WR 06 VNA Frequency Extension Module
110-170GHz – FEV-06

Datasheet

Description

The FEV-06 Series will expand your existing Vector Network Analyzer (VNA) capabilites so you can conduct industry leading millimeter wave S-parameters measurements in D band. These frequency extension modules connect to your existing test ports, and leverage the inherent microwave network analyzer's performance and features to display full port S-parameters: Two measurement architectures are available:1-path/2-port and fully reversing 2-port. Waveguide calibration kits are available as seperate accessories.

Features

• Full simultaneous 2-port or 4-port network analysis
• Excellent dynamic range
• Excellent stability
• Compact and robust design
• Convection cooled – no fans – hence no vibration.
• T/R and T heads available
• Electronic power control compatibility with Agilent PNA-X
• 25 dB integrated manual variable attenuator on Port 1 heads
• 2-Port controller available as standard
• 4-port controller available for balanced and multi-port measurements to special order

Applications

• Test and measurement frequency range extension
• Balanced S-parameters
• Multi-port S-parameters
• Wafer probe measurement
• Antenna measurements
• Dielectric material characterisation

Accessories

• Calibration kits
• Cables
• Manuals
• Flight cases

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Specification	Unit	Min	Typ	Max
System Operating Frequency	GHz	110		170
Test Port Output Power (2)	dBm	-20	-10	
System Dynamic Range (3)	dB	80	100	
Raw Coupler Directivity	dB	35	40	
Trace Stability Magnitude (4)	dB		±0.4	
Trace Stability Phase (4)	degree		4	
Test Port Input 0.1dB Compression Point	dBm		+5	
Manual Variable Attenuator	dB	0		25
RF Input Frequency	GHz	9.17		14.17
RF Input Power	dBm	+5		+10
LO Input Frequency	GHz	10		17
LO Input Power	dBm	+5		+10
IF Output Frequency	MHz	5		50
Test Port Damage Level	dBm	+10		
RF/LO Port Damage Level	dBm	+15		
Test Port Interface	-	WR-06 UG-387/UM		
RF/LO Connector	-	3.5 mm (F)		
IF Connector	-	SMA (F)		
DC Power Requirements	-	+6V at 1500 mA		
Weight	kg		3.5	
Dimensions (L x W x H)	-	290 x 130 x 85		
Operating Temperatures	°C	0		30

(1) Specifications are typical and subject to change without a notice.
(2) For frequencies greater than 110 GHz traceable only to FTL calorimeter.
(3) Measured with PNA-X 5242A at 10 Hz of IF bandwidth.
(4) Measured at 1h after 2h warm up and calibration. Assuming ideal RF and LO cables.

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