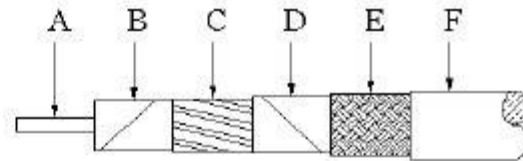


047 Cable Specifications

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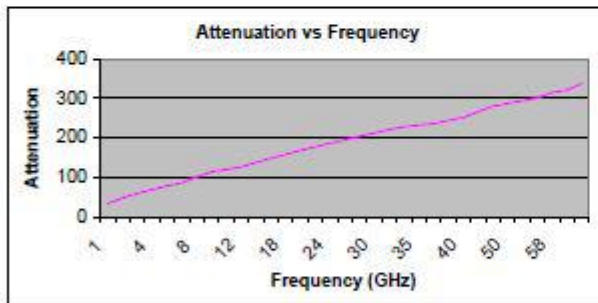
.047 diameter Semi-Rigid cable is often used as an interconnect without connectors. The exposed center conductor and outer jacket are soldered directly to the circuits being connected. Several subminiature connectors also mate well with this diameter and are used where space is at a premium and high loss can be tolerated.



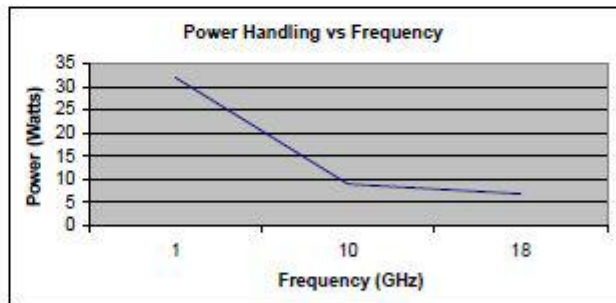
Electrical Data			
Frequency, Max (GHz)	65.0		
Impedance, nominal (Ω)	50		
Velocity of Propagation (%)	69.5		
Shielding Effectiveness, 1 GHz (dB/ft)	>100		
Capacitance (pF/ft)	29.5		
Delay (ns/ft), (ns/meter)	1.463	4.80	
Attenuation k1 (db/100ft) @ 23 deg C	1.014		Attenuation (typical) at any Frequency =k1 x SqRt (FMHz) + k2 x (FMHz)
Attenuation k2 (db/100ft) @ 23 deg C	0.0012		

Mechanical Data			
Weight (lbs/100ft), (Kg/100m)	0.45	0.68	
Temperature Range ($^{\circ}$ C)	-40 to 100		
Minimum Bend Radius (inch), (mm)	0.15	3.76	

Construction Data				
Inner Conductor (inch)	A	Solid	0.011	Silver Covered Copper Clad Steel
Dielectric (inch)	B		0.037	Solid Polytetrafluoroethylene
First Outer Shield (inch)	C		0.047	Bare Copper
Second Outer Shield (inch)	D			
Third Outer Shield (inch)	E			
Jacket (inch O.D.)	F		0.047	None



(dB per 100 feet)



*CW Power in watts at sea level and 23 $^{\circ}$ C

QUICK SPEC

Max Frequency	Loss @ 5 GHz	Cable Diameter	Shielding Effect.
65 GHz	20.5 dB	0.047"	>100

047 Cable Specifications

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Standard Connectors:

Cable Code	Connector Code	Series	Gender	Type	C-Nut Style*	Body Material*	Body Finish*	Loss per GHz	Frequency Max GHz
047	SMMPFS	GPPO (SM	(Female) jack	Straight	NA	Be	G	0.015	50
047	SMPFS	GPO (SMF	(Female) jack	Straight	NA	Be	G	0.015	40
047	SMPFR	GPO (SMF	(Female)	R/A	NA	Be	G	0.025	40
047	SMS	SMA	(Male) plug	Straight	H	B	G	0.02	8
047	SFS	SMA	(Female) jack	Straight	NA	B	G	0.02	8
047	TRIM	No Connector (Ends Trimmed)							

* C-Nut Style: H=Hex Nut, K=Knurled, HK=Hex Nut & Knurled

* Body Materials: B=Brass, SS=Stainless Steel, BE=Beryllium Copper

* Body Finish: N=Nickel, S=Silver, G=Gold, P=Passivated, T=Tri-Metal

Sex of the connector is determined by center pin.

Standard Options:

Cable Code	Option Code	Option Description	Option Details
047	W	Weatherized Protective Covering	Polyolefin shrink tube cover
047	RP	Phase Matched in sets	Cable matched to each other to +/- 2.8PS
047	AP	Phase Matched to an electrical length	Absolute electrical length +/- 2.8PS
047	RoHS	RoHS Compliant Cable Assembly	per EU directive 2002/95/EC

Standard Product is not RoHS compliant

For RoHS complaint assemblies (-ROHS) is required to be added to end of standard part number

ex. SMS-047-12.0-SMS-ROHS

Custom Options:

The above connectors and options the most common types used. Florida RF Labs offers a wide range of cables, connectors and options. If you do not see what you need please consult the factory.

QUICK SPEC

Max Frequency	Loss @ 5 GHz	Cable Diameter	Shielding Effect.
65 GHz	20.5 dB	0.047"	>100