



UF Series Ultra-Flexible Cable Assembly

UF1/SMA Male /SMA Male/DC-18 GHz

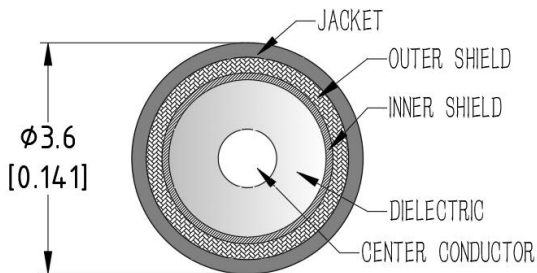
Features:

- Max Frequency 18 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 | | 18 | GHz |
| VSWR | | 1.25 | 1.3 | :1 |
| Velocity of propagation | | 74% | | |
| Shielding Effectiveness | 90 | | | dB |
| Capacitance | | | 81 | pF/m |
| Phase Stability Vs. Flexure@18GHz | | ± 3 | | $^{\circ}$ |
| Amplitude Stability Vs. Flexure@18GHz | | ± 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 | $^{\circ}\text{C}$ |
| Storage Temperature | -55 to +85 | $^{\circ}\text{C}$ |

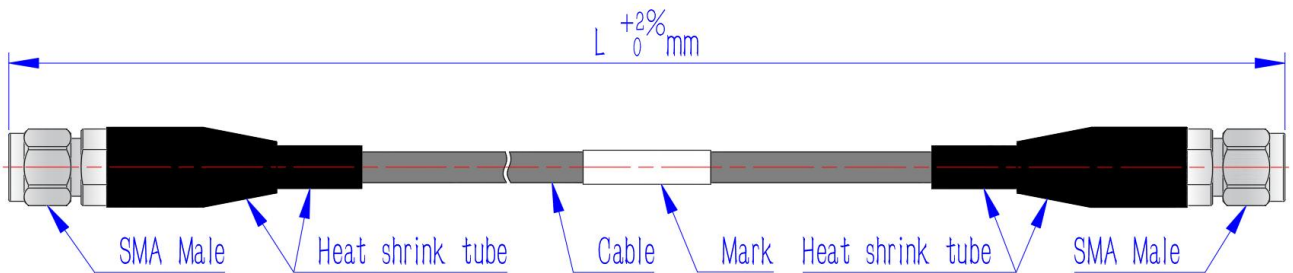
Cable Performance By Frequency:

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

Connectors:

| Description | Connector 1 | Connector 2 |
|------------------------------|-----------------------------|-----------------------------|
| Type | SMA Straight Male | SMA Straight Male |
| Contact Material And Plating | Brass,Gold | Brass,Gold |
| Dielectric Type | PTFE | PTFE |
| Body Material And Plating | Passivated Stainless Steel | Passivated Stainless Steel |
| Insertion Loss (dB Max) | $0.05 \cdot \sqrt{f_{GHz}}$ | $0.05 \cdot \sqrt{f_{GHz}}$ |

Outline Drawing:



Ordering Information:

| Base Number | Length (Unit meters) | Armour | Phase/delay Matched |
|--------------|----------------------|---|---|
| UF1-SMAMSMAM | -L | LEAVE BLANK(NOT REQUIRED) -A(默认黑色尼龙铠甲) -AS(不锈钢铠甲) -AP(PUR防水铠甲) -AT(透明铠甲) | LEAVE BLANK(NOT REQUIRED) -XXPS($\pm XX$ PS) -XX°($\pm XX^\circ$) |

Typical Performance Data:

Model:UF1-SMAMSMAM-1m

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