SUCOFLEX® 500

High performance up to 70 GHz

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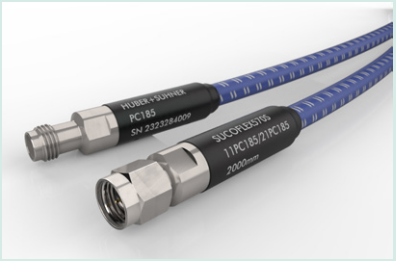
HUBER+SUHNER

SUCOFLEX 526V

- Consistent electrical performance up to 26.5 GHz
- Best-in-class phase and amplitude stability with flexure, movement, temperature, and tensile stress
- Extremely flexible and simplifies handling and routing

SUCOFLEX 526 E/EA/S, 540 E/EA/S, 550 E/EA/S, 570 E/S

- High electrical performance up to 70 GHz
- Excellent return and insertion loss
- Best-in-class phase and amplitude stability with flexure and movement
- Very long service life (>100.000 flex cycles)
- Variety of interface options available



SUCOFLEX 500 Variations

26.5 GHz	SUCOFLEX 526	SUCOFLEX 526E	SUCOFLEX 526EA	SUCOFLEX 526S	SUCOFLEX 526V
40 GHz	SUCOFLEX 540	SUCOFLEX 540E	SUCOFLEX 540EA	SUCOFLEX 540S	
50 GHz	SUCOFLEX 550	SUCOFLEX 550E	SUCOFLEX 550EA	SUCOFLEX 550S	
70 GHz	SUCOFLEX 570	SUCOFLEX 570E		SUCOFLEX 570S	

Applications

- Bench top testing
- RF production testing
- Automated test equipment
- Vector network analyzers (VNAs)
- Scalar analyzers
- Portable test equipment
- RF module testing
- High speed digital testing (HSDT)

SUCOFLEX 526V – 26.5 GHz

SUCOFLEX 526V

The only VNA microwave cable assembly worldwide with a typical 50 ppm phase variation vs. temperature between +15 and +30 °C. No "PTFE phase knee" at +19 °C as seen on conventional VNA test cable assemblies which cause phase variations and unstable measurements in critical laboratory conditions.

Available assemblies

Product configuration

Art. No.	85069744	85081169	85070046	85081172	85070047	85081177
Cable type	SUCOFLEX 526V					
Length	25" (635 mm)	25" (635 mm)	38" (965 mm)	38" (965 mm)	48" (1219 mm)	48" (1219 mm)
Connector 1	3.5 mm ruggedised PORT female (35VF)					
Connector 2	3.5 mm rug-gedised DUT male (35VM)	3.5 mm DUT female (35F)	3.5 mm rug-gedised DUT male (35VM)	3.5 mm DUT female (35F)	3.5 mm ruggedised DUT male (35VM	3.5 mm DUT female (35F)

Mechanical data

Diameter (mm)	13
Min. bending radius (mm)	50
Crush resistance (kN/m)	80
Typ. flex life (cycles)	>100 000 2.0 Mio. for slight movements

Environmental data

Operating temperature	laboratory conditions, analyser specific (+15 to +30 °C)
2011/65/EC (RoHS)	compliant

Electrical data

Art. No.	85069744	85081169	85070046	85081172	85070047	85081177
Impedance (Ω)	50					
Operating frequency (GHz)	up to 26.5					
Velocity of propagation (%)	80					
Time delay (ns/m)	4.15					
Return loss (dB)	typ. 25 min. 20					
Insertion loss (dB)	max. 2.5		max. 3.6		max. 4.4	
Min. screening effective-ness (dB)	> 90					
Amplitude stability vs. movement (dB)	max. 0.05					
Amplitude stability vs. flexure (dB)	max. 0.08					
Phase stability vs. flexure (°)	max. 3.9		max. 7.4		max. 10	
Phase stability vs. tensile stress (°/GHz)	max. 0.1°/GHz (100 N)					
Phase stability vs. temperature (ppm)	typ. 50 (+15 to +30 °C)					

Order information stock assemblies

Art. No.	Description
85069744	SF526V/35VF/35VM/25in
85081169	SF526V/35VF/35F/25in
85070046	SF526V/35VF/35VM/38in
85081172	SF526V/35VF/35F/38in
85070047	SF526V/35VF/35VM/48in
85081177	SF526V/35VF/35F/48in

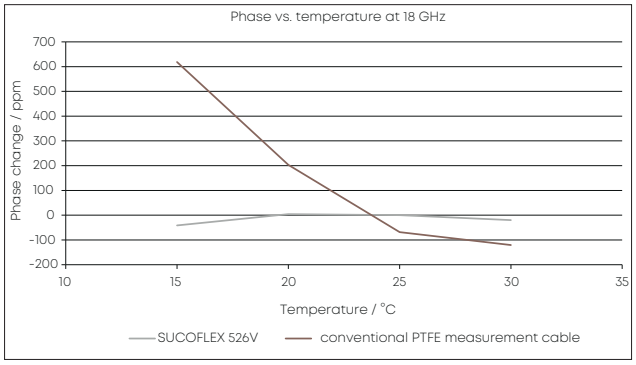
SUCOFLEX 526V – 26.5 GHz

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

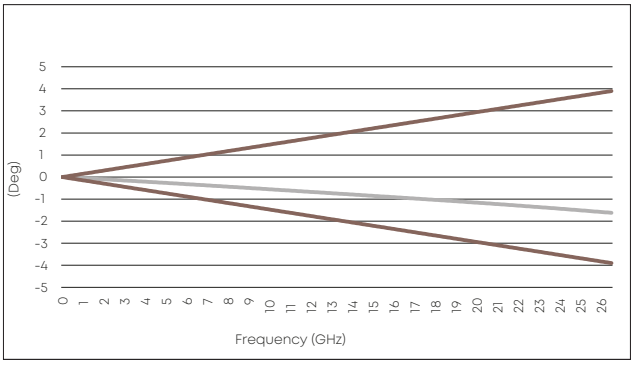
		SUCOFLEX 526V	Conventional VNA test lead
Assembly length (in (mm)	Frequency (GHz)*	Phase shift /° (for 50 ppm, 80 % VOP)	Phase shift /° (for 700 ppm, 84 % VOP)
25 (635)	18	0.9	11.4
25 (635)	26.5	1.3	16.7

*Other frequencies on request

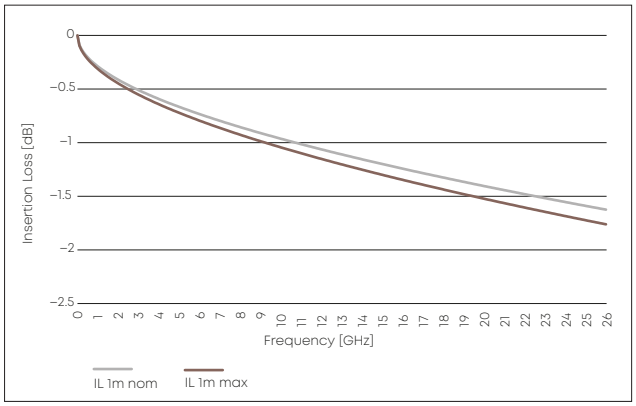
Phase stability vs. temperature performance



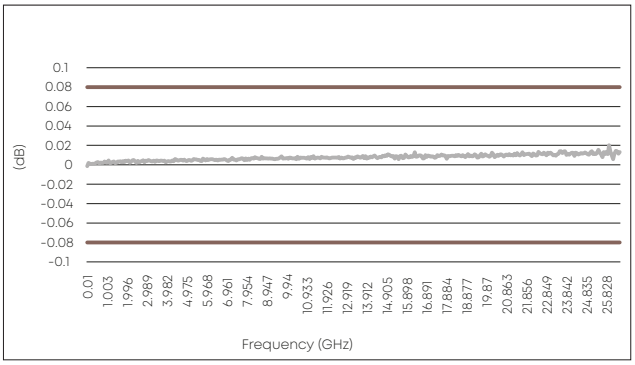
Phase stability vs. flexure



Insertion loss



Loss stability vs. flexure



Return loss SUCOFLEX 526V with PC3.5 connectors