

LTI RF Interconnects

Features & Benefits

- No need for a dust cap
- Easy-to-clean exposed interface
- IP67 in the mated and unmated condition
- No fragile parts exposed greatly reduces chance of damage

Applications

- Weather proof systems
- Durable outdoor field equipment
- Rugged marine products



P/N: 1180-6057

SV Microwave has developed a new RF series that re-imagines the design of our proprietary LiteTouch product line to create an easy-to-clean exposed interface in a familiar SMA-sized form factor. Our LTI (LiteTouch Interface) product line includes cable connectors for both $\text{\O}0.047''$ and $\text{\O}0.085''$ cable types and panel mount adapters that are IP67-rated in the unmated condition and easily wiped down. This eliminates the need for an extra accessory, such as a dust cap.



Figure 1: LTI female to SMA female bulkhead adapter with salt.

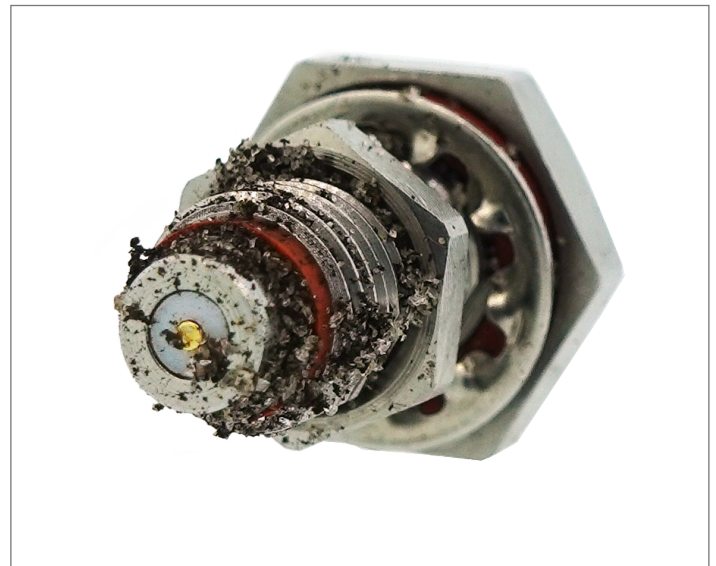


Figure 2: LTI female to SMA female bulkhead adapter with mud.

Electrical Performance

The data shown in Figure 3 shows the typical VSWR response of a mated pair of adapters (1180-6056 & 1180-6057) as shown in Figure 4. The test was performed before and after each environmental exposure: corrosion and immersion in mud (interface wiped after environmental exposure).

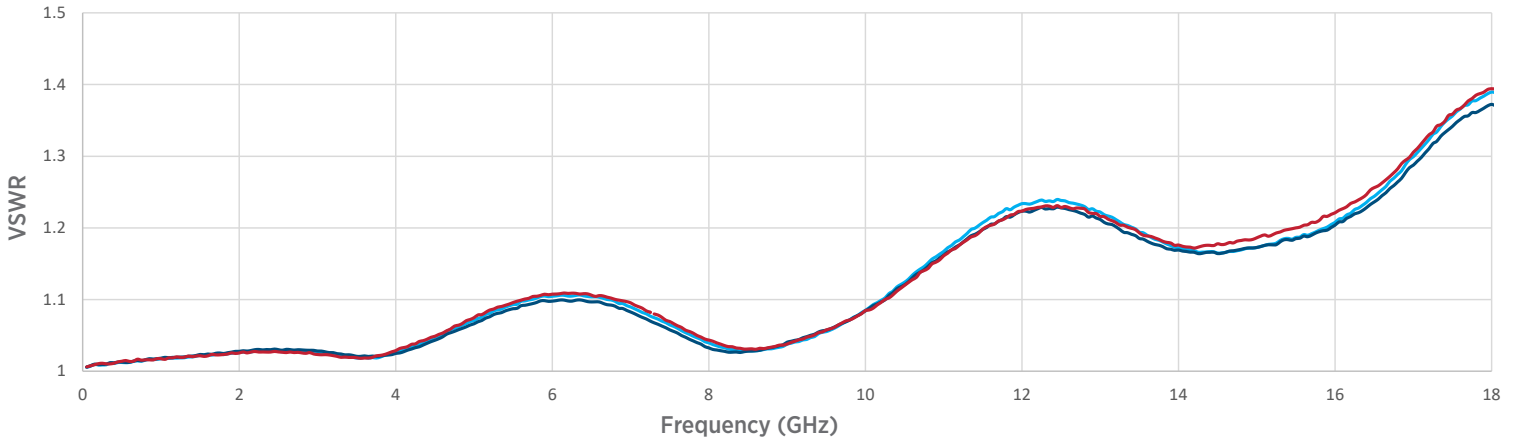


Figure 3: LTI Environmental VSWR

— LTI Control — LTI + Mud — LTI + Salt

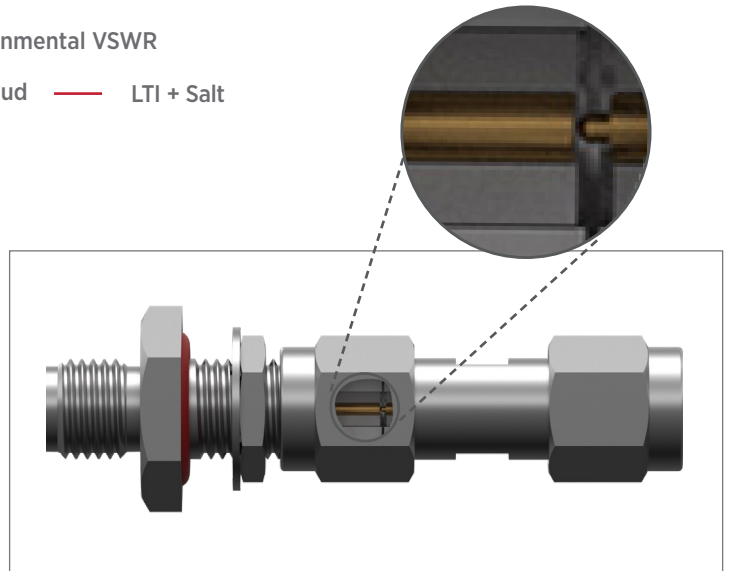


Figure 4: Cross section of mated pair, 1180-6056 and 1180-6057

Specifications

Electrical

Impedance	50Ω
Frequency Range	DC to 18 GHz
VSWR	1.3:1 Max
Insertion Loss	0.55 dB Max*

*Mated pair of LTI adapters

Mechanical

Mating Cycles	500
Recommended Mating Torque	7-10 in-lbs

Environmental

Salt	MIL-STD-202, Method 101, Condition B
Vibe	MIL-STD-202, Method 204, Condition D

LTI Product Line

P/N	Description
1180-6056	LTI Male to SMA Male Adapter
1180-6057	LTI Female to SMA Female Bulkhead Adapter
8021-60159	LTI Female Connector for .047 Cable
8011-60051	LTI Male Connector for .047 Cable
8021-60158	LTI Female Connector for .085 Cable
8011-60050	LTI Male Connector for .085 Cable