

CABLE SPECIFICATIONS

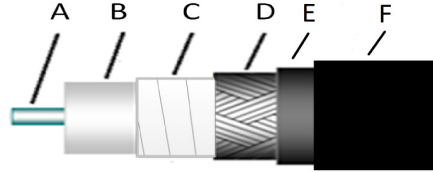
Lab-Flex® 340AF



DATA SHEET PART SERIES: Lab-Flex® AF

SHEET 1 OF 2

Lab-Flex® 340AF is designed for severe environment aircraft applications. It utilizes a low loss dielectric and along with hermetically sealed, high performance connectors to meet requirements of MIL-T-81490.



1.0 Electrical Data

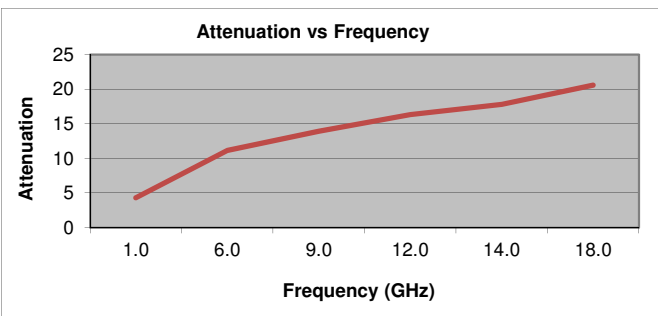
Frequency, Max (GHz)	18.0		
Impedance, nominal (Ω)	50		
Velocity of Propagation (%)	84.5%		
Shielding Effectiveness, 18 GHz (dB/ft)	>-90dB		
Capacitance (pF/ft)	24		
Delay (ns/ft), (ns/meter)	1.2	3.940157	
Attenuation k1 (db/100ft) @ 23 deg C	0.131		Attenuation (Typical) at any Frequency =k1 x SqRt (FMHz) + k2 x (FMHz)
Attenuation k2 (db/100ft) @ 23 deg C	0.000167		

2.0 Mechanical/Environmental Data

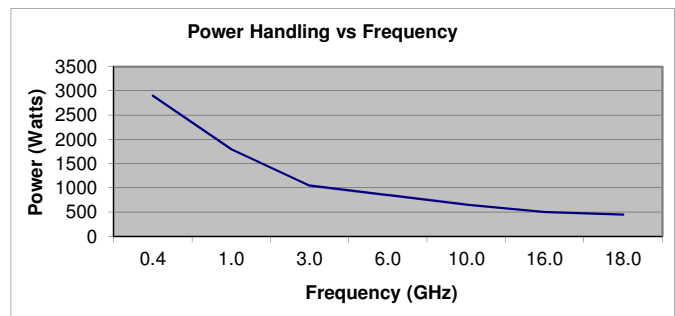
Weight (lbs/100ft), (Kg/100m)	9.00	13.53	
Temperature Range (°C)	-65 to +200*		
Minimum Bend Radius (inch), (mm)	1.50	38.10	

3.0 Construction Data

Inner Conductor (inch)	A	-	Solid SPC
Dielectric (inch)	B	-	Expanded PTFE
First Outer Shield (inch)	C	-	Helical Wrap Flat Braid
Second Outer Shield (inch)	D	-	Silver Plated Round Braid
Third Outer Shield (inch)	E	-	FEP
Jacket (inch O.D.)	F	.340	Nomex®



(dB per 100 feet)



*CW Power in watts at sea level and 23°C

Frequency GHz	1.0	6.0	9.0	12.0	14.0	18.0
Typical Loss dB/100ft	4.3	11.2	13.9	16.4	17.8	20.6

Frequency GHz	0.4	1.0	3.0	10.0	12.0	18.0
CW Power in Watts	2900.0	1800.0	1050.0	650.0	600.0	450.0

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SHEET 2 OF 2

Standard Connectors:

Cable Code	Connector Code	Series	Gender	Type	C-Nut Style*	Body Material*	Body Finish*	Loss per GHz	Frequency Max GHz
340AF	SCMS	SC	(Male)	Straight	H	SS	P	0.01	8
340AF	SCFS	SC	(Female)	Straight	N/A	SS	P	0.015	8
340AF	SCFBS	SC	(Female) Bulkhead	Straight	N/A	SS	P	0.015	8
340AF	SCMR	SC	(Male)	Straight	H	SS	P	0.02	8
340AF	NMS	Type N	(Male)	Straight	H	SS	P	0.011	18
340AF	NFS	Type N	(Female)	Straight	N/A	SS	P	0.015	18
340AF	NFBS	Type N	(Female) Bulkhead	Straight	N/A	SS	P	0.015	18
340AF	NMR	Type N	(Male)	Straight	H	SS	P	0.02	18
340AF	TMS	TNC	(Male)	Straight	H	SS	P	0.01	18
340AF	TFS	TNC	(Female)	Straight	N/A	SS	P	0.015	18
340AF	TFBS	TNC	(Female) Bulkhead	Straight	N/A	SS	P	0.015	18
340AF	TMR	TNC	(Male)	Straight	H	SS	P	0.02	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

*All connectors with Wire-Lock Holes

*All AF series connector are sealed and tested to $1X 10^{-5}$ per MIL-ST-202F, paragraph 5

Standard Options:

Cable Code	Option Code	Option Description	Option Details
340AF	+/-2.8PS	Phase Match	Standard Tolerance of +/-2.8PS
340AF	RoHS	RoHS Compliant	Per EU Directive 2002/95/EC
340AF	W	Weatherized	Weatherized Jacket (With Pel-Seal)
340AF	D/DD	Dust Cap one side/Both Sides	
340AF	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-340AF-120.0-NMS-ROHS

*for phase matched assemblies (+/-2.8PS) is require to be added to the end of standard part number
ex. NMS-340AF-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.