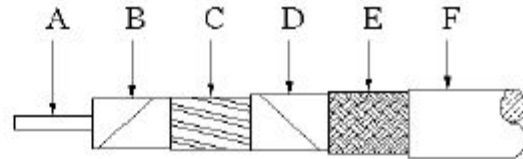


RG401 Cable Specifications M17/129-RG401

DOCUMENT No: CABLE-RG401

SHEET 1 OF 2
REV -

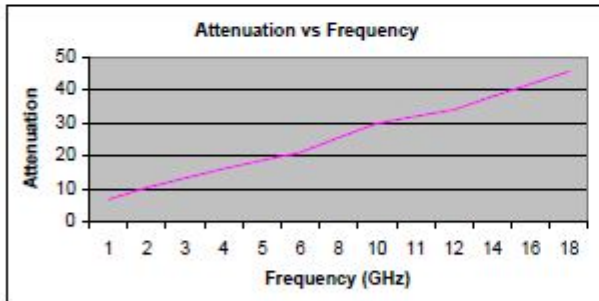
.250 diameter Semi-Rigid cable is used where power and low loss are required with the reliability of a Semi-Rigid cable. Larger connectors such as Type N and TNC with extended performance to 18 GHz.



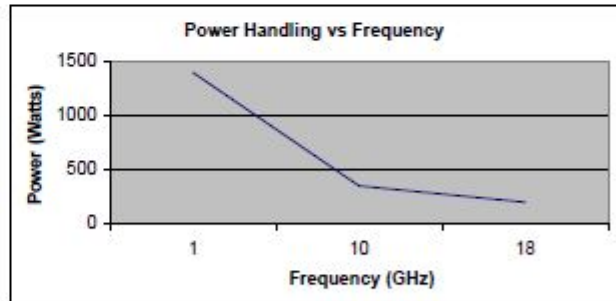
Electrical Data			
Frequency, Max (GHz)	18.0		
Impedance, nominal (Ω)	50		
Velocity of Propagation (%)	69.5		
Shielding Effectiveness, 1 GHz (dB/ft)	>100		
Capacitance (pF/ft)	29.6		
Delay (ns/ft), (ns/meter)	1.463	4.80	
Attenuation k1 (db/100ft) @ 23 deg C	0.178		Attenuation (typical) at any Frequency =k1 x SqRt (FMHz) + k2 x (FMHz)
Attenuation k2 (db/100ft) @ 23 deg C	0.0012		

Mechanical Data			
Weight (lbs/100ft), (Kg/100m)	10.50	15.78	
Temperature Range ($^{\circ}$ C)	-40 to 125		
Minimum Bend Radius (inch), (mm)	0.50	12.70	

Construction Data				
Inner Conductor (inch)	A	Solid	0.064	Covered Solid Copper
Dielectric (inch)	B	Solid	0.215	Polytetrafluoroethylene
First Outer Shield (inch)	C		0.250	Bare Copper Tube
Second Outer Shield (inch)	D			
Third Outer Shield (inch)	E			
Jacket (inch O.D.)	F		0.250	None



(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.
18 GHz	19 dB	0.250"	>100

RG401 Cable Specifications M17/129-RG401

DOCUMENT No: CABLE-RG401

SHEET 2 OF 2
REV -

Standard Connectors:

Cable Code	Connector Code	Series	Gender	Type	C-Nut Style*	Body Material*	Body Finish*	Loss per GHz	Frequency Max GHz
RG401	SMS	SMA	(Male) plug	Straight	H	SS	P	0.013	18
RG401	NMS	Type N	(Male) plug	Straight	H	SS	P	0.010	12

* 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

Sex of the connector is determined by center pin.

Standard Options:

Cable Code	Option Code	Option Description	Option Details
RG401	W	Weatherized Protective Covering	Polyolefin shrink tube cover
RG401	RP	Phase Matched in sets	Cable matched to each other to +/- 2.8PS
RG401	AP	Phase Matched to an electrical length	Absolute electrical length +/- 2.8PS
RG401	RoHS	RoHS Compliant Cable Assembly	per EU directive 2002/95/EC

Standard Product is not RoHS compliant

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

ex. SMS-RG401-18.0-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.
18 GHz	19 dB	0.250"	>100