CABLE SPECIFICATIONS

Mini Flex 105



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SHEET 1 OF 2

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DATA SHEET PART SERIES: Mini-Flex

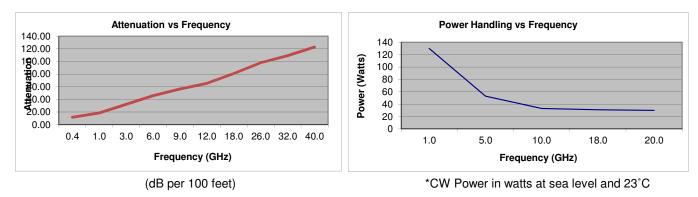
Mini-Flex 105 is a very stable, high frequency, cost effective cable for applications requiring high flexibility and where losses can be tolerated. An overlapping helical inner shield provide 110dB of shielding and lower loss than other cables with solid dielectric of the same size.

1.0 Electrical Data			
Frequency, Max (GHz)	40.0		
Impedance, nominal (Ω)	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
Attenuation k2 (db/100ft) @ 23 deg C	0.00019		=k1 x SqRt (FMHz) + k2 x (FMHz)

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

3.0 Construction Data

5.0 Construction Data			
Inner Conductor (inch)	А	-	Solid SCCS
Dielectric (inch)	В	-	Solid PTFE
First Outer Shield (inch)	С	-	Metal Tape SPC
Second Outer Shield (inch)	D	-	Braid SPC
Jacket (inch O.D.)	F	0.104	FEP



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	

smiths microwave

Cage Codes: 24602 / 2Y194

Specifications are subject to Change Without Notice

www.emc-rflabs.com / +1 772-286-9300 AS 9100, ISO 9001 and 14001, and Nadcap AS7003 Certified

CABLE SPECIFICATIONS

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SHEET 2 OF 2



DATA SHEET PART SERIES: Mini-Flex

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