



# UF1-3.5M3.5M-L

## UF Series Ultra-Flexible Cable Assembly

UF1/3.5mm Male /3.5mm Male/DC-26.5 GHz

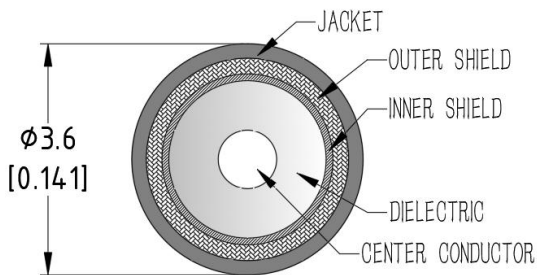
### Features:

- Max Frequency 26.5 GHz
- VSWR max of 1.30
- Velocity of Propagation of 74%

### Applications:

- Test & Measurement equipment
- Manufacturing lab
- WAN system equipment

### Cable Cross Section:



### Electrical Characteristics:

| Parameter                               | Min | Typ   | Max  | Units |
|---|-----|-------|------|-------|
| Frequency Range                         | DC  |       | 26.5 | GHz   |
| VSWR                                    |     | 1.25  | 1.3  | :1    |
| Velocity of propagation                 |     | 74%   |      |       |
| Shielding Effectiveness                 | 90  |       |      | dB    |
| Capacitance                             |     |       | 81   | pF/m  |
| Phase Stability Vs. Flexure@26.5GHz     |     | ±3    |      | °     |
| Amplitude Stability Vs. Flexure@26.5GHz |     | ±0.05 |      | dB    |
| Phase Stability Vs. Temperature         |     | 1000  |      | PPM   |

### Environmental And Physical Characteristics:

| Description           | Parameter  | Units |
|-----------------------|------------|-------|
| Cable Diameter        | 3.6        | mm    |
| Cable Jacket          | PUR        |       |
| Min. Bending Radius   | 14         | mm    |
| Typical Flex life     | 50000      |       |
| Operating Temperature | -55 to +85 | °C    |
| Storage Temperature   | -55 to +85 | °C    |

### Cable Performance By Frequency

| Frequency                 | 2 GHz | 4 GHz | 6 GHz | 8 GHz | 10 GHz | 12 GHz | 16 GHz | 18 GHz | 26.5 GHz | 40GHz |
|---------------------------|-------|-------|-------|-------|--------|--------|--------|--------|----------|-------|
| Insertion Loss (dB/m Max) | 0.74  | 1.07  | 1.33  | 1.56  | 1.76   | 1.95   | 2.29   | 2.45   | 3.05     | 3.89  |
| RF Power CW (W Max.)      | 82    | 57    | 46    | 40    | 35     | 32     | 27     | 25     | 20       | 16    |

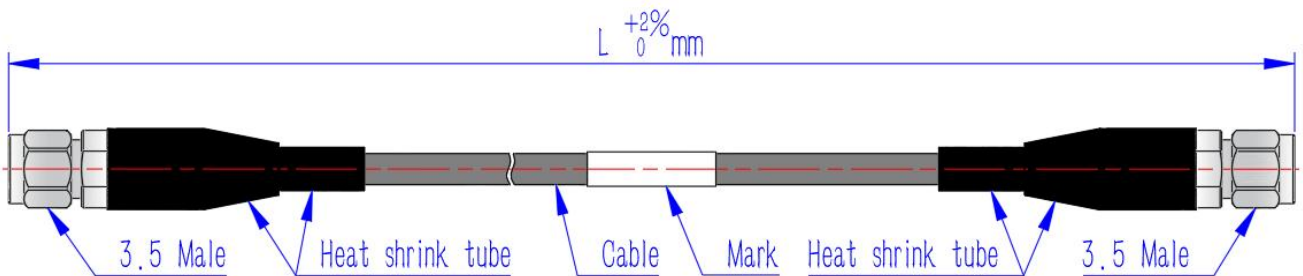


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## Connectors:

| Description                  | Connector 1                | Connector 2                |
|------------------------------|----------------------------|----------------------------|
| Type                         | 3.5mm Straight Male        | 3.5mm Straight Male        |
| Contact Material And Plating | Beryllium Copper,Gold      | Beryllium Copper,Gold      |
| Dielectric Type              | PEI                        | PEI                        |
| Body Material And Plating    | Passivated Stainless Steel | Passivated Stainless Steel |
| Insertion Loss (dB Max)      | 0.05* $\sqrt{f\_GHz}$      | 0.05* $\sqrt{f\_GHz}$      |

## Outline Drawing:



## Ordering Information:

| Base Number  | Lenth (Unit meters) | Armour  | Phase/delay Matched   |
|--------------|---------------------|---|---|
| UF1-3.5M3.5M | -L                  | <b>LEAVE BLANK(NOT REQUIRED)</b><br>-A(默认黑色尼龙铠甲)<br>-AS(不锈钢铠甲)<br>-AP(PUR防水铠甲)<br>-AT(透明铠甲) | <b>LEAVE BLANK(NOT REQUIRED)</b><br>-XXPS( $\pm XX$ PS)<br>-XX°( $\pm XX^\circ$ ) |

## Typical Performance Data:

Model:UF1-3.5M3.5M-1m

| Frequency      | 2 GHz |      | 6 GHz |      | 12 GHz |      | 18 GHz |      | 26.5 GHz |      |
|----------------|-------|------|-------|------|--------|------|--------|------|----------|------|
|                | Typ   | Max  | Typ   | Max  | Typ    | Max  | Typ    | Max  | Typ      | Max  |
| Insertion Loss | 0.81  | 0.89 | 1.46  | 1.58 | 2.12   | 2.30 | 2.87   | 3.09 | 3.31     | 3.57 |
| VSWR           | 1.08  | 1.15 | 1.15  | 1.20 | 1.20   | 1.25 | 1.20   | 1.25 | 1.25     | 1.30 |