

Flexible Ultra Low Loss Coax Cable Assembly

GL2/1.85 Male /1.85 Male/DC-40 GHz

Model:GL2-1.85M1.85M-L



Features:

- Max Frequency 40 GHz
- VSWR max of 1.30
- Velocity of Propagation of 76%

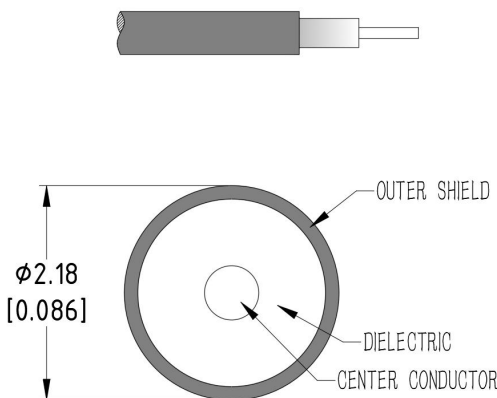
Applications:

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

Electrical Characteristics:

| Parameter | Min | Typ | Max | Units |
|---------------------------------|-----|------|------|-------|
| Frequency Range | DC | | 40 | GHz |
| VSWR | | 1.25 | 1.3 | :1 |
| Velocity of propagation | | 76% | | |
| Shielding Effectiveness | 90 | | | dB |
| Capacitance | | | 81 | pF/m |
| Phase Stability Vs. Temperature | | | 1500 | PPM |

Cable Cross Section:



Environmental And Physical Characteristics:

| Description | Parameter | Units |
|-----------------------|-------------|-------|
| Cable Diameter | 2.18 | mm |
| Min. Bending Radius | 7 | mm |
| Typical Flex life | 50000 | |
| Operating Temperature | -55 to +200 | °C |
| Storage Temperature | -55 to +200 | °C |

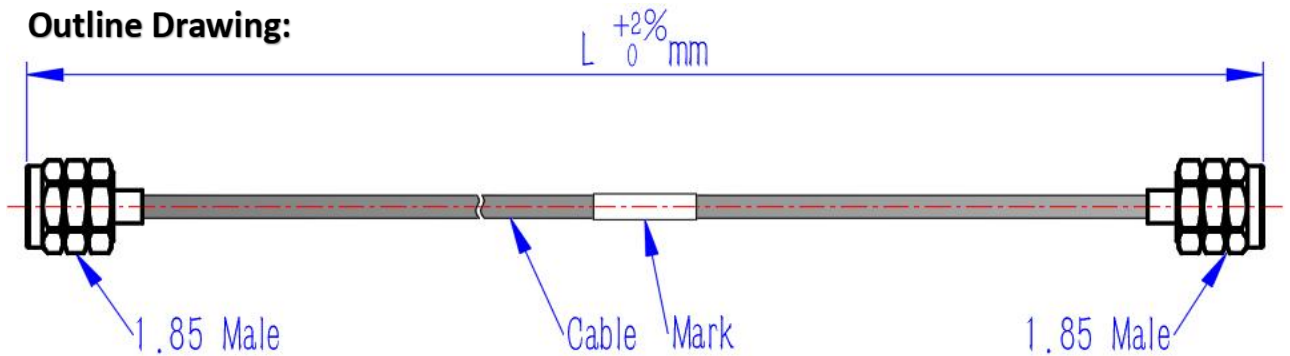
Cable Performance By Frequency

| Frequency | 2 GHz | 4 GHz | 6 GHz | 8 GHz | 12 GHz | 16 GHz | 18 GHz | 26.5 GHz | 40GHz |
|----------------------------|-------|-------|-------|-------|--------|--------|--------|----------|-------|
| Insertion Loss (dB/m Max) | 0.78 | 1.11 | 1.37 | 1.59 | 1.96 | 2.27 | 2.42 | 2.96 | 3.68 |
| RF Power CW (W Max.) | 183 | 128 | 104 | 90 | 73 | 63 | 59 | 48 | 39 |

Connectors:

| Description | Connector 1 | Connector 2 |
|------------------------------|----------------------------|----------------------------|
| Type | 1.85mm Straight Male | 1.85mm Straight 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) |
|----------------|-------|-----------------------------|-----------------------------------|
| GL2-1.85M1.85M | -L | -A(Black nylon woven armor) | |
| | | -AP(PUR water proof armor) | -XXPS($\leq \pm XX \text{ PS}$) |
| | | -AS(Stainless steel armor) | -XX°($\pm XX^\circ$) |
| | | -AT(Transparent armor) | |

Typical Performance Data:

Model:GL2-1.85M1.85M-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 | 0.85 | 0.92 | 1.49 | 1.61 | 2.13 | 2.30 | 2.63 | 2.84 | 3.22 | 3.47 | 4.00 | 4.31 |
| VSWR | 1.05 | 1.10 | 1.05 | 1.10 | 1.10 | 1.15 | 1.15 | 1.20 | 1.20 | 1.25 | 1.25 | 1.30 |

