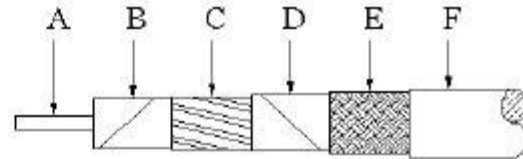


MINI-FLEX 165 Cable Specifications

DOCUMENT No: CABLE-MINI-FLEX-165

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REV -

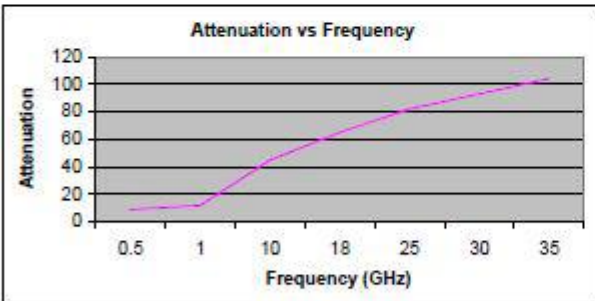
Mini-Flex 165 is a flexible version of 141 semi-rigid cable. The cable use the same direct solder connectors with the terminations protected with reinforcing sleeves. An overlapping helical inner shield provides 90dB of shielding and lower loss than other cables with solid dielectric of the same size.



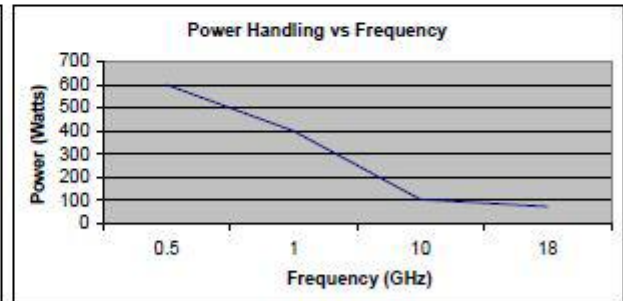
Electrical Data			
Frequency, Max (GHz)	35.0		
Impedance, nominal (Ω)	50		
Velocity of Propagation (%)	69.9		
Shielding Effectiveness, 1 GHz (dB/ft)	>90		
Capacitance (pF/ft)	29.4		
Delay (ns/ft), (ns/meter)	1.45	4.76	
Attenuation k1 (db/100ft) @ 23 deg C	0.33		Attenuation (typical) at any Frequency =k1 x SqRt (FMHz) + k2 x (FMHz)
Attenuation k2 (db/100ft) @ 23 deg C	0.0012		

Mechanical Data			
Weight (lbs/100ft), (Kg/100m)	2.91	4.37	
Temperature Range ($^{\circ}$ C)	-65 to 80		
Minimum Bend Radius (inch), (mm)	0.50	12.70	

Construction Data				
Inner Conductor (inch)	A	Solid	0.036	Silver Plated Copper Clad Steel
Dielectric (inch)	B	Solid	0.120	Polytetrafluoroethylene
First Outer Shield (inch)	C		0.140	Silver Plated Copper Tape
Second Outer Shield (inch)	D			Silver Plated Copper Braid
Third Outer Shield (inch)	E			
Jacket (inch O.D.)	F		0.165	FEP Color Aqua



(dB per 100 feet)



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

QUICK SPEC

Max Frequency	Loss @ 5 GHz	Cable Diameter	Shielding Effect.
35 GHz	23 dB	0.165"	>90

MINI-FLEX 165 Cable Specifications

DOCUMENT No: CABLE-MIIN-FLEX-165

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Standard Connectors:

Cable Code	Connector Code	Series	Gender	Type	C-Nut Style*	Body Material*	Body Finish*	Loss per GHz	Frequency Max GHz
165	KMS	2.9 mm	(Male) plug	Straight	H	SS	G	0.007	35
165	KMSR ²	2.9 mm	(Male) plug	R/A	H	SS	G	0.007	35
165	KFS	2.9 mm	(Female) jack	Straight	N/A	SS	G	0.015	35
165	SMS	SMA	(Male) plug	Straight	H	SS	G	0.007	18
165	SMSR ²	SMA	(Male) plug	R/A	H	SS	G	0.007	18
165	SMR	SMA	(Male) plug	R/A	H	SS	G	0.015	12
165	SFS	SMA	(Female) jack	Straight	N/A	SS	G	0.010	18
165	SFBS	SMA	(Female) Bulkhead	Straight	N/A	SS	G	0.015	18
165	SMSAT ¹	SMA	(Male) plug	Straight	H	SS	G	0.010	18
165	OSPMBBS	OSP	(Male) Bulkhead	Straight	H	SS	G	0.010	18
165	NMS	TYPE N	(Male) plug	Straight	HK	B	T	0.015	18
165	NMSR ²	TYPE N	(Male) plug	R/A	HK	B	T	0.015	18
165	NFBS	TYPE N	(Female) Bulkhead	Straight	N/A	SS	P	0.015	18
165	TMS	TNC	(Male) plug	Straight	H	SS	G	0.015	18
165	TMSR ²	TNC	(Male) plug	R/A	H	SS	G	0.015	18
165	TMR	TNC	(Male) plug	R/A	H	SS	G	0.020	18
165	TFS	TNC	(Female) jack	Straight	N/A	B	G	0.020	12
165	TFBS	TNC	(Female) Bulkhead	Straight	N/A	SS	G	0.015	18
165	MCXMR	MCX	(Male)	R/A	H	B	G	0.015	6
165	BMS	BNC	(Male) plug	Straight	H	B	N	0.010	4
165	BFBS	BNC	(Female) Bulkhead	Straight	N/A	B	N	0.010	4

* C-Nut Style: H=Hex Nut, 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

SMSAT¹ = Anti-Torque

² = Connector pre-bent cable to form right angle

Sex of the connector is determined by center pin.

Note all connectors come with reinforcing sleeves and boots to protect solder termination.

Standard Options:

Cable Code	Option Code	Option Description	Option Details
165	W	Weatherized Protective Covering	Polyolefin shrink tube cover
165	RP	Phase Matched in sets	Cable matched to each other to +/- 2.8PS
165	AP	Phase Matched to an electrical length	Absolute electrical length +/- 2.8PS
165	RoHS	RoHS Compliant Cable Assembly	per EU directive 2002/95/EC

Standard Product is not RoHS compliant

For RoHS compliant assemblies (-ROHS) is required to be added to end of standard part number

ex. SMS-165-12.0-SMS-ROHS

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 what you need please consult the factory.

QUICK SPEC

Max Frequency	Loss @ 5 GHz	Cable Diameter	Shielding Effect.
35 GHz	23 dB	0.165"	>90