



## Fire Rated SMA Male to TNC Male Low Loss Cable Using LMR-200-FR Coax with Times Microwave Components

### TECHNICAL DATA SHEET

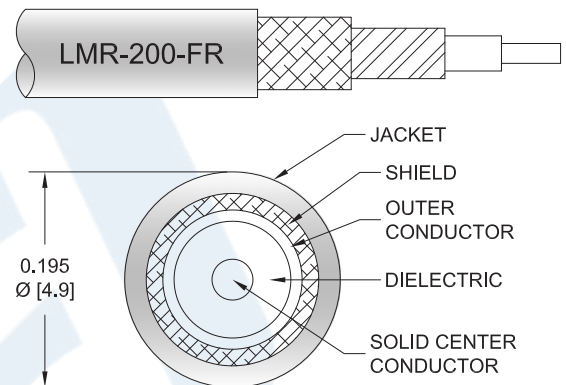
PE3C6886

#### Configuration

- Connector 1: SMA Male
- Connector 2: TNC Male
- Cable Type: LMR-200-FR
- Coax Flex Type: Flexible

#### Features

- Max Frequency 5.8 GHz
- Shielding Effectivity > 90 dB
- 83% Phase Velocity
- Double Shielded
- FRPE Jacket



#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE3C6886 SMA male to TNC male cable using LMR-200-FR 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 SMA to TNC cable assembly has a male to male gender configuration with 50 ohm flexible LMR-200-FR coax. The PE3C6886 SMA 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: [Fire Rated SMA Male to TNC Male Low Loss Cable Using LMR-200-FR Coax with Times Microwave Components PE3C6886](#)



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**PE3C6886**

#### Electrical Specifications

| Description                   | Minimum | Typical      | Maximum | Units           |
|-------------------------------|---------|--------------|---------|-----------------|
| Frequency Range               | DC      |              | 5.8     | GHz             |
| VSWR                          |         |              | 1.4:1   |                 |
| Velocity of Propagation       |         | 83           |         | %               |
| RF Shielding                  | 90      |              |         | dB              |
| Group Delay                   |         | 1.22 [4]     |         | ns/ft [ns/m]    |
| Capacitance                   |         | 24.5 [80.38] |         | pF/ft [pF/m]    |
| Inductance                    |         | 0.061 [0.2]  |         | uH/ft [uH/m]    |
| DC Resistance Inner Conductor |         | 5.36 [17.59] |         | Ω/1000ft [Ω/Km] |
| DC Resistance Outer Conductor |         | 4.9 [16.08]  |         | Ω/1000ft [Ω/Km] |
| Jacket Spark                  |         |              | 3,000   | Vrms            |

#### Specifications by Frequency

| Part Number | Length                   | Description           | F1   | F2   | F3   | F4   | F5   | Units | Weight (lbs) |
|-------------|--------------------------|-----------------------|------|------|------|------|------|-------|--------------|
|             |                          | Frequency             | 250  | 500  | 1000 | 2500 | 5800 | MHz   |              |
| PE3C6886    | Custom Lengths Available | Insertion Loss (Typ.) | 0.05 | 0.07 | 0.1  | 0.16 | 0.26 | dB/ft |              |
|             |                          |                       | 0.17 | 0.23 | 0.33 | 0.53 | 0.86 | dB/m  |              |
| PE3C6886-12 | 12 inch                  | Insertion Loss (Typ.) | 0.15 | 0.21 | 0.3  | 0.48 | 0.74 | dB    | 0.133        |
| PE3C6886-48 | 48 inch                  | Insertion Loss (Typ.) | 0.3  | 0.42 | 0.6  | 0.96 | 1.52 | dB    | 0.2          |
| PE3C6886-36 | 36 inch                  | Insertion Loss (Typ.) | 0.25 | 0.35 | 0.5  | 0.8  | 1.26 | dB    | 0.18         |
| PE3C6886-60 | 60 inch                  | Insertion Loss (Typ.) | 0.35 | 0.49 | 0.7  | 1.12 | 1.78 | dB    | 0.22         |
| PE3C6886-72 | 72 inch                  | Insertion Loss (Typ.) | 0.4  | 0.56 | 0.8  | 1.28 | 2.04 | dB    | 0.24         |

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:    | $0.1 * \sqrt{\text{FGHz}}$ dB |
| Loss due to Connector 2:    | $0.1 * \sqrt{\text{FGHz}}$ dB |
| Base Weight:                | 0.133 pounds                  |
| Additional Weight per Inch: | 0.00184 pounds                |

#### Mechanical Specifications

##### Cable Assembly

Weight 0.115 lbs [52.16 g]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Fire Rated SMA Male to TNC Male Low Loss Cable Using LMR-200-FR Coax with Times Microwave Components PE3C6886](#)



## Fire Rated SMA Male to TNC Male Low Loss Cable Using LMR-200-FR Coax with Times Microwave Components

### TECHNICAL DATA SHEET

**PE3C6886**

#### Cable

|                                      |                        |
|--------------------------------------|------------------------|
| Cable Type                           | LMR-200-FR             |
| Impedance                            | 50 Ohms                |
| Inner Conductor Type                 | Solid                  |
| Inner Conductor Material and Plating | Copper                 |
| Dielectric Type                      | PE                     |
| Number of Shields                    | 2                      |
| Shield Layer 1                       | Aluminum Tape          |
| Shield Layer 2                       | Tinned Copper Braid    |
| Jacket Material                      | FRPE, 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]         |
| Bending Moment                       | 2 lbs-ft [2.71 N-m]    |
| Flat Plate Crush                     | 15 lbs/in [0.27 Kg/mm] |
| Tensile Strength                     | 40 lbs [18.14 Kg]      |

#### Connectors

| Description                        | Connector 1                | Connector 2            |
|------------------------------------|----------------------------|------------------------|
| Type                               | SMA Male Threaded          | TNC Male Threaded      |
| Specification                      | MIL-STD-348                | MIL-STD-348            |
| Impedance                          | 50 Ohms                    | 50 Ohms                |
| Contact Material and Plating       | Beryllium Copper, Gold     | Beryllium Copper, Gold |
| Contact Plating Specification      | ASTM B488                  |                        |
| Dielectric Type                    | Teflon                     | PTFE                   |
| Body Material and Plating          | Passivated Stainless Steel | Brass, Tri-Metal       |
| Body Plating Specification         | SAE-AMS-2700               |                        |
| Coupling Nut Material and Plating  | Passivated Stainless Steel | Brass, Tri-Metal       |
| Coupling Nut Plating Specification | SAE-AMS-2700               |                        |
| Hex Size                           | 16-May Inch                | 8-May Inch             |

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

#### Plotted and Other Data

Notes:

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Fire Rated SMA Male to TNC Male Low Loss Cable Using LMR-200-FR Coax with Times Microwave Components PE3C6886](#)



## Fire Rated SMA Male to TNC Male Low Loss Cable Using LMR-200-FR Coax with Times Microwave Components

### TECHNICAL DATA SHEET

**PE3C6886**

#### How to Order

Part Number Configuration:

**PE3C6886**

- **xx**

**uu**

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

Example: PE3C6886-12 = 12 inches long cable  
PE3C6886-100cm = 100 cm long cable

Fire Rated SMA Male to TNC Male Low Loss Cable Using LMR-200-FR Coax with Times Microwave Components 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.

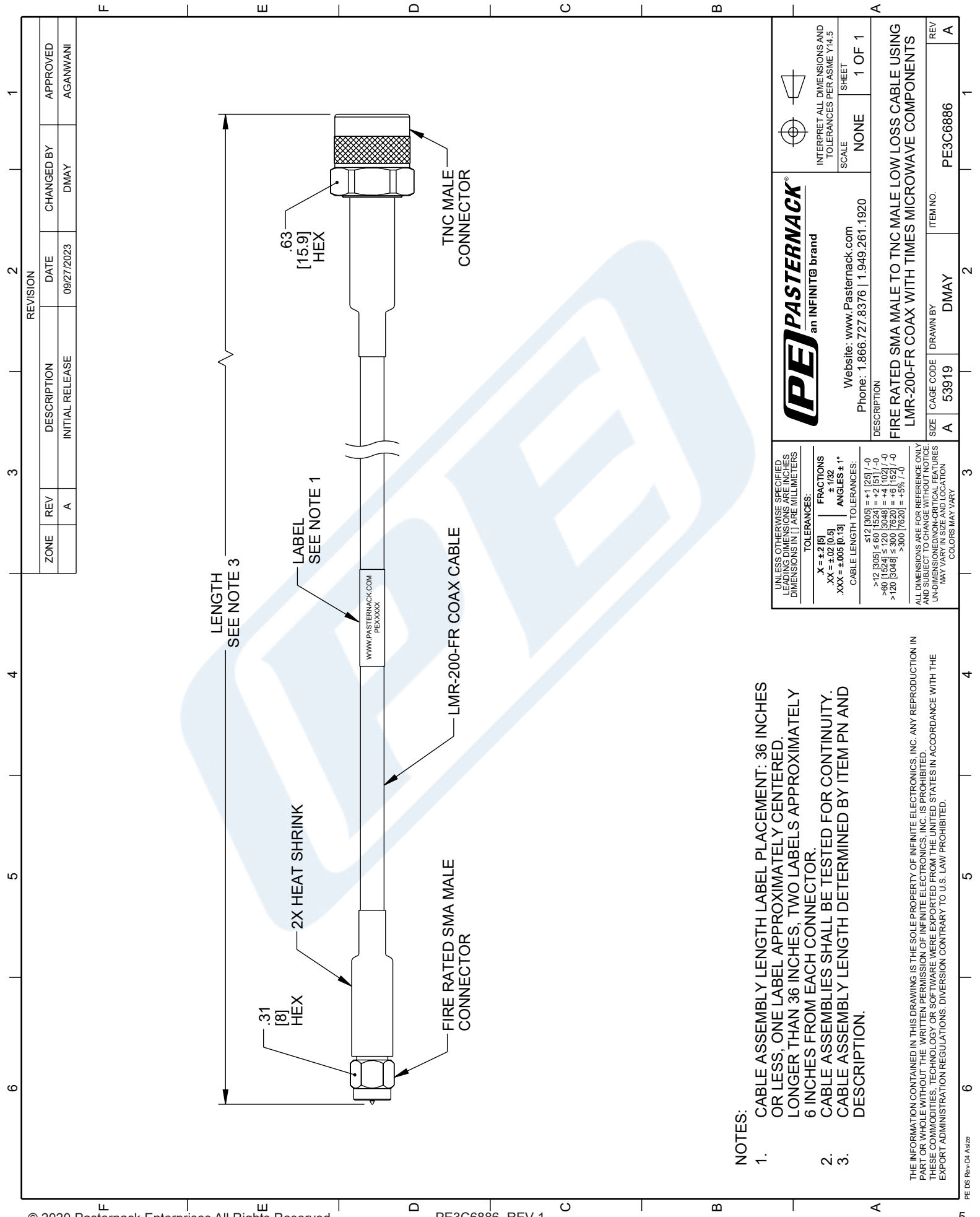
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Fire Rated SMA Male to TNC Male Low Loss Cable Using LMR-200-FR Coax with Times Microwave Components PE3C6886](https://www.pasternack.com/fire-rated-sma-male-to-tnc-male-low-loss-cable-using-lmr-200-fr-pe3c6886-p.aspx)

URL: <https://www.pasternack.com/fire-rated-sma-male-to-tnc-male-low-loss-cable-using-lmr-200-fr-pe3c6886-p.aspx>

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# PE3C6886 CAD Drawing

Fire Rated SMA Male to TNC Male Low Loss Cable Using LMR-200-FR Coax with Times Microwave Components



LENGTH  
SEE NOTE 3

.31  
[8]  
HEX

2X HEAT SHRINK

LABEL  
SEE NOTE 1

WWW.PASTERNAK.COM  
PEXXXX

FIRE RATED SMA MALE  
CONNECTOR

LMR-200-FR COAX CABLE

TNC MALE  
CONNECTOR

.63  
[15.9]  
HEX


**NOTES:**

1. CABLE ASSEMBLY LENGTH LABEL PLACEMENT: 36 INCHES OR LESS, ONE LABEL APPROXIMATELY CENTERED. LONGER THAN 36 INCHES, TWO LABELS APPROXIMATELY 6 INCHES FROM EACH CONNECTOR.
2. CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.
3. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

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|   |  |
|---|--|
| UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES. DIMENSIONS IN [ ] ARE IN MILLIMETERS. |  |
| TOLERANCES:   | FRACTIONS                                |
| .X = ±.2 [5]  | ±.732                                    |
| .XX = ±.02 [0.5]  | ANGLES ± 1°                              |
| .XXX = ±.005 [0.13]   | CABLE LENGTH TOLERANCES:                 |
|   | <12 [305] ≤ ±1 [25] / -0                 |
|   | >12 [305] ≤ 60 [1525] = ±2 [51] / -0     |
|   | >60 [1524] ≤ 120 [3048] = ±4 [102] / -0  |
|   | >120 [3048] ≤ 300 [7620] = ±6 [152] / -0 |
|   | >300 [7620] = ±5% / -0                   |

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE NON-CRITICAL FEATURES. DIMENSIONS MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.



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INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

SCALE: NONE

SHEET: 1 OF 1

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DESCRIPTION  
FIRE RATED SMA MALE TO TNC MALE LOW LOSS CABLE USING LMR-200-FR COAX WITH TIMES MICROWAVE COMPONENTS

|      |           |          |          |     |
|------|-----------|----------|----------|-----|
| SIZE | CAGE CODE | DRAWN BY | ITEM NO. | REV |
| A    | 53919     | DMAY     | PE3C6886 | A   |