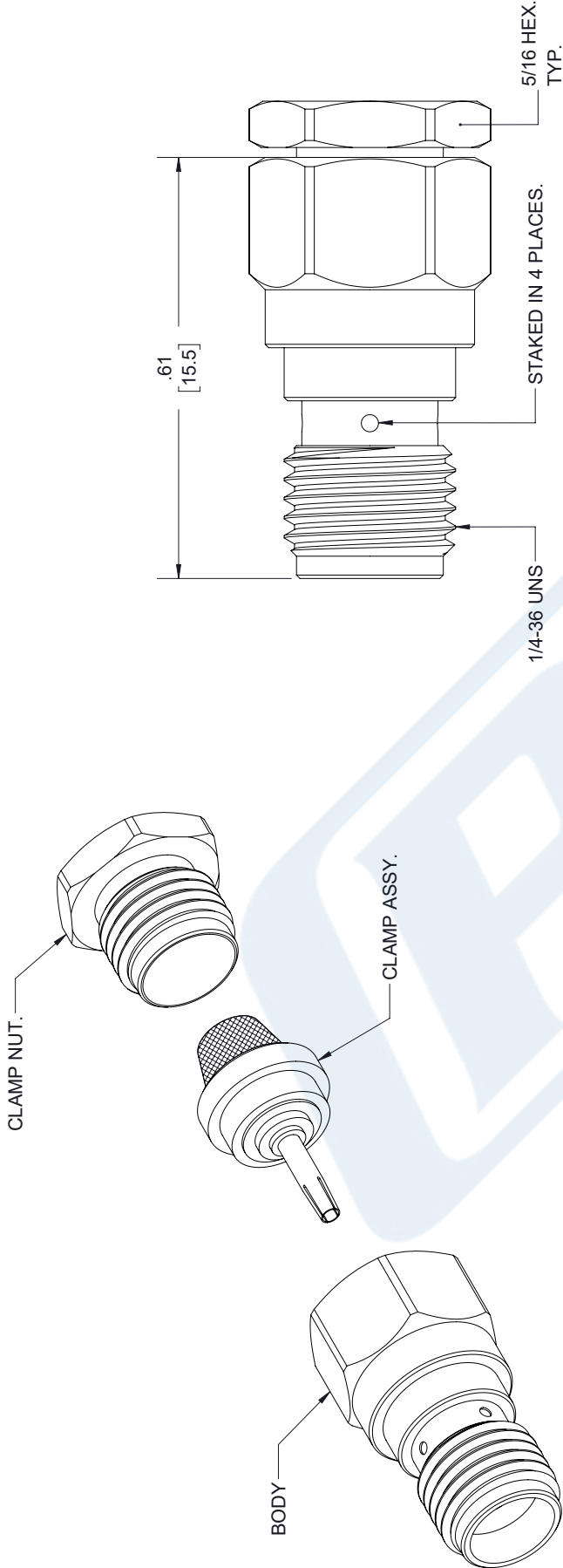
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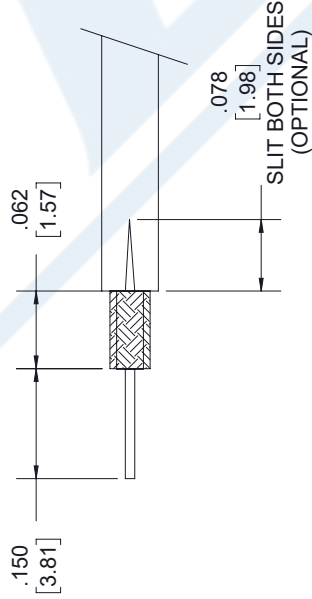
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PE4031 CAD Drawing

SMA Female Connector Clamp/Solder Attachment for RG55, RG58, RG141, RG142, RG223, RG303, RG400, PE-C195, PE-P195, LMR-195



50 Ω
SMA FEMALE



STRIPPING DIMENSIONS

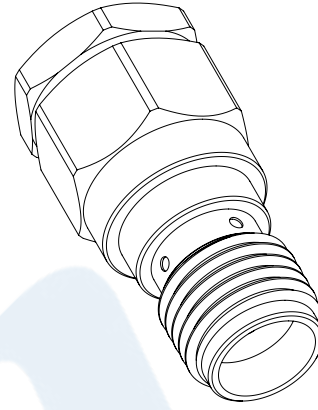
NOTES:

- CABLE ATTACHMENT:
• OUTER: CLAMP.
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STANDARD TOLERANCES

- .X ±0.2
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- .XXX ±0.005

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DWG TITLE
PE4031

CAGE CODE **53919**

7361

SIZE A

SCALE N/A

CAD FILE 12/13/18



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Phone: (949) 261-1920 | Fax: (949) 261-7451

Website: www.pasternack.com | E-Mail: sales@pasternack.com



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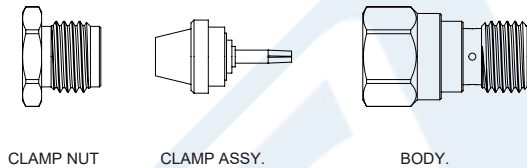


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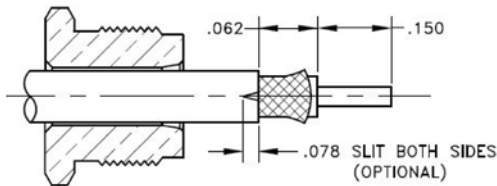
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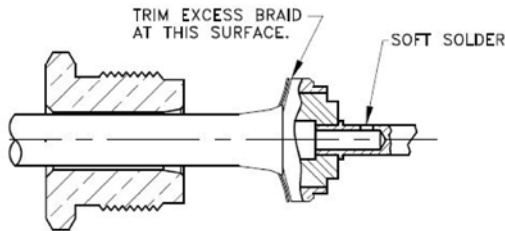


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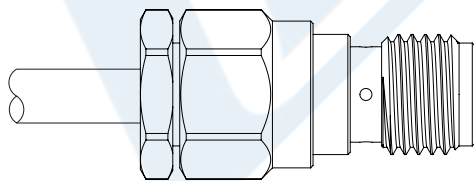


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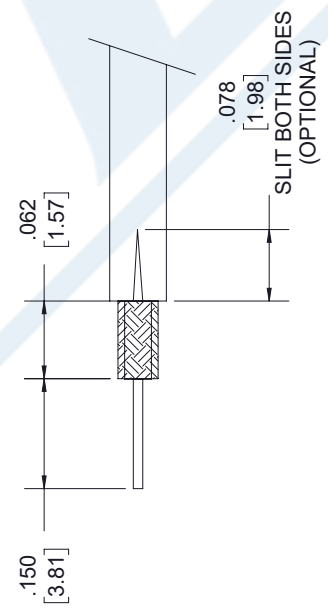
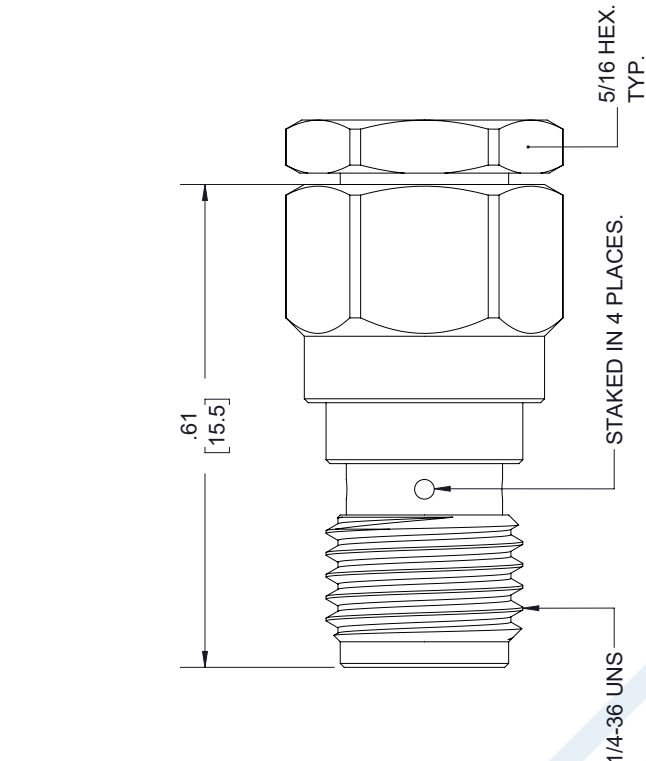
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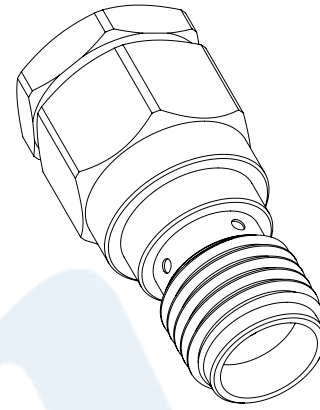


STRIPPING DIMENSIONS

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 - OUTER: CLAMP.
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STANDARD TOLERANCES	
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SCALE	N/A
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PASTERNAK®
 THE ENGINEER'S RF SOURCE
 Pasternack Enterprises, Inc.
 P.O. Box 16759 | Irvine | CA | 92623
 Phone: (949) 261-1920 | Fax: (949) 261-7451
 Website: www.pasternack.com | E-Mail: sales@pasternack.com

LMR®-195

Flexible Low Loss Communications Coax

Ideal for...



- Jumper Assemblies in Wireless Communications Systems
 - Short Antenna Feeder runs
 - Any application (e.g. WLL, GPS, LMR, WLAN, WISP, WiMax, SCADA, Mobile Antennas) requiring an easily routed, low loss RF cable
 - Drop-in replacement for RG-58 and RG-142
- **LMR®** standard is a UV Resistant Polyethylene jacketed cable designed for 20-year service outdoor use. The bending and handling characteristics are significantly better than air-dielectric and corrugated hard-line cables.
 - **LMR® - DB** is identical to standard LMR plus has the advantage of being watertight. The addition of waterproofing compound in and around the foil/braid insures continuous reliable service should the jacket be inadvertently damaged during installation or in the future.
 - **LMR® - FR** is a non-halogen (non-toxic), low smoke, fire retardant cable designed for in-building runs that can be routed anywhere except air handling plenums. LMR-FR is UL/NEC & CSA rated 'CMR' and 'FT4' respectively, meets FAA FAR25 requirements and is MSHA-P for mining applications.
 - **LMR® - FR-PVC** is a general-purpose indoor cable and has a UL/NEC & CSA rating of 'CMR' and 'FT4' respectively. It is less expensive than LMR-FR, however it emits toxic fumes (HCL) and greater smoke density when burned.
 - **LMR® - PVC** is designed for low loss general-purpose applications and is somewhat more flexible than the standard polyethylene jacketed LMR.
 - **LMR® - PVC-W** is a white-jacketed version of LMR-PVC for marine and other applications where color compatibility is desired.
 - **LMR® - MA** is a flexible cable designed specifically for mobile antenna applications. It has a PVC jacket and un-bonded aluminum tape to facilitate end stripping with automated equipment.
 - **Flexibility** and bendability are hallmarks of the LMR-195 cable design. The flexible outer conductor enables the tightest bend radius available for any cable of similar size and performance.
 - **Low Loss** is another hallmark feature of LMR-195. Size for size LMR has the lowest loss of any flexible cable and comparable loss to semirigid hard-line cables.
 - **RF Shielding** is 50 dB greater than typical single shielded coax (40 dB). The multi-ply bonded foil outer conductor is rated conservatively at > 90 dB (i.e. >180 dB between two adjacent cables).
 - **Weatherability:** LMR-195 cables designed for outdoor exposure incorporate the best materials for UV resistance and have life expectancy in excess of 20 years.
 - **Connectors:** A wide variety of connectors are available for LMR-195 cable, including all common interface types, reverse polarity, and a choice of solder or non-solder center pins. Most LMR connectors employ crimp outer attachment using standard hex crimp sizes.
 - **Cable Assemblies:** All LMR-195 cable types are available as pre-terminated cable assemblies. Refer to the section on FlexTech for further details.

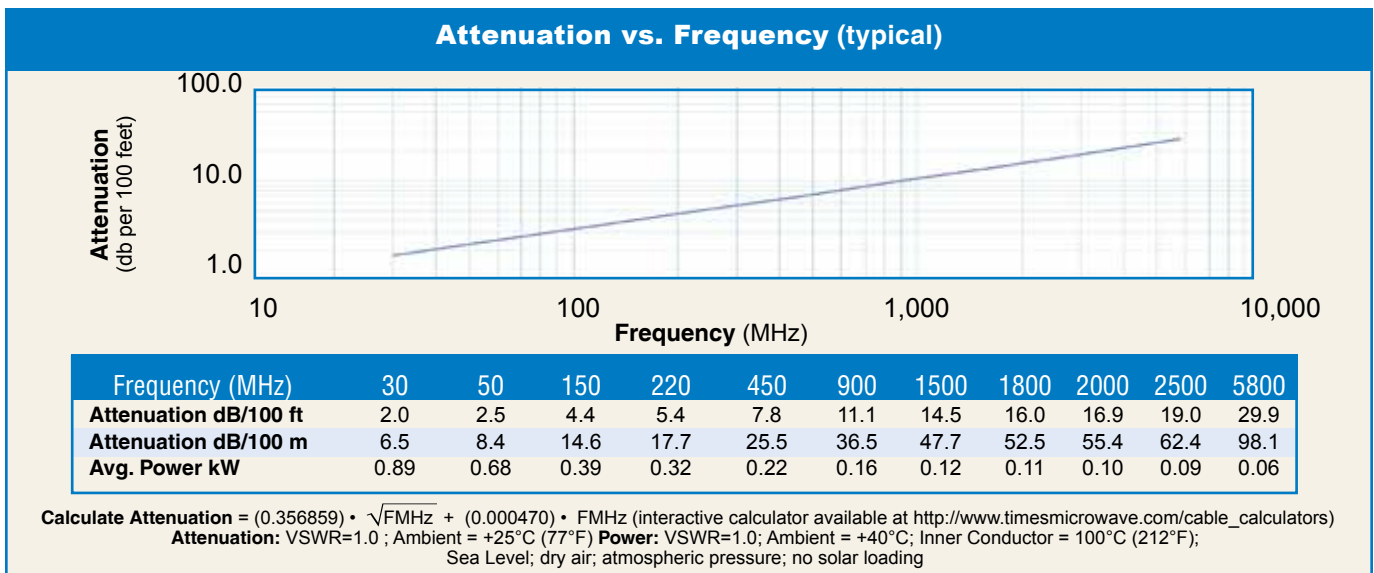
Part Description				Stock	
Part Number	Application	Jacket	Color	Code	
LMR-195	Outdoor	PE	Black	54110	
LMR-195-DB	Outdoor/Watertight	PE	Black	54113	
LMR-195-FR	Indoor/Outdoor Riser	CMR	FRPE	Black	54111
LMR-195-FR-W	Indoor/Outdoor Riser	CMR	FRPE	White	54158
LMR-195-FR-PVC	Indoor/Outdoor Riser	CMR	FRPVC	Black	54105
LMR-195-MA	Mobile Antennas	PVC	Black	54210	
LMR-195-PVC	General Purpose	PVC	Black	54215	
LMR-195-PVC-W	General Purpose	PVC	White	54199	

Construction Specifications			
Description	Material	In.	(mm)
Inner Conductor	Solid BC	0.037	(0.94)
Dielectric	Foam PE	0.110	(2.79)
Outer Conductor	Aluminum Tape	0.116	(2.95)
Overall Braid	Tinned Copper	0.139	(3.53)
Jacket	(see table above)	0.195	(4.95)

Mechanical Specifications			
Performance Property	Units	US	(metric)
Bend Radius: installation	in. (mm)	0.5	(12.7)
Bend Radius: repeated	in. (mm)	2.0	(50.8)
Bending Moment	ft-lb (N-m)	0.2	(0.27)
Weight	lb/ft (kg/m)	0.021	(0.03)
Tensile Strength	lb (kg)	40	(18.2)
Flat Plate Crush	lb/in. (kg/mm)	15	(0.27)

Electrical Specifications			
Performance Property	Units	US	(metric)
Velocity of Propagation	%	76	
Dielectric Constant	NA	1.56	
Time Delay	nS/ft (nS/m)	1.27	(4.17)
Impedance	ohms	50	
Capacitance	pF/ft (pF/m)	25.4	(83.3)
Inductance	uH/ft (uH/m)	0.064	(0.21)
Shielding Effectiveness	dB	>90	
DC Resistance			
Inner Conductor	ohms/1000ft (/km)	7.6	(24.9)
Outer Conductor	ohms/1000ft (/km)	4.9	(16.1)
Voltage Withstand	Volts DC	1000	
Jacket Spark	Volts RMS	3000	
Peak Power	kW	2.5	

Environmental Specifications		
Performance Property	°F	°C
Installation Temperature Range	-40/+185	-40/+85
Storage Temperature Range	-94/+185	-70/+85
Operating Temperature Range	-40/+185	-40/+85



Connectors

Interface	Description	Part Number	Stock Code	VSWR** Freq. (GHz)	Coupling Nut	Inner Contact Attach	Outer Contact Attach	Finish* Body /Pin	Length in (mm)	Width in (mm)	Weight lb (g)
N male	Straight Plug	TC-195-NM	3190-1555	<1.25:1 (2.5)	Knurl	Solder	Crimp	S/G	1.5 (38.1)	0.75 (19.1)	0.073 (33.1)
N male	Right Angle	TC-195-NMH-RA-D	3190-2425	<1.35:1 (6)	Hex/Knurl	Solder	Crimp	A/G	1.3 (32.1)	1.19 (30.1)	0.083 (37.5)
SMA male	Straight Plug	TC-195-SM	3190-1553	<1.25:1 (2.5)	Hex	Solder	Crimp	SS/G	1.0 (25.4)	0.32 (8.1)	0.015 (6.8)
TNC male	Straight Plug	TC-195-TM	3190-1554	<1.25:1 (2.5)	Knurl	Solder	Crimp	S/G	1.4 (35.6)	0.59 (15.0)	0.045 (20.4)

* Finish metals: N=Nickel, S=Silver, G=Gold, SS=Stainless Steel, A=Alloy **VSWR spec based on 3 foot cable with a connector pair

Install Tools

Type	Part Number	Stock Code	Description
Crimp Tool	CT-240/200/195/100	3190-667	Crimp tool for LMR-100,195, 200 and 240 connectors
Cutting Tool	CCT-01	3190-1544	Cable end flush cut tool
Deburr Tool	DBT-U	3192-001	Removes center conductor rough edges
Replacement Blade	RB-01	3190-1609	Replacement blade for cutting tool

