

**AEROSPACE - GRADE
RUGGEDIZED RF,
MICROWAVE, AND
mmWAVE COAXIAL
CABLE ASSEMBLIES**



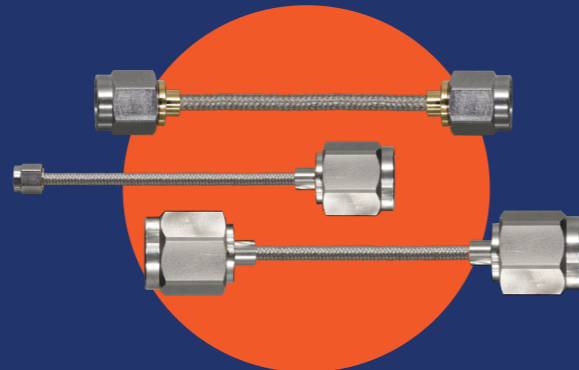
Accurate specification of RF assemblies depends on a thorough understanding of these key variables:

- Operating environment (temp, moisture, etc.)
- Operational frequency range
- Insertion Loss budget
- VSWR requirement

BLUMARK RF
COAX CABLES
Mil/Aero-Grade
Flexible RF Cables



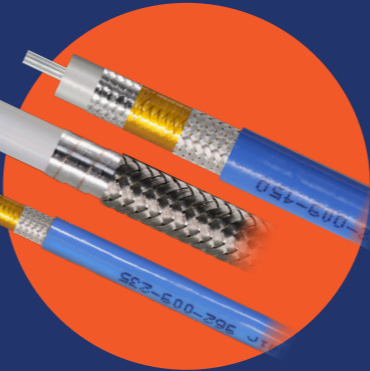
**50 Ohm Flexible
RF Cable Jumpers**



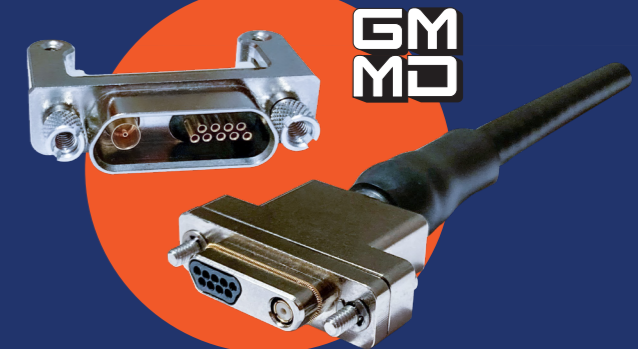
SMA 086, SMA 141,
SMA-N 141, N-N 141

**Multi-Port Configuration
RF Assemblies: Hand-Formable (left),
Rugged Environmental (right)**

047, 086, 160, 200, 235,
300, 450



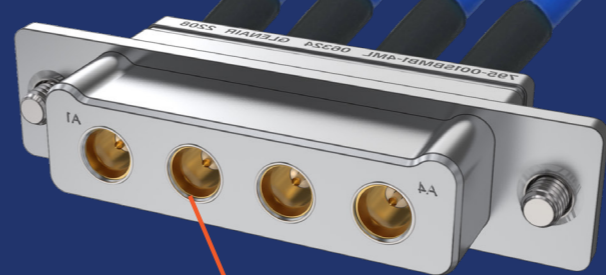
**Glenair GMMD
Modular Micro-D**



**GM
MD**

**Micro Miniature Board
and I/O-to-Board
Hybrid Coax Connectors**

**Rugged, Shielded, Vibration-
Resistant Mil-Aero Grade
Multi-Port RF Shells**



**Single-Channel RF Connectors for
Multi-Port Shell Configurations
sizes #8, #12, #16**



**SuperNine, Mighty Mouse,
Series 806 RF, and Series 795 RF
Multi-Port RF Connector Shells**

**RF Connector
Accessories**



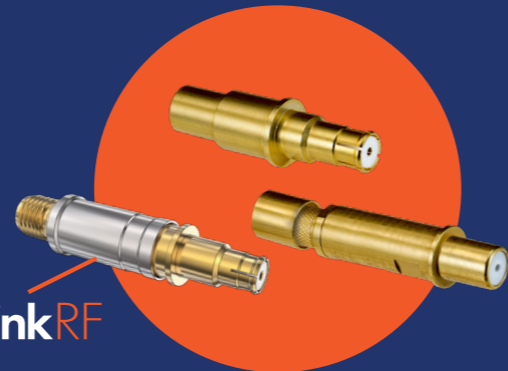
**Dummy Receptacles
and Protective Covers**

**Precision-Grade
RF Connector Adapters**



**TNC-SMA, N-SMA, SMA-SMA,
SMP-SMA, 2.92-SMA,
BNC-SMA**

**Single-Channel RF Connectors for
Multi-Port Shell Configurations
sizes #8, #12, #16**



G-LinkRF
















**G-LinkRF: 26.5 GHz RF
BMB-to-SMA contact adapters**

G-LinkRF

**G-LinkRF: 26.5 GHz RF
BMB-to-SMA contact adapters**

BLUMARK RF 50 Ohm COAX CABLES

"Coax cables" are available in size categories including 047, 086, 160, 200, 235, 300 and 450 and are suitable for both flight- and test-grade equipment. "Hand-formable" or tin-soaked designs are intended for non-environmental applications.

047		26.5 GHz Hand Formable Tin-Soaked Braid .047 (1.2) Diameter	
086	 	40 GHz FEP Jacket Tape + Braid Shield .104 (2.6) Diameter	40 GHz ETFE Jacket Tape + Braid Shield .097 (2.5) Diameter
160	 	40 GHz FEP Jacket Triple Shield .161 (4.1) Diameter	18 GHz FEP Jacket Tape + Braid Shield .163 (4.1) Diameter
	 	18 GHz ETFE Jacket Tape + Braid Shield .163 (4.1) Diameter	18 GHz ETFE Jacket Triple Shield .145 (3.7) Diameter
	 	40 GHz Low Phase Change FEP Jacket .157 (4.0) Diameter	40 GHz Low Phase Change ETFE Jacket .157 (4.0) Diameter
200	 	26.5 GHz FEP Jacket Triple Shield .204 (5.2) Diameter	26.5 GHz ETFE Jacket Triple Shield .187 (4.7) Diameter
235	 	18 GHz FEP Jacket Triple Shield .235 (6.0) Diameter	18 GHz ETFE Jacket Triple Shield .205 (5.2) Diameter
300		18 GHz FEP Jacket Triple Shield .310 (7.9) Diameter	
450		10 GHz FEP Jacket Triple Shield .448 (6.0) Diameter	

RF ADAPTERS

RF "connectors" are terminated directly to coax cables. Series 852 RF "adapters" are threaded devices which connect between or within a series.



TNC-SMA adapters N-SMA adapters SMA-SMA adapters SMP-SMA adapters 2.92-SMA adapters

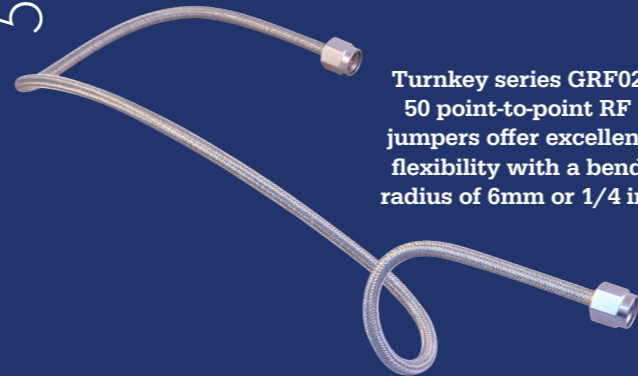
RF CONNECTORS AKA "Coaxial Contacts"

The RF industry describes these single-channel coaxial pin and socket devices as "connectors." Even when used in a multiport shell, the term "RF connector" will be commonly applied.

<p>SIZE #8 for Sr. 23 SuperNine/ Series 80</p>			
	50 Ohm 26.5 GHz	75 Ohm 4 GHz	75 Ohm 12 GHz
<p>SIZE #8 for Series 795/ Series 806 RF</p>			
	50 Ohm 6 GHz	50 Ohm 26.5 GHz	75 Ohm 4 GHz
<p>SIZE #12 for SuperNine Series 795 Series 806 RF</p>			
	50 Ohm 3 GHz	50 Ohm 40 GHz	75 Ohm 3 GHz
<p>SIZE #16 for SuperNine Series 795 Series 806 RF</p>			
	50 Ohm 4 GHz	50 Ohm 65 GHz	

EXPERIENCE 50 Ohm RF JUMPERS

Series GRF02 50 Ohm Coax Cable "Jumpers" are COTS, cut-to-length cable assemblies with pre-installed connectors at both ends.



Turnkey series GRF02 50 point-to-point RF jumpers offer excellent flexibility with a bend radius of 6mm or 1/4 in.

G-LinkRF

G-LinkRF is an RF connector adapter with a BMB-style mating interface, and a female SMA back-end interface for easy termination of SMA cables to size #8 BMB mating interface applications.

Multi-Port "HOUSINGS" or "SHELLS"

Rugged, environmentally-protected multi-port "Shells" are connector devices that group coax assemblies into a bundle and provide a common ground plane that eliminates EMI radiation through the connector.



SuperNine

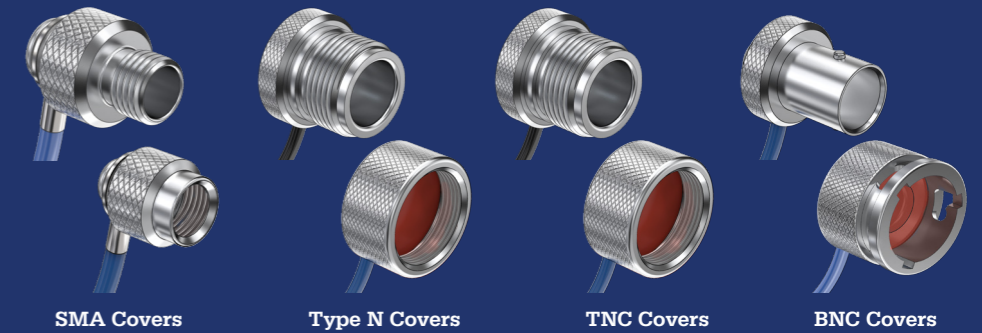
SERIES 806 RF MIL-AERO

SERIES 795 RF

VITA 67.3

DUMMY RECEPTACLES & PROTECTIVE COVERS

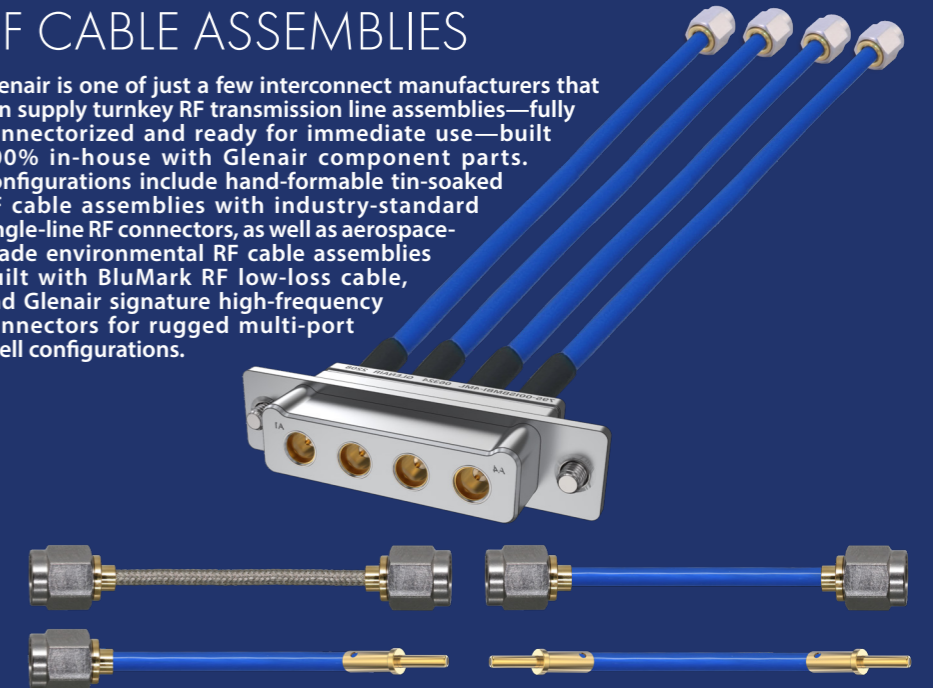
RF connector accessories include Protective Covers and Dummy Receptacles for standard single-channel RF coax connectors and adapters.



SMA Covers Type N Covers TNC Covers BNC Covers

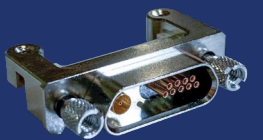
RF CABLE ASSEMBLIES

Glenair is one of just a few interconnect manufacturers that can supply turnkey RF transmission line assemblies—fully connectorized and ready for immediate use—built 100% in-house with Glenair component parts. Configurations include hand-formable tin-soaked single-line RF cable assemblies with industry-standard single-line RF connectors, as well as aerospace-grade environmental RF cable assemblies built with BluMark RF low-loss cable, and Glenair signature high-frequency connectors for rugged multi-port shell configurations.



GM MD

Series GMMD modular Micro-D Coax connectors are supplied in PCB edge-launched, SMT PCB formats, pigtail plug/receptacle assemblies, and inside-the-box jumpers. Coax insert arrangements support up to 16 lines of 50 Ohm coax.



RF LEXICON

- Insertion Loss (AKA Attenuation)** – The amount of signal loss over a given cable length from the source to the output (expressed in dB).
- VSWR (Voltage Standing Wave Ratio)** – The value of the reflected energy back to the source (expressed as a ratio).
- Return Loss** – The measure of energy reflected back to the source (expressed in dB).
- Phase Stable (Stability)** – The ability of a cable to resist phase change under thermal changes.
- Phase Tracking** – The ability of two or more cables to stay within phase of each other under thermal changes.
- Phase Matching** – Adjusting cables during connector termination so that they are within a specified phase with each other.