StripFlex®-II (SFT)

Features & Benefits

- Lower Loss than SF Versions
- Superior Shielding Effectivess
- Low Passive Intermod (-155dBc)
- Stable Loss & VSWR vs. Flexing
- Excellent Connector Selection

SFT cables provides the ultimate performance in a flexible cable. The low density PTFE tape dielectric provides the lowest dielectric loss of any practical dielectric and silver plated conductors make these the ideal choice for microwave applications and other commercial and military interconnect systems.

The high temperature dielectric and jacket enable their use in high ambient temperature up to +200C. They have losses slightly smaller than their low temperature TCOM counterparts as well as high power handling capability.

The Shielding systems, pioneered by Times Microwave Systems in the mid-sixties, consists of an inner silver plated ribbon braid (FSC), a spirally applied and overlapped composite aluminum tape interlayer (Intl), and an overall silver plated round wire braid (SC). The flat ribbon shield affords approximately 30% lower loss and >95 Db shielding compared with the typical M17/RG round wire braided shield (40 to 60 dB).

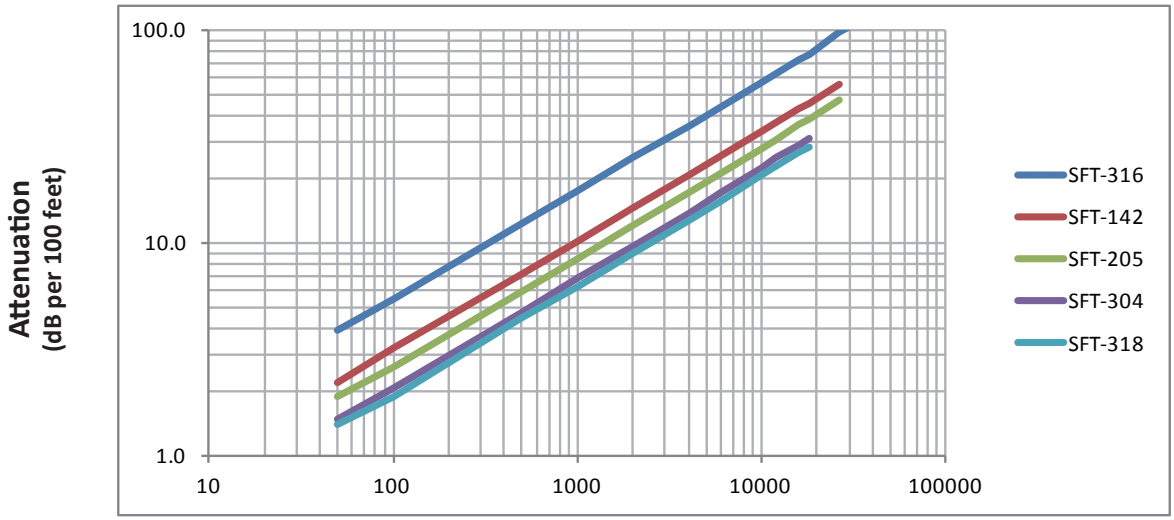
Standard M17/RG cables are shielded with high coverage single or double round wire braids. While these shields provide 40 dB and 60 dB shielding effectiveness respectively. They are not particularly stable (loss & VSWR) nor is the shielding adequate for today's sensitive wireless communications and microwave military/defense applications.

VSWR is lower since the flat ribbon can be applied over the dielectric much more uniformly than multi-end round wire braids. The VSWR and attenuation variation due to aging and flexure is substantially lower at all frequencies, and especially above 12 GHz. StripFlex-II cables are also available from Times that have been sweep tested for broadband VSWR and attenuation performance. Please contact the factory with your specific requirements.

A good selection of standard interface connectors (crimp or clamp style) are available. SFT cable can be purchased in bulk reels or as preterminated and tested cable assemblies.

Cable	AA number MI Number	Conductor in (mm)	Dielectric in (mm)	inner Shield in (mm)	Interlayer in (mm)	Outer Shield in (mm)	Jacket in (mm)	Weight lb/ft (kg/m)	Impedance ohms Vp (%)	Capacitance pF/ft (pF/m)	Temp. Range F (C)	Min.Bend Radius in (mm)	Cut-off Frequency (GHz)
SFT-316	AA-8649 51743	SC 0.023 (0.57)	LDPTFE 0.068 (1.73)	FSC 0.078 (1.98)	Al/Kapton 0.083 (1.85)	SC 0.096 (2.44)	Blue FEP 0.120 (3.05)	0.018 (0.027)	50+/-1 76%	26.7 (87.6)	-67 +392 (-55 +200)	0.50 (12.7)	62.95
SFT-142	AA-8650 51742	SC 0.040 (1.02)	LDPTFE 0.121 (3.07)	FSC 0.131 (3.33)	Al/Kapton 0.136 (3.48)	SC 0.158 4.01	Blue FEP 0.180 (4.57)	0.036 (0.054)	50+/-1 76%	26.7 (87.6)	-67 +392 (-55 +200)	0.75 (19.1)	35.40
SFT-205	AA-8651 51802	SC 0.051 (1.29)	LDPTFE 0.154 (3.91)	FSC 0.164 (4.17)	Al/Kapton 0.169 (4.29)	SC 0.187 (4.75)	Blue FEP 0.205 (5.21)	0.042 (0.063)	50+/-1 76%	26.7 (87.6)	-67 +392 (-55 +200)	1.00 (25.4)	27.84
SFT-304	AA-8652 51807	SC 0.062 (1.57)	LDPTFE 0.185 (4.70)	FSC 0.195 (4.95)	Al/Kapton 0.200 (5.08)	SC 0.227 (5.77)	Blue FEP 0.250 (6.35)	0.067 (0.100)	50+/-1 76%	26.7 (87.6)	-67 +392 (-55 +200)	1.25 (31.8)	23.09
SFT-318	AA-9702 51972	SC 0.074 (1.88)	LDPTFE 0.221 (5.61)	FSC 0.231 (5.87)	Al/Kapton 0.240 (6.10)	SC 0.263 (6.68)	Blue FEP 0.291 (7.39)	0.095 (0.140)	50+/-1 76%	26.7 (87.6)	-67 +392 (-55 +200)	1.75 (44.45)	19.33

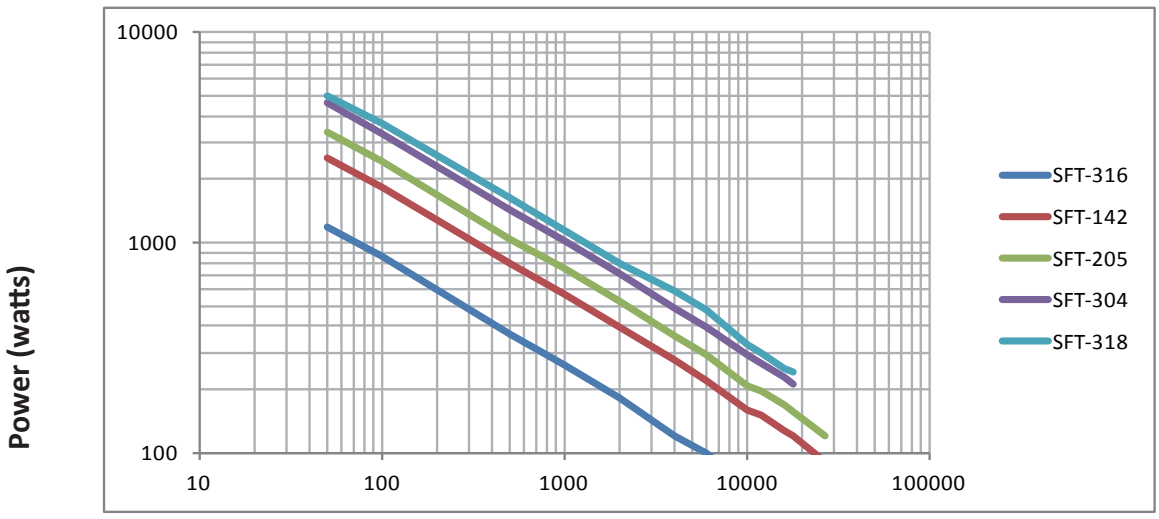
Attenuation vs. Frequency (Typical)



Frequency (MHz)	50	100	500	1,000	2,000	4,000	6,000	10,000	12,000	16,000	18,000	26500	40,000	K1	K2
SFT-316	3.9	5.5	12.4	17.6	25.0	35.6	43.8	57.0	62.6	72.7	77.3	98.3	117.5	0.55168	0.00018
SFT-142	2.2	3.2	7.1	10.2	14.5	20.7	25.5	33.3	36.7	42.8	45.6	56.1		0.31533	0.00018
SFT-205	1.9	2.6	5.9	8.4	12.0	17.2	21.3	27.9	30.7	36.0	38.3	47.3		0.26098	0.00018
SFT-304	1.5	2.1	4.7	6.8	9.7	13.9	17.2	22.6	25	29	31.2			0.20810	0.00018
SFT-318	1.4	1.9	4.4	6.2	8.9	12.8	15.8	20.7	22.8	26.7	28.4			0.19236	0.00015

Attenuation at Any Frequency = [k1 x SQRT (Fmhz)] + [k2 x Fmhz]; dB per 100 feet

Power Handling vs. Frequency (Maximum)



Frequency (MHz)	50	100	500	1,000	2,000	4,000	6,000	10,000	12,000	16,000	18,000	26500	40,000
SFT-316	1180	854	370	263	183	120	100	70	69	58	54	40	30
SFT-142	2540	1843	790	569	397	275	221	160	151	128	120	90	
SFT-205	3360	2430	1040	750	523	362	291	210	198	168	157	120	
SFT-304	4590	3309	1420	1020	710	491	394	290	268	227	212		
SFT-318	5000	3690	1630	1140	790	590	474	330	300	250	240		

Watts; Sea Level; Ambient +40C; VSWR 1:1

Connectors & Cable Assemblies

Times Microwave Systems designs and manufactures high performance RF and Microwave coaxial cables, connectors and cable assemblies for military, aerospace, telecommunications, compliance testing and industrial applications. We are an engineering organization committed to innovation and development of new products for demanding applications, but also a fully integrated manufacturer of cable, connectors and assemblies with cost effective production facilities and the resources of Amphenol behind us.

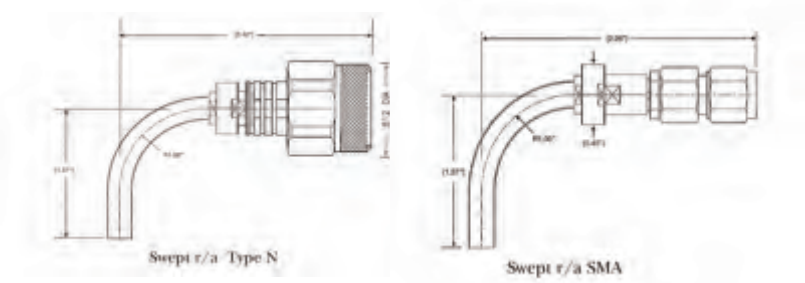
We offer a full range of connectors with all standard interfaces designed to match our microwave and provide optimum performance. Our integrated design and production expertise positions to provide custom cable assemblies to meet your requirements including phase matching, special testing, custom connectors, improved strain relief, armoring, special markings, traceability, color coding, kitting and other special requirements.

Here is the summary of the connectors we have developed for microwave cables:

Cable / Connector	HF-160	HF-190	HF-290	SFT-316	SFT-142	SFT-205	SFT-304	TFlex-405	TFlex-402
SMA Male Straight	CF	3190-2722	3190-2604	3190-2738	3190-2793	3190-2289	3190-2288	3190-2711	3190-6248
SMA Male Right Angle	CF	3190-6042	CF	3190-2952	CF	3190-2733	CF	3190-2901	3190-2902
SMA Male Swept	CF	3190-6105	CF	CF	CF	3190-6089	CF	CF	CF
N Male Straight	CF	3190-2710	3190-2605	3190-2996	3190-2794	3190-2291	3190-2290	CF	3190-2921
N Male Right Angle	CF	CF	3190-6117	CF	CF	CF	CF	CF	CF
N Male Swept	CF	3190-6106	CF	CF	CF	3190-6090	CF	CF	CF
TNC Male Straight	CF	3190-2723	3190-2606	3190-2994	CF	3190-2676	3190-2584	CF	CF
TNC Male Swept	CF	3190-6107	CF	CF	CF	3190-6091	CF	CF	CF
3.5MM Male Straight	CF	3190-6044	CF	CF	CF	3190-2925	CF	CF	CF
3.5MM Male Swept	CF	3190-6108	CF	CF	CF	3190-6156	CF	CF	CF
2.92MM Male Straight	3190-6269	CF	CF	CF	CF	CF	CF	3190-6225	3190-2842
2.92MM Male Swept	3190-6308	CF	CF	CF	CF	CF	CF	CF	CF
Straighteel Armor Option	MI-10642	MI-10630	MI-10635	CF	CF	MI-10630	CF	CF	CF

*CF: Consulting Factory

Swept option: Swept replaceable screw tube is available to satisfy the right angle requirement with an effective cost, while the performance could be maintained the same as the straight connectors.



* Dimension is just for reference, detailed information please contact factory.

Armored option: Steel armor is available as an option to provide the cable assembly the additional protection for rough field application.