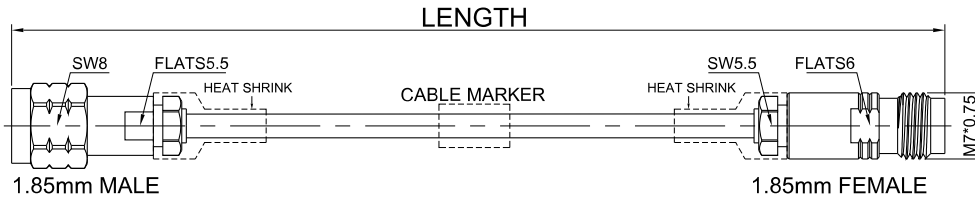


P/N: FRU2-185M185F-XXX

## 1.85mm Male to 1.85mm Female Cable Assembly | 3506 Series Low Loss Phase Stable Flexible Coax Cable | DC - 67GHz



Dimensions are in mm

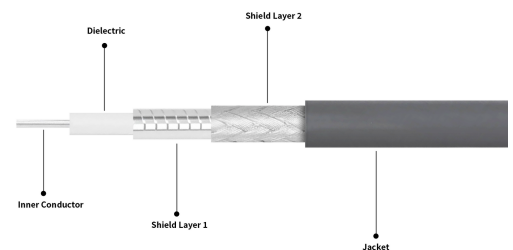


### Connectors Configuration

|                           | Connector 1     | Connector 2     |
|---------------------------|-----------------|-----------------|
| Connector Series          | 1.85mm          | 1.85mm          |
| Connector Polarity        | Standard        | Standard        |
| Connector Gender          | Male            | Female          |
| Connector Impedance (Ohm) | 50              | 50              |
| Connector Body Style      | Straight        | Straight        |
| Connector Body Material   | Stainless Steel | Stainless Steel |
| Connector Body Plating    | Passivated      | Passivated      |

### Cable Configuration

|                          |                            |
|--------------------------|----------------------------|
| Cable Type               | GT3506 flexible cable      |
| Cable Impedance (Ohm)    | 50                         |
| Inner Conductor Material | Silver Plated Copper Wire  |
| Dielectric Material      | LD-PTFE                    |
| Number of Shields        | 2                          |
| Shield Layer 1 Material  | Silver Plated Copper Tape  |
| Shield Layer 2 Material  | Silver Plated Copper Braid |
| Jacket Material          | FEP                        |
| Cable Diameter (mm)      | 2.2                        |
| Cable Color              | Gray                       |
| Minimum Bend Radius (mm) | 11                         |
| Capacitance (pF/m)       | 94                         |
| Velocity of Propagation  | 82%                        |
| Shielding Effectiveness  | < -100dB @ 1GHz            |



## Electrical Data

| Electrical Specifications for Different Length |                       |            |                    |                       |
|--|-----------------------|------------|--------------------|-----------------------|
| Length (mm)                                    | Length Tolerance (mm) | Frequency  | VSWR / Return Loss | Insertion Loss ≤ (dB) |
| 100  | ±3                    | DC - 67GHz | 1.35               | 1.61                  |
| 200  | ±3                    |            |                    | 1.90                  |
| 300  | ±5                    |            |                    | 2.95                  |
| 400  | ±5                    |            |                    | 2.85                  |
| 500  | ±5                    |            |                    | 3.78                  |
| 800  | ±10                   |            |                    | 5.80                  |
| 1000   | ±10                   |            |                    | 6.59                  |
| 1500   | ±15                   |            |                    | 9.4                   |
| 2000   | ±20                   |            |                    | 12.21                 |

## Environmental Specifications

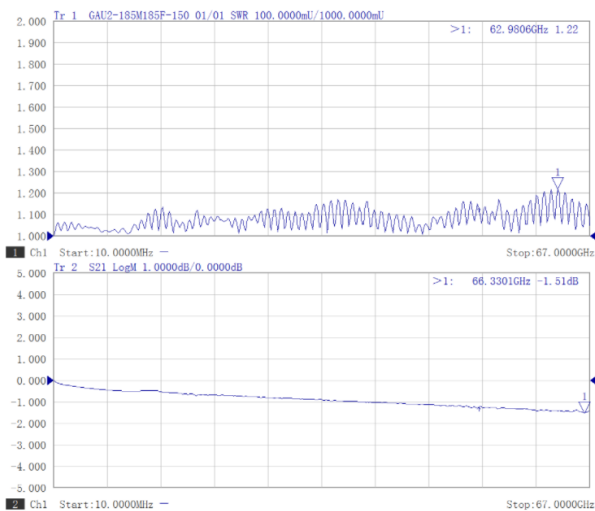
RoHS Compliant

Yes

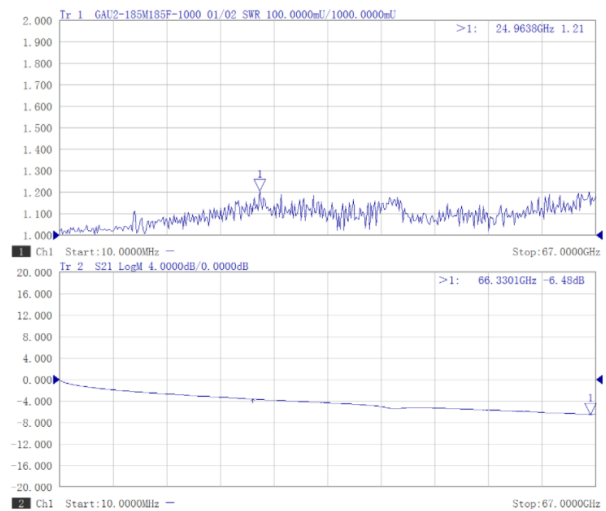
Operating Temperature Range

-55 °C to +125 °C

## Test Report for Cable assembly



\*Note: Test Cable Assembly Length = 150 mm



\*Note: Test Cable Assembly Length = 1000 mm

## Revision History

| Version | Description     | Prepared By | Approved By | Date       |
|---------|-----------------|-------------|-------------|------------|
| V1.0    | Initial release | Grimm       | Hebe        | 2024-01-01 |