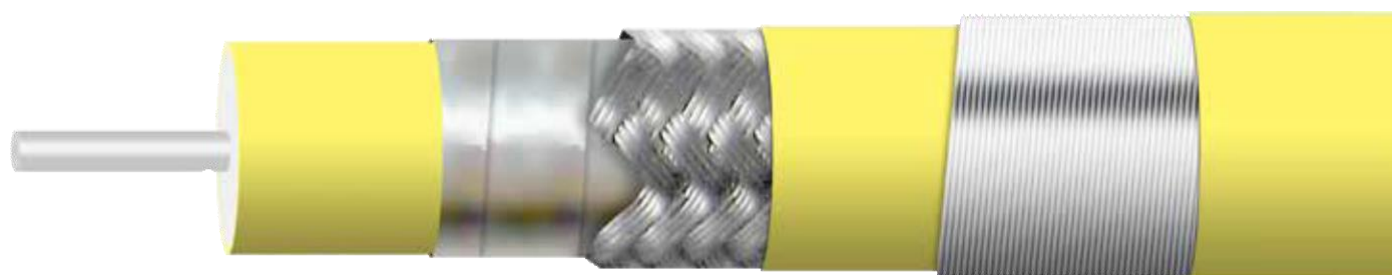


Product Data Sheet

140 Series Low Loss Flexible Microwave Cable

140 Series Operating Up to 50 GHz



Center Conductor	Dielectric	Foil	Braid	Outer Jacket	Copper (3.30mm 0.130")
Silver Plated Copper 1401/1403 Solid 1406/1408 Stranded	EPTFE	Silver Plated	Silver Plated	FEP Copper	

	1401	1406	1403	1408
Electrical Characteristics				
Impedance	50 +/- 2ohm	50 +/- 2ohm	50 +/- 2ohm	50 +/- 2ohm
Cut Off Frequency (cable only, max)	50GHz	48.5 GHz	50GHz	48.5 GHz
Capacitance	24 pF/ft.	25 pF/ft.	24pF/ft.	25 pF/ft.
Velocity of Propagation	83%	83%	83%	83%
Time Delay	1.22 ns/ft.	1.22 ns/ft	1.22ns/ft	1.22ns/ft.
Shielding Effectiveness up to 18GHz	>90 dB	>90 dB	>90 dB	>90 dB
Power Handling	See Chart	See Chart	See Chart	See Chart
Mechanical Characteristics:				
Weight	.3 oz/ft (28g/m)	0.275 oz/ft (26g/m)	0.73 oz/ft (68g/m)	0.73 oz/ft (68g/m)
Minimum Bend Radius inches (mm)	0.25" (6.4mm)	0.25" (6.4mm)	0.25" (6.4mm)	0.25" (6.4mm)
Environmental Characteristics:				
Operating Temperature Range ¹	-65°C to +165°C	-65°C to +165°C	-65°C to +165°C	-65°C to +165°C
RoHS (2002/95/EC)	Compliant	Compliant	Compliant	Compliant

¹+200°C available on request

VSWR for assemblies with two straight
2.4 mm connectors

1.40 : 1 to 50 GHz

1.40 : 1 to 50 GHz

140 Series

Insertion Loss

GHz	1401/1403			1406/1408		
	dB/ft.	dB/m	Power(W) @ 20°C @ Sea Level	dB/ft.	dB/m	Power(W) @ 20°C @ Sea Level
0.04	0.075	0.25	550	0.08	0.28	491
1	0.12	0.39	450	0.13	0.43	402
2	0.17	0.55	300	0.19	0.62	268
4	0.24	0.80	225	0.27	0.90	201
6	0.30	0.99	175	0.34	1.11	156
8	0.35	1.16	150	0.40	1.30	134
10	0.40	1.32	140	0.45	1.47	125
12	0.44	1.46	120	0.50	1.63	107
14	0.48	1.59	110	0.54	1.78	98
16	0.52	1.72	105	0.59	1.92	94
18	0.56	1.83	100	0.63	2.05	89
20	0.59	1.95	95	0.67	2.18	85
22	0.63	2.06	90	0.70	2.30	80
24	0.66	2.16	85	0.74	2.42	76
26	0.69	2.27	80	0.77	2.54	71
28	0.72	2.37	75	0.81	2.65	67
30	0.75	2.46	73	0.84	2.76	65
32	0.78	2.56	71	0.87	2.87	63
34	0.81	2.65	70	0.91	2.97	63
36	0.84	2.74	68	0.94	3.07	61
38	0.86	2.83	65	0.97	3.17	58
40	0.89	2.92	60	1.00	3.27	54
42	0.92	3.01	58	1.03	3.37	52
44	0.94	3.09	56	1.06	3.47	50
46	0.97	3.18	54	1.09	3.56	48
48	0.99	3.26	52	1.11	3.65	46
50	1.02	3.34	50	N/A	N/A	N/A

