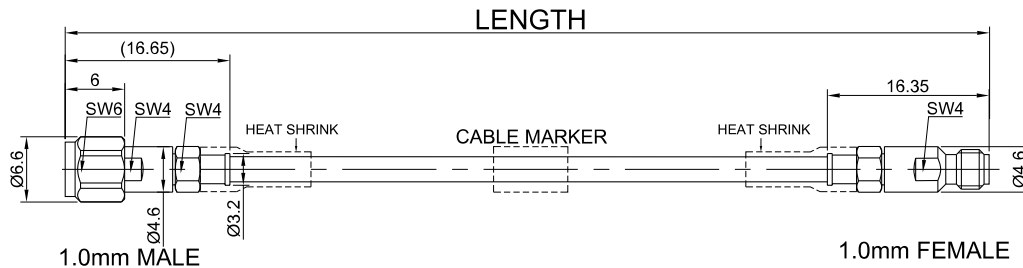


## P/N: FRU12-10M10F-XXX

### 1.0mm Male to 1.0mm Female Cable Assembly | .047" U12 Series Low Loss Phase Stable Flexible Coax Cable | DC - 110GHz



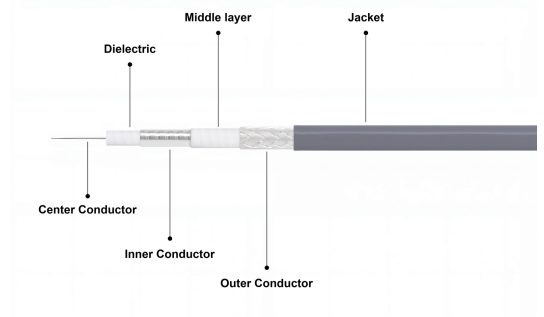
Dimensions are in mm

## Connectors Configuration

	Connector 1	Connector 2
Connector Series	1.0mm	1.0mm
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	U12-110G Series
Cable Impedance (Ohm)	50
Inner Conductor Material	Silver Plated Copper Wire
Dielectric Material	ePTFE
Number of Shields	2
Shield Layer 1 Material	Silver Plated Copper Tape
Middle layer	ePTFE
Shield Layer 2 Material	Silver Plated Copper Braid
Jacket Material	FEP
Cable Diameter (mm)	1.85
Cable Color	Gray
Minimum Bend Radius (mm)	10
Capacitance (pF/m)	86
Velocity of Propagation	80%
Shielding Effectiveness	> 90dB @ 1GHz



## Electrical Data

Electrical Specifications for Different Length				
Length (mm)	Length Tolerance (mm)	Frequency	VSWR / Return Loss	Insertion Loss ≤ (dB)
100	±3	DC - 110GHz	1.44 to 110GHz	2.0 to 110GHz
150	±3			2.7 to 110GHz
200	±3			3.2 to 110GHz
250	±3			4.1 to 110GHz
300	±5			4.8 to 110GHz
400	±5			5.8 to 110GHz
500	±5			7.1 to 110GHz
800	±10			11.1 to 110GHz
1000	±10			13.7 to 110GHz

## Environmental Specifications

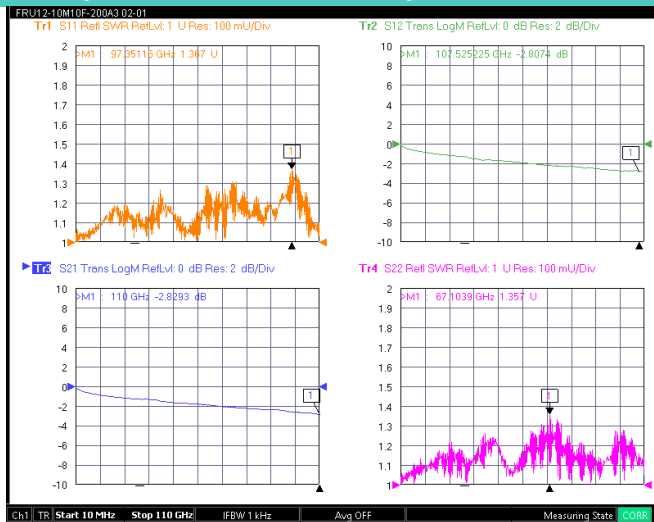
RoHS Compliant

Yes

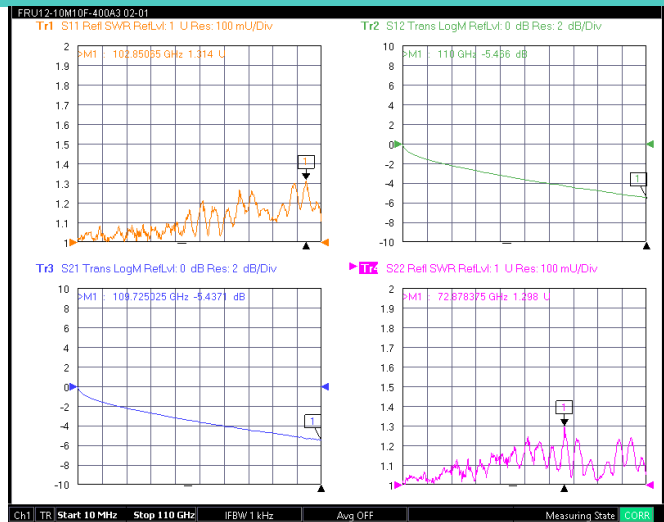
Operating Temperature Range

-55 °C to +165 °C

## Test Report for Cable assembly



\*Note: Test Cable Assembly Length = 200 mm



\*Note: Test Cable Assembly Length = 400 mm

## Revision History

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