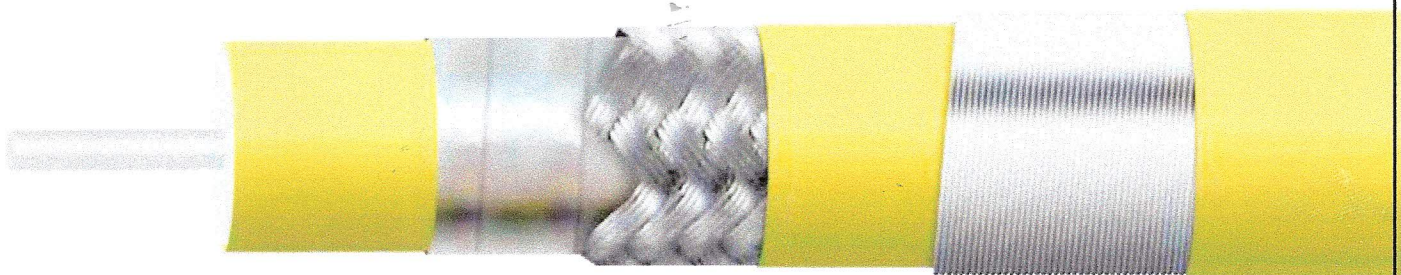




Low Loss -Phase Stable Flexible Cable

1500 Series

Operating Up to 40 GHz



Center Conductor Silver Plated Copper 1501/1503 Solid 1506/1508 Stranded	Dielectric EPTFE	Foil Silver Plated	Braid Silver Plated	Outer Jacket FEP Copper	Copper (3.65mm 0.144")
--	----------------------------	------------------------------	-------------------------------	-----------------------------------	------------------------

	1501	1506	1503	1508
Electrical Characteristics				
Impedance	50 +/- 2%	50 +/- 2%	50 +/- 2%	50 +/- 2%
Cut Off Frequency (cable only, max)	40GHz	40GHz	40GHz	40GHz
Capacitance	24 pF/ft.	26 pF/ft.	24 pF/ft.	26 pF/ft.
Velocity of Propagation	83%	83%	83%	83%
Time Delay	1.22 ns/ft.	1.22 ns/ft.	1.22 ns/ft.	1.22 ns/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	.36 oz/ft. (33g/m)	0.34 oz/ft. (31g/m)	0.75 oz/ft. (70g/m)	0.73 oz/ft. (68g/m)
Minimum Bend Radius inches (mm)	0.5" (12.7mm)	0.5" (12.7mm)	0.5" (12.7mm)	0.5" (12.7mm)
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/E)	Compliant	Compliant	Compliant	Compliant



Address

Instruments 4 Engineers Ltd
 Business & Innovation Centre
 Broadstone Mill, Broadstone Road
 Stockport SK5 7DL, United Kingdom

Contact

Tel: +44 (0) 161 871 7450
 sales@instruments4engineers.com

www.instruments4engineers.com

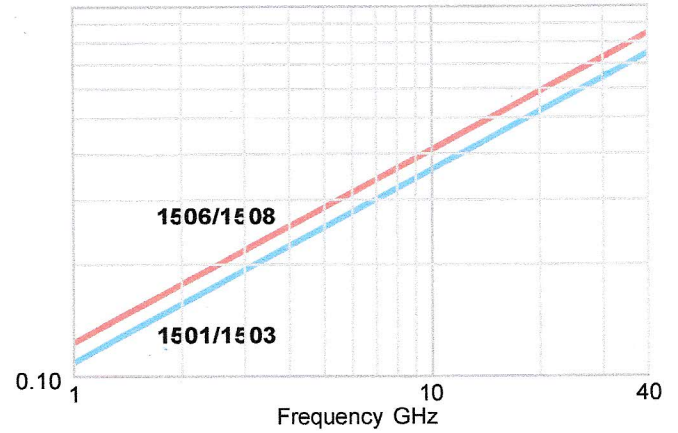
1500 Series

Insertion Loss

GHz	1501/1503			1506/1508		
	dB/ft.	dB/m	Power(W) @ 20°C @ Sea Level	dB/ft.	dB/m	Power(W) @ 20°C @ Sea Level
0.04	0.07	0.23	600	0.08	0.26	536
1	0.11	0.36	500	0.12	0.41	446
2	0.16	0.51	370	0.18	0.58	330
4	0.22	0.73	260	0.25	0.82	232
6	0.27	0.90	210	0.31	1.01	188
8	0.32	1.04	180	0.36	1.18	161
10	0.36	1.17	160	0.40	1.32	143
12	0.39	1.29	150	0.44	1.45	134
14	0.43	1.40	140	0.48	1.58	125
16	0.46	1.50	125	0.52	1.69	112
18	0.49	1.60	120	0.55	1.80	107
20	0.51	1.69	115	0.58	1.91	103
22	0.54	1.78	110	0.61	2.01	98
24	0.57	1.86	105	0.64	2.10	94
26	0.59	1.94	100	0.67	2.20	89
28	0.62	2.02	99	0.70	2.29	88
30	0.64	2.10	97	0.72	2.37	87
32	0.66	2.17	95	0.75	2.46	85
34	0.69	2.25	90	0.77	2.54	80
36	0.71	2.32	85	0.80	2.62	76
38	0.73	2.39	80	0.82	2.70	71
40	0.75	2.46	75	0.85	2.78	67

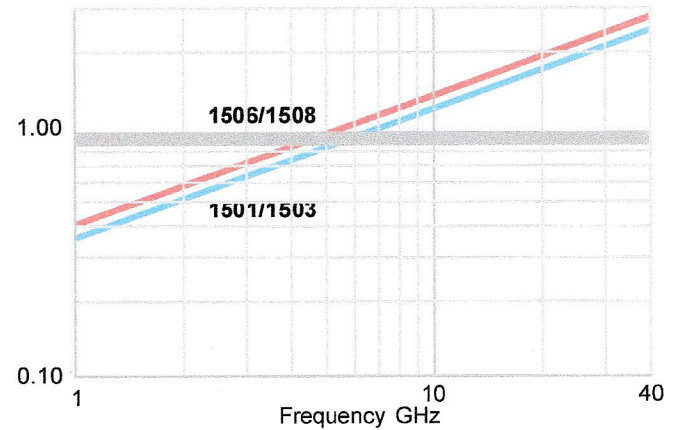
dB/ft
1.00

Attenuation



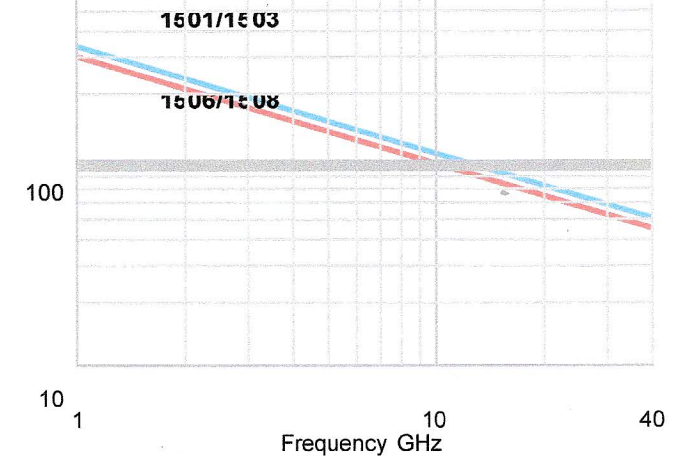
dB/m

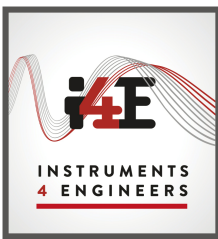
Attenuation



Watts

Max RF Power at 20°C at Sea Level





Address

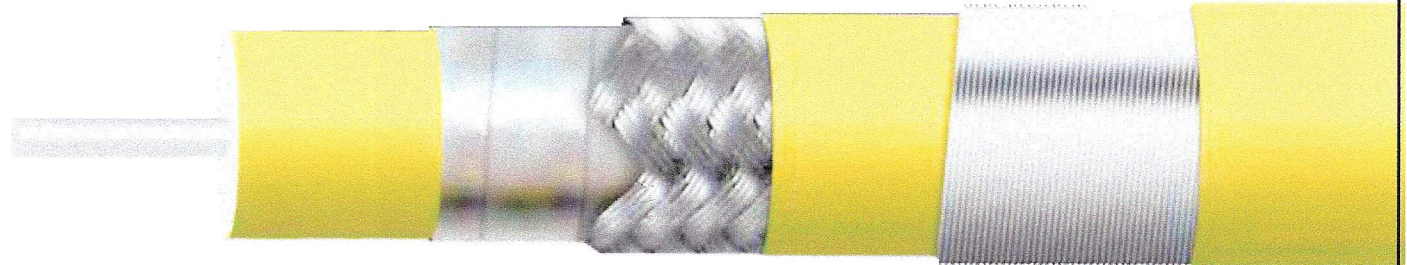
Instruments 4 Engineers Ltd
 Business & Innovation Centre
 Broadstone Mill, Broadstone Road
 Stockport SK5 7DL, United Kingdom

Contact

Tel: +44 (0) 161 871 7450
 sales@instruments4engineers.com

www.instruments4engineers.com

1800 Series Operating Up to 32 GHz



Center Conductor	Dielectric	Foil	Braid	Outer Jacket	Servicing	Outer Jacket
Silver Plated Copper	EPTFE (4.8mm 0.190")	Silver Plated Copper	Silver Plated Copper	FEP (4.8mm 0.190")	SCCS Armor	FEP (6.6mm)
1801/1803 Solid 1806/1808 Stranded						

	1801	1806	1803	1808
--	------	------	------	------

Electrical Characteristics

Impedance	50 +/- 2 Ω	50 +/- 2 Ω	50 +/- 2 Ω	50 +/- 2 Ω
Cut Off Frequency (cable only, max)	32GHz	31GHz	32GHz	31GHz
Capacitance	24 pF/ft.	25 pF/ft.	24 pF/ft.	25 pF/ft
Velocity of Propagation	83%	83%	83%	83%
Time Delay	1.22ns/ft.	1.22ns/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	0.62 oz./ft. (58g/m)	0.6 oz./ft. (54g/m)	1.4 oz./ft. (130g/m)	1.4 oz./ft. (130g/m)
Minimum Bend Radius inches (mm)	0.5" (13mm)	0.5" (13mm)	0.5" (13mm)	0.5" (13mm)

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)	Available on request	Available on request	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	1.35:1 to 18 GHz	1.35:1 to 18 GHz
VSWR for assemblies with one straight and one right angle connector	1.40:1 to 18 GHz	1.40:1 to 18 GHz	1.40:1 to 18 GHz	1.40:1 to 18 GHz
VSWR for assemblies with two right angle connectors	1.45:1 to 18 GHz	1.45:1 to 18 GHz	1.45:1 to 18 GHz	1.45:1 to 18 GHz
VSWR for assemblies with two straight 3.5mm connectors	1.35:1 to 26.5GHz	1.35:1 to 26.5GHz	1.35:1 to 26.5GHz	1.35:1 to 26.5GHz



Address

Instruments 4 Engineers Ltd
 Business & Innovation Centre
 Broadstone Mill, Broadstone Road
 Stockport SK5 7DL, United Kingdom

Contact

Tel: +44 (0) 161 871 7450
 sales@instruments4engineers.com

www.instruments4engineers.com

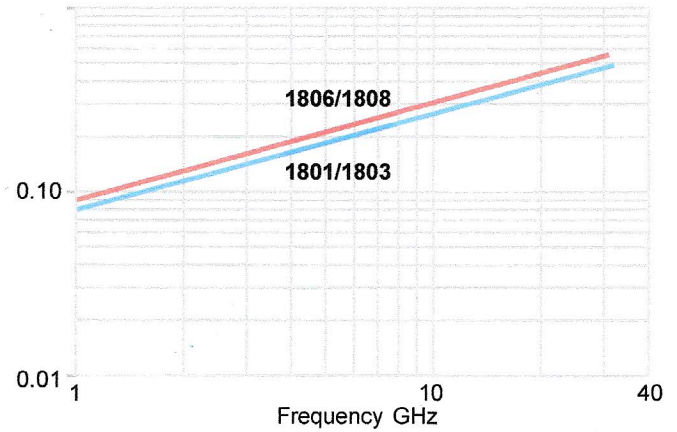
1800 Series

Insertion Loss

GHz	1801/1803			1806/1808		
	dB/ft.	dB/m	Power(W) @ 20°C @ Sea Level	dB/ft.	dB/m	Power(W) @ 20°C @ Sea Level
0.04	0.05	0.17	1000	0.06	0.19	893
1	0.08	0.27	800	0.09	0.30	714
2	0.12	0.38	550	0.13	0.42	491
4	0.16	0.53	400	0.18	0.60	357
6	0.20	0.66	320	0.23	0.74	286
8	0.23	0.77	290	0.26	0.86	259
10	0.26	0.87	250	0.30	0.97	223
12	0.29	0.95	220	0.33	1.07	196
14	0.32	1.03	210	0.35	1.16	188
16	0.34	1.11	200	0.35	1.25	179
18	0.36	1.18	195	0.41	1.33	174
20	0.38	1.25	190	0.43	1.40	170
22	0.40	1.32	185	0.45	1.48	165
24	0.42	1.38	180	0.47	1.55	161
26	0.44	1.45	175	0.49	1.62	156
28	0.46	1.51	170	0.52	1.69	152
30	0.47	1.54	160	0.53	1.73	143
31	0.48	1.57	155	0.56	1.76	138
32	0.49	1.62	150	n/a	n/a	n/a

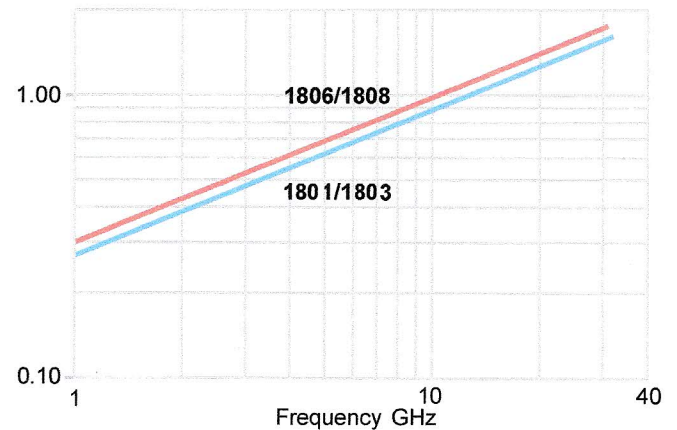
dB/ft
1.00

Attenuation



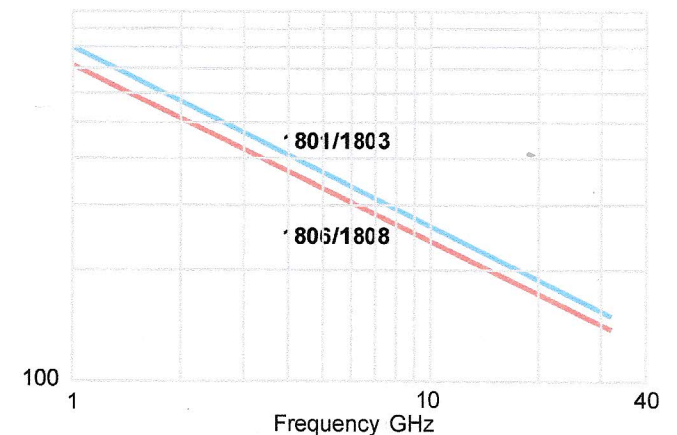
dB/m

Attenuation



Watts
1000

Max RF Power at 20°C at Sea Level

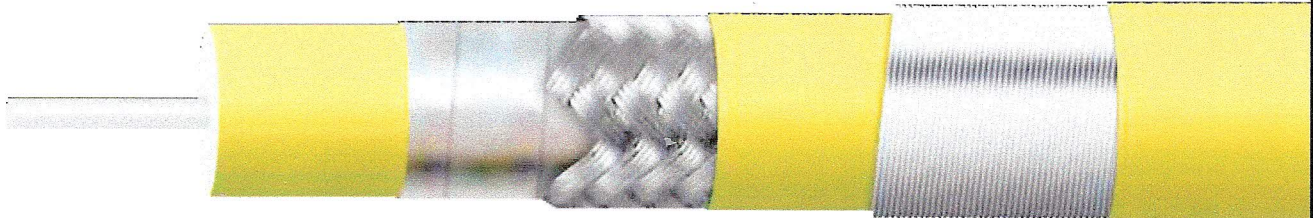




INSTRUMENTS 4 ENGINEERS

Where Customer Service Matters!

2300 Series Operating Up to 26.5 GHz



Center Conductor	Dielectric	Foil	Braid	Outer Jacket	Serving	Outer Jacket
Silver Plated Copper 2301/2303 Solid 2306/2308 Stranded	EPTFE	Silver Plated Copper	Silver Plated Copper	FEP (5.8mm 0.230")	SCCS Armor	FEP (7.4mm 0.290")

2301

Electrical Characteristics

Impedance	50 +/- 2%
Cut Off Frequency (cable only, max)	26.5 GHz
Capacitance	24 pF/ft.
Velocity of Propagation	83%
Time Delay	1.22 ns/ft.
Shielding Effectiveness up to 18GHz	>90 dB
Power Handling	See Chart

Mechanical Characteristics:

Weight	0.77 oz/ft (72g/m)
Minimum Bend Radius inches (mm)	0.750" (19mm)

Environmental Characteristics:

Operating Temperature Range ¹	-65°C to +165°C
RoHS (2002/95/EC)	Available on request

¹+200°C available on request

VSWR for assemblies with two straight connectors	1.35:1 to 18 GHz
VSWR for assemblies with one straight and one right angle connector	1.40:1 to 18 GHz
VSWR for assemblies with two right angle connectors	1.45:1 to 18 GHz
VSWR for assemblies with two straight 3.5mm connectors	1.35:1 to 26.5 GHz



Address

Instruments 4 Engineers Ltd
 Business & Innovation Centre
 Broadstone Mill, Broadstone Road
 Stockport SK5 7DL, United Kingdom

Contact

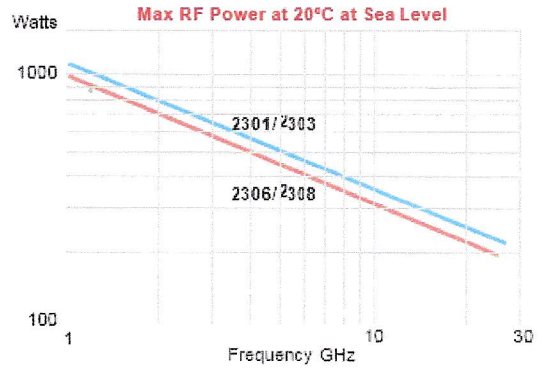
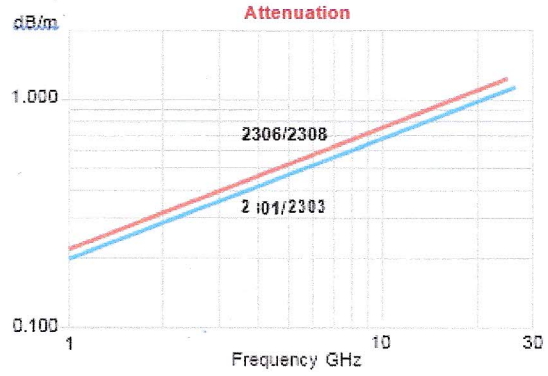
Tel: +44 (0) 161 871 7450
 sales@instruments4engineers.com

www.instruments4engineers.com

2300 Series

Insertion Loss

GHz	2301/2303			2306/2308		
	dB/ft.	dB/m	Power(W) @ 20°C @ Sea Level	dB/ft.	dB/m	Power(W) @ 20°C @ Sea Level
0.04	0.038	0.125	1300	0.043	0.140	1161
1	0.061	0.200	1100	0.068	0.220	982
2	0.087	0.285	800	0.097	0.320	714
4	0.125	0.410	520	0.14	0.460	464
6	0.155	0.508	450	0.173	0.570	402
8	0.18	0.590	380	0.202	0.660	339
10	0.203	0.666	350	0.228	0.750	313
12	0.224	0.735	310	0.251	0.820	277
14	0.244	0.800	300	0.273	0.900	268
16	0.263	0.863	280	0.294	0.960	250
18	0.28	0.918	270	0.314	1.030	241
20	0.297	0.974	250	0.332	1.09	223
22	0.313	1.027	230	0.351	1.15	205
24	0.329	1.079	220	0.368	1.21	196
25	0.336	1.102	215	0.377	1.24	188
26.5	0.347	1.138	210	N/A	N/A	N/A



Address

Instruments 4 Engineers Ltd
 Business & Innovation Centre
 Broadstone Mill, Broadstone Road
 Stockport SK5 7DL, United Kingdom

Contact

Tel: +44 (0) 161 871 7450
 sales@instruments4engineers.com

www.instruments4engineers.com