

StripFlex®-II (SFT)

Features & Benefits

- Lower Loss than SF Versions
- Superior Shielding Effectiveness
- 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 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).

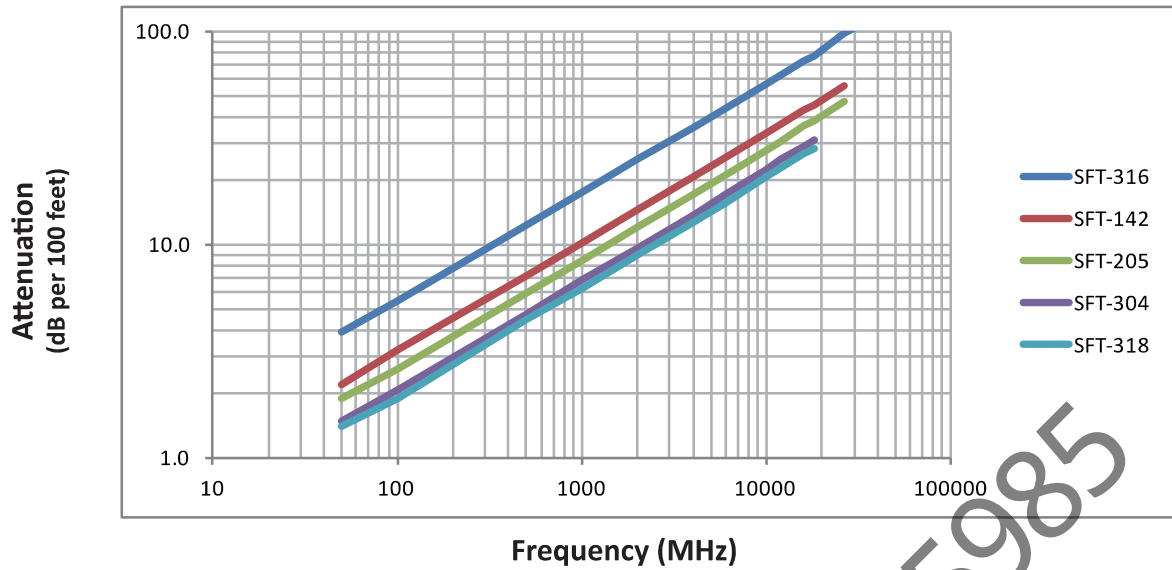
Standard M17/RG cables are shielded with high coverage single or double round wire braids. While these shields provide 40 dB and 60 dB shielding effectiveness respectively. They are not particularly stable (loss & VSWR) nor is the shielding adequate for today's sensitive wireless communications.

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

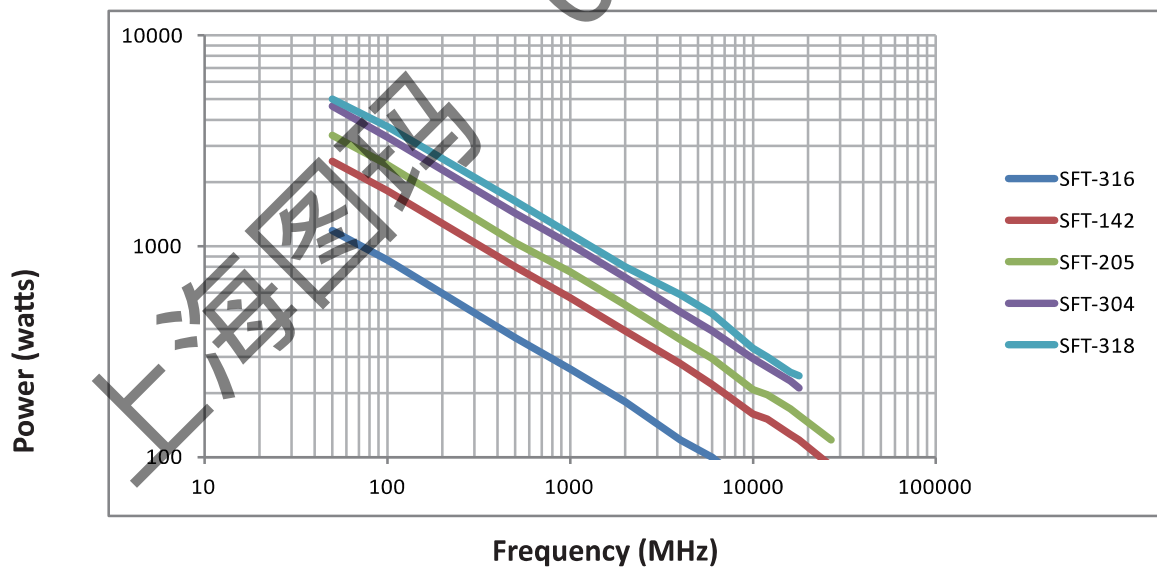
Attenuation vs. Frequency (Typical)



Frequency (MHz)	50	100	500	1,000	2,000	4,000	6,000	10,000	12,000	16,000	18,000	26,500	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	26,500	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