

## Flexible Ultra Low Loss Coax Cable Assembly

A40/SMA Right Angle Male / SMA Right Angle Male/DC-18 GHz

Model: A40-SMAWMSMAWM-

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### Features:

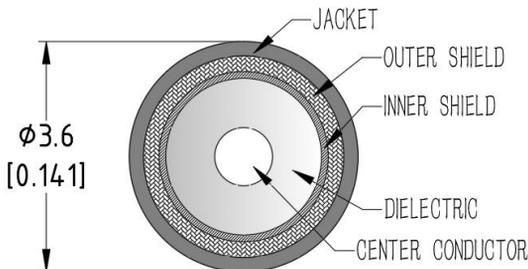
- Max Frequency 18 GHz
- VSWR max of 1.30
- Velocity of Propagation of 82%



### 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               |     | 82%        |     |            |
| Shielding Effectiveness               | 90  |            |     | dB         |
| Capacitance                           |     |            | 81  | pF/m       |
| Phase Stability Vs. Flexure@18GHz     |     | $\pm 2$    |     | $^{\circ}$ |
| Amplitude Stability Vs. Flexure@18GHz |     | $\pm 0.03$ |     | dB         |
| Phase Stability Vs. Temperature       |     |            | 550 | PPM        |

### Environmental And Physical Characteristics:

| Description           | Parameter   | Units              |
|-----------------------|-------------|--------------------|
| Cable Diameter        | 3.6         | mm                 |
| Cable Jacket          | FEP         |                    |
| Min. Bending Radius   | 18          | mm                 |
| Typical Flex life     | 50000       |                    |
| Operating Temperature | -55 to +125 | $^{\circ}\text{C}$ |
| Storage Temperature   | -55 to +125 | $^{\circ}\text{C}$ |

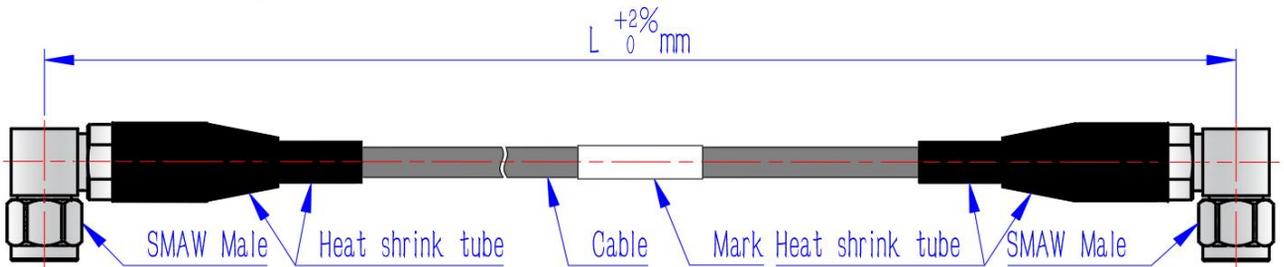
### Cable Performance By Frequency

| Frequency | 2 GHz | 4 GHz | 6 GHz | 8 GHz | 10 GHz | 12 GHz | 16 GHz | 18 GHz |
|-----------|-------|-------|-------|-------|--------|--------|--------|--------|
|           |       |       |       |       |        |        |        |        |

### Connectors:

| Description                  | Connector 1                | Connector 2                |
|------------------------------|----------------------------|----------------------------|
| Type                         | SMA Right Angle Male       | SMA Right Angle Male       |
| Contact Material And Plating | Beryllium Copper,Gold      | Beryllium Copper,Gold      |
| Dielectric Type              | PTFE                       | PTFE                       |
| Body Material And Plating    | Passivated Stainless Steel | Passivated Stainless Steel |
| Insertion Loss (dB Max)      | $0.07 * \sqrt{f\_GHz}$     | $0.07 * \sqrt{f\_GHz}$     |

### Outline Drawing:



### Ordering Information:

| Base Number     | Lenth | Armour (optional)           | Phase/delay Matched (optional)  |                          |
|-----------------|-------|-----------------------------|---|--------------------------|
| A40-SMAWMSMAW M | -L    | -A(Black nylon woven armor) |  |                          |
|                 |       | -AP(PUR water proof armor)  |  | -XXPS( $\leq \pm XX$ PS) |
|                 |       | -AS(Stainless steel armor)  |  | -XX°( $\pm XX$ °)        |
|                 |       | -AT(Transparent armor)      |  |                          |

### Typical Performance Data:

Model:A40-SMAWMSMAWM-1m

| Frequency      | 2 GHz |      | 6 GHz |      | 12 GHz |      | 18 GHz |      |
|----------------|-------|------|-------|------|--------|------|--------|------|
|                | Typ   | Max  | Typ   | Max  | Typ    | Max  | Typ    | Max  |
| Insertion Loss | 0.60  | 0.72 | 0.96  | 1.07 | 1.52   | 1.60 | 1.70   | 1.88 |
| VSWR           | 1.05  | 1.1  | 1.08  | 1.15 | 1.1    | 1.25 | 1.2    | 1.30 |

