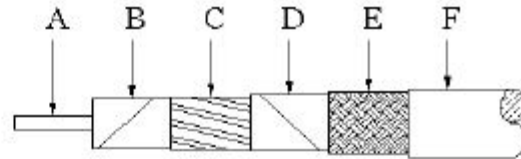


RG316 Cable Specifications M17/113-RG316

DOCUMENT No: CABLE-RG316

SHEET 1 OF 2
REV -

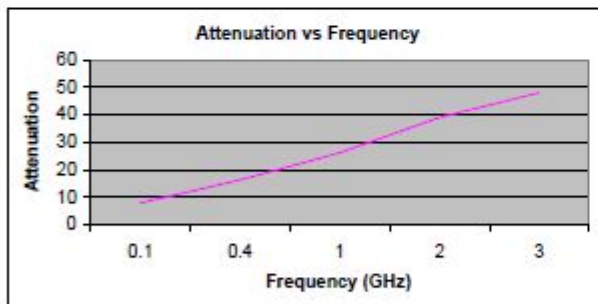
This group of cable includes familiar RG cable part numbers that have been superseded by MIL-C-17 numbers and alternative custom cable with improved electrical performance over standard M17 cables. The cables have been grouped by outside diameter. All standard cables supplied by Florida Rf Labs are purchased to the MIL-C-17 specification and no longer carry the RG designation.



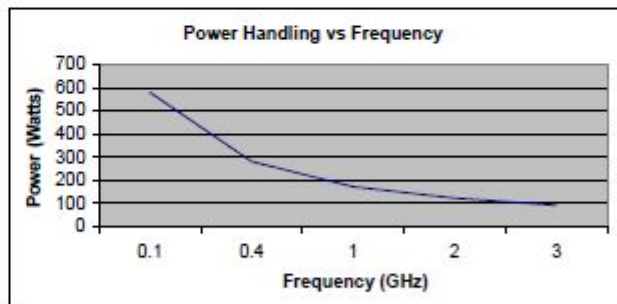
Electrical Data			
Frequency, Max (GHz)	3.0		
Impedance, nominal (Ω)	50		
Velocity of Propagation (%)	69.5		
Shielding Effectiveness, 1 GHz (dB/ft)	>40		
Capacitance (pF/ft)	29.4		
Delay (ns/ft), (ns/meter)	1.463	4.80	
Attenuation k1 (db/100ft) @ 23 deg C	0.787		Attenuation (typical) at any Frequency =k1 x SqRt (FMHz) + k2 x (FMHz)
Attenuation k2 (db/100ft) @ 23 deg C	0.0012		

Mechanical Data			
Weight (lbs/100ft), (Kg/100m)	1.20	1.80	
Temperature Range ($^{\circ}$ C)	-55 to 200		
Minimum Bend Radius (inch), (mm)	0.40	10.16	

Construction Data			
Inner Conductor (inch)	A	Stranded	7/.0067 Silver Covered Copper Clad Steel
Dielectric (inch)	B		0.060 Solid Polytetrafluoroethylene
First Outer Shield (inch)	C		0.078 38SC
Second Outer Shield (inch)	D		
Third Outer Shield (inch)	E		
Jacket (inch O.D.)	F		0.098 Fluorinated Ethylene Propylene -IX



(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.
3 GHz	N/A dB	0.098"	>40

RG316 Cable Specifications M17/113-RG316

DOCUMENT No: CABLE-RG316

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
RG316	SSMS	SSMA	(Male) plug	Straight	H	SS	P	0.010	3
RG316	SSMR	SSMA	(Male) plug	R/A	H	SS	P	0.015	3
RG316	SMS	SMA	(Male) plug	Straight	H	B	N	0.010	3
RG316	SMR	SMA	(Male) plug	R/A	H	B	N	0.015	3
RG316	SFS	SMA	(Female) jack	Straight	NA	B	N	0.010	3
RG316	SFBS	SMA	(Female) Bulkhead	Straight	NA	B	N	0.010	3
RG316	NMS	TYPE N	(Male) plug	Straight	H	B	N	0.010	3
RG316	NMR	TYPE N	(Male) plug	R/A	H	B	N	0.015	3
RG316	NFBS	TYPE N	(Female) Bulkhead	Straight	NA	B	N	0.012	3
RG316	TMS	TNC	(Male) plug	Straight	NA	B	N	0.010	3
RG316	TMR	TNC	(Male) plug	R/A	NA	B	N	0.015	3
RG316	TFBS	TNC	(Female) Bulkhead	Straight	NA	B	N	0.012	3
RG316	SMCFS	SMC	(Female)	Straight	NA	B	N	0.010	3
RG316	MCXMS	MCX	(Male) plug	Straight	NA	B	N	0.010	3
RG316	MCXMR	MCX	(Male)	R/A	NA	B	N	0.010	3
RG316	MCXFS	MCX	(Female) jack	Straight	NA	B	N	0.010	3
RG316	MMCXMS	MMCX	(Male) plug	Straight	NA	B	N	0.010	3
RG316	MMCXMR	MMCX	(Male) plug	R/A	NA	B	N	0.010	3
RG316	BMS	BNC	(Male) plug	Straight	NA	B	N	0.010	3
RG316	BMR	BNC	(Male) plug	R/A	NA	B	N	0.015	3
RG316	BFBS	BNC	(Female) Bulkhead	Straight	NA	B	N	0.012	3
RG316	SMBMS	SMB	(Male) plug	Straight	H	B	N	0.010	3
RG316	SMBMR	SMB	(Male) plug	R/A	H	B	N	0.015	3
RG316	SMBFS	SMB	(Female) jack	Straight	NA	B	N	0.010	3
RG316	SMBFR	SMB	(Female) jack	R/A	NA	B	N	0.015	3

* 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
RG316	E	Extended Boots	Layered adhesive lined polyolefin shrink tubing
RG316	P	Phase Matched in sets	Cable matched to each other to +/- 2.8PS
RG316	AP	Phase Matched to an electrical length	Absolute electrical length +/- 2.8PS

Standard RG316 assemblies are RoHS compliant per EU directive 2002/95/EC

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.
3 GHz	N/A dB	0.098"	>40