

Junkosha Microwave/mmWave Coaxial Cable Assembly

8series - VNA Test Assemblies

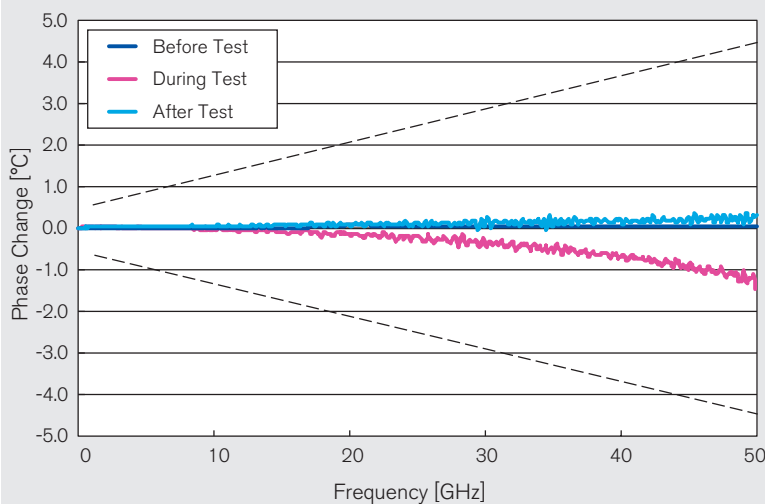


Junkosha Launches Metrology Grade mmWave VNA Test Cable Assembly

Junkosha's new mmWave VNA Test Cable Assembly exhibits excellent phase (within $\pm 4.5^\circ$ at 50GHz), and amplitude (within ± 0.08 dB at 50GHz) stability in flexure alongside strong phase stability in temperature through its 50 GHz bandwidth, available with NMD connector.

The assembly also displays impressive performance durability, surpassing 50,000 tick tock cycles during testing. The cable is bent 180° on a 2.25" radius mandrel with ease, demonstrating superior flexibility and no spring back. A ruggedized port side NMD connector is also available to ensure reliable connections to the VNA.

Typical Phase Stability in Flexure



Upper Specification Limit

Test condition

Sample length: 635 mm

Bend condition

1) Initial straight shape

2) Bent 180° 114 mm mandrel

3) Back to the straight shape again

Lower Specification Limit

Accuracy is crucial in any test setting, but particularly so for metrology grade cabling that offers ultimate precision and therefore demands the highest reliability for testing and calibration purposes. In response, global cabling and interconnect pioneers, Junkosha, have recently launched a new microwave/mmWave VNA test cable assembly - designed as a high-quality metrology grade VNA test cable for those requiring optimum precision. This latest innovation builds on the foundations of their 0 Series and shares the same core principles.



Specification

Cable Type	821		851	
Frequency [GHz]	26.5		50.0	
Assembly Length [in]	25"	38"	25"	38"
Maximum Operating Frequency [GHz]	26.5	26.5	50	50
Characteristic Impedance Nom. [Ω]	50	50	50	50
Maximum Phase Stability [degree (@Max Freq.)]	3.9	7.1	4.5	9.0
Maximum Amplitude Stability [dB (@Max Freq.)]	0.08	0.15	0.08	0.15
Nominal Velocity of Propagation [%]	79	79	79	79
Typical Insertion loss [dB (@Max Freq.)]	1.75	2.45	3.6	5.1
Maximum Insertion loss [dB (@Max Freq.)]	2.1	2.8	4.5	6.2
Typical VSWR	1.29:1		1.43:1	
Shielding Effectiveness to 18GHz [dB]	> 90		> 90	
Cable Outer Diameter [in (mm)]	0.56 (14.2)		0.56 (14.2)	
Minimum Bending Radius [in (mm)]	2.25 (57)		2.25 (57)	
Typical Cable Mass [oz/ft (g/m)]	2.58 (240)		2.26 (210)	
Operating Temperature Range [°C]	23+/-5		23+/-5	

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