

N Male Right Angle Connector Clamp/Solder Attachment for RG58, RG55, RG141, RG142, RG223, RG400, RG303, PE-C195, PE-P195, LMR-195



# RF Connectors Technical Data Sheet

PE4135

# Configuration

- N Male Connector
- MIL-STD-348A
- 50 Ohms
- Right Angle Body Geometry

### **Features**

- Max. Operating Frequency 1,000 MHz
- Good VSWR of 1.35:1

- RG58, RG55, RG141, RG142, RG223, RG400, RG303, PE-C195, PE-P195, LMR-195 Interface Type
- Clamp/Solder Attachment

- Gold Plated Brass Contact
- 30 µin minimum contact plating

# **Applications**

General Purpose Test

Custom Cable Assemblies

# Description

Pasternack's PE4135 type N male right angle connector with clamp/solder attachment for RG58, RG55, RG141, RG142, RG223, RG400, RG303, PE-C195, PE-P195 and LMR-195 is part of our full line of RF components available for same-day shipping. Our type N male connector operates up to a maximum frequency of 1,000 MHz and offers good VSWR of 1.35:1. Its right angle body geometry allows for easier connections in tight spaces.

Our type N male right angle connector PE4135 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.

# **Electrical Specifications**

Description	Minimum Typical		Maximum	Units		
Frequency Range	DC		1,000	MHz		
VSWR		1.35:1				
Operating Voltage (AC)			1,000	Vrms		

# **Mechanical Specifications**

Size

Length 1.35 in [34.29 mm] Width/Dia. 0.827 in [21.01 mm] 1.15 in [29.21 mm] Height 0.115 lbs [52.16 g] Weight

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: N Male Right Angle Connector Clamp/Solder Attachment for RG58, RG55, RG141, RG142, RG223, RG400, RG303, PE-C195, PE-P195, LMR-195 PE4135

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623 Phone: (866) 727-8376 or (949) 261-1920 • Fax: (949) 261-7451



N Male Right Angle Connector Clamp/Solder Attachment for RG58, RG55, RG141, RG142, RG223, RG400, RG303, PE-C195, PE-P195, LMR-195



# RF Connectors Technical Data Sheet

PE4135

### **Material Specifications**

Description	Material	Plating
Contact	Brass	Gold 30 μin minimum
Insulation	PTFE	
Body	Brass	Nickel 100 µin minimum
Coupling Nut	Brass	Nickel 100 µin minimum

# **Environmental Specifications**

Temperature

Operating Range

-65 to +165 deg C

Compliance Certifications (see product page for current document)

# **Plotted and Other Data**

Notes:

N Male Right Angle Connector Clamp/Solder Attachment for RG58, RG55, RG141, RG142, RG223, RG400, RG303, PE-C195, PE-P195, LMR-195 from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: N Male Right Angle Connector Clamp/Solder Attachment for RG58, RG55, RG141, RG142, RG223, RG400, RG303, PE-C195, PE-P195, LMR-195 PE4135

URL: https://www.pasternack.com/n-male-rg58-rg55-rg141-rg142-rg223-rg400-connector-pe4135-p.aspx

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Pasternack reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.

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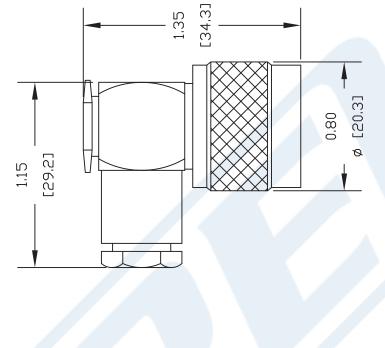
# PE4135 CAD Drawing

N Male Right Angle Connector Clamp/Solder Attachment for RG58, RG55, RG141, RG142, RG223, RG400, RG303, PE-C195, PE-P195, LMR-195

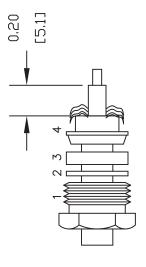
# ASSEMBLY PROCEDURES

1. SLIDE CLAMP NUT (1), WASHER (2) & GASKET (3) OVER CABLE. STRIP CABLE AS SHOWN. DO NOT NICK BRAID WHILE CUTTING JACKET. TAPER END OF BRAID TO PERMIT ASSEMBLY OF BRAID CLAMP (4). SLIDE BRAID CLAMP (4) OVER BRAID & SEAT AGAINST CABLE.

0.45



2. FORM BRAID OVER CLAMP NUT (4). CUT DIELECTRIC TO DIMENSION SHOWN. DO NOT NICK CENTER CONDUCTOR. SLIDE ASSEMBLY INTO BODY, SOLDER CENTER CONDUCTOR IN PLACE & TIGHTEN CLAMP NUT. SCREW CAP DOWN INTO PLACE.



PE PASTERNACK®

NOTES:
1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.
2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.
3. DIMENSIONS ARE IN INCHES (mm).
4. FITS MIL-C-17 AND EQUIVALENT CABLES.

147

SIZE

Α×

042309

CAD FILE

53919

<u>8</u>

FSCM

REV.

PE4135

DWG TITLE

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PE4135 REV 1.2



TNC Male Right Angle Connector Clamp/Solder Attachment for RG58, RG55, RG141, RG142, RG223, RG400, RG303, PE-C195, PE-P195, LMR-195



# RF Connectors Technical Data Sheet

PE4054

# Configuration

- TNC Male Connector
- MIL-STD-348A
- 50 Ohms
- Right Angle Body Geometry

# **Features**

- Max. Operating Frequency 11 GHz
- Gold Plated Brass Contact

- RG58, RG55, RG141, RG142, RG223, RG400, RG303, PE-C195, PE-P195, LMR-195 Interface Type
- Clamp/Solder Attachment

• 30 µin minimum contact plating

# Applications

General Purpose Test

Custom Cable Assemblies

# Description

Pasternack's PE4054 TNC male right angle connector with clamp/solder attachment for RG58, RG55, RG141, RG142, RG223, RG400, RG303, PE-C195, PE-P195 and LMR-195 is part of our full line of RF components available for same-day shipping. Our TNC male connector operates up to a maximum frequency of 11 GHz. Its right angle body geometry allows for easier connections in tight spaces.

Our TNC male right angle connector PE4054 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.

# **Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		11	GHz
Operating Voltage (AC)	,		500	Vrms
Dielectric Withstanding Voltage (AC)			1,500	Vrms

# Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 4					GHz
VSWR, Max	1.5:1					

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: TNC Male Right Angle Connector Clamp/Solder Attachment for RG58, RG55, RG141, RG142, RG223, RG400, RG303, PE-C195, PE-P195, LMR-195 PE4054

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# RF Connectors Technical Data Sheet

PE4054

# **Mechanical Specifications**

Size

 Length
 1.6 in [40.64 mm]

 Width/Dia.
 0.59 in [14.99 mm]

 Height
 1.145 in [29.08 mm]

 Weight
 0.089 lbs [40.37 g]

# **Material Specifications**

Description	Material	Plating
Contact	Brass	Gold 30 µin minimum
Insulation	PTFE	
Body	Brass	Nickel 100 µin minimum
Coupling Nut	Brass	Nickel 100 µin minimum

# **Environmental Specifications**

Temperature
Operating Range

-65 to +165 deg C

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: TNC Male Right Angle Connector Clamp/Solder Attachment for RG58, RG55, RG141, RG142, RG223, RG400, RG303, PE-C195, PE-P195, LMR-195 PE4054

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TNC Male Right Angle Connector Clamp/Solder Attachment for RG58, RG55, RG141, RG142, RG223, RG400, RG303, PE-C195, PE-P195, LMR-195



# RF Connectors Technical Data Sheet

PE4054

Compliance Certifications (see product page for current document)

# **Plotted and Other Data**

Notes:

TNC Male Right Angle Connector Clamp/Solder Attachment for RG58, RG55, RG141, RG142, RG223, RG400, RG303, PE-C195, PE-P195, LMR-195 from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: TNC Male Right Angle Connector Clamp/Solder Attachment for RG58, RG55, RG141, RG142, RG223, RG400, RG303, PE-C195, PE-P195, LMR-195 PE4054

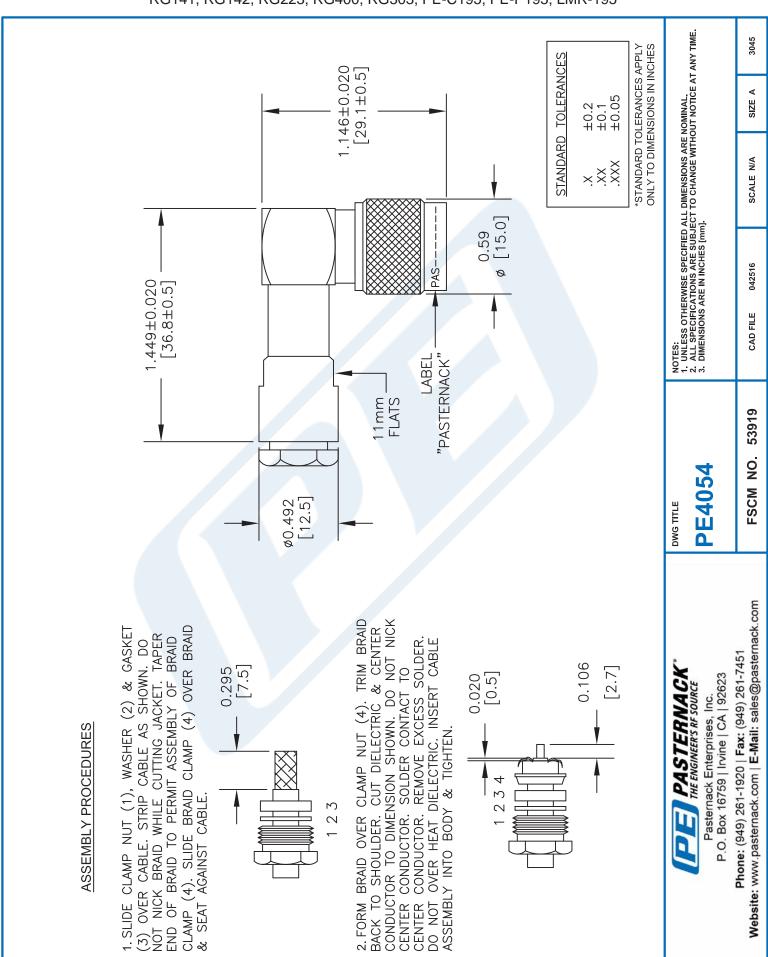
URL: https://www.pasternack.com/tnc-male-standard-rg58-rg55-rg141-rg142-rg223-rg400-connector-pe4054-p.aspx

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Pasternack reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.

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# PE4054 CAD Drawing

TNC Male Right Angle Connector Clamp/Solder Attachment for RG58, RG55, RG141, RG142, RG223, RG400, RG303, PE-C195, PE-P195, LMR-195



# TIMES MICROWAVE SYSTEMS

# 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.

LMR 105 TIMES MI

- **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							
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-P\	C Indoor/Outdoor Riser CN	MR FRP	/C 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			

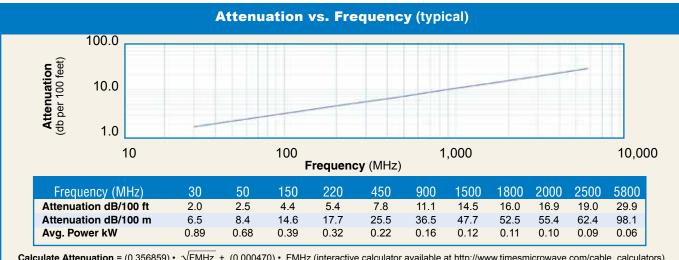
Construction Specifications								
Description	Material	In.	(mm)					
Inner Conductor	Solid BC	0.037	(0.94)					
Dielectric	rielectric Foam PE							
Outer Conductor	Aluminum Tape	0.116	(2.95)					
Overall Braid	0.139	(3.53)						
Jacket	(see table above)	0.195	(4.95)					



Mechanical Specifications										
Performance Property	Units	US	(metric)							
Bend Radius: installation	n 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)							

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						

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 Shielding Effectiveness DC Resistance	uH/ft (uH/m) dB	0.064 >90	(0.21)						
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							



Calculate Attenuation = (0.356859) • √FMHz + (0.000470) • FMHz (interactive calculator available at http://www.timesmicrowave.com/cable\_calculators)

Attenuation: VSWR=1.0 ; Ambient = +25°C (77°F) Power: VSWR=1.0; Ambient = +40°C; Inner Conductor = 100°C (212°F);

Sea Level; dry air; atmospheric pressure; no solar loading







# **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=Alballoy \*\*VSWR spec based on 3 foot cable with a connector pair

Туре	Pa	rt Number	Stock Code	Description
Crimp Tool	CT-24	10/200/195/100	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
Replace Blade	ment	RB-01	3190-1609	Replacement blade for cutting tool



