Low Loss Superflexible Corrugated SPF-250 Fire Rated Coax Cable with Black FRPE Jacket, By The Foot

SPF-250-LC

Configuration
- Low Loss Corrugated Cable
- 1 Shield(s)

Features
- PIM < -160 dBC
- UL Listed, Type CMR Riser Rated Cable
- Lightweight and Extremely Flexible
- Low Loss Dielectric 83% VoP
- Shielding > 100 dB
- Fire Rated Low Smoke Polyolefin Jacket

Applications
- Distributed Antenna Systems (DAS)
- UL Listed, Type CMR Riser Applications
- Low Smoke Requirements
- Small Cell
- Outdoor Applications
- Antenna Jumpers

Description
SPF-250-LC coax cable from L-com is one of several radio frequency coaxial cable types specifically stocked to be ready for quick shipment. Times Microwave SPF-250-LC coax cable, available at L-com, is manufactured in a helically corrugated, superflexible design and has a 50 Ohm impedance. This low loss corrugated coax cable SPF-250-LC is constructed with a 0.303 inch diameter and BK FRPE jacket. The FRPE makes this cable type perfect for CMR riser rated applications.

SPF-250-LC corrugated 50 Ohm coax cable with FRPE jacket is rated for a 5.8 GHz maximum operating frequency. This coaxial cable is built with a Copper outer conductor and RF shielding of 100 dB. L-com SPF-250-LC coax is constructed with Foam PE dielectric and a maximum operating temperature of 85 degrees C. Times Microwave SPF-250-LC coax cable specs for this wire can be found on its RF coax cable SPF-250-LC datasheet.

SPF-250-LC cable is part of more than one million RF and microwave parts in stock at L-com. This Times Microwave low loss SPF-250-LC coax cable is ready to buy and can be shipped worldwide. L-com also maintains a wide selection of other radio frequency coaxial cable products that ship same-day from our warehouse as with the rest of our other RF/microwave components.

Electrical Specifications

<table>
<thead>
<tr>
<th>Description</th>
<th>Minimum</th>
<th>Typical</th>
<th>Maximum</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency Range</td>
<td>DC</td>
<td></td>
<td>5.8</td>
<td>GHz</td>
</tr>
<tr>
<td>Impedance</td>
<td>50</td>
<td></td>
<td></td>
<td>Ohms</td>
</tr>
<tr>
<td>Velocity of Propagation</td>
<td>83</td>
<td></td>
<td></td>
<td>%</td>
</tr>
<tr>
<td>Shielding Effectiveness</td>
<td>100</td>
<td></td>
<td></td>
<td>dB</td>
</tr>
<tr>
<td>Nominal Capacitance</td>
<td>24 [78.74]</td>
<td></td>
<td></td>
<td>pF/ft [pF/m]</td>
</tr>
<tr>
<td>Nominal Inductance</td>
<td>0.054 [0.18]</td>
<td></td>
<td></td>
<td>uH/ft [uH/m]</td>
</tr>
</tbody>
</table>
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**SPF-250-LC**

### Performance by Frequency Band

<table>
<thead>
<tr>
<th>Description</th>
<th>F1</th>
<th>F2</th>
<th>F3</th>
<th>F4</th>
<th>F5</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>0.45</td>
<td>1.5</td>
<td>2</td>
<td>2.5</td>
<td>5.8</td>
<td>GHz</td>
</tr>
<tr>
<td>Attenuation, Typ</td>
<td>4.1</td>
<td>7.8</td>
<td>9.13</td>
<td>10.33</td>
<td>16.65</td>
<td>dB/100ft</td>
</tr>
<tr>
<td></td>
<td>13.45</td>
<td>25.59</td>
<td>29.95</td>
<td>33.89</td>
<td>54.63</td>
<td>dB/100m</td>
</tr>
<tr>
<td>Input Power (CW), Max</td>
<td>1,110</td>
<td>580</td>
<td>500</td>
<td>440</td>
<td>280</td>
<td>Watts</td>
</tr>
</tbody>
</table>

### Mechanical Specifications
- **Diameter**: 0.303 in 7.7 mm
- **Weight**: 0.057 lbs/ft [0.08 kg/m]
- **Min. Bend Radius (Installation)**: 1.25 in [31.75 mm]
- **Bending Moment**: 0.5 lbs-ft [0.68 N-m]

### Construction Specifications

<table>
<thead>
<tr>
<th>Description</th>
<th>Material and Plating</th>
<th>Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inner Conductor</td>
<td>Copper Clad Aluminum , 1 Strands Strand(s)</td>
<td>0.075in 1.91mm</td>
</tr>
<tr>
<td>Conductor Type</td>
<td>Solid</td>
<td></td>
</tr>
<tr>
<td>Dielectric</td>
<td>Foam PE</td>
<td>0.177in 4.5mm</td>
</tr>
<tr>
<td>Outer Conductor</td>
<td>Copper</td>
<td>0.252 in 6.4 mm</td>
</tr>
<tr>
<td></td>
<td>Corrugated</td>
<td></td>
</tr>
<tr>
<td>Jacket</td>
<td>FRPE, Black</td>
<td>0.303in 7.7mm</td>
</tr>
</tbody>
</table>

### Environmental Specifications
- **Temperature**: Operating Range -40deg C to +85deg C

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

### Plotted and Other Data

Low Loss Superflexible Corrugated SPF-250 Fire Rated Coax Cable with Black FRPE Jacket, By The Foot from L-com has same day shipment for domestic and International orders. Our portfolio includes coaxial cable assemblies, connectors, adapters and custom products as well as lightning and surge protectors, NEMA rated enclosures, and an RF product line which includes antennas, amplifiers,
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SPF-250-LC

passive, and active components.

The information contained within 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. L-com reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. L-com does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and L-com does not assume liability arising out of the use of any part or document.
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**SECTION VIEW**

- **Center Conductor**: Ø 0.075 [1.91]
- **Outer Conductor**: Ø 0.252 [6.40]
- **Jacket**: Ø 0.303 [7.70]
- **Dielectric**: Ø 0.177 [4.50]

**Tolerances**:
- UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE INCHES AND DIMENSIONS IN [ ] ARE MILLIMETERS.
  - TOLERANCES:
    - X ± 0.005 [0.13]
    - XX ± 0.01 [0.25]
    - XXX ± 0.005 [0.13]
    - ANGLES ± 1°

**Cable Length (L) Tolerances**:
- 12 [305] < 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

**DIMENSIONS IN [ ] ARE MILLIMETERS**

**TOLERANCES**:
- ± 1/32

**Angles ± 1°**

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**REV. DESCRIPTION DATE APPROVED**

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