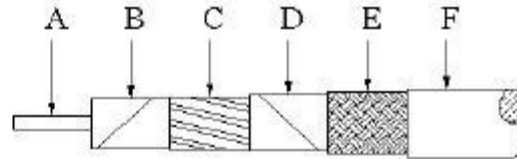


# BJ141 Cable Specifications

DOCUMENT No: CABLE-BJ141

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REV -

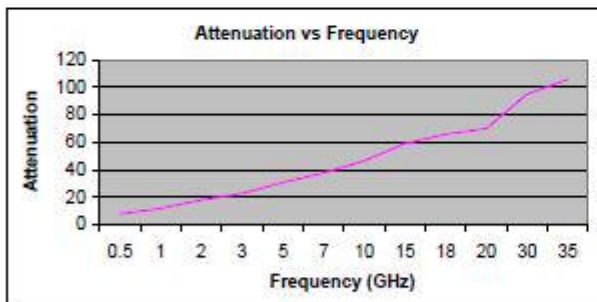
BJ141 cable is the most popular size in the hand-formable cable group. This is used throughout the industry as a low cost assembly that delivers high performance. There is a very slight penalty in loss and shielding when compared to .141 Semi-Rigid but BJ141 does not require detailed bending drawings.



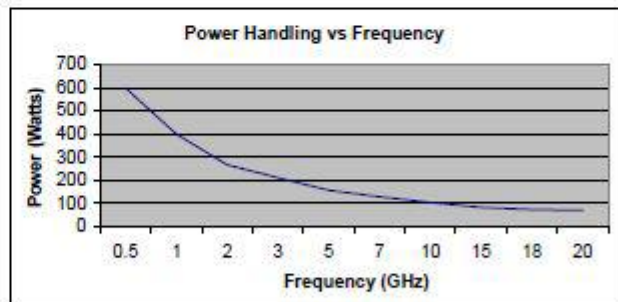
Electrical Data			
Frequency, Max (GHz)	35.0		
Impedance, nominal ( $\Omega$ )	50		
Velocity of Propagation (%)	69.5		
Shielding Effectiveness, 1 GHz (dB/ft)	>90		
Capacitance (pF/ft)	29.5		
Delay (ns/ft), (ns/meter)	1.46	4.79	
Attenuation k1 (db/100ft) @ 23 deg C	0.34		Attenuation (typical) at any Frequency =k1 x SqRt (FMHz) + k2 x (FMHz)
Attenuation k2 (db/100ft) @ 23 deg C	0.0012		

Mechanical Data			
Weight (lbs/100ft), (Kg/100m)	2.00	3.01	
Temperature Range ( $^{\circ}$ C)	-70 to 200		
Minimum Bend Radius (inch), (mm)	0.25	6.35	

Construction Data				
Inner Conductor (inch)	A	Solid	0.036	Silver Plated Copper Covered Steel
Dielectric (inch)	B		0.116	Tetrafluoroethylene
First Outer Shield (inch)	C			Copper Foil
Second Outer Shield (inch)	D		0.141	Tin-Filed Composite
Third Outer Shield (inch)	E			
Jacket (inch O.D.)	F		0.141	Unjacketed



(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	31 dB	0.141	>90

# BJ141 Cable Specifications

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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
BJ141	KMS	2.9 mm	(Male) plug	Straight	H	SS	G	0.007	35
BJ141	KMSR <sup>2</sup>	2.9 mm	(Male) plug	R/A	H	SS	G	0.007	35
BJ141	KFS	2.9 mm	(Female) jack	Straight	N/A	SS	G	0.015	35
BJ141	SMS	SMA	(Male) plug	Straight	H	G	G	0.007	18
BJ141	SMSR <sup>2</sup>	SMA	(Male) plug	R/A	H	SS	G	0.007	18
BJ141	SMR	SMA	(Female) plug	R/A	H	SS	G	0.015	12
BJ141	SFS	SMA	(Female) jack	Straight	N/A	SS	G	0.010	18
BJ141	SFBS	SMA	(Female) Bulkhead	Straight	N/A	SS	G	0.015	18
BJ141	SMSAT <sup>1</sup>	SMA	(Male) plug	Straight	H	SS	G	0.010	18
BJ141	OSPMBBS	OSP	(Male) Bulkhead	Straight	H	SS	G	0.010	18
BJ141	NMS	TYPE N	(Male) plug	Straight	HK	B	T	0.015	18
BJ141	NMSR <sup>2</sup>	TYPE N	(Male) plug	R/A	HK	B	T	0.015	18
BJ141	NFBS	TYPE N	(Female) Bulkhead	Straight	N/A	SS	P	0.015	18
BJ141	TMS	TNC	(Male) plug	Straight	H	SS	G	0.015	18
BJ141	TMSR <sup>2</sup>	TNC	(Male) plug	R/A	H	SS	G	0.015	18
BJ141	TMR	TNC	(Male) plug	R/A	H	SS	G	0.020	18
BJ141	TFBS	TNC	(Female) Bulkhead	Straight	N/A	SS	G	0.015	18
BJ141	TFS	TNC	(Female) jack	Straight	N/A	B	G	0.020	12
BJ141	MCXMR	MCX	(Male)	R/A	H	B	G	0.015	6
BJ141	BMS	BNC	(Male) plug	Straight	H	B	N	0.010	4
BJ141	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

SMSAT<sup>1</sup> = Anti-Torque

<sup>2</sup> = Connector pre-bent cable to form right angle

Sex of the connector is determined by center pin.

Note: many standard small length assemblies with SMA plugs in stock.

**Standard Options:**

Cable Code	Option Code	Option Description	Option Details
BJ141	W	Weatherized Protective Covering	Polyolefin shrink tube cover
BJ141	RP	Phase Matched in sets	Cable matched to each other to +/- 2.8PS
BJ141	AP	Phase Matched to an electrical length	Absolute electrical length +/- 2.8PS
BJ141	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-BJ141-12.0-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.
<b>35 GHz</b>	<b>31 dB</b>	<b>0.141</b>	<b>&gt;90</b>