



# PL26-SMAMSMAM-L

## Phaseline Series High Performance Phase Stable Test Cable

PL26/SMA Male /SMA Male/DC-26.5 GHz

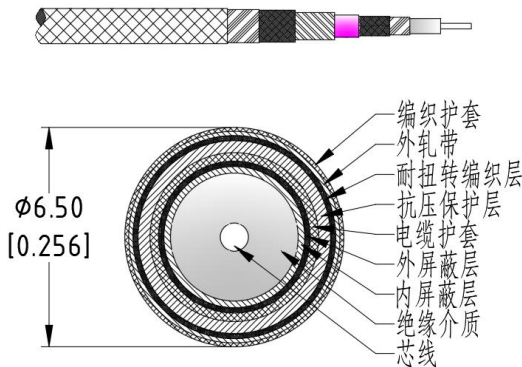
### Features:

- Max Frequency 26.5 GHz
- VSWR max of 1.30
- Velocity of Propagation of 76%

### 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                                    |     | 1.20  | 1.25 | :1    |
| Velocity of propagation                 |     | 76%   |      |       |
| Shielding Effectiveness                 | 90  |       |      | dB    |
| Capacitance                             |     |       | 87   | pF/m  |
| Phase Stability Vs. Flexure@26.5GHz     |     | ±4    |      | °     |
| Amplitude Stability Vs. Flexure@26.5GHz |     | ±0.03 |      | dB    |
| Phase Stability Vs. Temperature         |     | 1000  |      | PPM   |

### Environmental And Physical Characteristics:

| Description           | Parameter   | Units |
|-----------------------|-------------|-------|
| Cable Diameter        | 6.5         | mm    |
| Cable Jacket          | PTFE        |       |
| Min. Bending Radius   | 75          | mm    |
| Typical Flex life     | 50000       |       |
| Operating Temperature | -55 to +150 | °C    |
| Storage Temperature   | -55 to +150 | °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 ) | 0.40  | 0.58  | 0.75  | 0.87  | 0.99   | 1.10   | 1.33   | 1.45   | 1.80     |
| RF Power CW (W Max.)       | 431   | 302   | 245   | 211   | 190    | 171    | 147    | 138    | 112      |

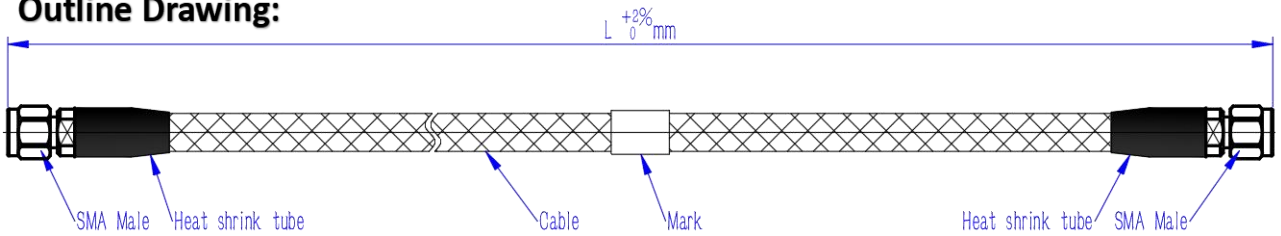


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## Connectors:

| 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)      | $0.05 * \sqrt{f_{GHz}}$    | $0.05 * \sqrt{f_{GHz}}$    |

## Outline Drawing:



## Ordering Information:

| Base Number   | Length (Unit meters) | Phase/delay Matched  |
|---------------|----------------------|--|
| PL26-SMAMSMAM | -L                   | <b>LEAVE BLANK(NOT REQUIRED)</b><br>-XXPS( $\leq \pm XX$ PS)<br>-XX°( $\pm XX^\circ$ ) |

## Typical Performance Data:

Model:PL26-SMAMSMAM-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 | 0.52  | 0.65 | 0.85  | 1.1  | 1.33   | 1.58 | 1.65   | 1.85 | 2.01     | 2.2  |
| VSWR           | 1.03  | 1.05 | 1.05  | 1.10 | 1.10   | 1.15 | 1.15   | 1.30 | 1.20     | 1.30 |

