



115 Series Operating Up to 61 GHz



Center Conductor
Silver Plated Copper
1151 Solid
1156 Stranded

Dielectric
PTFE

Foil
Silver Plated
Copper

Braid
Silver Plated
Copper

Outer Jacket
FEP
(0.104", 2.64mm)

	1151	1156
Electrical Characteristics		
Impedance	50 +/- 2Ω	50 +/- 2Ω
Cut Off Frequency (cable only, max)	61 GHz	65 GHz
Capacitance	28.6 pF/ft.	28.6 pF/ft.
Velocity of Propagation	71%	71%
Time Delay	1.43 ns/ft.	1.43 ns/ft.
Shielding Effectiveness up to 18GHz	>90 dB	>90 dB
Cable Attenuation Factors (K1, K2) *	19.4, 0.89	23, 0.87
Power Handling	See Chart	See Chart

Mechanical Characteristics:		
Weight	.22 oz/ft (20.8 g/m)	.21 oz/ft (19.3 g/m)
Static Bend Radius	0.25" (6.35mm)	0.25" (3.17mm)
Dynamic Bend Radius	0.625" (15.9mm)	0.5" (12.7mm)

Environmental Characteristics:		
Operating Temperature Range ¹	-65°C to +200°C	-65°C to +200°C
RoHS 3 (EU 2015/863)	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
VSWR for assemblies with one straight and one right angle connector	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

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

1151 is a flexible replacement for RG405 cable



115 Series

Attenuation (max)

GHz	1151			1156		
	dB/ft.	dB/m	Power(W) @ 20°C @ Sea Level	dB/ft.	dB/m	Power(W) @ 20°C @ Sea Level
0.5	0.14	0.46	357	0.17	0.55	310
1	0.20	0.67	220	0.24	0.78	196
2	0.29	0.96	200	0.34	1.12	170
4	0.42	1.39	120	0.49	1.62	107
6	0.53	1.73	85	0.62	2.02	76
8	0.62	2.03	75	0.72	2.36	67
10	0.70	2.30	70	0.81	2.67	63
12	0.78	2.56	65	0.90	2.96	58
14	0.85	2.79	60	0.98	3.22	54
16	0.92	3.01	55	1.06	3.48	49
18	0.98	3.23	50	1.13	3.72	45
20	1.04	3.42	45	1.19	3.89	40
22	1.10	3.62	43	1.26	4.13	38
24	1.17	3.82	42	1.33	4.36	38
26	1.23	4.02	40	1.40	4.58	36
28	1.28	4.21	39	1.46	4.80	35
30	1.34	4.40	38	1.53	5.01	34
32	1.40	4.58	37	1.59	5.22	33
34	1.45	4.76	36	1.65	5.43	32
36	1.51	4.94	35	1.72	5.63	31
38	1.56	5.11	32	1.78	5.83	29
40	1.61	5.28	30	1.84	6.02	27
42	1.66	5.45	29	1.90	6.22	26
44	1.71	5.62	28	1.95	6.41	25
46	1.76	5.79	27	2.01	6.60	24
48	1.81	5.95	26	2.07	6.78	23
50	1.86	6.11	25	2.12	6.97	22
52	1.91	6.27	25	2.18	7.15	22
54	1.96	6.43	25	2.24	7.33	22
56	2.01	6.59	23	2.29	7.51	21
58	2.06	6.74	23	2.34	7.69	21
60	2.10	6.90	22	2.40	7.86	20
62	2.15	7.05	22	2.45	8.04	20

