

# SFT Specifications

	SFT-316		SFT-142		SFT-205				
<b>Physical &amp; Mechanical Specifications</b>									
Dimensions	inches	mm	inches	mm	inches	mm			
Center Conductor	0.0226	0.57	0.0403	1.02	0.0508	1.29			
Dielectric	0.068	1.73	0.121	3.07	0.154	3.91			
Inner Shield	0.078	1.98	0.131	3.33	0.164	4.17			
Interlayer	0.083	1.85	0.136	3.48	0.169	4.29			
Outer Shield	0.096	2.44	0.158	4.01	0.187	4.75			
Jacket	0.120	3.05	0.180	4.57	0.205	5.21			
Bend Radius: minimum	0.500	12.7	0.750	19.1	1.000	25.4			
Weight	0.018 lbs/ft	0.03 kG/m	0.036lbs/ft	0.05kG/m	0.042lbs/ft	0.06kG/m			
Temperature Range			-67°/+392°F		(-55°/+200°C)				
<b>Electrical Specifications</b>									
Impedance	50 ohms		50 ohms		50 ohms				
Velocity of Propagation	76%		76%		76%				
Dielectric Constant	1.73		1.73		1.73				
Shielding Effectiveness	>100 dB		>100 dB		>100 dB				
Time Delay	1.34 nS/ft	4.39 nS/m	1.34 nS/ft	4.39 nS/m	1.34 nS/ft	4.39 nS/m			
Capacitance	26.7 pF/ft	87.7 pF/m	26.7 pF/ft	87.7 pF/m	26.7 pF/ft	87.7 pF/m			
Inductance	0.067 uH/ft	0.22 uH/m	0.067 uH/ft	0.22 uH/m	0.067 uH/ft	0.22 uH/m			
Cutoff Frequency	63 GHz		35 GHz		28 GHz				
Voltage Withstand	500 DC		1000 DC		1500 DC				
DC Resistance - ohms	ohms/1000ft	ohms/km	ohms/1000ft	ohms/km	ohms/1000ft	ohms/km			
Inner Conductor	20.3	66.6	6.39	21.0	4.02	13.2			
Outer Conductor	5.54	18.2	3.10	10.2	2.43	8.0			
<b>Attenuation &amp; Power Handling Attenuation +25°C Ambient &amp; Power Handling +40°C Ambient; Sea Level; VSWR 1:1</b>									
Frequency MHz	dB/100ft	dB/100m	kW	dB/100ft	dB/100m	kW	dB/100ft	dB/100m	kW
13.56	2.0	7.0	4.044	1.2	3.8	5.040	1.0	3.2	6.648
30	3.0	10.0	2.713	1.7	5.7	3.382	1.4	4.7	4.461
100	5.5	18.0	1.478	3.2	10.4	1.843	2.6	8.6	2.431
150	7.0	22.0	1.203	3.9	12.8	1.501	3.2	10.6	1.980
400	11.0	36.0	0.730	6.4	20.9	0.912	5.3	17.4	1.202
900	17.0	55.0	0.481	9.6	31.6	0.601	8.0	26.2	0.792
1000	18.0	58.0	0.455	10.2	33.3	0.569	8.4	27.7	0.750
1500	22.0	71.0	0.368	12.5	41.0	0.461	10.4	34.0	0.608
2000	25.0	82.0	0.316	14.5	47.4	0.397	12.0	39.5	0.523
3000	31.0	101.0	0.255	17.8	58.4	0.320	14.8	48.7	0.422
4000	36.0	117.0	0.219	20.7	67.8	0.275	17.2	56.5	0.362
5000	40.0	131.0	0.194	23.2	76.1	0.244	19.4	63.5	0.321
6000	44.0	144.0	0.175	25.5	83.7	0.221	21.3	69.9	0.291
8000	51.0	167.0	0.149	29.6	97.3	0.189	24.8	81.3	0.249
10000	57.0	187.0	0.132	33.3	109.4	0.167	27.9	91.5	0.220
12000	63.0	205.0	0.119	36.7	120.4	0.151	30.7	100.9	0.198
13500	67.0	218.0	0.111	39.1	128.2	0.141	32.8	107.5	0.186
15000	70.0	231.0	0.105	41.3	135.6	0.133	34.7	113.7	0.175
18000	77.0	253.0	0.094	45.5	149.4	0.120	38.3	125.5	0.157
24000	90.0	295.0	0.079	53.2	174.5	0.101	44.8	146.8	0.133
28000	97.0	319.0	0.072	57.8	189.7	0.092	48.7	159.8	0.122
35000	110.0	359.0	0.063	65.3	214.2	0.081			
63000	150.0	492.0	0.043						
<b>Attenuation at Frequency</b>									
K1	0.551680		0.315330		0.260980				
K2	0.000180		0.000180		0.000180				