

CABLE SPECIFICATIONS

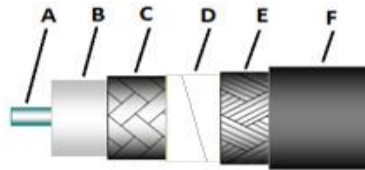
Lab-Flex[®] 200



DATA SHEET PART SERIES: Lab-Flex[®]

SHEET 1 OF 2

Lab-Flex[®] 200 is ideal for low loss replacement of .200 inch size solid dielectric cables. With 80% velocity tape-wrapped dielectric, Lab-Flex 200 cable has 40% lower loss than solid dielectrics of the same size.



1.0 Electrical Data

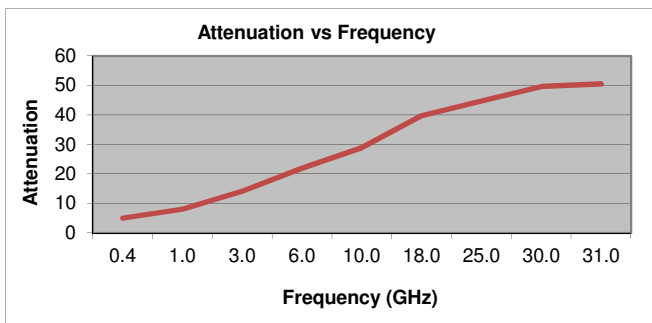
Frequency, Max (GHz)	31.0		
Impedance, nominal (Ω)	50		
Velocity of Propagation (%)	80		
Shielding Effectiveness, 18 GHz (dB/ft)	>-90dB		
Capacitance (pF/ft)	25.5		
Delay (ns/ft), (ns/meter)	1.27	4.17	
Attenuation k1 (db/100ft) @ 23 deg C	0.266		Attenuation (Typical) at any Frequency =k1 x SqRt (FMHz) + k2 x (FMHz)
Attenuation k2 (db/100ft) @ 23 deg C	0.000209		

2.0 Mechanical/Environmental Data

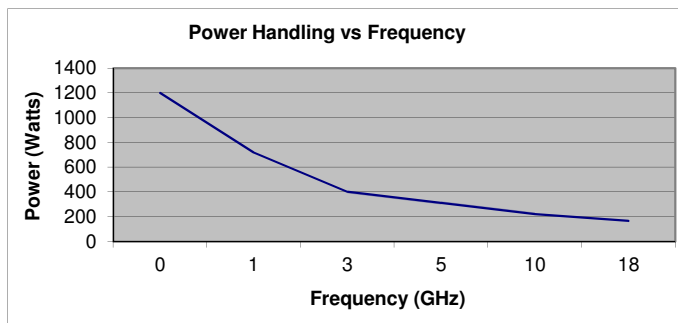
Weight (lbs/100ft), (Kg/100m)	4.80	7.22	
Temperature Range (°C)	-55 to +200 C		
Minimum Bend Radius (inch), (mm)	1.00	25.40	

3.0 Construction Data

Inner Conductor (inch)	A	-	Solid SC
Dielectric (inch)	B	-	Expanded PTFE
First Outer Shield (inch)	C	-	Flat Braid SC
Second Outer Shield (inch)	D	-	Metalized Tape wrap
Third Outer Shield (inch)	E	-	Round Braid SC
Jacket (inch O.D.)	F	0.200	FEP



(dB per 100 feet)



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

Frequency GHz	0.4	5.0	10.0	18.0	26.5	31.0
Typical Loss dB/100ft	5.0	19.9	26.7	39.8	46.2	50.5

Frequency GHz	0.4	1.0	3.0	5.0	10.0	18.0
CW Power in Watts	1200.0	720.0	400.0	310.0	220.0	165.0

CABLE SPECIFICATIONS

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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
200	KMS	2.9mm	(Male) Plug	Straight	H	SS	P	0.01	31
200	SMS	SMA	(Male) Plug	Straight	H	SS	P	0.01	18
200	SFS	SMA	(Female) Jack	Straight	N/A	SS	P	0.015	18
200	SFBS	SMA	(Female) Bulkhead	Straight	N/A	SS	P	0.015	18
200	SMR	SMA	(Male) Plug	R/A	H	SS	P	0.02	18
200	NMS	Type N	(Male) Plug	Straight	HK	SS	P	0.01	18
200	NFS	Type N	(Female) Jack	Straight	HK	SS	P	0.015	18
200	NFBS	Type N	(Female) Bulkhead	Straight	N/A	SS	P	0.015	18
200	NMR	Type N	(Male) Plug	R/A	HK	SS	P	0.02	18
200	TMS	TNC	(Male) Plug	Straight	H	SS	P	0.01	18
200	TFS	TNC	(Female) Jack	Straight	N/A	SS	P	0.015	18
200	TFBS	TNC	(Female) Bulkhead	Straight	N/A	SS	P	0.015	18
200	TMR	TNC	(Male) Plug	R/A	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

Standard Options:

Cable Code	Option Code	Option Description	Option Details
200	A	Armorized Protective Coating	SS Interlock Armor
200	W	Weatherized	Extruded PVC cover
200	MC	Armorized/Weatherized Covering	SS Monocoil Armor with Extruded Silicone Cover
200	MP	Armorized/Weatherized Covering	SS Monocoil Armor with Polyolefin Cover
200	Z	Water Tight	Cable to Connector Junction "Sealed"
200	D	Dustcaps	Dustcaps with Tether
200	+/-2.8PS	Phase Match	Standard Tolerance of +/- 2.8PS
200	EE	Extended Boots	Layered Adhesive Lined Polyolefin Shrink Tubing
200	AW	Armorized/Weatherized Covering	SS Interlock Armor with Extruded PVC Cover
200	RoHS	RoHS compliant	Per EU Directive 2002/95/EC

*for RoHS complaint assemblies (-ROHS) is required to be added to end of standard part number
ex. NMS-200-120.0-NMS-ROHS

*for phase matched assemblies (+/-2.8PS) is require to be added to the end of standard part number
ex. NMS-200-120.0-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.