



## 047 Series Operating Up to 110 GHz



**Center Conductor**  
Silver Plated  
Copper

**Dielectric**  
PTFE

**Foil**  
Silver Plated  
Copper

**Braid**  
Silver Plated  
Copper

**Outer Jacket**  
FEP  
(0.062", 1.63mm)

**0471**

### Electrical Characteristics

Impedance	50 +/- 2Ω
Cut Off Frequency (cable only, max)	110 GHz
Capacitance	28.6 pF/ft
Velocity of Propagation	71%
Time Delay	1.43 ns/ft
Shielding Effectiveness up to 18GHz	>90 dB
Cable Attenuation Factors*	K1 = 37.5, K2 = 0.935
Power Handling	See Chart

### Mechanical Characteristics:

Weight	0.08 oz/ft (7.4 g/m)
Static Bend Radius	0.2" (5.1mm)
Dynamic Bend Radius	0.375" (9.5mm)

### Environmental Characteristics:

Operating Temperature Range	-65°C to +150°C
RoHS 3 (EU 2015/863)	Yes

\*Standard cable assembly temperature range is -55°C to +135°C, -65°C to +150°C available for select configurations

\*Attenuation =  $K1\sqrt{f} + K2f$  (cable only)



# 047 Series

## Attenuation (max)

0471			
GHz	dB/ft.	dB/m	Power(W) @ 20°C @ Sea Level
0.5	0.27	0.89	55.8
1	0.38	1.26	32.0
2	0.55	1.80	25.0
4	0.79	2.58	15.0
6	0.97	3.20	12.0
8	1.14	3.73	10.0
10	1.28	4.20	9.0
12	1.41	4.63	8.0
14	1.53	5.03	7.5
16	1.65	5.41	7.0
18	1.76	5.77	6.5
20	1.86	6.12	6.0
22	1.96	6.45	5.6
24	2.06	6.76	5.3
26	2.16	7.07	5.0
28	2.25	7.37	4.8
30	2.33	7.66	4.6
40	2.75	9.01	3.4
50	3.12	10.23	3.2
60	3.47	11.37	3.0
70	3.79	12.44	2.2
80	4.10	13.46	2.4
90	4.40	14.43	2.3
100	4.69	15.37	2.01
110	4.96	16.28	2.0
90	4.35	14.27	2.3
100	4.65	15.27	2.1
110	4.96	16.28	2.0

