



TNC Male to TNC Male Low Loss Cable Using LMR-400 Coax with Times Microwave Components, LF Solder

TECHNICAL DATA SHEET

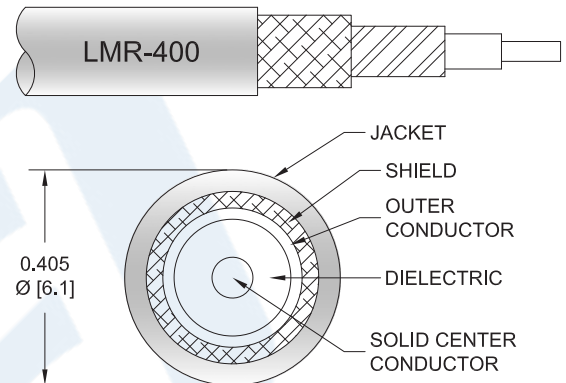
PE3C2055LF

Configuration

- Connector 1: TNC Male
- Connector 2: TNC Male
- Cable Type: LMR-400
- Coax Flex Type: Flexible

Features

- Max Frequency 5.8 GHz
- Shielding Effectivity > 90 dB
- 85% Phase Velocity
- Double Shielded
- PE Jacket
- 500 Mating Cycles



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3C2055LF TNC male to TNC male cable using LMR-400 coax is part of our full line of RF components available for same-day shipping. Pasternack's flexible RF cable assemblies are ideal for applications where tight bends and flexure are required. This Pasternack TNC to TNC cable assembly has a male to male gender configuration with 50 ohm flexible LMR-400 coax. The PE3C2055LF TNC male to TNC male cable assembly operates to 5.8 GHz. The double shielding of this Pasternack cable assembly provides excellent shielding effectiveness of better than 90 dB.

Custom versions of most RF cable assemblies can be built and shipped same day. Custom cable assembly lengths can be obtained by specifying the desired length on the web site at time of order or by contacting a sales representative. Other available RF cable assembly value added services include connector orientation or clocking, heat shrink booting and custom labeling. RF testing can also be performed to document the electrical performance of your cable assembly.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [TNC Male to TNC Male Low Loss Cable Using LMR-400 Coax with Times Microwave Components, LF Solder PE3C2055LF](#)



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Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|-------------------------------|---------|--------------|---------|----------------------------------|
| Frequency Range | DC | | 5.8 | GHz |
| VSWR | | | 1.4:1 | |
| Velocity of Propagation | | 85 | | % |
| RF Shielding | 90 | | | dB |
| Group Delay | | 1.2 [3.94] | | ns/ft [ns/m] |
| Capacitance | | 23.9 [78.41] | | pF/ft [pF/m] |
| Inductance | | 0.06 [0.2] | | uH/ft [uH/m] |
| DC Resistance Inner Conductor | | 1.39 [4.56] | | Ω /1000ft [Ω /Km] |
| DC Resistance Outer Conductor | | 1.65 [5.41] | | Ω /1000ft [Ω /Km] |
| Jacket Spark | | | 8,000 | Vrms |

Specifications by Frequency

| Part Number | Length | Description | F1 | F2 | F3 | F4 | F5 | Units | Weight (lbs) |
|---------------|--------------------------|-----------------------|------|------|------|------|------|-------|--------------|
| | | Frequency | 250 | 500 | 1000 | 2500 | 5800 | MHz | |
| PE3C2055LF | Custom Lengths Available | Insertion Loss (Typ.) | 0.02 | 0.03 | 0.04 | 0.07 | 0.11 | dB/ft | |
| | | | 0.07 | 0.1 | 0.14 | 0.23 | 0.36 | dB/m | |
| PE3C2055LF-12 | 12 inch | Insertion Loss (Typ.) | 0.22 | 0.23 | 0.25 | 0.27 | 0.31 | dB | 0.247 |
| PE3C2055LF-24 | 24 inch | Insertion Loss (Typ.) | 0.24 | 0.26 | 0.29 | 0.34 | 0.42 | dB | 0.315 |
| PE3C2055LF-36 | 36 inch | Insertion Loss (Typ.) | 0.26 | 0.29 | 0.33 | 0.41 | 0.53 | dB | 0.382 |
| PE3C2055LF-48 | 48 inch | Insertion Loss (Typ.) | 0.28 | 0.32 | 0.37 | 0.48 | 0.64 | dB | 0.449 |
| PE3C2055LF-60 | 60 inch | Insertion Loss (Typ.) | 0.3 | 0.34 | 0.41 | 0.54 | 0.74 | dB | 0.516 |

The insertion loss data for the base model does not include loss due to the connectors. Each length includes insertion loss due to the connectors.

| | |
|-----------------------------|----------------|
| Loss due to Connector 1: | 0.1 dB |
| Loss due to Connector 2: | 0.1 dB |
| Base Weight: | 0.247 pounds |
| Additional Weight per Inch: | 0.00559 pounds |

Mechanical Specifications

Cable Assembly

Weight 0.247 lbs [112.04 g]

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Cable

| | |
|--------------------------------------|------------------------|
| Cable Type | LMR-400 |
| Impedance | 50 Ohms |
| Inner Conductor Type | Solid |
| Inner Conductor Material and Plating | Copper Clad Aluminum |
| 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 | 0.405 in [10.29 mm] |
| One Time Minimum Bend Radius | 1 in [25.4 mm] |
| Repeated Minimum Bend Radius | 4 in [101.6 mm] |
| Bending Moment | 0.5 lbs-ft [0.68 N-m] |
| Flat Plate Crush | 40 lbs/in [0.71 Kg/mm] |
| Tensile Strength | 160 lbs [72.57 Kg] |

Connectors

| Description | Connector 1 | Connector 2 |
|--------------------------------------|------------------------|------------------------|
| Type | TNC Male Threaded | TNC Male Threaded |
| Impedance | 50 Ohms | 50 Ohms |
| Mating Cycles | 500 | 500 |
| Contact Material and Plating | Beryllium Copper, Gold | Beryllium Copper, Gold |
| Dielectric Type | PTFE | PTFE |
| Outer Conductor Material and Plating | Brass, Tri-Metal | Brass, Tri-Metal |
| Body Material and Plating | Brass, Tri-Metal | Brass, Tri-Metal |
| Coupling Nut Material and Plating | Brass, Tri-Metal | Brass, Tri-Metal |
| Hex Size | 5/8 inch | 5/8 inch |
| Torque | 6 in-lbs [0.68 Nm] | 6 in-lbs [0.68 Nm] |

Environmental Specifications

Temperature

Operating Range -40 to +85 deg C

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

Plotted and Other Data

Notes:

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TECHNICAL DATA SHEET

PE3C2055LF

How to Order

Part Number Configuration:

PE3C2055LF - xx uu

Unit of Measure:
cm = Centimeters
<blank> = Inches
Length
Base Number

Example: PE3C2055LF-12 = 12 inches long cable
PE3C2055LF-100cm = 100 cm long cable

TNC Male to TNC Male Low Loss Cable Using LMR-400 Coax with Times Microwave Components, LF Solder from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

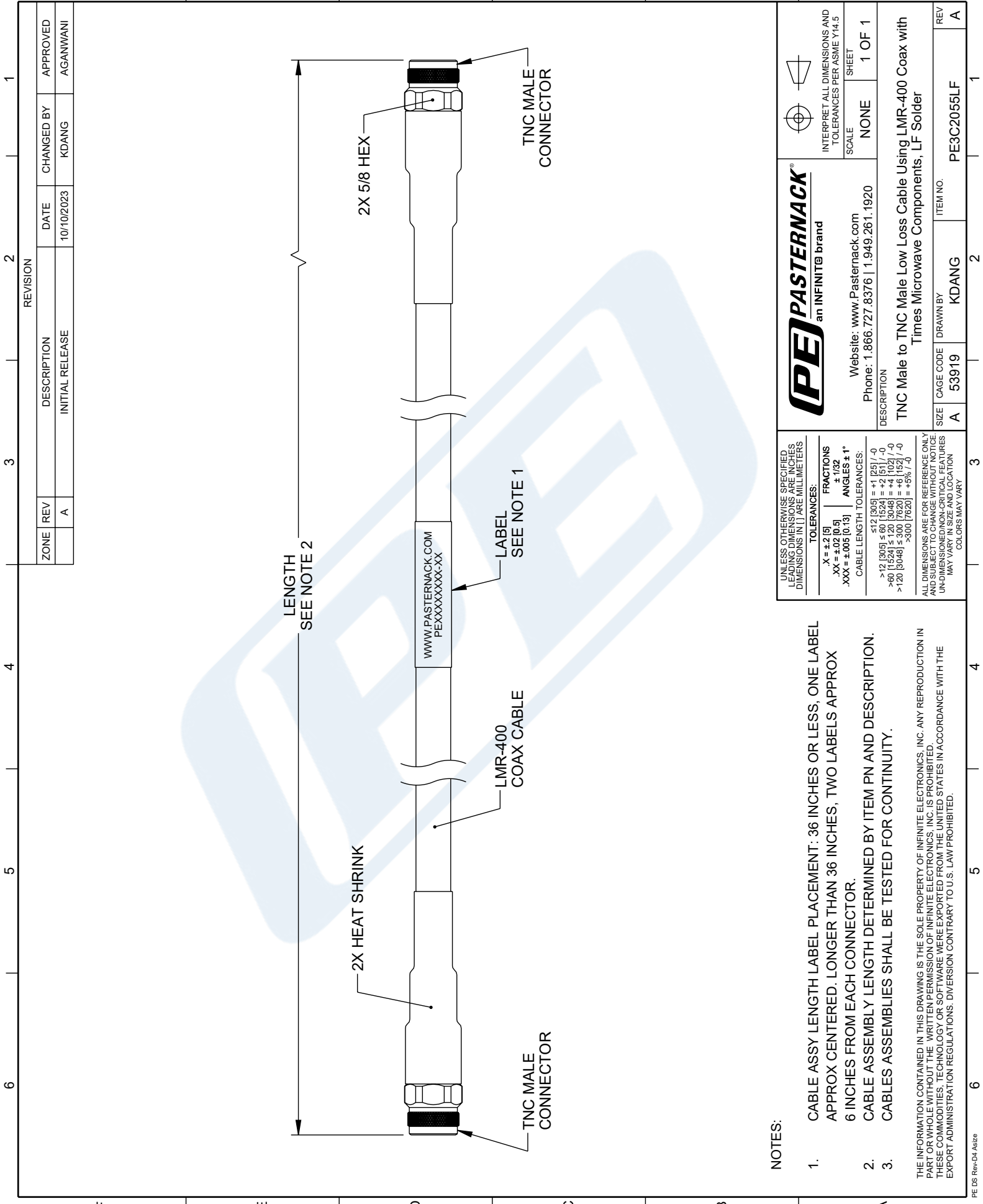
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URL: <https://www.pasternack.com/tnc-male-to-tnc-male-low-loss-cable-using-lmr-400-lf-solder-pe3c2055lf-p.aspx>

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.

PE3C2055LF CAD Drawing

TNC Male to TNC Male Low Loss Cable Using LMR-400 Coax with Times Microwave Components, LF Solder



| ZONE | | REVISION | | DATE | | CHANGED BY | | APPROVED | |
|------|--|-----------------|--|------------|-------|------------|----------|----------|--|
| A | | INITIAL RELEASE | | 10/10/2023 | KDANG | | AGANWANI | | |

| | |
|--|------------------|
| UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES, DIMENSIONS IN [] ARE MILLIMETERS. | |
| TOLERANCES: | |
| X = ± 2 [5] | FRACTIONS ± 1/32 |
| .XX = ± 02 [0.5] | ANGLES ± 1° |
| .XXX = ± 005 [0.13] | |
| CABLE LENGTH TOLERANCES: | |
| ≤ 12 [305] | ± 1 [25] / -0 |
| > 12 [305] ≤ 60 [1524] | ± 2 [51] / -0 |
| > 60 [1524] ≤ 120 [3048] | ± 4 [102] / -0 |
| > 120 [3048] | ± 8 [93] / -0 |
| > 300 [7620] | ± 16 [93] / -0 |
| ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE UNLESS INDICATED OTHERWISE. UNDIMENSIONED NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY. | |

| | |
|---|--|
| <p>NOTES:</p> <ol style="list-style-type: none"> CABLE ASSY LENGTH LABEL PLACEMENT: 36 INCHES OR LESS, ONE LABEL APPROX CENTERED. LONGER THAN 36 INCHES, TWO LABELS APPROX 6 INCHES FROM EACH CONNECTOR. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION. CABLES ASSEMBLIES SHALL BE TESTED FOR CONTINUITY. <p>THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF INFINITE ELECTRONICS, INC. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF INFINITE ELECTRONICS, INC. IS PROHIBITED. THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.</p> | |
| <p>PE DS Rev-D4 Asize</p> | |

| | | | |
|--|-------------------|-----------------|----------------------|
| | | | |
| Website: www.Pasternack.com Phone: 1.866.727.8376 1.949.261.1920 | | SCALE: NONE | SHEET: 1 OF 1 |
| INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 | | | |
| DESCRIPTION: TNC Male to TNC Male Low Loss Cable Using LMR-400 Coax with Times Microwave Components, LF Solder | | | |
| SIZE: A | CABLE CODE: 53919 | DRAWN BY: KDANG | ITEM NO.: PE3C2055LF |
| REV: A | | | REV: A |