

## ACH-XXX-510010-S4S4

- Frequency DC-18GHz
- Ultra Low Loss
- Fast Velocity of Propagation
- Low Dielectric Constant
- Excellent Phase Stability
- RoHS Compliant

## **Coaxial Test Cable**

## High Velocity, Ultra Low Loss, SMA Male Connectors

ETL Systems ACH series of high velocity ultra low loss test cable assemblies are designed for general purpose use with laboratory and test equipment applications where low loss, flexibility, high performance and affordability are key features.

The high Vp of these cables offers improved phase stability over lower Vp types. Connectors are SMA 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.



GENERAL SPECIFICATIONS				
Operating Frequency	DC-18GHz			
Connectors	SMA Male			
Cable Impedance	50 Ohms			
Operating Temperature	-55 to +165°C			
Storage Temperature	-65 to +165°C			
Dielectric Constant	1.3			
Velocity of Propagation	83%			
Shielding Effectiveness	90dB			
Voltage Withstand	2000V DC			
Cable Outside Diameter:	7.80mm			
Outer Shield: Silver Plated	7.10mm			
Outer Conductor:	6.55mm			
Cable Dielectric:	6.20mm			
Centre Conductor:	2.30mm			
Bend Radius (Installation)	35mm			
Bend Radius (Repeated)	80mm			
Mechanical Phase	+/-5 deg			
Phase Change with	500ppm typ.			
Weight	130g/m			

















PART NUMBER	LENGTH	INSERTION LOSS (dB)			VSWR (:1)		
SMA Male/SMA Male		6	12 GHz	18	6	12	18 GHz
ACH-005-510010-S4S4	0.5	0.2	0.3	0.4	1.1	1.1	1.2
ACH-010-510010-S4S4	1.0	0.4	0.6	0.7	1.1	1.1	1.2
ACH-015-510010-S4S4	1.5	0.6	1.0	1.1	1.1	1.1	1.2
ACH-020-510010-S4S4	2.0	0.8	1.3	1.4	1.1	1.1	1.2

FREQUENCY (GHz)	POWER HANDLING TYPICAL VALUES @ 40°C (WATTS) CW
6	716
12	496
18	398

TOLERANCE ON CABLE LENGTH		
LENGTH RANGE	(+/-mm)	
0 - 0.5M	+10/-0	
0.51 - 1.0M	+25/-0	
1.1 - 5.0M	+50/-0	
Longer lengths available on request		

Note 1: The specification is subject to regular reviews and will be updated from time to time as part of our continuing product development and improved spec accuracy. Note 2: Operation beyond the quoted limits stated above may cause instantaneous and permanent damage.













