High Speed Interconnects 141, 086, 070 and 047 Flexible, RF Microwave Assemblies Outperform during Handling and Vibration

High Speed Interconnects LLC, an extruder and manufacturer of highly engineered RF Microwave coaxial cable assemblies outperform during the rigors and handling in Aerospace, Defense, and Space applications. All HSI assemblies are precisely fitted with 3.5mm, 2.92mm, 1.85mm, 1.00mm, SMP and SSMP connectors designed to deliver exceptional signal integrity. HSI's advancement in signal integrity and applied materials produce exceptionally low insertion loss, phase and amplitude stable performance during handling and vibration - making HSI coaxial cable assemblies an excellent alternative to traditionally based semi-rigid coaxial cable assemblies.

Clean Series

	VP90™			
	047	070	086	141
OD (inches)	0.055	0.074	0.083	0.165
Impedance (Ohms)	50	50	50	50
Max Frequency (GHz)Tested	20	20	40	32
Attenuation (-dB/ft.)				
5 GHz	0.88	0.65	0.42	0.20
10 GHz	1.22	0.86	0.62	0.31
15 GHz	1.54	1.09	0.78	0.40
20 GHz	1.7	1.18	0.92	0.54
30 GHz	-	-	1.18	0.62
40 GHz	-	-	1.41	0.75
Phase vs. Flexure (180°)	2.5 °	2.5 °	2.5 °	2.5 °
Velocity of Propagation	81	81	81	84
Capacitance (PF/ft.) Nom	24	24	24	24
Shielding Effectiveness	-95	-95	-95	-95
Minimum Bend Radius (in.)	<0.25"	<0.25"	<0.25"	<0.50"
Operating Temperature	-55 to +125	-55 to +125	-55 to +125	-55 to +125
Weight (Grams/ft.)	0.9	2.5	3.0	12.5

SG Series

	General Purpose	
	047	086
OD (inches)	0.055	0.098
Impedance (Ohms)	50	50
Max Frequency (GHz)Tested	40	40
Attenuation (-dB/ft.)		
5 GHz	0.8	0.54

10 GHz	1.16	0.81
15 GHz	1.48	1.03
20 GHz	1.74	1.23
30 GHz	2.25	1.62
40 GHz	2.58	1.76
Phase vs. Flexure (180°)	<5 °	<5 °
Velocity of Propagation	70	70
Capacitance (PF/ft.) Nom	29	29
Shielding Effectiveness	-95	-95
Minimum Bend Radius (in.)	0.25”	0.30”
Operating Temperature	-55 to +125	-55 to +125
Weight (Grams/ft.)	1.4	5.0

As industry analysts continue to report preferred ways for high speed data transmission, RF Microwave technology continues to emerge as a predominate path towards solving the convergence between digital computing and traditional analog RF technologies. This predominance presents engineers with multiple and complex connectivity challenges related to high-frequency communication, wireless, commercial & military systems and sub-systems, and many other millimeter wave applications. As a result - HSI’s flexible, miniature, and lightweight 141, 086, 070 and 047 RF Microwave coaxial cable size options solve these connectivity challenges and provide excellent route-ability and signal integrity performance.

"As analog and digital technologies continue to converge and systems become smaller, lighter and faster – the increased demand for miniature, flexible, and phase stable RF Microwave coaxial cable assemblies becomes paramount” said Antonio De La Rosa, Founder, CEO and Manager of High Speed Interconnects, LLC. "We are delighted our 141, 086, 070 and 047 RF Microwave Coaxial Cable Assembly platform's solve today, and tomorrow’s high frequency interconnectivity challenges."

High Speed Interconnects offers live Microwave/RF Assembly performance demonstrations at industry trade-shows. Should you be interested with scheduling a live demonstration prior to our next industry trade-show, please contact us sales@highspeedint.com.