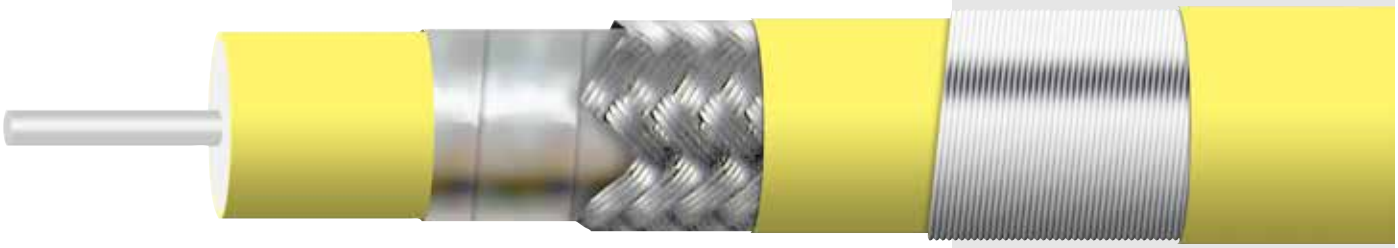
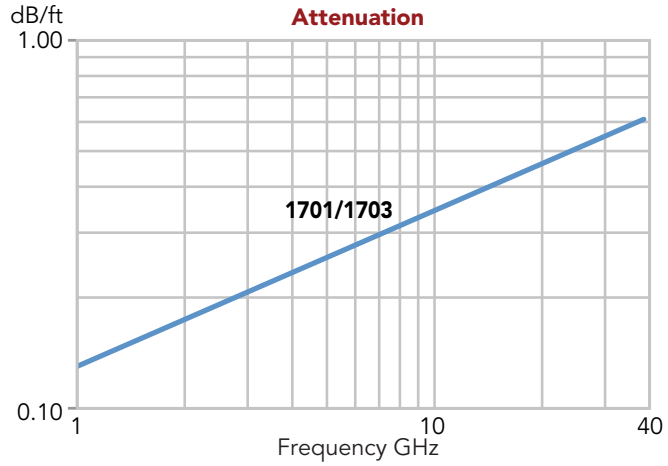
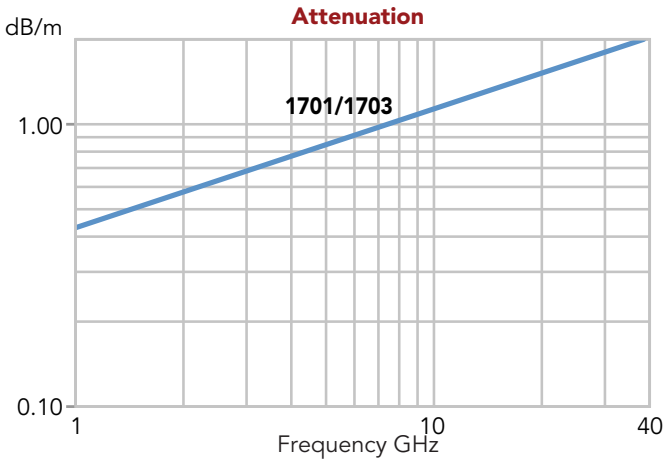
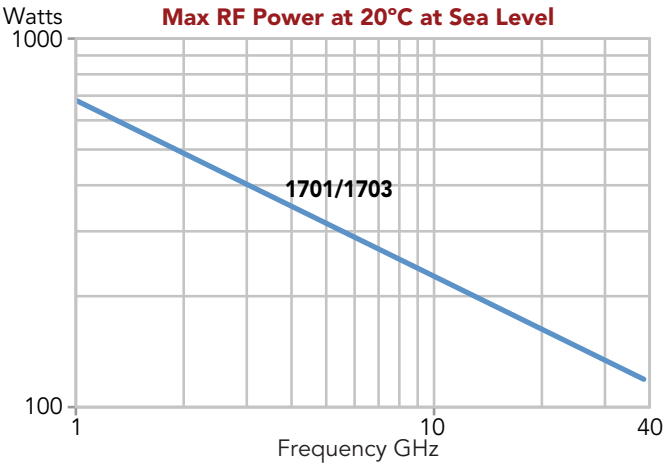
170 Series Operating Up to 38.5 GHz



Center Conductor	Dielectric	Foil	Braid	Outer Jacket	Serving	Outer Jacket
Silver Plated Copper	EPTFE	Silver Plated Copper	Silver Plated Copper	FEP (4.3mm 0.170")	SCCS Armor	FEP (6.09mm 0.240")

	1701	1703
Electrical Characteristics		
Impedance	50 +/– 2Ω	50 +/– 2Ω
Cut Off Frequency (cable only, max)	38 GHz	38 GHz
Capacitance	24 pF/ft.	24 pF/ft.
Velocity of Propagation	83%	83%
Time Delay	1.22 ns/ft.	1.22 ns/ft.
Shielding Effectiveness up to 18GHz	>90 dB	>90 dB
Power Handling	See Chart	See Chart
Mechanical Characteristics:		
Weight	.44 oz/ft (41g/m)	1.50 oz/ft (111g/m)
Minimum Bend Radius inches (mm)	0.25" (6.5mm)	0.5" (13mm)
Environmental Characteristics:		
Operating Temperature Range [1]	-65°C to +165°C	-65°C to +165°C
RoHS (2002/95/EC)	Available on request	Available on request
[1]+200°C available on request		
VSWR for assemblies with two straight connectors	1.35:1 to 18 GHz	1.35:1 to 18 GHz

170 Series (Continued)

Attenuation (max)

	1701/1703		
GHz	**dB/ft.**	**dB/m**	**Power(W) @ 20°C @ Sea Level**
0.04	0.10	0.32	850
1	0.13	0.43	680
2	0.18	0.59	467
4	0.25	0.86	340
6	0.26	0.82	270
8	0.29	0.95	245
10	0.31	1.03	210
12	0.34	1.13	190
14	0.36	1.13	178
16	0.38	1.17	170
18	0.40	1.24	165
20	0.42	1.31	160
22	0.44	1.63	157
24	0.46	1.42	153
26	0.48	1.49	148
28	0.50	1.56	144
30	0.52	1.63	136
32	0.53	1.73	131
34	0.55	1.79	127
36	0.56	1.84	125
38	0.57	1.88	120
38.5	0.61	2.00	119