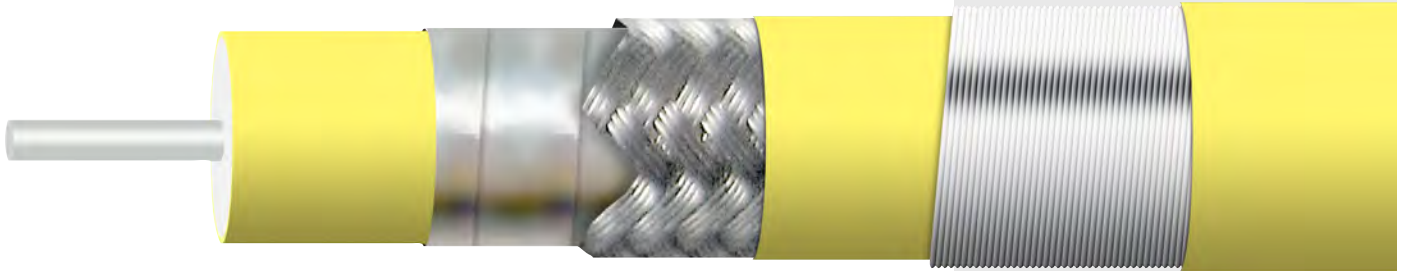




180 Series Operating Up to 32 GHz



Center Conductor Silver Plated Copper 1801/1803 Solid 1806/1808 Stranded	Dielectric EPTFE	Foil Silver Plated Copper	Braid Silver Plated Copper	Inner Jacket FEP (0.188", 4.8mm)	Serving SCCS Armor	Outer Jacket FEP (0.260", 6.6mm)
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	1801	1806	1803	1808
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Electrical Characteristics

Impedance	50 +/- 2Ω	50 +/- 2Ω	50 +/- 2Ω	50 +/- 2Ω
Cut Off Frequency (cable only, max)	32 GHz	32 GHz	32 GHz	32 GHz
Capacitance	24.5 pF/ft.	24.5 pF/ft.	24.5 pF/ft.	24.5 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 32GHz	>90 dB	>90 dB	>90 dB	>90 dB
Cable Attenuation Factors (K1, K2) *	7.8, 0.165	9.0, 0.190	7.8, 0.165	9.0, 0.190
Power Handling	See Chart	See Chart	See Chart	See Chart

Mechanical Characteristics:

Weight	.59 oz/ft (55 g/m)	.56 oz/ft (52 g/m)	1.39 oz/ft (129 g/m)	1.34 oz/ft (125 g/m)
Static Bend Radius	0.75" (19mm)	0.625" (15.9mm)	0.875" (22.2mm)	0.875" (22.2mm)
Dynamic Bend Radius	1.25" (31.75mm)	1.25" (31.75 mm)	1.75" (44.5mm)	1.75" (44.5mm)

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 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

*Attenuation = $K_1\sqrt{f} + K_2f$ (cable only)



180 Series

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
0.5	0.06	0.18	1044	0.06	0.21	931
1	0.08	0.26	800	0.09	0.30	714
2	0.11	0.37	550	0.13	0.43	491
4	0.16	0.53	400	0.19	0.61	357
6	0.20	0.66	320	0.23	0.75	286
8	0.23	0.77	290	0.27	0.88	259
10	0.26	0.86	250	0.30	0.99	223
12	0.29	0.95	220	0.33	1.09	196
14	0.31	1.03	210	0.36	1.18	188
16	0.34	1.11	200	0.39	1.27	179
18	0.36	1.18	195	0.42	1.35	174
20	0.38	1.25	190	0.44	1.44	170
22	0.40	1.32	185	0.46	1.52	165
24	0.42	1.38	180	0.49	1.60	161
26	0.44	1.45	175	0.51	1.67	156
28	0.46	1.51	170	0.53	1.74	152
30	0.48	1.56	160	0.55	1.80	143
31	0.49	1.59	155	0.56	1.87	138
32	0.49	1.62	150	0.57	1.87	136

