

# FMCA1267-100CM DATA SHEET

# Low Loss SMA Female to TNC Male Cable LL142 Coax in 100 cm with LF Solder

The SMA female to TNC male 100 cm cable using LL142 coax, part number FMCA1267-100CM, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to TNC cable assembly has a female to male gender configuration with 50 ohm flexible LL142 coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA1267-100CM SMA female to TNC male cable assembly operates to 18 GHz. The triple shielding of this Fairview cable assembly provides excellent shielding effectiveness of better than 95 dB. Fairview High performance test cables boast 83% phase velocity and offer excellent low loss performance up to 18 GHz. The FMCA1267 cable assemblies use durable stainless steel connectors and an FEP jacket. The connector/cable interface has double heat-shrink booting which provides added strain relief while increasing the durability of the cable assembly. The low attenuation per foot in a 0.195 inch diameter cable creates a cable that has good flexibility while offering industry leading loss characteristics. All FMCA1267 cable assemblies are 100% RF tested to ensure the VSWR and insertion loss specifications meet or exceed Fairview's published electrical specifications.

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 RF cable assembly value added services including connector orientation or clocking, heat shrink booting and labeling are also available. RF testing can also be performed to document the electrical performance of your cable assembly.

### **Electrical Specifications**

| Description             | Min            | Тур | Max    | Units |    |
|-------------------------|----------------|-----|--------|-------|----|
| Frequency Range         | DC             |     | 18     | GHz   |    |
| VSWR                    |                |     | 1.45:1 |       |    |
| Return Loss             |                |     | 14.72  | dB    |    |
| Insertion Loss          |                |     | 1.7    | dB    |    |
| Velocity of Propagation |                | 83  |        | %     |    |
| RF Shielding            | 95             |     |        | dB    |    |
| Capacitance             | 25 [82.02] pF/ |     |        |       | n] |

#### **Performance by Frequency**

| Description           | F1   | F2   | F3   | F4   | F5   | Units |
|-----------------------|------|------|------|------|------|-------|
| Frequency             | 1    | 2    | 4.5  | 9    | 18   | GHz   |
| Insertion Loss (Max.) | 0.74 | 0.86 | 1.06 | 1.34 | 1.7  | dB    |
| Insertion Loss (Typ.) | 0.64 | 0.74 | 0.93 | 1.15 | 1.47 | dB    |

### **Mechanical Specifications**

Cable Assembly

Length\*

**Cable** Cable Type 39.37 in [100 cm]



# **Configuration:**

- SMA Female
- TNC Male
- LL142

## **Features:**

- Max Frequency 18 GHz
- Shielding Effectivity > 95 dB
- 83% Phase Velocity
- Triple Shielded
- FEP Jacket
- 83% Velocity of Propagation (Vop)
- Shielding effectiveness >95 dB
- Maximum VSWR is < 1.45:1 to 18 GHz
- Minimum Bend Radius of 1 inch
- Operating Temperature range of -55 to +125°C
- 100% RF Tested
- Custom lengths available

# **Applications:**

- General Purpose
- Laboratory Use
- Long Run coaxial cable applications
- Antenna testing
- Low loss system cables

Fairview Microwave 301 Leora Ln., Suite 100 Lewisville, TX 75056 Tel: 1-800-715-4396 / (972) 649-6678 Fax: (972) 649-6689 www.fairviewmicrowave.com sales@fairviewmicrowave.com Fairview Microwave

## an INFINIT<sup>C</sup> brand



| Impedance<br>Inner Conductor Type<br>Inner Conductor Material and Plating | 50 Ohms<br>Solid<br>Copper, Silver |
|---|------------------------------------|
| Dielectric Type   | PTFE                               |
| Number of Shields   | 3                                  |
| Shield Layer 1  | Silver Plated Copper Tape          |
| Shield Layer 2  | Aluminum Polyester                 |
| Shield Layer 3  | Silver Plated Copper Wire          |
| Jacket Material   | FEP, Green                         |
| Jacket Diameter   | 0.195 in [4.95 mm]                 |
| One Time Minimum Bend Radius<br>Repeated Minimum Bend Radius              | 1 in [25.4 mm]<br>1 in [25.4 mm]   |

#### Connectors

| Description                 | Connector 1          |         | Connector 2 |                   | or 2    |       |
|-----------------------------|----------------------|---------|-------------|-------------------|---------|-------|
| Туре                        | SMA Fen              | nale    |             | TNC Mal           | e       |       |
| Specification               |                      |         |             | MIL-STD-3         | 348     |       |
| Impedance                   | 50 Ohr               | ns      |             | 50 Ohm            | S       |       |
| Contact Material & Plating  | Beryllium Cop        | per, G  | old         | Beryllium Copp    | er, Gol | d     |
| Contact Plating Spec.       | ASTM-B488, 50µ       | in. mii | nimur       | mASTM-B488, 50µ   | u in. m | ninim |
| Dielectric Type             | PTFE                 |         |             | PEI               |         |       |
| Outer Cond Material & Plati | ing Passivated Stair | nless S | Steel       |                   |         |       |
| Outer Cond Plating Spec.    | SAE-AMS-             | 2700    |             |                   |         |       |
| Body Material & Plating     | Passivated Stair     | nless S | Steel       | Passivated Stainl | ess St  | eel   |
| Body Plating Spec.          | SAE-AMS-             | 2700    |             | SAE-AMS-2         | 701     |       |
| Coupling Nut Material & Pla | iting                |         |             | Passivated Stainl | ess St  | eel   |
| Coupling Nut Plating Spec.  |                      |         |             | SAE-AMS-2         | 701     |       |
| Hex Size                    |                      |         |             | 9/16 Inc          | h       |       |
| Torque                      |                      |         |             | 12 in-lbs 1.3     | 6 Nm    |       |
|                             |                      |         |             |                   |         |       |
|                             |                      |         |             |                   |         |       |

#### **Environmental Specifications**

**Temperature** Operating Range

-55 to +125 deg C

**Compliance Certifications** (see product page for current document)

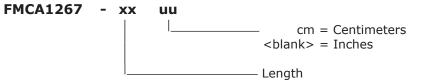
### **Plotted and Other Data**

Notes:

Values at 25°C, sea level.

### How to Order

Part Number Configuration:



Example: FMCA1267-12 = 12 inches long cable FMCA1267-100 cm = 100 cm long cable

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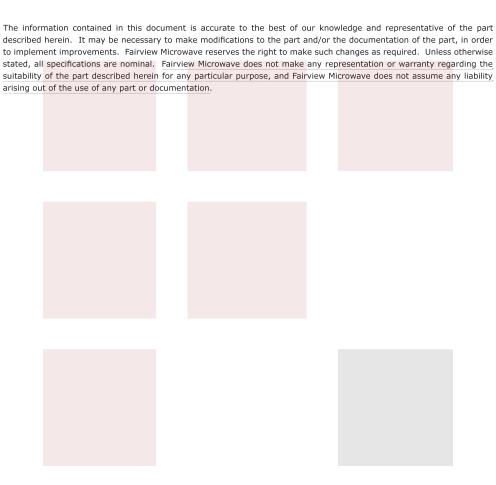


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Low Loss SMA Female to TNC Male Cable LL142 Coax in 100 cm with LF Solder from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

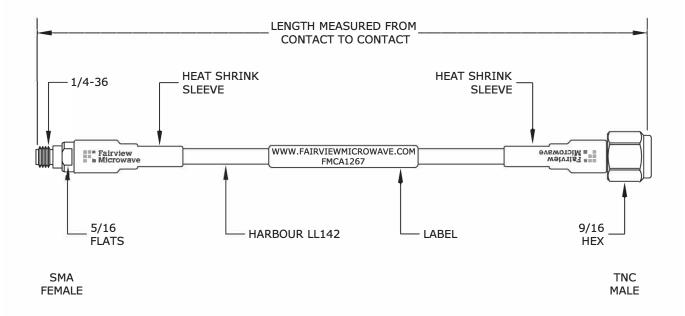
Click the following link to obtain additional part information: Low Loss SMA Female to TNC Male Cable LL142 Coax in 100 cm with LF Solder FMCA1267-100CM

URL: https://www.fairviewmicrowave.com/low-loss-sma-female-tnc-male-cable-II142-coax-fmca1267-100cm-p.aspx









NOTE:

LABEL FOR CABLE LENGTHS 48" OR SHORTER TO BE CENTERED. LONGER THAN 48" WILL BE 6" AWAY FROM CONNECTOR.

| FAIRVIEW MICROWAVE INC.<br>ALLEN, TX 75013 WWW.FAIRVIEWMICROWAVE.COM                 | NOTES:<br>1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.<br>2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.<br>3. DIMENSIONS ARE IN INCHES [mm]. |       |      |       |                 |      |  |
|--|---|-------|------|-------|-----------------|------|--|
| ITTLE<br>Low Loss SMA Female to TNC Male Cable LL142 Coax<br>n 100 cm with LF Solder | DWG NO FMCA1267   |       |      |       | CAGE CODE 3FKR5 |      |  |
|  | CAD FILE 072216   | SHEET | SCAL | E N/A | SIZE A          | 2233 |  |

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