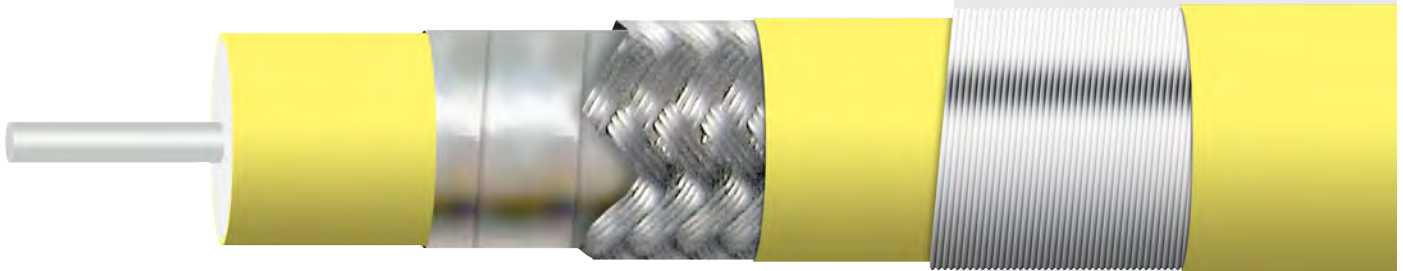




140 Series Operating Up to 50 GHz



Center Conductor	Dielectric	Foil	Braid	Inner Jacket	Serving	Outer Jacket
Silver Plated Copper 1401/1403 Solid 1406/1408 Stranded	EPTFE	Silver Plated Copper	Silver Plated Copper	FEP (0.130", 3.30mm)	SCCS Armor	FEP (0.186", 4.72mm)

	1401	1406	1403	1408
Electrical Characteristics				
Impedance	50 +/- 2Ω	50 +/- 2Ω	50 +/- 2Ω	50 +/- 2Ω
Cut Off Frequency (cable only, max)	50 GHz	50 GHz	50 GHz	50 GHz
Capacitance	24.5 pF/ft.	25.4 pF/ft.	24.5 pF/ft.	25.4 pF/ft.
Velocity of Propagation	83%	80%	83%	80%
Time Delay	1.22 ns/ft.	1.27 ns/ft.	1.22 ns/ft.	1.27 ns/ft.
Shielding Effectiveness up to 18GHz	>100 dB	>100 dB	>100 dB	>100 dB
Cable Attenuation Factors (K1, K2) *	12.9, 0.195	14.5, 0.190	12.9, 0.195	14.5, 0.190
Power Handling	See Chart	See Chart	See Chart	See Chart

Mechanical Characteristics:				
Weight	.30 oz/ft (28g/m)	.29 oz/ft (27 g/m)	.83 oz/ft (77 g/m)	.82 oz/ft (76 g/m)
Static Bend Radius	0.5" (12.7mm)	0.5" (12.7mm)	0.75" (19.1mm)	0.75" (19.1mm)
Dynamic Bend Radius	1.0" (25.4mm)	1.0" (25.4mm)	1.375" (34.9mm)	1.375" (34.9mm)

Environmental Characteristics:				
Operating Temperature Range ¹	-65°C to +200°C	-65°C to +200°C	-65°C to +200°C	-65°C to +200°C
RoHS 3 (EU 2015/863)	Yes	Yes	Yes	Yes

¹ Standard cable assembly temperature range is -55°C to +165°C, -65°C to +200°C available for select configurations

VSWR for assemblies with two straight 2.4 mm connectors

1.40 : 1 to 50 GHz	1.40 : 1 to 50 GHz	1.40 : 1 to 50 GHz	1.40 : 1 to 50 GHz
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*Attenuation = $K1\sqrt{f} + K2f$ (cable only)



140 Series

Attenuation (max)

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
0.5	0.09	0.30	688	0.10	0.34	608
1	0.13	0.43	450	0.15	0.48	402
2	0.19	0.61	300	0.21	0.69	268
4	0.27	0.87	225	0.30	0.98	201
6	0.33	1.08	185	0.37	1.20	156
8	0.38	1.25	150	0.43	1.40	134
10	0.43	1.40	140	0.48	1.57	125
12	0.47	1.54	120	0.53	1.72	107
14	0.51	1.67	110	0.57	1.87	98
16	0.55	1.80	105	0.61	2.00	94
18	0.58	1.91	100	0.65	2.13	89
20	0.62	2.02	95	0.69	2.25	85
22	0.65	2.13	90	0.72	2.37	80
24	0.68	2.23	85	0.76	2.48	76
26	0.69	2.28	80	0.77	2.53	71
28	0.71	2.32	75	0.79	2.59	67
30	0.77	2.51	73	0.85	2.79	65
32	0.79	2.60	71	0.88	2.89	63
34	0.82	2.69	70	0.91	2.99	63
36	0.84	2.77	68	0.94	3.08	61
38	0.87	2.85	65	0.97	3.17	58
40	0.89	2.93	60	0.99	3.26	54
42	0.92	3.01	58	1.02	3.35	52
44	0.94	3.09	56	1.05	3.43	50
46	0.96	3.16	54	1.07	3.51	48
48	0.99	3.24	52	1.10	3.60	46
50	1.01	3.31	50	1.12	3.68	44

