

# CABLE SPECIFICATIONS

## Lab-Flex® 335SP

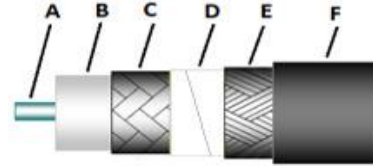


DATA SHEET PART SERIES: Lab-Flex® S

SHEET 1 OF 2

Revision 0916

Lab-Flex® 335SP is ideal for high flexure applications requiring low loss cable and durability over flexure. With a 78% velocity expanded PTFE dielectric, Lab-flex 335SP cable has 30% lower loss than solid dielectrics of the same size.



### 1.0 Electrical Data

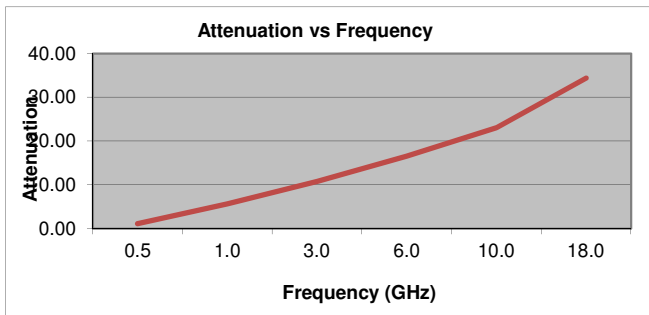
Frequency, Max (GHz)	18.0		
Impedance, nominal (Ω)	50		
Velocity of Propagation (%)	78		
Shielding Effectiveness, 18 GHz (dB/ft)	>-90dB		
Capacitance (pF/ft)	27		
Delay (ns/ft), (ns/meter)	1.3	4.268504	
Attenuation k1 (db/100ft) @ 23 deg C	0.155558		Attenuation (Typical) at any Frequency =k1 x SqRt (FMHz) + k2 x (FMHz)
Attenuation k2 (db/100ft) @ 23 deg C	0.00075		

### 2.0 Mechanical/Environmental Data

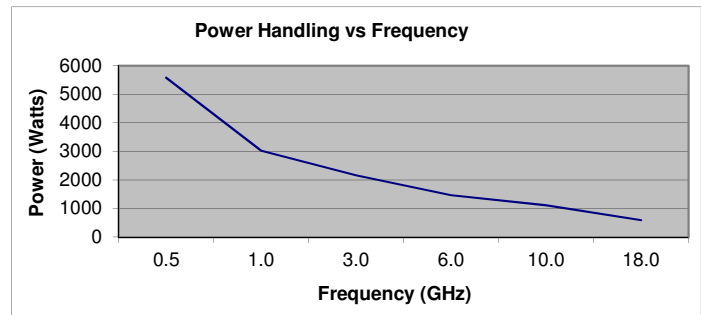
Weight (lbs/100ft), (Kg/100m)	9.00	13.53	
Temperature Range (°C)	-65 to +85		
Minimum Bend Radius (inch), (mm)	1.60	40.64	

### 3.0 Construction Data

Inner Conductor (inch)	A	-	Stranded SPC
Dielectric (inch)	B	-	Expanded PTFE
First Outer Shield (inch)	C	-	SPC Flat Spiral
Second Outer Shield (inch)	D	-	Metalized Film Tape layer
Third Outer Shield (inch)	E	-	SPC Round Braid
Jacket (inch O.D.)	F	0.335	Extruded PUR



(dB per 100 feet)



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

Frequency GHz	1.0	3.0	6.0	10.0	12.0	18.0
Typical Loss dB/100ft	5.7	10.8	16.6	23.1	26.0	34.4

Frequency GHz	1.0	3.0	6.0	10.0	12.0	18.0
CW Power in Watts	3020.0	2160.0	1470.0	1107.0	990.0	590.0

# CABLE SPECIFICATIONS

## Lab-Flex® 335SP



### Standard Connectors:

Cable Code	Connector Code	Series	Gender	Type	C-Nut Style*	Body Material*	Body Finish*	Loss per GHz	Frequency Max GHz
335SP	SMS	SMA	(Male)	Straight	H	SS	P	0.01	18
335SP	NMS	Type-N	(Male)	Straight	HK	SS	P	0.011	18
335SP	NFBS	Type-N	(Female) Bulkhead	Straight	N/A	SS	P	0.015	18
335SP	TMS	TNC	(Male)	Straight	HK	SS	P	0.01	18
335SP	7/16MS	7/16	(Male)	Straight	H	B	WB	0.01	6

\* C-nut Style: H= Hex, K=Knurled, HK= Hex Nut & Knurled, B=Bayonet

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

\*Body Finish: N= Nickel, S=Silver, G=Gold, P= Passivated, T= Tri-metal, WB= White Bronze

Sex of connector is determined by center pin

### Standard Options:

Cable Code	Option Code	Option Description	Option Details
335SP	+/-2.8PS	Phase Match	Standard Tolerance of +/-2.8PS
335SP	RoHS	RoHS Compliant	Per EU Directive 2002/95/EC
335SP	D/DD	Dust Cap one side/Both Sides	
335SP	E/EE	Extended Booting One Side/ Both Sides	
335SP	A	Armor	
335SP	AW	Armor with Weatherized Jacket	

\*for RoHS complaint assemblies (-ROHS) is required to be added to end of standard part number  
ex. NMS-335SP-120.0-NMS-ROHS

\*for phase matched assemblies (+/-2.8PS) is require to be added to the end of standard part number  
ex. NMS-335SP-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.