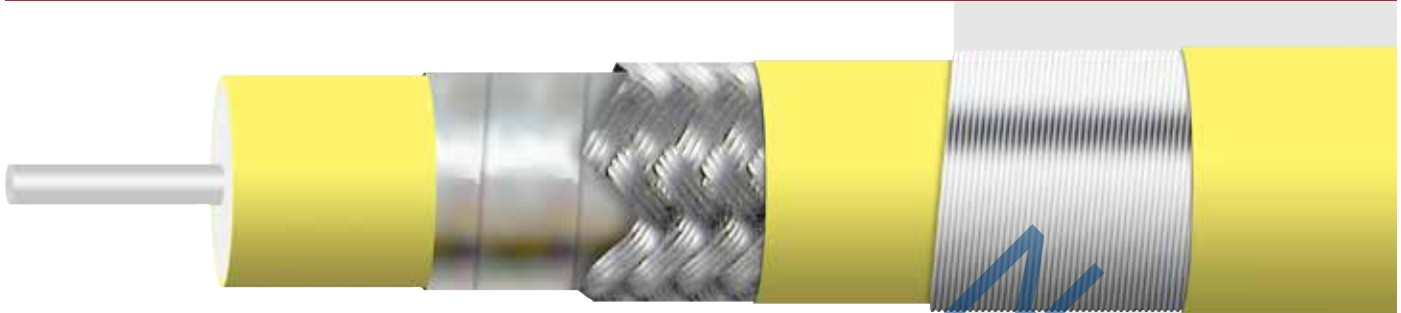




## 180 Series Operating Up to 32 GHz



Center Conductor	Dielectric	Foil	Braid	Outer Jacket	Serving	Outer Jacket
Silver Plated Copper 1801/1803 Solid 1806/1808 Stranded	EPTFE	Silver Plated Copper	Silver Plated Copper	FEP (4.8mm 0.190")	SCCS Armor	FEP (6.6mm 0.260")

	1801	1806	1803	1808
<b>Electrical Characteristics</b>				
Impedance	50 +/- 2Ω	50 +/- 2Ω	50 +/- 2Ω	50 +/- 2Ω
Cut Off Frequency (cable only, max)	32 GHz	31 GHz	32 GHz	31 GHz
Capacitance	24 pF/ft.	25 pF/ft.	24 pF/ft.	25 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
<b>Mechanical Characteristics:</b>				
Weight	0.62 oz/ft (58g/m)	0.6 oz/ft (54g/m)	1.40 oz/ft (130g/m)	1.40 oz/ft (130g/m)
Minimum Bend Radius inches (mm)	0.5" (13mm)	0.5" (13mm)	0.5" (13mm)	0.5" (13mm)
<b>Environmental Characteristics:</b>				
Operating Temperature Range <sup>1</sup>	-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
<sup>1</sup> +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 26.5 GHz	1.35:1 to 26.5 GHz	1.35:1 to 26.5 GHz	1.35:1 to 26.5 GHz



## 180 Series (Continued)

### Attenuation (max)

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

