

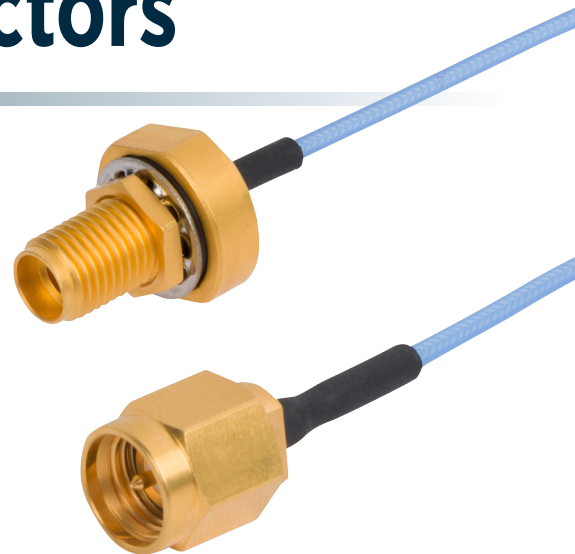
UltraLite RF Cable Connectors

Features & Benefits

- Up to 66% lighter than standard cable connectors due to aluminum material
- Same reliability as standard steel RF connectors
- Series: SMA and 2.92mm
- DC - up to 40GHz (2.92mm version)
- COTS versions available through distribution

Applications

- Space
- Missiles
- Man Pack Radios
- Airborne



UltraLite RF Cable Connectors are designed to perform at high frequencies and harsh environments with lower weight compared to their steel and brass counterparts by leveraging aluminum construction. These connectors, cable assemblies and components are ideal for Space and other applications where weight is at a premium.



Standard Connector
Weight: 5.6 grams

UltraLite Connector
Weight: 2.1 grams

Figure 1: Weight comparison of two 2.92mm Female Bulkhead Connectors for .047 cable. The left connector (SF1521-60045) built with standard stainless steel material, the right connector (1521-80001) constructed with aluminum material as part of SV's UltraLite RF Cable Connector product line.

Electrical Performance

The following electrical data compares SV's UltraLite and standard stainless steel cable connectors. Figures 2, 3 and 4 demonstrate that both UltraLite and SV's standard offering provide excellent performance up to 40 GHz.

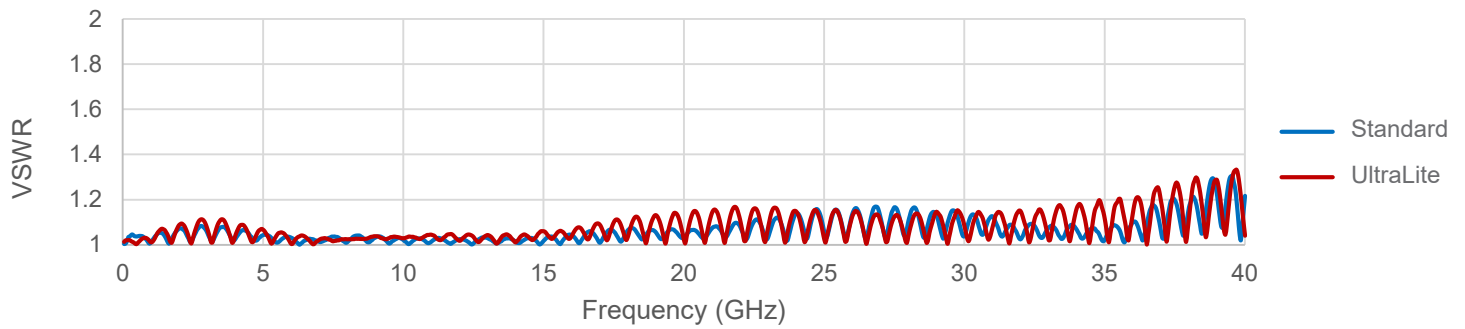


Figure 2: VSWR - 2.92mm Male to 2.92mm Male UltraLite 6" Cable Assembly for .047 Cable

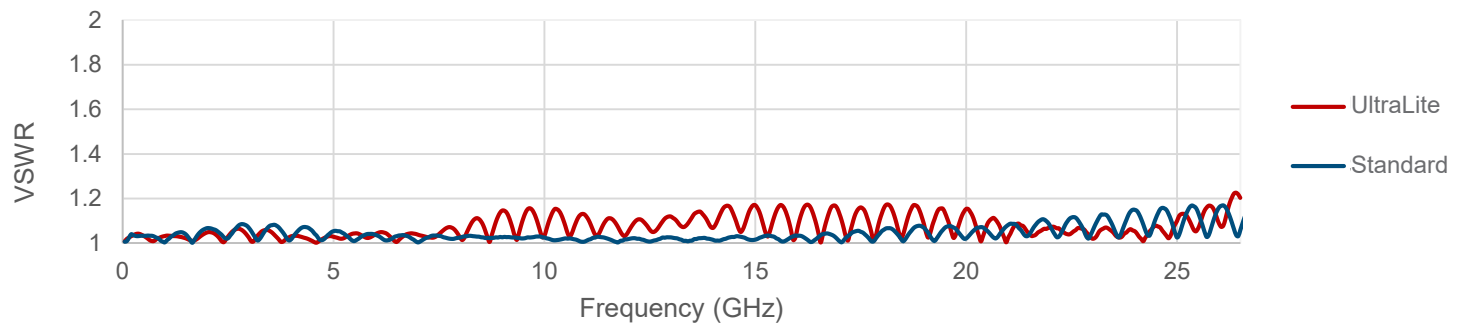


Figure 3: VSWR - SMA Male to SMA Male UltraLite 6" Cable Assembly for .047 Cable

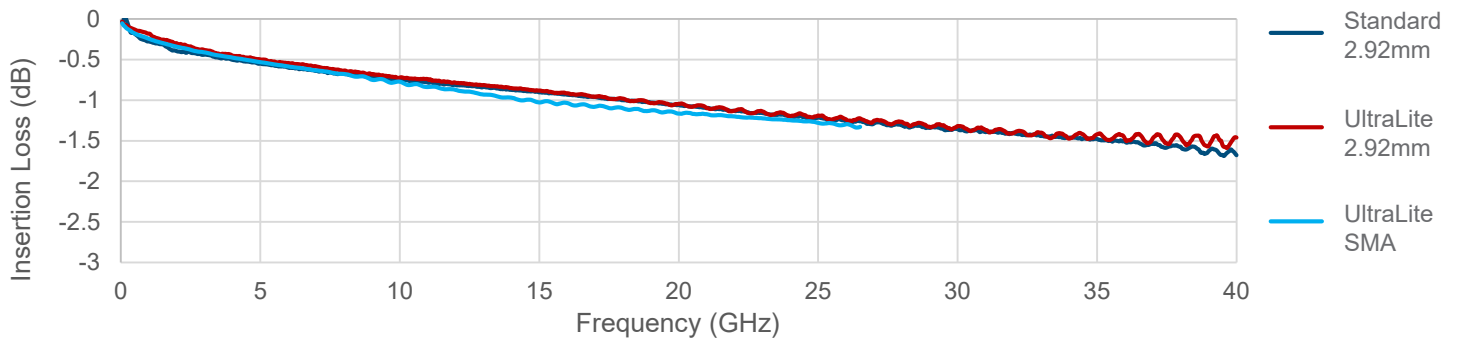


Figure 4: Insertion Loss Comparison three 6" Cable Assemblies - SMA to SMA Male UltraLite, 2.92mm to 2.92mm Male UltraLite 2.92mm to 2.92mm Male Standard Cable Assembly for .047 Cable

Specifications

Electrical	SMA	2.92mm
Impedance	50Ω	50Ω
Max Frequency	26.5 GHz	40 GHz
VSWR	1.3:1 Max	1.4:1 Max
Mechanical	SMA	2.92mm
Mating Cycles	250	250
Mating Torque	7 - 10 in - lbs	7 - 10 in - lbs

UltraLite RF Cable Connectors

Part No.	Part Description
1521-80001	2.92mm Female Bulkhead Connector, Aluminum for .047 Cable
1511-80001	2.92mm Male Connector, Aluminum for .047 Cable
2921-80001	SMA Female Bulkhead, Aluminum for .047 Cable
2911-80001	SMA Male Connector, Aluminum for .047 Cable