

Microwave Coaxial Cables & Assemblies

ISO 9001 Certified

SFT™- Strip Flex Taped

- Low Loss
- Rugged for Flexing
- Sizes from SFT-316 (0.120") to SFT-600 (0.565")

HELI-FOIL™

- Ultra Low Loss
- High Power Handling
- Sizes from HF-190 (0.192") to HF-290 (0.301")



SFT™ high performance microwave coaxial cables are rugged and flexible, making them ideal for system interconnections and antenna feeders in military and commercial applications. The wide range of available connectors covers many interface types and frequency ranges.

Features & Benefits:

- Much lower loss than solid dielectric cables
- Superior shielding effectiveness >100 dB
- Stable Loss, VSWR and phase with flexing

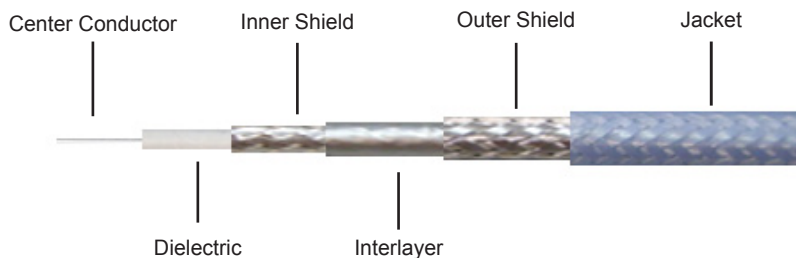
HELI-FOIL™ ultra low loss, flexible microwave coaxial cables are designed ideally for system installation. Heli-Foil cable comes in two different diameters, with options of stranded center conductors (for dynamic applications) and solid center conductors (for static applications). All sizes provide state of the art lowest insertion loss and excellent phase stability.

Features & Benefits:

- Lowest Insertion Loss Available
- Superior Shielding Effectiveness (>90 dB)
- Excellent Phase Tracking Performance with Wide Temperature (-55°C to +150°C)

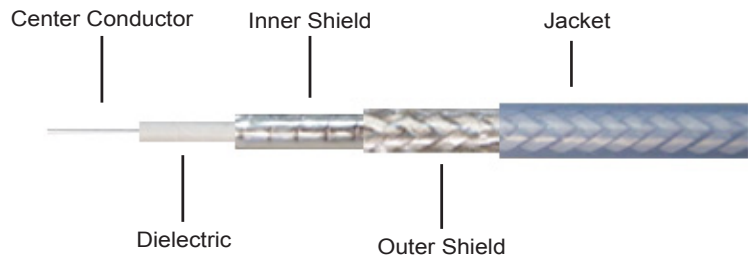
Specifications:

Center Conductor: Solid Silver-Plated Copper
 Dielectric: Low Density Taped PTFE
 Inner Shield: Silver-Plated Copper Flat Ribbon Braid
 Interlayer: Aluminum-Polyimide Tape
 Outer Shield: Silver-plated Copper Braid
 Jacket: Teflon® FEP



	SFT-142			SFT-205			SFT-304		
Physical & Mechanical Specifications									
Dimensions	in		mm	in		mm	in		mm
Center Conductor	0.0403		(1.02)	0.0508		(1.29)	0.062		(1.57)
Dielectric	0.121		(3.07)	0.154		(3.91)	0.185		(4.70)
Inner Shield	0.131		(3.33)	0.164		(4.17)	0.195		(4.95)
Interlayer	0.136		(3.48)	0.169		(4.29)	0.200		(5.08)
Outer Shield	0.158		(4.01)	0.187		(4.75)	0.227		(5.77)
Jacket	0.180		(4.57)	0.205		(5.21)	0.250		(6.35)
Bend Radius: minimum	0.750		(19.1)	1.000		(25.4)	1.250		(31.8)
Weight lbs./ft (kg/m)	0.036 lbs/ft		(0.05 kg/m)	0.042 lbs/ft		(0.06 kg/m)	0.067 lbs/ft		(0.10 kg/m)
Environmental Specifications									
Temperature Range	-67°/+392°F (-55°/+200°C)								
Electrical Specifications									
Impedance	50ohms			50ohms			50ohms		
Velocity of Propagation	76%			76%			76%		
Dielectric Constant	1.73			1.73			1.73		
Shielding Effectiveness	>100dB			>100dB			>100dB		
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)		
Attenuation & Power Handling		Attenuation (+25°C Ambient) & Power Handling (+40°C Ambient; Sea Level; VSWR 1:1)							
Attenuation (MHz)	dB/100ft	dB/100m	kW	dB/100ft	dB/100m	kW	dB/100ft	dB/100m	kW
100	3.2	10.4	1.843	2.6	8.6	2.431	2.1	6.9	3.310
1000	10.2	33.3	0.569	8.4	27.7	0.750	6.8	22.2	1.020
3000	17.8	58.4	0.320	14.8	48.7	0.422	11.9	39.2	0.573
8000	29.6	97.3	0.189	24.8	81.3	0.249	20.1	65.8	0.336
10000	33.3	109.4	0.167	27.9	91.5	0.220	22.6	74.2	0.297
12000	36.7	120.4	0.151	30.7	100.9	0.198	25.0	81.9	0.268
13500	39.1	128.2	0.141	32.8	107.5	0.186	26.6	87.3	0.251
18000	45.5	149.4	0.120	38.3	125.5	0.157	31.2	102.2	0.213
Attenuation at Frequency	(A=K1 √ Fmhz + K2 Fmhz)								
K1	0.315330			0.260980			0.208100		
K2	0.000180			0.000180			0.000180		

Center Conductor: Silver Plated Copper
 Dielectric: Low Density PTFE
 Inner Shield: Helical Silver-Plated Copper Tape
 Outer Shield: Silver-plated Copper Braid
 Jacket: Teflon® FEP



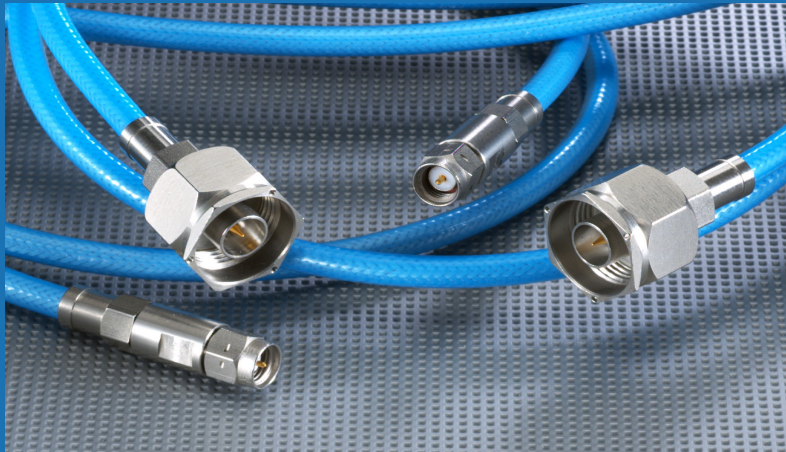
HF-190			HF-190S*			HF-290			HF-290S*		
in	mm		in	mm		in	mm		in	mm	
0.053	(1.35)		0.056	(1.41)		0.088	(2.24)		0.094	(2.39)	
0.146	(3.71)		0.146	(3.71)		0.240	(6.10)		0.240	(6.10)	
0.154	(3.91)		0.154	(3.91)		0.255	(6.48)		0.255	(6.48)	
/	/		/	/		/	/		/	/	
0.172	(4.37)		0.172	(4.37)		0.273	(6.93)		0.273	(6.93)	
0.192	(4.88)		0.192	(4.88)		0.301	(7.65)		0.301	(7.65)	
1.000	(25.4)		1.000	(25.4)		1.500	(38.1)		1.500	(38.1)	
0.040lbs/ft	(0.060kg/m)		0.039lbs/ft	(0.058kg/m)		0.092lbs/ft	(0.137kg/m)		0.090lbs/ft	(0.134kg/m)	
-67°/+302°F						(-55°/+150°C)					
50ohms			50ohms			50ohms			50ohms		
83%			83%			83%			83%		
1.45			1.45			1.45			1.45		
>90dB			>90dB			>90dB			>90dB		
1.22 nS/ft (4.02 nS/m)			1.22 nS/ft (4.02 nS/m)			1.22 nS/ft (4.02 nS/m)			1.22 nS/ft (4.02 nS/m)		
24.5 pF/ft (80.3 pF/m)			24.5 pF/ft (80.3 pF/m)			24.5 pF/ft (80.3 pF/m)			24.5 pF/ft (80.3 pF/m)		
dB/100ft	dB/100m	kW	dB/100ft	dB/100m	kW	dB/100ft	dB/100m	kW	dB/100ft	dB/100m	kW
2.3	7.6	2.8	2.5	8.4	2.5	1.4	4.6	5.6	1.5	5.1	5.1
7.4	24.3	0.9	8.1	26.7	0.8	4.5	14.7	1.7	5.0	16.3	1.6
13.0	42.6	0.5	14.3	46.9	0.4	8.0	26.1	1.0	8.8	28.9	0.9
21.6	70.9	0.3	23.7	77.9	0.3	13.4	44.0	0.6	14.8	48.5	0.5
24.3	79.7	0.3	26.7	87.6	0.2	15.1	49.6	0.5	16.7	54.7	0.5
26.8	87.8	0.2	29.4	96.4	0.2	16.7	54.8	0.5	18.4	60.4	0.4
28.5	93.5	0.2	31.3	102.6	0.2	17.8	58.5	0.4	19.6	64.4	0.4
33.2	109.0	0.2	36.4	119.5	0.2	20.0	68.6	0.4	23.0	75.4	0.3
(A=K1 √ Fmhz + K2 Fmhz)											
0.229587			0.253447			0.131900			0.153308		
0.000134			0.000134			0.000134			0.000134		

Specifications subject to change without notice.

For further information, pricing and delivery, please contact our sales department.

Cable Assemblies & Connectors:

Times Microwave Systems provides SFT and HELI-FOIL high performance assemblies to meet a broad range of application in both field and laboratory conditions. We provide special testing, common interface connector such as Type N and SMA, custom connectors, improved strain relief, special markings for customer. They are ideally suited for high frequency application and high ambient temperature environments up to 18 GHz.



Our Mission

TIMES MICROWAVE SYSTEMS designs and manufactures high performance RF and microwave transmission lines for the military, aerospace and telecommunications industry. These products consist of flexible coaxial cable, connectors, accessories and cable assemblies.

We are committed to understanding the needs and requirements of our customers and providing highly engineered, cost effective products. TIMES MICROWAVE SYSTEMS is dedicated to total customer satisfaction and superior results for our shareholders in all we do.



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