Fairview Microwave
an INFINITE brand

FM26VNA007
DATA SHEET

Vector Network Analyzer (VNA) Ruggedized 27 GHz Test Cable 3.5mm NMD Female to 3.5mm Male

Fairview's high performance precision VNA test cables are designed to provide highly accurate repeatable test results. These rugged VNA test cables have excellent insertion loss, low VSWR and +/- 3° of phase stability with flexure. The precision stainless steel connectors and spiral stainless steel armoring are designed to limit torsional twist when the cables are flexed. These VNA test cables have a 5,000 mating cycle life when mated with proper care. The cable armoring prevents stress due to over bending and enhances amplitude and phase stability, while maintaining the flexibility required in a test environment. When properly calibrated, these test cables effectively extend the VNA test port to the terminating connector of the cable assembly allowing for accurate measurement of devices that cannot be directly connected to a network analyzer test port.

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	DC		27	GHz
VSWR			1.3:1	
Velocity of Propagation		70		%
RF Shielding	90			dB
Capacitance		29.4 [96.46]		pF/ft [pF/m]
Phase Stability with Flexure		±3		Degrees

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	12	18	26.5			GHz
Insertion Loss (Max.)	0.54	0.68	0.85			dB/ft
	1.77	2.23	2.79			dB/m
Power Handling (Max.)			65			W

Mechanical Specifications

Cable Assembly

Length*	0 in [0 mm]

Cable

Cable Type	VNA-R
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper, Silver
Dielectric Type	PTFE
Number of Shields	3
Shield Layer 1	Silver Plated Copper Braid
Shield Layer 2	Silver Plated Copper Tape
Shield Layer 3	Silver Plated Copper Braid
Jacket Material	PET
Jacket Diameter	0.43 in [10.92 mm]
One Time Minimum Bend Radius	4 in [101.6 mm]

Configuration:

- 3.5mm NMD Female
- 3.5mm Male
- VNA-R

Features:

- Max Frequency 27 GHz
- Shielding Effectivity > 90 dB
- 70% Phase Velocity
- Triple Shielded
- PET Jacket
- VNA Test Cables Extend VNA Test Ports
- Low VSWR and Low Insertion Loss
- Crush resistant stainless steel cable armor
- Flexible PET protective sleeve
- Connector resist twisting during flexure
- Rugged connector attachment
- Highly stable +/- 3° of phase change under flexure
- Serialized test data provided
- Same day shipment standard length assemblies

Applications:

- General Purpose
- Test & Measurement
- Laboratory Use
- VNA Test applications
- Production floor testing
- Precision lab testing

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Connectors

Description	Connector 1	Connector 2
Type	3.5mm NMD Female	3.5mm Male
Impedance	50 Ohms	50 Ohms
Contact Material & Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Dielectric Type	PCTFE	PCTFE
Outer Cond Material & Plating	Passivated Stainless Steel	
Body Material & Plating	Passivated Stainless Steel	Passivated Stainless Steel
Coupling Nut Material & Plating		Passivated Stainless Steel

Mechanical Specification Notes:
Crush Resistance: 1,050 lbs.
Jacket Material is a PET weave over a spiral stainless steel sheath

Environmental Specifications

Temperature

Operating Range +125 deg C

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

How to Order

Part Number Configuration: **FM26VNA007 - xx uu**

cm = Centimeters
<blank> = Inches

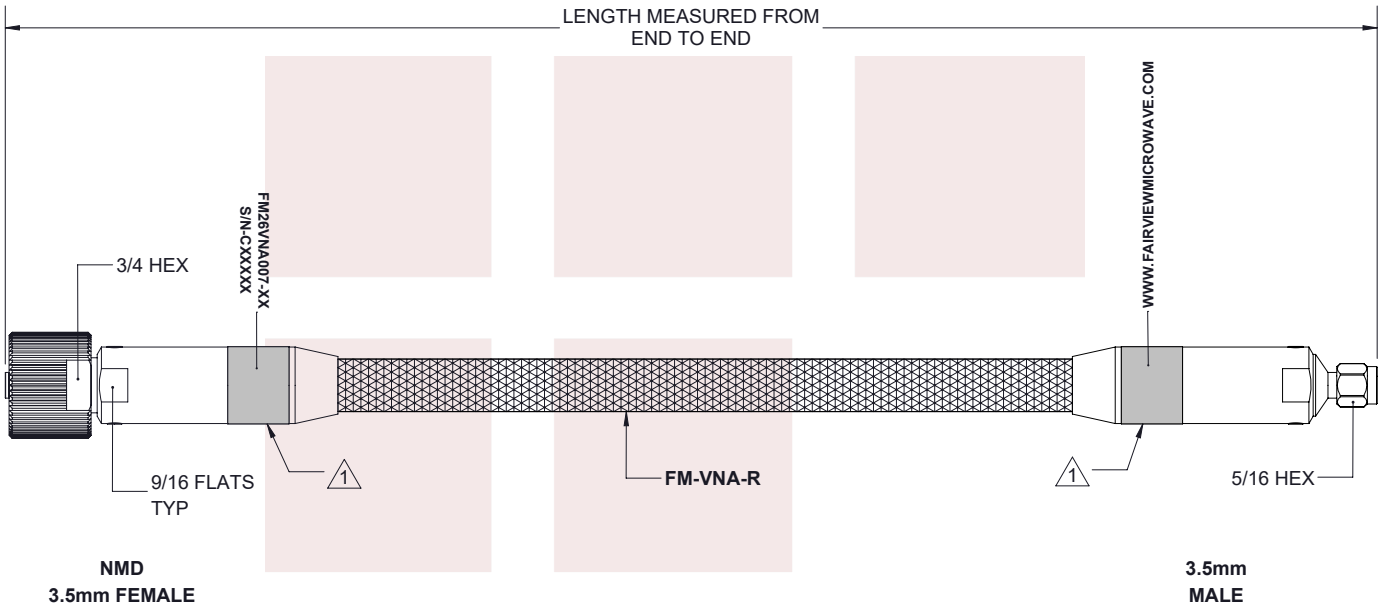
Length

Example: FM26VNA007-12 = 12 inches long cable
FM26VNA007-100cm = 100 cm long cable

Vector Network Analyzer (VNA) Ruggedized 27 GHz Test Cable 3.5mm NMD Female to 3.5mm Male from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: Vector Network Analyzer (VNA) Ruggedized 27 GHz Test Cable 3.5mm NMD Female to 3.5mm Male FM26VNA007

URL: https://www.fairviewmicrowave.com/3.5mm-nmd-female-3.5mm-male-cable-vna-cable-coax-fm26vna007-p.aspx



STANDARD TOLERANCES	
.X	±0.2
.XX	±0.01
.XXX	±0.005

*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

NOTES:
1. BLACK LETTERS ON SILVER LABEL.

Fairview Microwave RF COMPONENTS ON DEMAND. Done!

NOTES:
1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.
2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.
3. DIMENSIONS ARE IN INCHES [mm].

TITLE	DWG NO	CAGE CODE				
Vector Network Analyzer (VNA) Ruggedized 27 GHz Test Cable 3.5mm NMD Female to 3.5mm Male	FM26VNA007	3FKR5				
	CAD FILE 04/05/19	SHEET 1 OF 1	SCALE N/A	SIZE A	7361	