

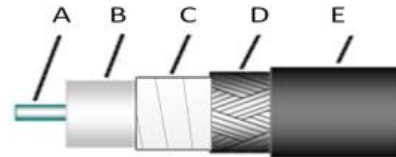
# CABLE SPECIFICATIONS

## Mini Flex 105



DATA SHEET    PART SERIES: Mini-Flex    SHEET 1 OF 2

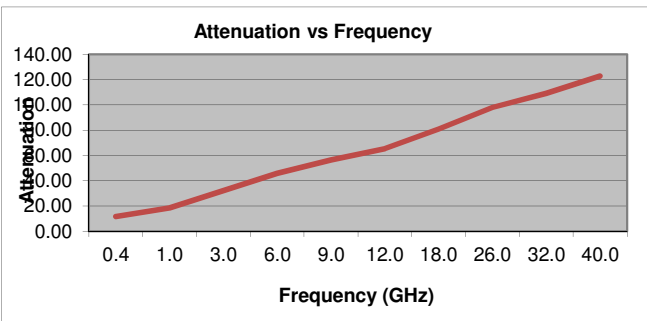
Mini-Flex 105 is a very stable, high frequency, cost effective cable for applications requiring high flexibility and where losses can be tolerated. An overlapping helical inner shield provide 110dB of shielding and lower loss than other cables with solid dielectric of the same size.



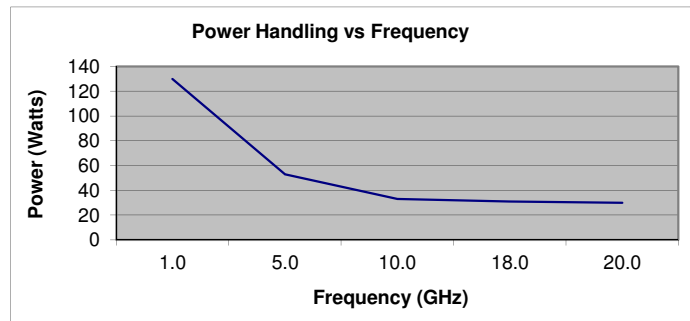
1.0 Electrical Data			
Frequency, Max (GHz)	40.0		
Impedance, nominal ( $\Omega$ )	50		
Velocity of Propagation (%)	70		
Shielding Effectiveness, 18 GHz (dB/ft)	>-110dB		
Capacitance (pF/ft)	30		
Delay (ns/ft), (ns/meter)	1.46	4.793858	
Attenuation k1 (db/100ft) @ 23 deg C	0.576		Attenuation (Typical) at any Frequency =k1 x SqRt (FMHz) + k2 x (FMHz)
Attenuation k2 (db/100ft) @ 23 deg C	0.00019		

2.0 Mechanical/Environmental Data			
Weight (lbs/100ft), (Kg/100m)	1.30	1.95	
Temperature Range ( $^{\circ}$ C)	-55 to +170*		
Minimum Bend Radius (inch), (mm)	0.50	12.70	

3.0 Construction Data			
Inner Conductor (inch)	A	-	Solid SCCS
Dielectric (inch)	B	-	Solid PTFE
First Outer Shield (inch)	C	-	Metal Tape SPC
Second Outer Shield (inch)	D	-	Braid SPC
Jacket (inch O.D.)	F	0.104	FEP



(dB per 100 feet)



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

Frequency GHz	6.0	12.0	18.0	26.0	32.0	40.0
Typical Loss dB/100ft	45.8	65.4	80.7	97.8	109.1	122.8

Frequency GHz	1.0	5.0	10.0	18.0	20.0
CW Power in Watts	130.0	53.0	33.0	31.0	30.0

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## Mini Flex 105



DATA SHEET PART SERIES: Mini-Flex SHEET 2 OF 2

Cable Code	Connector Code	Series	Gender	Type	C-Nut Style*	Body Material*	Body Finish*	Loss per GHz	Frequency Max GHz
105	SMS	SMA	(Male)	Straight	H	SS	G	0.01	18
105	SFS	SMA	(Female)	Straight	N/A	SS	G	0.015	18
105	SMR	SMA	(Male)	R/A	H	SS	G	0.02	18
105	MMS	2.4mm	(Male)	Straight	H	SS	G	0.01	40
105	MFS	2.4mm	(Female)	Straight	N/A	SS	G	0.015	40
105	KMS	2.9mm	(Male)	Straight	H	SS	G	0.01	40
105	KFS	2.9mm	(Female)	Straight	N/A	SS	G	0.015	40
105	NMS	Type-N	(Male)	Straight	H	SS	G	0.01	18
105	NFBS	Type-N	(Female) Bulkhead	Straight	N/A	SS	G	0.015	18
105	TMS	TNC	(Male)	Straight	H	SS	G	0.01	18

\* C-nut Style: H= Hex, 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 connector is determined by center pin

### Standard Options:

Cable Code	Option Code	Option Description	Option Details
105	+/-2.8PS	Phase Match	Standard Tolerance of +/-2.8PS
105	RoHS	RoHS Compliant	Per EU Directive 2002/95/EC
105	W	Weatherized	Weatherized Jacket (With Pel-Seal)
105	D/DD	Dust Cap one side/Both Sides	
105	E/EE	Extended Booting One Side/ Both Sides	

\*for RoHS complaint assemblies (-ROHS) is required to be added to end of standard part number  
 ex. NMS-105-120.0-NMS-ROHS

\*for phase matched assemblies (+/-2.8PS) is require to be added to the end of standard part number  
 ex. NMS-105-120.0-NMS+/-2.8PS

### 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 an option you require please consult the sales department.