

## Hermetic RF/Microwave Connectors

Designed for military and commercial use where upper frequency, microwave applications are necessary, PacAero's hermetic 50 Ohm RF/Microwave connectors provide excellent electrical and environmental performance characteristics.



### Technical Advantages

#### Aluminum or Titanium Compatible

PacAero's RF connector line uses our explosive metal welding technology to create bi-metal connector bodies. Kovar pins are sealed with glass into the lower, Kovar portion of the body while the upper portion of the connector body can be aluminum or titanium for weld transitions into lightweight aluminum or titanium hermetic electronic housings.

#### Laser Weld Integration

These interconnect components are designed to be integrated via state-of-the-art laser welding processes. This process eliminates solder and, as a result, a key point of potential hermetic failure: solder fatigue. Laser weld integration also means connectors can easily and safely be replaced, even when a package is fully populated - no need for high heat to re-flow solder prior to extraction.

#### Format Options

RF/Microwave connectors from PacAero are available in a variety of configurations including: flange mount; push-on [GPO, GPPOJ, and thread-in [SMA, SSMA] form factors. PacAero also manufactures a hermetic BMA [Blind Mate Attach] connector uses our industryproven hermetic RF connector technology with industry-standard MIL-DTL 38999/23 Series III shell interfaces. The atmospheric side of the connector contains #8 BMA coaxial contacts per MIL-STD-348. The hermetic side contains SMA contacts per the same MIL-STD.

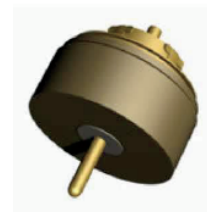
#### Reliable, High Performance

Our connectors operate up to 100GHz and deliver a hermetic leak rate of  $<1 \times 10^{-9}$  He at 1 ATM reliably from  $-65^{\circ}\text{C}$  to  $200^{\circ}\text{C}$ . High performance variants operate in the 20GHz range.

## RF/Microwave Flange Mount Connectors

PacAero's 50 Ohm flange mount connectors are compatible with lightweight materials such as aluminum and titanium, as well as conventional iron/nickel alloys. These connectors are available for both laser-weld and solder-in applications.

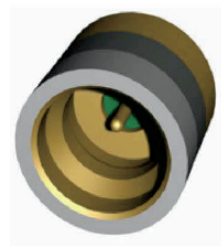
RF Series	Description
100	RF Connector, 50 Ohm Flange Mount
150	RF Connector, 50 Ohm Flange Mount, High Performance (over 26 GHz)



## RF/Microwave Push-On Connectors

PacAero's 50 Ohm push-on connectors are compatible with lightweight materials such as aluminum and titanium, as well as conventional iron/nickel alloys. These connectors are available for both laser-weld and solder-in applications. We offer a standard laser-weld option [LWP®], a miniature version [LLWP®], a standard solder mount option [SMP] and a miniature version [SSMP]. Our push-on connectors are manufactured in accordance with MIL-STD-348. Connector interfaces are equivalent to GPO/GPPO.

RF Series	Description
200	RF Connector, 50 Ohm LWP (Laser Weld Push-On)
250	RF Connector, 50 Ohm LWP, High Performance (over 26 GHz)
300	RF Connector, 50 Ohm LLWP, (Little Laser Weld Push-On)
350	RF Connector, 50 Ohm LLWP, High Performance (over 26 GHz)
400	RF Connector, 50 Ohm SMP (Solder Mount Push-On)
450	RF Connector, 50 Ohm SMP, High Performance (over 26 GHz)
500	RF Connector, 50 Ohm SSMP (Small Solder Mount Push-On)
550	RF Connector, 50 Ohm SSMP, High Performance (over 26 GHz)



## RF/Microwave Thread-In Connectors

PacAero's 50 Ohm thread-in connectors are compatible with lightweight materials such as aluminum and titanium, as well as conventional iron/nickel alloys. These connectors are available for both laser-weld and solder-in applications. We offer a standard option [SMA] and a miniature version [SSMA] with a thread size of 1/4-36 UNS-28. Our thread-in connectors are manufactured in accordance with MIL-STD-348.

RF Series	Description
600	RF Connector, 50 Ohm SMA (Thread-In)
650	RF Connector, 50 Ohm SMA, High Performance (over 26 GHz)
700	RF Connector, 50 Ohm SSMA (Small Thread-In)
750	RF Connector, 50 Ohm SSMA, High Performance (over 26 GHz)

