MegaPhase

MEGAFORM™

MADE IN THE USA

MegaForm™ Cables to 20 GHz

Hand-Formable Jumper Cables

- **Low VSWR**
- **Alternate to Semi-Rigid**
- **Easy Installation**
- **Tin-Dipped Copper Braid Outer Conductor**
- **Bends in Place**
- **.086in (2.18mm), and .141in (3.5mm)**

MegaForm™ hand-formable jumper cables are ideal for "on the fly" bending when semi-rigid cables are not practical. These cable assemblies can be hand formed in-place and eliminate the cost of design and drawings which semi-rigid cables would require. Applications include cabinet interconnects, ATE, and systems integration. A wide variety of connectors are available.

Electrical Data

Maximum Frequency:
CC086, CC141: 20.0 GHz

Impedance:
50 Ω nominal

Propagation Velocity:
69.5% nominal

Time Delay:
1.46 ns/ft (4.79 ns/m)

Shielding Effectiveness:
-110 dB minimum (cable only)

Dielectric Withstanding Voltage:
CC086: 1.5 kV at 60 Hz
CC141: 1.9 kV at 60 Hz

Capacitance:
29.5 pF/ft (96.8 pF/m)

Mechanical Data

Finished Outer Diameter:
CC086: 0.085 in (0.216 cm)
CC141: 0.139 in (0.353 cm)

Static Bend Radius:
CC086: 0.125 in (0.3175 cm)
CC141: 0.43 in (1.092 cm)

Weight with Standard Jacket/Armor:
CC086: 0.01 lbs/ft (0.018 kg/m)
CC141: 0.02 lbs/ft (0.030 kg/m)

Operating Temp. Range:
-85 to 392° F (-65 to 200° C)

Cable Construction

Inner Conductor:	Solid Ag-plated C-clad Steel
Dielectric:	PTFE
Outer Conductor:	Metallic Alloy Saturated Cu Braid (Pb Free)

Available Connectors

CC086: 2.4 mm, 2.92mm, 3.5mm, MMCX, OSP, OSSP, SMA, SMB, SMC, SMP, SSMA, SSMB, SSMP, TNC, Type N, ZMA

CC141: 2.9mm, 3.5mm, SMA, TNC, Type N

(maximum frequency dependent on cable; other connectors available)

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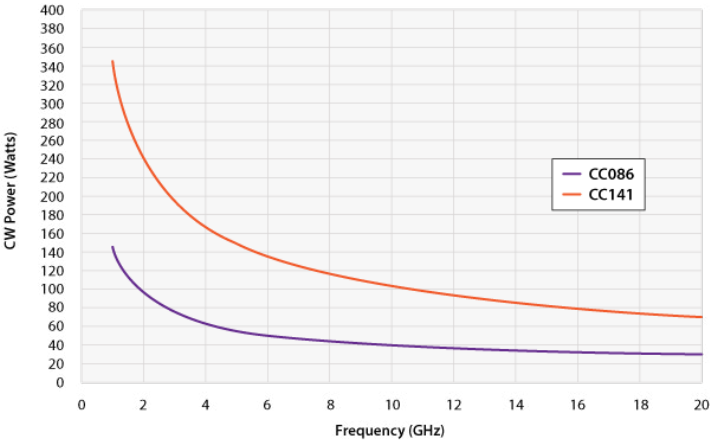
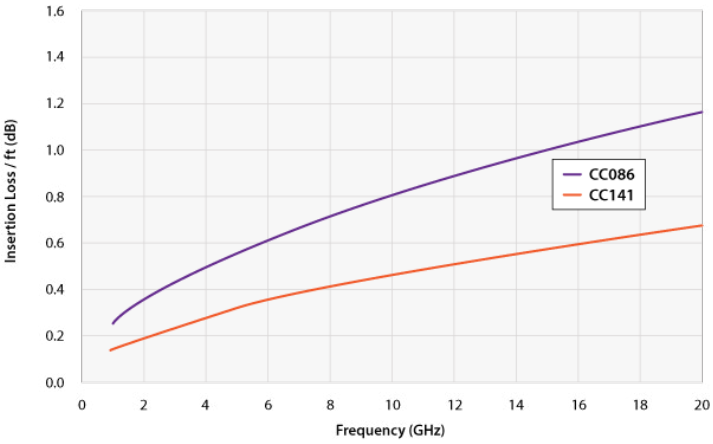
MegaForm™ Cables to 20 GHz (continued)

Cable CW Power Handling



Insertion Loss



Specifications

Frequency		CC086		CC141		Conn Loss dB	VSWR
		Attenuation		Attenuation			
GHz	Band	dB/ft	dB/m	dB/ft	dB/m		
0.3	UHF	0.117	0.384	0.063	0.206	0.006	1.10
0.5		0.153	0.501	0.082	0.270	0.009	
0.8		0.195	0.641	0.106	0.348	0.012	
1.0	L	0.220	0.722	0.120	0.394	0.014	
2.0	S	0.319	1.047	0.177	0.579	0.024	1.15
2.4		0.352	1.156	0.196	0.643	0.027	
3.0		0.398	1.307	0.223	0.731	0.032	
4.0	C	0.467	1.533	0.264	0.865	0.040	
6.0		0.587	1.927	0.336	1.102	0.055	
8.0	X	0.693	2.273	0.400	1.314	0.070	1.20
10.0		0.789	2.588	0.460	1.510	0.084	1.25
12.4		0.896	2.938	0.527	1.730	0.101	1.30
15.0	Ku	1.004	3.293	0.596	1.956	0.118	
18.0		1.121	3.677	0.672	2.203	0.139	1.35
20.0	K	1.195	3.922	0.720	2.362	0.152	

Note: Typical Insertion Loss dB = (Attenuation)(Length) +2(Conn. Loss)
Attenuation at any frequency =
CC086: (0.20638 x √freq GHz) + (0.1362 x freq GHz)
CC141: (0.10819 x √freq GHz) + (0.01181 x freq GHz)

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