

SMA Hand-Formable Fixed Length Cable Assemblies for RF/Microwave Applications



Emerson Network Power Connectivity Solutions has added to its Johnson® product line a series of SMA Hand-Formable, fixed-length cable assemblies for RF/Microwave applications.

These Hand-Formable cable assemblies are an excellent alternative to semi-rigid cables which are more costly and less flexible during early stages of design and effectively eliminate additional tooling charges.

In conjunction with our popular Johnson® brand of connectors on each end, these SMA Hand-Formable cable assemblies are constructed of a silver-plated, copper covered steel conductor, with an additional copper-tin composite braid foil. When RF interference isn't an option, these cables provide 100% shielded cable coverage assuring an outstanding VSWR and low insertion loss of up to 18 GHz.

Available in a variety of lengths off-the-shelf, these Hand-Formable SMA cable assemblies offer users a high quality, low cost solution. As with all other RF cable assemblies provided by Johnson®, these assemblies are also available in custom lengths upon request.

Key Features & Benefits

- Constructed with Johnson® Premium SMA Connectors
- Assembled with 50 Ohm Hand-Formable Microwave Cable
- 100% Shielded Cable Coverage
- Available in .086 & .141 cable diameters
- Off-the-Shelf Availability
- Low-cost alternative to Custom-made cables
- Excellent VSWR to 18 GHz for Microwave applications



Part No.	Cable Assembly	Conn. 1	Conn. 2	Length*
415-0081-003	Hand-Formable .086 Cable	SMA Plug, Straight	SMA Plug, Straight	3 in.
415-0081-004	Hand-Formable .086 Cable	SMA Plug, Straight	SMA Plug, Straight	4 in.
415-0081-005	Hand-Formable .086 Cable	SMA Plug, Straight	SMA Plug, Straight	5 in.
415-0081-006	Hand-Formable .086 Cable	SMA Plug, Straight	SMA Plug, Straight	6 in.
415-0081-007	Hand-Formable .086 Cable	SMA Plug, Straight	SMA Plug, Straight	7 in.
415-0081-008	Hand-Formable .086 Cable	SMA Plug, Straight	SMA Plug, Straight	8 in.
415-0081-012	Hand-Formable .086 Cable	SMA Plug, Straight	SMA Plug, Straight	12 in.
415-0081-018	Hand-Formable .086 Cable	SMA Plug, Straight	SMA Plug, Straight	18 in.
415-0081-024	Hand-Formable .086 Cable	SMA Plug, Straight	SMA Plug, Straight	24 in.
415-0082-003	Hand-Formable .141 Cable	SMA Plug, Straight	SMA Plug, Straight	3 in.
415-0082-004	Hand-Formable .141 Cable	SMA Plug, Straight	SMA Plug, Straight	4 in.
415-0082-005	Hand-Formable .141 Cable	SMA Plug, Straight	SMA Plug, Straight	5 in.
415-0082-006	Hand-Formable .141 Cable	SMA Plug, Straight	SMA Plug, Straight	6 in.
415-0082-007	Hand-Formable .141 Cable	SMA Plug, Straight	SMA Plug, Straight	7 in.
415-0082-008	Hand-Formable .141 Cable	SMA Plug, Straight	SMA Plug, Straight	8 in.
415-0082-012	Hand-Formable .141 Cable	SMA Plug, Straight	SMA Plug, Straight	12 in.
415-0082-018	Hand-Formable .141 Cable	SMA Plug, Straight	SMA Plug, Straight	18 in.
415-0082-024	Hand-Formable .141 Cable	SMA Plug, Straight	SMA Plug, Straight	24 in.

*Ref Plane to Ref Plane

Electrical Ratings

Part No.	Length (inches)	Nominal Electrical Delay (ns)	Insertion Loss (dB Max) Vs Frequency (GHz)						VSWR (MAX) Vs Frequency (GHz)		
			0 to 1	1 to 2	2 to 4	4 to 6	6 to 12	12 to 18	0 to 1	1 to 2	2 to 18
415-0081-003	3.00±.05	0.36	0.12	0.17	0.24	0.29	0.41	0.51	1.06	1.10	1.1+.01f
415-0081-004	4.00±.05	0.49	0.14	0.20	0.29	0.35	0.49	0.60			
415-0081-005	5.00±.10	0.61	0.17	0.23	0.33	0.40	0.57	0.70			
415-0081-006	6.00±.10	0.73	0.19	0.26	0.38	0.46	0.65	0.79			
415-0081-007	7.00±.10	0.85	0.21	0.30	0.42	0.51	0.72	0.89			
415-0081-008	8.00±.10	0.97	0.23	0.33	0.47	0.57	0.80	0.98			
415-0081-012	12.00±.15	1.46	0.32	0.45	0.65	0.79	1.11	1.36			
415-0081-018	18.00±.15	2.19	0.46	0.64	0.92	1.12	1.58	1.93			
415-0081-024	24.00±.15	2.92	0.59	0.83	1.19	1.45	2.04	2.49			
415-0082-003	3.00±.05	0.36	0.09	0.13	0.19	0.24	0.34	0.43	1.06	1.10	1.1+.01f
415-0082-004	4.00±.05	0.49	0.10	0.15	0.22	0.27	0.39	0.49			
415-0082-005	5.00±.10	0.61	0.12	0.17	0.24	0.30	0.44	0.56			
415-0082-006	6.00±.10	0.73	0.13	0.18	0.27	0.34	0.49	0.62			
415-0082-007	7.00±.10	0.85	0.14	0.20	0.30	0.37	0.54	0.69			
415-0082-008	8.00±.10	0.97	0.15	0.22	0.32	0.40	0.59	0.75			
415-0082-012	12.00±.15	1.46	0.20	0.29	0.43	0.54	0.79	1.01			
415-0082-018	18.00±.15	2.19	0.27	0.39	0.59	0.74	1.09	1.40			
415-0082-024	24.00±.15	2.92	0.35	0.50	0.75	0.94	1.39	1.79			

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