

# SUCOFLEX® 526V



The only VNA microwave cable 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 connectors

Product configuration	85069744	85081169	85070046	85081172	85070047	85081177
Cable type	SUCOFLEX 526V					
Length	25" (635 mm)	25" (635 mm)	38" (965 mm)	38" (695 mm)	48" (1219 mm)	48" (1219 mm)
Connector A	3.5 mm ruggedised PORT female (35VF)					
Connector B	3.5 mm ruggedised DUT male (35VM)	3.5 mm DUT female (35F)	3.5 mm ruggedised DUT male (35VM)	3.5 mm DUT female (35F)	3.5 mm ruggedised DUT male (35VM)	3.5 mm DUT female (35F)
<b>Mechanical data</b>						
Diameter	13 mm					
Min. bending	50 mm					
Crush resistance	80 kN/m					
Flex life	100 000 cycles 2.0 Mio. for slight movements					
<b>Environmental data</b>						
Operating temperature	laboratory conditions, analyser specific (+15 to +30 °C)					
RoHS, REACH	compliant					
<b>Electrical data</b>						
Impedance	50 Ω					
Operating frequency	up to 26.5 GHz					
Velocity of propagation	80 %					
Time delay	4.15 ns/m					
Return loss	typ. 25 dB min. 20 dB					
Insertion loss	max. 2.5 dB		max. 3.6 dB		max. 4.4 dB	
Screening effectiveness	> 90 dB					
Amplitude stability vs. movement	max. 0.05 dB					
Amplitude stability vs. flexure	max. 0.08 dB					
Phase stability vs. flexure	max. 3.9°		max. 7.4°		max. 10°	
Phase stability vs. tensile stress	max. 0.1°/GHz (100 N)					
Phase stability vs. temperature	typ. 50 ppm (+15 to +30 °C)					

## Ordering information

Item 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

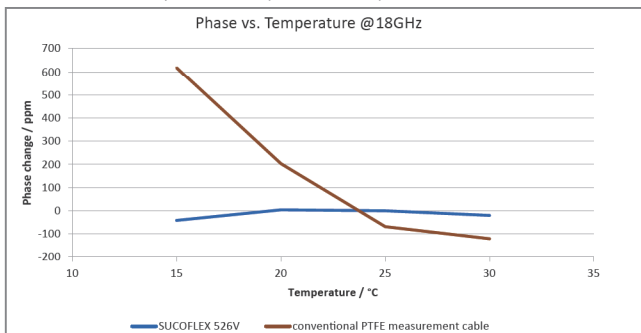
# SUCOFLEX® 526V

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

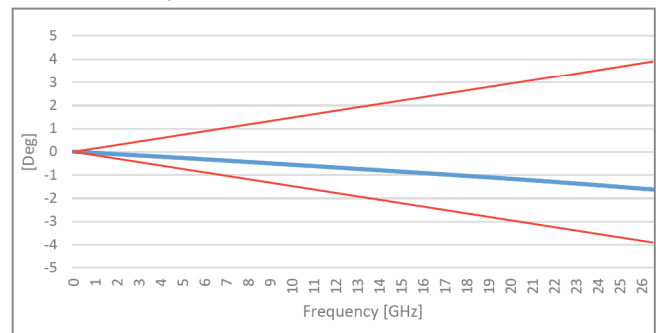
		SUCOFLEX 526V	Conventional VNA test lead
Assembly length (in (mm))	Frequency (GHz)*	Phase shift /° (for 50 ppm, 80% VOP)	Phase shift /° (for 700 ppm, 84% VOP)
25 (635)	18	0.9	11.4
25 (635)	26.5	1.3	16.7

\*Other frequencies on request

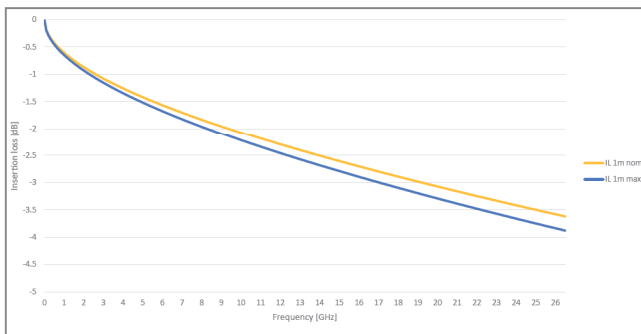
## Phase stability vs. temperature performance



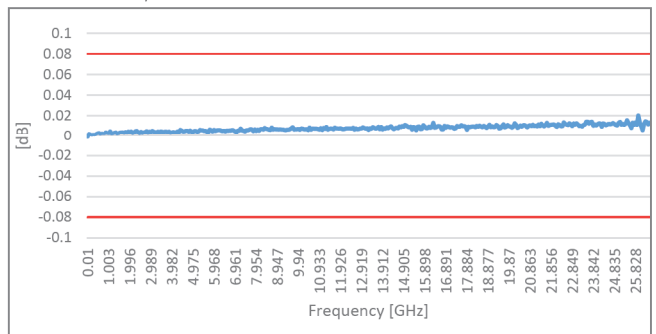
## Phase stability vs. flexure



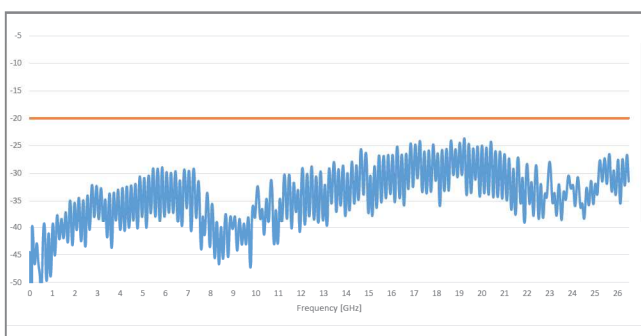
## Insertion Loss



## Loss stability vs. flexure

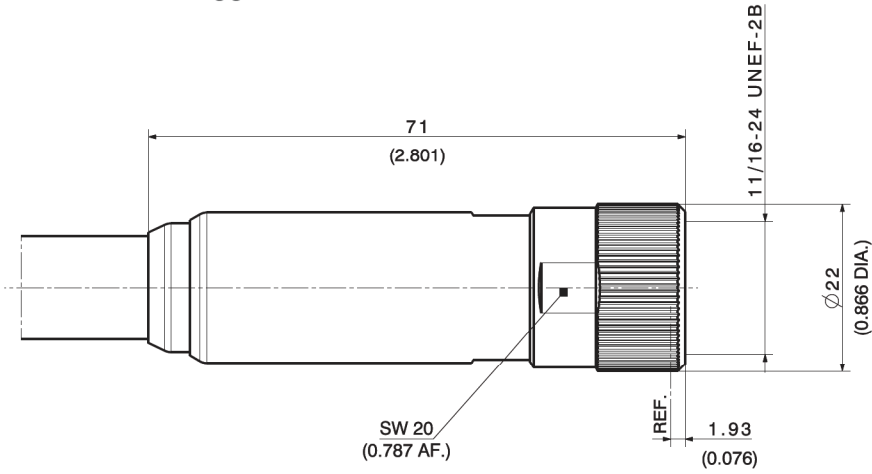


## Return Loss SUCOFLEX 526V with two straight PC3.5 connectors

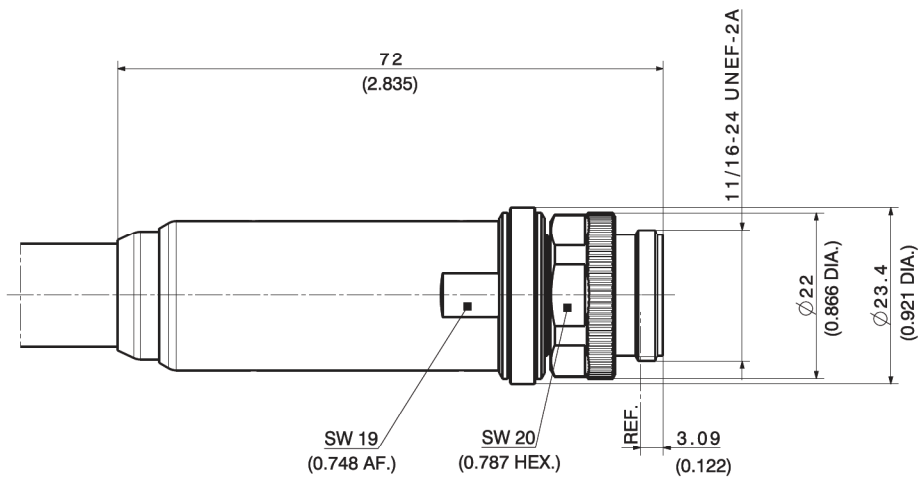


# Connector configuration

35 VF (3.5 mm ruggedized PORT female)



35 VM (3.5 mm ruggedized DUT male)



35 F (3.5 mm DUT female)

