

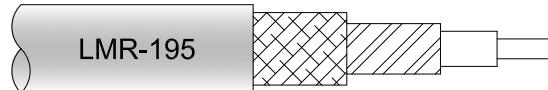
100 FT TNC to TNC M/M Right Angle 195 Series Low Loss Cable Jumper



## CA195LL045-100FT

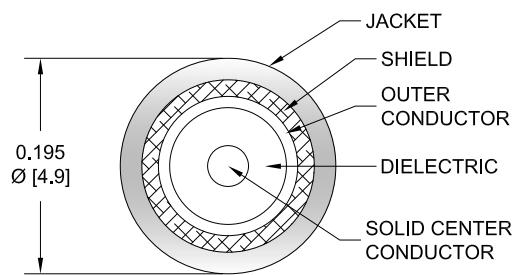
### Configuration

- Connector 1: TNC Male
- Connector 2: TNC Male Right Angle
- Cable Type: PPBC-195LL



### Features

- LMR Equivalent Coax
- Max Frequency 3 GHz
- Shielding Effectivity > 90 dB
- 80% Phase Velocity
- Low Insertion Loss
- Double Shielded
- PE Jacket
- One Time Bend Radius of 0.5 Inches



### Applications

- General Purpose
- Laboratory Use
- Antenna Installations
- Land Mobile Radio & Other Communication Systems
- Cellular & Wi-Fi Systems

### Description

PolyPhaser CA195LL045-100FT is a 100 foot TNC to TNC M/M Right Angle 195 Series Low Loss Cable Jumper is built using high quality components by skilled technicians to ensure a reliable product. The TNC Male and TNC Male Right Angle cable jumper connections are designed to industry standard interface dimensions to ensure superior performance. All of these products are available for same day shipment to fulfill your urgent needs. The use of a right angle interface helps when attaching the cable assembly in tight spaces and can reduce strain on the cable/connector interface. This high-quality RF coaxial assembly is perfect in many RF Interconnect applications such as LMR, industrial / commercial, IoT network, and many other applications. The CA195LL045-100FT TNC to TNC cable assembly is the perfect companion to PolyPhaser line of RF surge protection devices particularly when used as an antenna jumper cable.

The 195 Series coax used in these TNC to TNC assemblies is a 0.195 inch diameter coax with a black PE jacket. This cable's foam PE dielectric is low loss material with a VoP of 80% reducing the attenuation when compared to solid dielectric coax cables. PolyPhaser Low Loss 195 Series coax has a solid center conductor and uses a double shield consisting of a wire braid over a foil tape construction providing >90% shielding effectivity. The construction and materials of the CA195LL045-100FT result in a coax cable assembly with 0.5 inch one time bend radius and a repeat bend radius of 2 inches. The cable assembly's combination of TNC to TNC Male/Male Right Angle and 195 Series Low Loss Cable supports a maximum operating frequency of 3 GHz. Detailed specifications for this configuration includes layout drawings and performance and material specifications. This product is built and tested by our expert technicians to fulfill your cable assembly needs.

Polyolefin heat shrink strain relief boots add additional strength on both ends of this 100 foot assembly. These epoxy filled heat shrinks provide strain relief to help prevent damage from over-bending the assembly ends.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications:  
[100 FT TNC to TNC M/M Right Angle 195 Series Low Loss Cable Jumper CA195LL045-100FT](#)

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## CA195LL045-100FT

### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		3	GHz
VSWR			1.35:1	
Velocity of Propagation		80		%
RF Shielding	90			dB
Capacitance		25.4 [83.33]		pF/ft [pF/m]
Operating Voltage (AC)			500	Vrms
Jacket Spark			5,000	Vrms

### Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.1	0.25	0.5	1	3	GHz
Insertion Loss (Max.)	4.3	6.3	8.3	12.3	21.3	dB

#### Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax cable and connectors used in this assembly. Insertion Loss is estimated as 0.1 dB per connector and 0.2 dB per right angle connector.

### Mechanical Specifications

#### Size

Length	1,200 in [30.48 m]
Diameter	0.195 in [4.95 mm]
Weight	2.195 lbs [995.64 g]

#### Cable

Cable Type	PPBC-195LL
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper
Dielectric Type	PE (F)
Number of Shields	2
Shield Layer 1	Aluminum Tape
Shield Layer 2	Tinned Copper Braid
Jacket Material	PE, Black
Jacket Diameter	0.195 in [4.95 mm]
One Time Minimum Bend Radius	0.5 in [12.7 mm]
Repeated Minimum Bend Radius	2 in [50.8 mm]

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## 100 FT TNC to TNC M/M Right Angle 195 Series Low Loss Cable Jumper


**CA195LL045-100FT**
**Connectors**

Description	Connector 1	Connector 2
Type	TNC Male	TNC Male Right Angle
Specification	MIL-STD-348A	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	30 $\mu$ in. minimum	30 $\mu$ in. minimum
Dielectric Type	Teflon	Teflon
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	100 $\mu$ in. minimum	100 $\mu$ in. minimum
Coupling Nut Material and Plating		Brass, Nickel
Coupling Nut Plating Specification		100 $\mu$ in. minimum

**Environmental Specifications**
**Temperature**

Operating Range

-40 to +85 deg C

**Compliance Certifications**
**Plotted and Other Data**

## Notes:

- Values at 25°C, sea level.

PolyPhaser protects and increases the reliability of global RF communications networks, including transportation, telecommunications, defense, security and industrial applications, with superior RF surge protection technologies including DC Block, DC Pass and Ultra Low PIM. Backed by responsive service and expert technical support PolyPhaser continually expands its product offering and services to serve engineers' urgent needs for RF components in mission critical communication networks.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [100 FT TNC to TNC M/M Right Angle 195 Series Low Loss Cable Jumper CA195LL045-100FT](#)

URL: <https://www.polyphaser.com/100-ft-tnc-to-tnc-m-m-right-angle-195-series-low-loss-cable-jumper-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. PolyPhaser reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. PolyPhaser does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and PolyPhaser does not assume any liability arising out of the use of any part or documentation.

## CA195LL045-100FT CAD Drawing

REV.	DESCRIPTION	REVISIONS	DATE	APPROVED
A	INITIAL RELEASE		07/26/2020	SELLIS

LENGTH MEASURED FROM  
CONTACT TO CONTACT

2X HEATSHRINK BOOTING

LOW LOSS 195  
SERIES COAX

TNC MALE

LABEL  
(SEE NOTE 1)

TNC MALE

RIGHT ANGLE

THIRD-ANGLE PROJECTION



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SIZE CAGE CODE DRAWN BY  
A 30992 MV/VEERAPPAN ITEM NO.  
CA195LL045 REV A

NOTES:

1. CABLES 36" AND UNDER HAVE 1 LABEL CENTERED.  
CABLES OVER 36" HAVE 2 LABELS, ONE AT EACH  
END 6.0" FROM THE FRONT OF THE CONNECTOR.

UNLESS OTHERWISE SPECIFIED  
LEADING DIMENSIONS IN [ ] ARE INCHES  
DIMENSIONS IN [ ] ARE MILLIMETERS

$X = \pm .2$	[.08]	FRACTIONS
$XX = \pm .02$	[.51]	$\pm 1/32$
$XXX = \pm .005$	[.13]	ANGLES $\pm 1^\circ$

CABLE LENGTH (L) TOLERANCES:

$L \leq 12$ [305]	$= \pm 11.25$ / -0
$12$ [305] < $L \leq 80$ [1524]	$= +2$ [51] / -0
$80$ [1524] < $L \leq 120$ [3048]	$= +4$ [102] / -0
$120$ [3048] < $L \leq 300$ [7620]	$= +6$ [152] / -0
$300$ [7620] < $L \leq +56L$ / -0	

ALL DIMENSIONS SHOWN  
ARE FOR REFERENCE ONLY.  
WITH THE EXPORT ADMINISTRATION REGULATIONS, DIVERSION OR TRANSFER TO A FOREIGN COUNTRY IS PROHIBITED.