

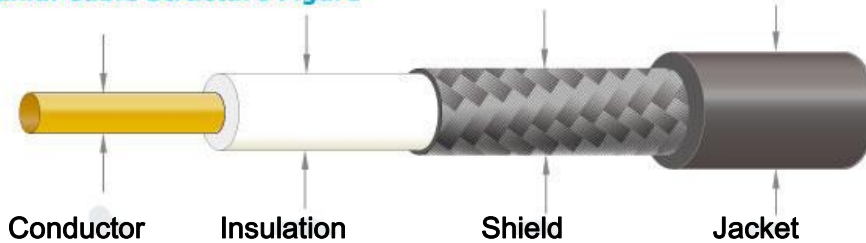
# RG316 Flexible Cable Assembly

**Part No.: WLC-F1111-XXX**

**RG316 SMA Male to SMA Male Cable Assembly**



Coaxial Cable Structure Figure



Actual Cable Section Illustration



## Construction

| Conductor  | Insulation   | Shield  | Jacket  |
|--|--|---|---|
| Material:<br>Silver-Coated Copper Clad Steel<br>Conductor No: 7<br>Construction Size:<br>0.175mm<br>Diameter:0.53mm (0.021") | Material:<br>FEP<br>Average Thickness:<br>0.51mm<br>Diameter:<br>1.53±0.03mm (0.06") | Material:<br>Silver-Coated Copper<br>Construction:<br>16/5/0.10mm<br>Coverage: 95%<br>Diameter:<br>1.98±0.05mm (0.078") | Material:<br>FEP<br>Average Thickness:<br>0.30mm<br>Overall Diameter:<br>2.53±0.10mm (0.1") |

## Electrical Characteristics

| Frequency | Attenuation(dB/m) |
|-----------|-------------------|
| 1GHZ      | 1.25              |
| 1.8GHZ    | 1.51              |
| 2.4GHZ    | 1.71              |
| 3GHZ      | 1.92              |

| Description             | Specification      |
|-------------------------|--------------------|
| Impedance               | 50 ± 3 Ω           |
| Conductor Resistance    | 302 Ω/km/20°C Max. |
| Insulation Resistance   | 3000 MΩ/km Min.    |
| Capacitance             | 95.8 ± 3 pF/m      |
| Dielectric Strength     | AC 1 KV/Minute     |
| Spark Test              | 5 KV               |
| Velocity of Propagation | 69 %               |

## Physical Characteristics

| Description         | Specification |                  |   |
|---------------------|---------------|------------------|---|
| Rating Temp Voltage | 105°C 30V     |                  |   |
| Insulation          | Unaged        | Tensile Strength | 2500 Psi Min. (1.76 Kg /mm <sup>2</sup> ) |
|                     |               | Elongation       | 200% Min.                                 |
|                     | Aged          | Tensile Strength | Unaged Min. 75% (168hrs×232°C)            |
|                     |               | Elongation       | Unaged Min. 75% (168hrs×232°C)            |
| Jacket              | Unaged        | Tensile Strength | 2500 Psi Min. (1.76 Kg /mm <sup>2</sup> ) |
|                     |               | Elongation       | 200% Min.                                 |
|                     | Aged          | Tensile Strength | Unaged Min.75% (168hrs×232°C)             |
|                     |               | Elongation       | Unaged Min.75% (168hrs×232°C)             |

## Schematic Drawing



Remark: Estimation of Cable Assembly Loss = Connector Loss + Assembly Loss + Cable Loss