

Low Loss Flexible VNA Test Cables

ACV-CA40 & ACV-CA50 Series

- Frequency DC-40GHz & DC-50GHz
- Flexible and Crush Resistant
- Abrasion Resistant Jacket
- Excellent Phase Stability
- STOCK Availability
- RoHS Compliant



AtlantecRF's ACV series of flexible coaxial low loss VNA test cable assemblies are designed for general purpose use with laboratory and test equipment applications where low loss, flexibility, performance and affordability are key features.

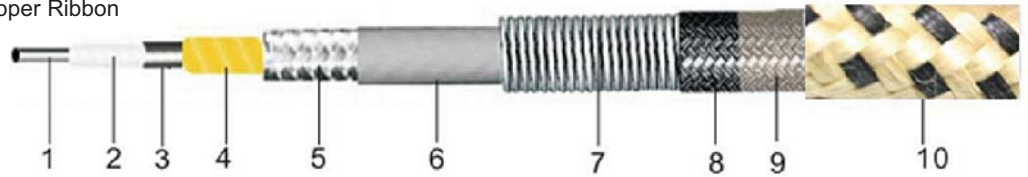
Connectors are either 2.92mm or 2.4mm male with passivated stainless steel bodies.

Standard stock lengths range from 0.5 to 2.0 metres but custom cable lengths are also available to order up to 20 metres.

General Specifications	ACV-CA40	ACV-CA50
Operating Frequency	DC-40GHz	DC-50GHz
Connectors	2.92mm Male	2.4mm Male
VSWR	1.30:1 max.	1.35:1 max.
Amplitude Stability	+/-0.03dB max.	+/-0.05dB max.
Phase Stability	+/-5 deg max.	+/-6 deg max.
Attenuation	4.46dB/m	5.06dB/m
Cable Impedance	50 Ohms	
Velocity of Propagation	76%	
Capacitance	138pF/m	
Insertion Loss Stability vs Flexure	+/-0.05dB max.	
Phase Stability vs Temperature	1000ppm	
Shielding Effectiveness	90dB	
Voltage Withstand	1000V DC	
Operating Temperature	-55 to +165C	
Storage Temperature	-65 to +165C	
Cable Outside Diameter	6.4mm	
Cable Jacket	FEP with a crush protection layer and braided outer Jacket	
Outer Conductor	Silver Plated Copper Ribbon	
Cable Dielectric	Low Density PTFE	
Centre Conductor	Silver Plated Copper	
Bend Radius	40mm min	
Weight	34g/m	

Test Cable Assemblies

1. Centre Conductor : Silver Plated Copper
2. Dielectric core : LD PTFE
3. Outer Conductor : Silver Plated Copper Ribbon
4. Stable Layer : PTFE
5. Inner Braiding : SPC
6. Jacket : FEP
7. Crush Protection Layer
8. Braiding
9. PTFE Stable Gum
10. Braided Outer Jacket



Part Number	Length (Metres)	Insertion Loss (dB) typ.					VSWR (:1)				
		12 GHz	18 GHz	26.5 GHz	40 GHz	50 GHz	12 GHz	18 GHz	26.5 GHz	40 GHz	50 GHz
2.92mm Male/2.92mm Male Connectors DC-40GHz											
ACV-CA40-KMKM-0.5M	0.5	1.0	1.2	1.4	1.7		1.1	1.2	1.2	1.2	1.2
ACV-CA40-KMKM-1.0M	1.0	1.9	2.3	2.8	3.3		1.1	1.2	1.2	1.2	1.2
ACV-CA40-KMKM-1.5M	1.5	2.9	3.5	4.2	5.0		1.1	1.2	1.2	1.2	1.2
ACV-CA40-KMKM-2.0M	2.0	3.8	4.6	5.6	6.6		1.1	1.2	1.2	1.2	1.2

Also available in inch lengths

Part Number	Length (Inches)	Insertion Loss (dB) typ.					VSWR (:1)				
		12 GHz	18 GHz	26.5 GHz	40 GHz	50 GHz	12 GHz	18 GHz	26.5 GHz	40 GHz	50 GHz
ACV-CA40-KMKM-24	24	1.1	1.4	1.7	2.0		1.1	1.2	1.2	1.2	1.2
ACV-CA40-KMKM-36	36	1.7	2.0	2.5	2.9		1.1	1.2	1.2	1.2	1.2
ACV-CA40-KMKM-48	48	2.3	2.8	3.4	4.0		1.1	1.2	1.2	1.2	1.2

Tolerance on cable length is +/-2.5mm (+/-0.1 inches)

Part Number	Length (Metres)	Insertion Loss (dB) typ.					VSWR (:1)				
		12 GHz	18 GHz	26.5 GHz	40 GHz	50 GHz	12 GHz	18 GHz	26.5 GHz	40 GHz	50 GHz
2.4mm Male/2.4mm Male Connectors DC-50GHz											
ACV-CA50-2.4M2.4M-0.5M	0.5	1.0	1.3	1.5	1.8	1.9	1.1	1.1	1.1	1.2	1.2
ACV-CA50-2.4M2.4M-1.0M	1.0	1.9	2.5	3.0	3.5	3.8	1.1	1.1	1.1	1.2	1.2
ACV-CA50-2.4M2.4M-1.5M	1.5	2.9	3.8	4.5	5.3	5.7	1.1	1.1	1.1	1.2	1.2
ACV-CA50-2.4M2.4M-2.0M	2.0	3.8	5.0	6.0	7.0	7.6	1.1	1.1	1.1	1.2	1.2

Also available in inch lengths

Part Number	Length (Inches)	Insertion Loss (dB) typ.					VSWR (:1)				
		12 GHz	18 GHz	26.5 GHz	40 GHz	50 GHz	12 GHz	18 GHz	26.5 GHz	40 GHz	50 GHz
ACV-CA50-2.4M2.4M-24	24	1.1	1.5	1.8	2.1		1.1	1.1	1.1	1.2	1.2
ACV-CA50-2.4M2.4M-36	36	1.7	2.2	2.7	3.1		1.1	1.1	1.1	1.2	1.2
ACV-CA50-2.4M2.4M-48	48	2.3	3.0	3.6	4.2		1.1	1.1	1.1	1.2	1.2

Tolerance on cable length is +/-2.5mm (+/-0.1 inches)

Frequency (GHz)	Power Handling Typical values @ 40C (Watts) CW
12	115
18	93
26.5	76
40	61
50	57

We reserve the right to change standard product specifications without notice but will be pleased to consider control drawings for quotation.

Test Cable Assemblies