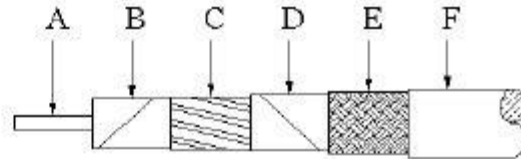


AL085 Cable Specifications M17/133-00013

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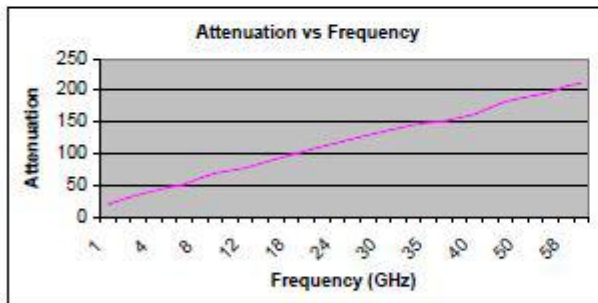
.086 diameter is the most common size Semi-Rigid cable. This size matches well with miniature high frequency connectors such as 2.4mm and SMP. The use of an aluminum jacket with tin plating will allow final shaping at the installation site. Cables available un-bent or shaped to your specifications.



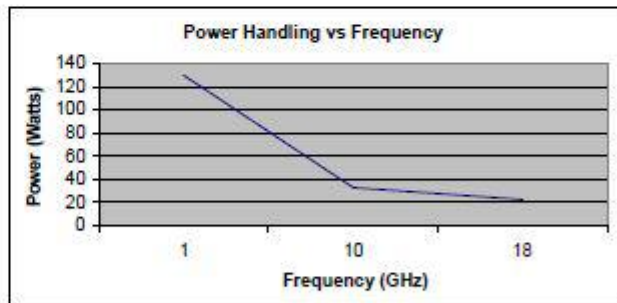
Electrical Data			
Frequency, Max (GHz)	60.0		
Impedance, nominal (Ω)	50		
Velocity of Propagation (%)	69.5		
Shielding Effectiveness, 1 GHz (dB/ft)	>100		
Capacitance (pF/ft)	32		
Delay (ns/ft), (ns/meter)	1.463	4.80	
Attenuation k1 (db/100ft) @ 23 deg C	0.569		Attenuation (typical) at any Frequency =k1 x SqRt (FMHz) + k2 x (FMHz)
Attenuation k2 (db/100ft) @ 23 deg C	0.0012		

Mechanical Data			
Weight (lbs/100ft), (Kg/100m)	1.53	2.30	
Temperature Range ($^{\circ}$ C)	-40 to 125		
Minimum Bend Radius (inch), (mm)	0.17	4.27	

Construction Data				
Inner Conductor (inch)	A	Solid	0.020	Silver Covered Copper Clad Steel
Dielectric (inch)	B	Solid	0.066	Polytetrafluoroethylene
First Outer Shield (inch)	C		0.086	Tin Plated Aluminum
Second Outer Shield (inch)	D			
Third Outer Shield (inch)	E			
Jacket (inch O.D.)	F		0.086	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.
60 GHz	46 dB	0.086"	>100

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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
AL085	MMS	2.4 mm	(Male) plug	Straight	H	SS	G	0.01	50
AL085	MMSR ²	2.4 mm	(Male) plug	R/A	H	SS	G	0.01	50
AL085	MFS	2.4 mm	(Female) jack	Straight	H	SS	G	0.015	50
AL085	MFBS	2.4 mm	(Female) bulkhead	Straight	H	SS	G	0.01	50
AL085	KMS	2.9 mm	(Male) plug	Straight	H	SS	G	0.01	40
AL085	KMSR ²	2.9 mm	(Male) plug	R/A	H	SS	G	0.01	40
AL085	KFS	2.9 mm	(Female) jack	Straight	H	SS	G	0.01	40
AL085	KFBS	2.9 mm	(Female) bulkhead	Straight	H	SS	G	0.01	40
AL085	SMPFS	GPO (SMP)	(Female) jack	Straight	N/A	Be	G	0.01	40
AL085	SMPFR	GPO (SMP)	(Female) jack	R/A	N/A	Be	G	0.01	40
AL085	SMS	SMA	(Male) plug	Straight	H	SS	G	0.01	26
AL085	SMSR ²	SMA	(Male) plug	R/A	H	SS	G	0.01	26
AL085	SMR	SMA	(Male) plug	R/A	H	SS	G	0.015	12
AL085	SMSAT ¹	SMA	(Male) plug	Straight	H	SS	G	0.01	18
AL085	SFS	SMA	(Female) jack	Straight	N/A	SS	G	0.01	18
AL085	SFBS	SMA	(Female) Bulkhead	Straight	N/A	SS	G	0.01	18
AL085	OSSPMBS	OSSP	(Female) Bulkhead	Straight	N/A	SS	G	0.01	18
AL085	OSPMBS	OSP	(Male) Bulkhead	Straight	H	SS	G	0.01	18
AL085	NMS	TYPE N	(Male) plug	Straight	H	B	N	0.01	12
AL085	NFBS	TYPE N	(Female) Bulkhead	Straight	N/A	B	N	0.01	12
AL085	TMS	TNC	(Male) plug	Straight	H	B	N	0.01	12
AL085	TMR	TNC	(Male) plug	R/A	H	B	N	0.01	12
AL085	TFBS	TNC	(Female) Bulkhead	Straight	N/A	B	N	0.01	12
AL085	MCXMR	MCX	(Male) plug	R/A	H	B	G	0.015	6
AL085	MCXMS	MCX	(Male) plug	Straight	H	B	G	0.01	6
AL085	MMCXMS	MMCX	(Male) plug	Straight	H	B	G	0.01	6
AL085	MMCXMR	MMCX	(Male) plug	R/A	H	B	G	0.015	6
AL085	SMBFS	SMB	(Female) jack	Straight	N/A	B	G	0.01	4
AL085	BMS	BNC	(Male) plug	Straight	H	B	G	0.01	4
AL085	BFBS	BNC	(Female) Bulkhead	Straight	N/A	B	G	0.01	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

SMSSAT¹ = Anti-Torque

² = Connector pre-bent cable to form right angle

Sex of the connector is determined by center pin.

Standard Options:

Cable Code	Option Code	Option Description	Option Details
AL085	W	Weatherized Protective Covering	Polyolefin shrink tube cover
AL085	RP	Phase Matched in sets	Cable matched to each other to +/- 2.8PS
AL085	AP	Phase Matched to an electrical length	Absolute electrical length +/- 2.8PS
AL085	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. KMS-AL085-12.0-KMS-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.