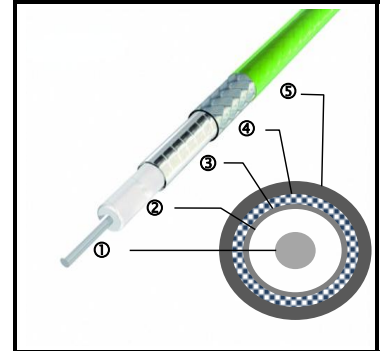


CONSTRUCTION / DIMENSIONS

	Material	Dimension
① Center conductor	Solid SPC ⁽¹⁾	1,46 mm ±0,015 / 0,057 in
② Dielectric	Low Density PTFE ⁽²⁾ tape	3,93 mm ±0,05 / 0,155 in
③ Inner shield	SPC ⁽¹⁾ tape	4,10 mm ±0,05 / 0,161 in
④ Outer shield	SPC ⁽¹⁾ braid	4,50 mm ±0,05 / 0,177 in
⑤ Jacket	Green FEP	5,10 mm ±0,10 / 0,201 in
Outer diameter (Max.)		5,20 mm / 0,205 in

- (1) SPC = Silver Plated Copper
- (2) PTFE = PolyTetraFluoroEthylene
- (3) FEP = Fluorinated Ethylene Propylene



ELECTRICAL CHARACTERISTICS

Impedance	50 ohms ±1 ohm	
Operating frequency range	DC - 26,5 GHz	
Velocity of propagation	84%	
Time delay	4,0 ns/m ;	1,2 ns/ft
Capacitance at 1 GHz	79,0 pF/m ;	24,1 pF/ft
Screening effectiveness at 18 GHz	> 90 dB	
Phase stability with bending	<0,4° / 360° / GHz	
Phase stability with temperature	<1°/m/GHz (-55 / +100°)	
Attenuation stability with bending	<0,05 dB at 18 GHz	
Atten. variation with temperature	att. (at X°C) = att. (at 20°C) x (1 + (X - 20) x 0,002)	

MECHANICAL CHARACTERISTICS

Maximum weight	60 g/m	18,2 g/ft
Recommended min. bend radius	25 mm	0,984 inch
Crush resistance	>200 N / 100 mm	

ENVIRONMENTAL CHARACTERISTICS

Operating temperature range (*)	-70 / +200° C	-94 / +392° F
Flammability	JAR25 / FAR25 853	
Halogen free jacket	No	

(*) cable alone.

APPLICATION NOTE

SHF5M, featuring a solid center conductor, is an ultra low loss cable. Cut off frequency is 31GHz.

Main benefits:

- ultra-low loss
- high screening effectiveness
- high chemical resistance (oil, lubricant, humidity...)

FREQUENCY / ATTENUATION (typ) / CW MAX POWER () / VSWR (***)**

GHz	dB/m typical ; dB/m max		dB/ft typical ; dB/ft max		VSWR	Watts
1.0	0,23	0,25	0,07	0,08	1.22 : 1	850
2.0	0,32	0,35	0,10	0,11	1.22 : 1	601
4.0	0,46	0,50	0,14	0,15	1.22 : 1	425
6.0	0,57	0,62	0,17	0,19	1.22 : 1	347
8.0	0,66	0,72	0,20	0,22	1.22 : 1	301
12.4	0,84	0,91	0,26	0,28	1.25 : 1	241
18.0	1,02	1,11	0,31	0,34	1.25 : 1	200
26,5	1,27	1,37	0,38	0,42	1,30 : 1	190
Attenuation calculation (dB/m)	Typical: (0.22 x √F GHz) + (0.005 x F GHz)					
	Max: (0.24 x √F GHz) + (0.005 x F GHz)					

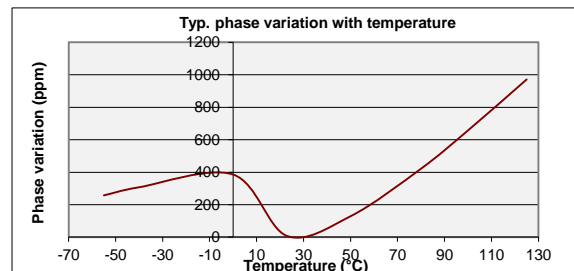
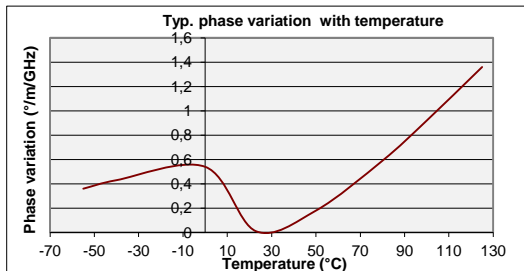
(**) CW max power calculated at sea level / 40°C and VSWR 1:1

(***) measured on 6m cable length

Cable-assembly power ratings may be limited by the connector type. Please contact us for specific needs.

Notes:

Typical Phase stability with Temperature



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