

## R Series Semi-flexible Cable Assemblies

R2/SMA Right Angle Male /DC-18 GHz    **Model: R2-SMAWMSMAWM-L**

### Features:

- Max Frequency 18 GHz
- VSWR max of 1.30
- Velocity of Propagation of 70%

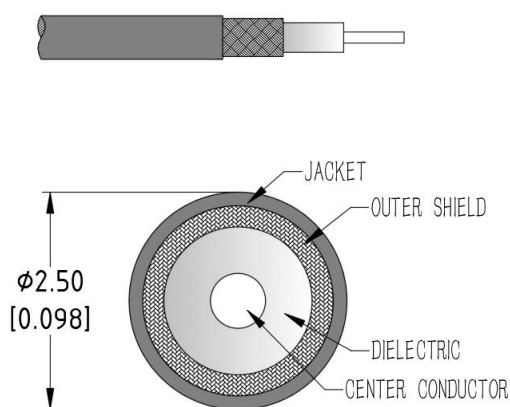
### Applications:

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

### Electrical Characteristics:

| Parameter               | Min | Typ  | Max | Units |
|-------------------------|-----|------|-----|-------|
| Frequency Range         | DC  |      | 18  | GHz   |
| VSWR                    |     | 1.25 | 1.3 | :1    |
| Velocity of propagation |     | 70%  |     |       |
| Shielding Effectiveness | 90  |      |     | dB    |
| Capacitance             |     |      | 81  | pF/m  |

### Cable Cross Section:



### Envrionmental And Physical Characteristics:

| Description           | Parameter   | Units |
|-----------------------|-------------|-------|
| Cable Diameter        | 2.5         | mm    |
| Cable Jacket          | FEP         |       |
| Min. Bending Radius   | 11          | mm    |
| Typical Flex life     | 50000       |       |
| Operating Temperature | -55 to +125 | °C    |
| Storage Temperature   | -55 to +165 | °C    |

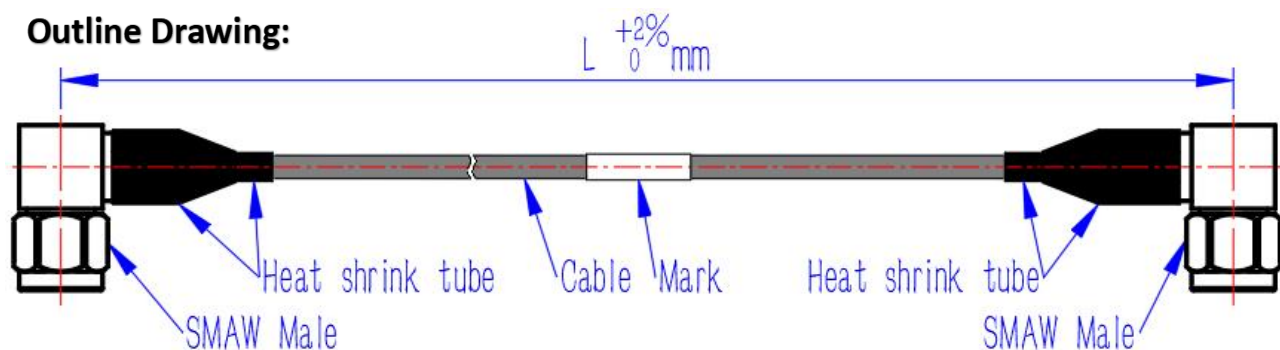
### Cable Performance By Frequency

| Frequency                  | 2 GHz | 4 GHz | 6 GHz | 8 GHz | 12 GHz | 16 GHz | 18 GHz |
|----------------------------|-------|-------|-------|-------|--------|--------|--------|
| Insertion Loss (dB/m Max ) | 1.00  | 1.46  | 1.84  | 2.16  | 2.74   | 3.24   | 3.48   |
| RF Power CW (W Max.)       | 69    | 47    | 38    | 32    | 25     | 21     | 20     |

## 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)      | $0.05 * \sqrt{f\_GHz}$     | $0.05 * \sqrt{f\_GHz}$     |

## Outline Drawing:



## Ordering Information:

| Base Number   | Lenth<br>(Unit meters) | Phase/delay Matched                                                             |
|---------------|------------------------|---------------------------------------------------------------------------------|
| R2-SMAWMSMAWM | -L                     | LEAVE BLANK(NOT REQUIRED)<br>-XXPS( $\leq \pm XX$ PS)<br>-XX°( $\pm XX^\circ$ ) |

## Typical Performance Data:

Model:R2-SMAWMSMAWM-1m

| Frequency      | 2 GHz |      | 6 GHz |      | 12 GHz |      | 18 GHz |      |
|----------------|-------|------|-------|------|--------|------|--------|------|
|                | Typ   | Max  | Typ   | Max  | Typ    | Max  | Typ    | Max  |
| Insertion Loss | 1.07  | 1.14 | 1.96  | 2.08 | 2.91   | 3.08 | 3.69   | 3.91 |
| VSWR           | 1.05  | 1.10 | 1.08  | 1.15 | 1.15   | 1.20 | 1.25   | 1.30 |