









From Concept to Product ...









7439 La Palma Ave., Suite 228, Buena Park, CA 90620 Tel: 562-472-0083 ◆ Fax 562-684-4545 www.coaxialprecision.com



SEMI-RIGID FORMED ASSEMBLIES

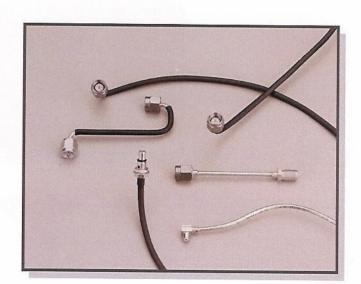
These assemblies offer connectivity solutions in complex shapes where space may be limited. We can terminate and form cable assemblies ranging in size from .031 to .250 inches in diameter. We use a wide variety of connectors. Our engineering team can support your project from the early design stages through manufacturing. Our support includes:

- Engineering design
- Prototype builds
- Custom cable design / routing
- Testing and verification
- Drawings and documentation



HAND FORMABLE CABLE ASSEMBLIES

Such types of cable assemblies offer an alternative to semi-rigid cable assemblies. Hand formable cable assemblies range in size from .047 to .141 and can be made in either standard or low loss versions. These assemblies are ideally suited for prototype builds, jumpers or other test setups. The cables assemblies can be covered in a variety of jacket covering the length of the assemblies.



FLEXIBLE CABLE ASSEMBLIES

Flexible cable assemblies can be manufactured in sizes ranging from .07 to .290 inches diameter. This is the dimension of the jacket. Low loss versions are available for some of these sizes. The center conductor can be either solid or stranded and the outer conductor construction can be a combination of braid over helical foil. Please call us for more information. We use a variety of connectors designed specifically for the cable size and type.





OUALITY OF WORKMANSHIP

Coaxial Precision Assemblies' quality Assurance system supports experimental design verification, performance validation and inspection equipment repeatability.

CPA's quality system is a continuous process, from incoming material inspection, component identification for traceability to 100% inspection of all orders after final assembly. This includes mechanical inspection and electrical performance verification

CPA's quality assurance program governs every aspect of our design and manufacturing process to ensure that every unit meets our customer's requirements. Our standards include:

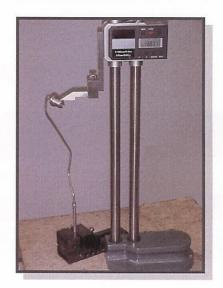
- MIL-I-45208 compliance
- ♦ IPC/WHMA-A-620 compliance
- ♦ J-STD-001D compliance
- Component identification for traceability

EQUIPMENT

- HP 8510 Vector Network Analyzer
- HP 8720 Vector Network Analyzer
- BLUE M Environmental Chamber
- Associated Research HI-POT Tester
- Custom built precision cutting saws
- Custom built cable forming tools
- High Power precision soldering machines
- Precision measuring tools

CAPABILITIES

- Complex formed Semi-rigid cable assemblies
- Flexible and hand-formable cable assemblies
- Phase Matching and tracking
- Amplitude tracking
- Delay matching
- Custom connector capability









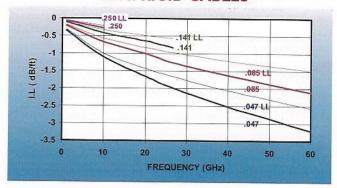




VSWR OF .085 CABLE 12" WITH SMA MALE CONNECTORS

1.3 1.2 28/05 1.1 0.9 0 5 10 15 20 25 FREQUENCY (GHz)

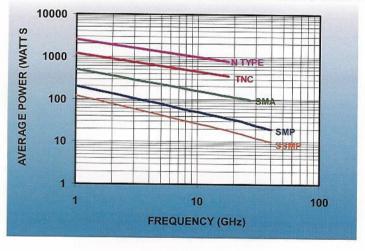
INSERTION LOSS OF SEMI RIGID CABLES



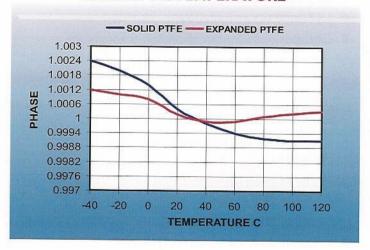
TYPICAL CONNECTOR LOSSES

NTYPE	TNC	SMA	SSMA	SMP	SMPM
Straight: .01 √ f (GHz)	Straight: .02√f (GHz)	Straight: .03 √ f (GHz)	Straight: .05√f (GHz)	Straight: .05 √f (GHz)	Straight: .06 √f (GHz)
Right Angle:.02√f (GHz)	Right Angle: .03 √f (GHz)	Right Angle;.04√f (GHz)	Right Angle; 06 √f (GHz)	Right Angle;.08√f (GHz)	Right Angle;.09 √f (GHz)

CONNECTOR POWER HANDLING CAPABILITY



PHASES VS. TEMPERATURE





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sales@coaxialprecision.com • www.coaxialprecision.com