

Flexible Ultra Low Loss Coax Cable Assembly

A15/2.92 Male /2.92W Male/DC-40 GHz

Model: A15-2.92M2.92WM-L



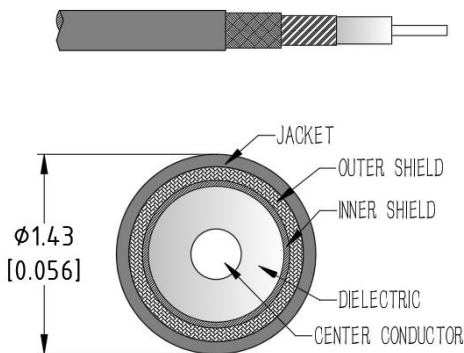
Features:

- Max Frequency 40 GHz
- VSWR max of 1.30
- Velocity of Propagation of 80%

Applications:

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

Cable Cross Section:



Electrical Characteristics:

| Parameter | Min | Typ | Max | Units |
|---------------------------------|-----|-------|-------|-------|
| Frequency Range | DC | | 40 | GHz |
| VSWR | | 1.25 | 1.3 | :1 |
| Velocity of propagation | | 80% | | |
| Shielding Effectiveness | 90 | | | dB |
| Capacitance | | | 81 | pF/m |
| Phase Stability Vs. Flexure | | ±3 | ±5 | ° |
| Amplitude Stability Vs. Flexure | | ±0.03 | ±0.05 | dB |
| Phase Stability Vs. Temperature | | | 550 | PPM |

Environmental And Physical Characteristics:

| Description | Parameter | Units |
|-----------------------|-------------|-------|
| Cable Diameter | 1.43 | mm |
| Cable Jacket | FEP | |
| Min. Bending Radius | 6 | mm |
| Typical Flex life | 50000 | |
| Operating Temperature | -55 to +125 | °C |
| Storage Temperature | -55 to +125 | °C |

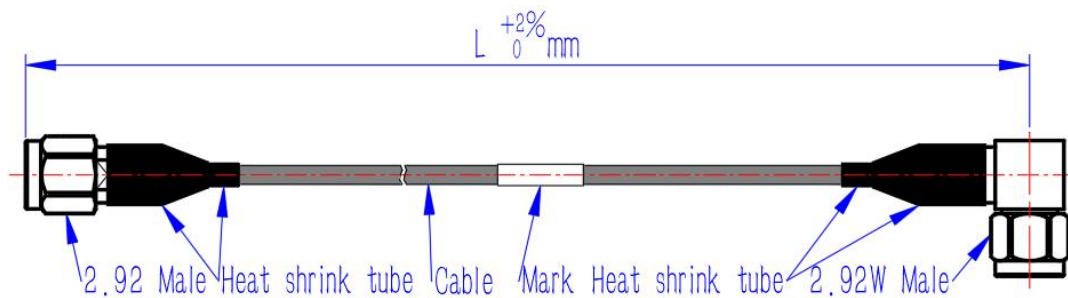
Cable Performance By Frequency

| Frequency | 2 GHz | 4 GHz | 6 GHz | 8 GHz | 12 GHz | 18 GHz | 26.5 GHz | 40GHz | 50 GHz | 67GHz | 110GHz |
|----------------------------|-------|-------|-------|-------|--------|--------|----------|-------|--------|-------|--------|
| Insertion Loss (dB/m Max.) | 1.62 | 2.30 | 2.83 | 3.28 | 4.04 | 4.99 | 6.12 | 7.60 | 8.57 | 10.03 | 13.14 |
| RF Power CW (W Max.) | 27 | 19 | 16 | 14 | 11 | 9 | 7 | 6 | 5 | 4 | 3 |

Connectors:

| Description | Connector 1 | Connector 2 |
|------------------------------|----------------------------|----------------------------|
| Type | 2.92mm Straight Male | 2.92mm Angle 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 | Armour (optional) | Phase/delay Matched (optional) |
|---------------------|-------|-----------------------------|--|
| A15- 2.92M2.92WM | -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:A15-2.92M2.92WM-1m

| Frequency | 2 GHz | | 6 GHz | | 12 GHz | | 18 GHz | | 26.5 GHz | | 40GHz | |
|----------------|-------|------|-------|------|--------|------|--------|------|----------|------|-------|------|
| | Typ | Max | Typ | Max | Typ | Max | Typ | Max | Typ | Max | Typ | Max |
| Insertion Loss | 1.69 | 1.76 | 2.95 | 3.07 | 4.22 | 4.39 | 5.21 | 5.42 | 6.37 | 6.63 | 7.92 | 8.24 |
| VSWR | 1.03 | 1.05 | 1.05 | 1.10 | 1.10 | 1.15 | 1.15 | 1.20 | 1.20 | 1.25 | 1.25 | 1.30 |

