

SMB Plug to BNC Male Cable LMR-100 Coax in 100 CM

The SMB plug to BNC male 100 cm cable using LMR-100 coax, part number FMC00258-100CM, from Fairview Microwave is in-stock and ships same day. This Fairview SMB to BNC cable assembly has a plug to male gender configuration with 50 ohm flexible LMR-100A coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMC00258-100CM SMB plug to BNC male cable assembly operates to 5.8 GHz. The double shielding of this Fairview 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 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 | Typ | Max | Units |
|-------------------------------|-----|---------------|-------|---|
| Frequency Range | DC | | 5.8 | GHz |
| VSWR | | | 1.4:1 | |
| Velocity of Propagation | | 66 | | % |
| RF Shielding | 90 | | | dB |
| Group Delay | | 1.54 [5.05] | | ns/ft [ns/m] |
| Capacitance | | 30.8 [101.05] | | pF/ft [pF/m] |
| Inductance | | 0.077 [0.25] | | uH/ft [uH/m] |
| DC Resistance Inner Conductor | | 81 [265.75] | | $\Omega/1000\text{ft}$ [Ω/Km] |
| DC Resistance Outer Conductor | | 9.5 [31.17] | | $\Omega/1000\text{ft}$ [Ω/Km] |
| Jacket Spark | | 2,000 | | Vrms |

Performance by Frequency

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|-----------------------|------|------|------|-----|-----|-------|
| Frequency | 0.25 | 0.5 | 1 | 2.5 | 5.8 | GHz |
| Insertion Loss (Typ.) | 0.57 | 0.74 | 0.98 | 1.5 | 2.3 | 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. The Insertion Loss includes an estimated insertion loss of 0.1 dB per connector.

Mechanical Specifications

Cable Assembly

| | |
|----------|--------------------|
| Length* | 39.37 in [100 cm] |
| Diameter | 0.571 in [14.5 mm] |

Cable

| | |
|------------|----------|
| Cable Type | LMR-100A |
| Impedance | 50 Ohms |



Configuration:

- SMB Plug
- BNC Male
- LMR-100A

Features:

- Max Frequency 5.8 GHz
- Shielding Effectivity > 90 dB
- 66% Phase Velocity
- Double Shielded
- PVC Jacket

Applications:

- General Purpose
- Laboratory Use

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| | |
|--------------------------------------|---------------------|
| Inner Conductor Type | Solid |
| Inner Conductor Material and Plating | Copper Clad Steel |
| Dielectric Type | PE |
| Number of Shields | 2 |
| Shield Layer 1 | Aluminum Tape |
| Shield Layer 2 | Tinned Copper Braid |
| Jacket Material | PVC, Black |
| Jacket Diameter | 0.11 in [2.79 mm] |

| | |
|------------------------------|------------------------|
| One Time Minimum Bend Radius | 0.25 in [6.35 mm] |
| Repeated Minimum Bend Radius | 1 in [25.4 mm] |
| Bending Moment | 0.1 lbs-ft [0.14 N-m] |
| Flat Plate Crush | 10 lbs/in [0.18 Kg/mm] |
| Tensile Strength | 15 lbs [6.8 Kg] |

Connectors

| Description | Connector 1 | Connector 2 |
|---------------------------------|------------------------|----------------------|
| Type | SMB Plug | BNC Male |
| Specification | MIL-STD-348A | MIL-STD-348A |
| Impedance | 50 Ohms | 50 Ohms |
| Contact Material & Plating | Beryllium Copper, Gold | Brass, Gold |
| Contact Plating Spec. | 30 μ in minimum | 50 μ in minimum |
| Dielectric Type | PTFE | PTFE |
| Body Material & Plating | Brass, Gold | Brass, Nickel |
| Body Plating Spec. | 3 μ in minimum | 100 μ in minimum |
| Coupling Nut Material & Plating | | Brass, Nickel |
| Coupling Nut Plating Spec. | | 100 μ in minimum |

Mechanical Specification Notes:

*All cable assemblies have a length tolerance of 1.5% or \pm 3/8", whichever is greater.

Environmental Specifications
Temperature

| | |
|-----------------|------------------|
| Operating Range | -40 to +85 deg C |
| Storage Range | -70 to +85 deg C |

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

Plotted and Other Data

Notes:

How to Order

Part Number Configuration:

FMC00258 - xx uu


cm = Centimeters
 <blank> = Inches
 Length

Example: FMC00258-12 = 12 inches long cable
 FMC00258-100cm = 100 cm long cable

SMB Plug to BNC Male Cable LMR-100 Coax in 100 CM from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

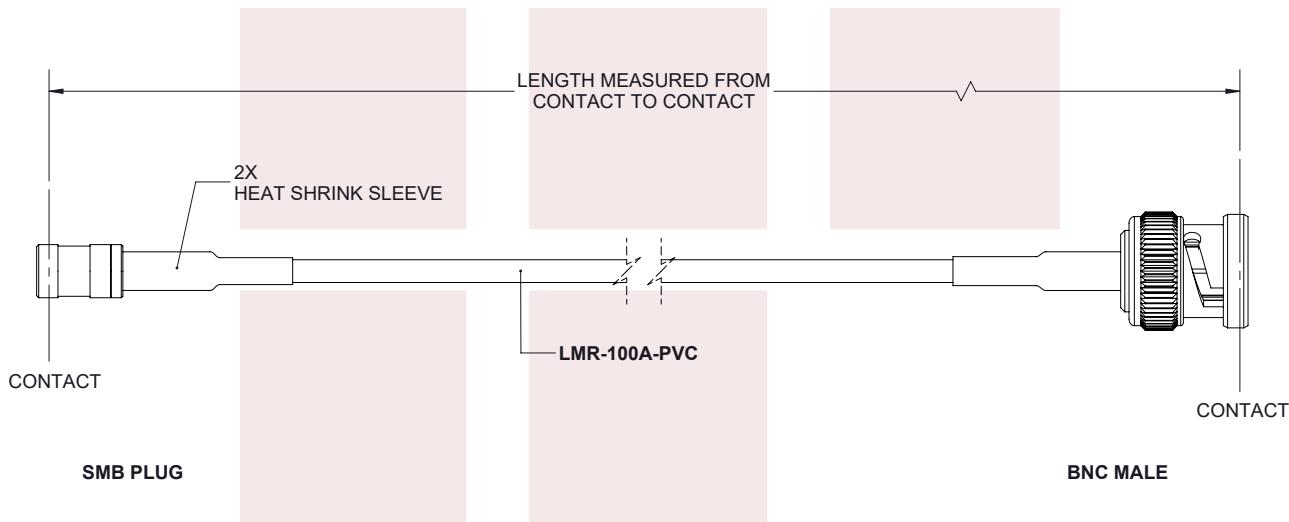
Click the following link to obtain additional part information: [SMB Plug to BNC Male Cable LMR-100 Coax in 100 CM FMC00258-100CM](https://www.fairviewmicrowave.com/smb-plug-bnc-male-cable-lmr100-coax-fmc00258-100cm-p.aspx)

URL: <https://www.fairviewmicrowave.com/smb-plug-bnc-male-cable-lmr100-coax-fmc00258-100cm-p.aspx>

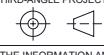
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| REVISIONS | | | |
|-----------|-----------------|-----------|----------|
| REV. | DESCRIPTION | DATE | APPROVED |
| A | INITIAL RELEASE | 2/18/2020 | S.ELLIS |



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| | TOLERANCES: | CABLE LENGTH (L) TOLERANCES: | |
| .X = ± 2 [5.08] FRACTIONS .XX = ± .02 [.51] ± 1/32 .XXX = ± .005 [.13] ANGLES ± 1° | | L ≤ 12 [305] = +1 [25] / -0 60 [1524] < L ≤ 60 [1524] = +2 [51] / -0 60 [1524] < L ≤ 120 [3048] = +4 [102] / -0 120 [3048] < L ≤ 300 [7620] = +6 [152] / -0 300 [7620] < L = +5%L / -0 | |
| TITLE SMB Plug to BNC Male Cable LMR-100 Coax in 100 CM | ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY. | | SCALE N/A |
| SIZE A | CAGE CODE 3FKR5 | DRAWN BY K.DANG | ITEM NO. FMC00258 REV A |

T-Rev.D