Data sheet



SF526V/35VF/35F/38in Microwave Cable Assembly

Description

SUCOFLEX 526V microwave cable assemblies set a new measurement standard for vector network analyzers (VNAs) through 26.5 GHz.

- Extremely flexible and ease of handling
- Best-in-class phase and amplitude stability with flexure, movement, temperature and tensile stress
- Robust and precise center positioning of 3.5mm center conductors
- Accurate and repeatable measurements
- Increased test efficiency and measurement saving costs due to reduced calibration intervals



Product Configuration

Description	SF526V/35VF/35F/38in		
Item no	85081172		
Cable type	SUCOFLEX 526V		
Length of assembly	38" (965 mm)		
Connector A	35VF (3.5 mm ruggedized PORT female)		
Connector B	35F (3.5 mm DUT female)		

Technical Data

Mechanical Data	
Nominal outer diameter	13.0 mm
Min. bending radius	50 mm
Crush resistance	80 kN/m
Nominal weight	345 g
Flex life	100'000 cycles

Environmental Data

Operating temperature	Laboratory conditions, analyzer specific (+15°C to +30°C)	
RoHS, REACH	Compliant	

Electrical Data

Impedance	50 Ω		
Operating frequency	up to 26.5 GHz		
Velocity of propagation	80 %		
Time delay	4.17 ns / m		
Return loss	min. 20 dB	up to 26.5 GHz	
Return loss stability	> 40 dB	up to 26.5 GHz	
Insertion loss (assembly)	max. 3.6 dB	26.5 GHz, 25°C	
Screening effectiveness	> 90 dB	up to 26.5 GHz	
Amplitude stability vs. movement (*)	max. 0.05 dB	up to 26.5 GHz	
Amplitude stability vs. flexure (**)	max. 0.08 dB	up to 26.5 GHz	
Phase stability vs. flexure (**)	max. 7.4°	up to 26.5 GHz	
Phase stability vs. tensile stress	max. 0.1° / GHz	100 N, up to 26.5 GHz	
Phase stability vs. temperature	max. 50 ppm	15°C to 30°C, up to 26.5GHz	

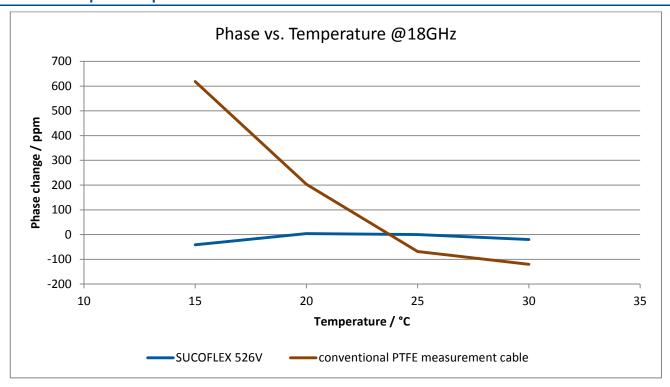
- (*) Stability test vs. movement 30s, displacement: 100 mm
- (**) Stability test vs. flexure 180°, diameter 115 mm

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SF526V/35VF/35F/38inch Microwave Cable Assembly

Phase vs. temperature performance

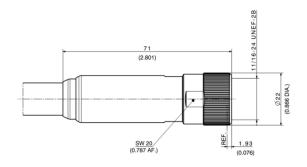


Phase shift vs. temperature (+15°C to + 30°C)

		SUCOFLEX 526V	Conventional VNA test lead
Assembly length (in (mm))	Frequency (GHz)*	Phase shift /° (for 50 ppm, 80% VOP)	Phase shift /° (for 700 ppm, 84% VOP)
38 (965)	18	1.4	17.3
38 (965)	26.5	2.0	25.4

^{*}Other frequencies on request

Connector configuration





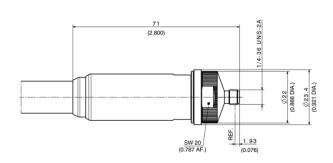


Figure 2: 35 F (3.5 mm DUT female)