

High frequency SMA feedthrough for UHV applications 242-SMAD18G-C16 (and other flange sizes)

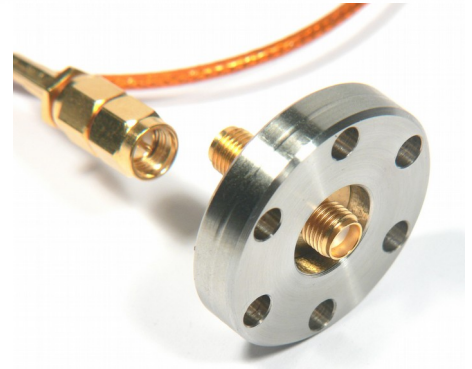
For demanding high frequency applications, Allectra offers a high quality double-sided SMA feedthrough in addition to the well established SMA versions.

Frequencies up to 18 GHz with well defined VSWR and insertion loss give high performance for RF applications.

All contacts are gold plated.

The smallest mounting flange is 16CF. Up to 4 of these feedthroughs can be fitted to a 40CF flange.

| 242-SMAD18G | |
|----------------------------|--|
| Type | SMA Standard |
| Impedance | 50 Ohm |
| Frequency range | 0 – 18 GHz |
| Standing Wave Ratio (VSWR) | 1.1 + 0.01x f (GHz) |
| Insertion Loss | 0.15 x \sqrt{f} (GHz) db |
| Max. voltage | 1000V |
| Temperature | -65 ... 200°C (CF flanges) |
| Vacuum leak rate | < 5x 10 ⁻¹⁰ mbar l / s (He) |
| Materials | Stainless Steel, BeCu, FeNi, Glass, PTFE |
| Plating | All metal parts gold plated |
| Seal | Welded all metal seal |



Hand formable Semi Flexible cable 312-PTFE-COAX-SR

This cable shows the same performance as a stiff tube shielded cable but can be formed easily by hand. Allectra offers the raw material or ready made cables with 18GHz SMA connectors.

| 312-PTFE-COAX-SR | |
|------------------|--|
| Type | Semi Flexible cable |
| Dimensions | Conductor 0.9mm /OD 3.6mm |
| Materials | Silver plated copper / PTFE dielectric/ Tinned copper |
| Impedance | 50 Ohm +/-2 |
| Frequency range | 0 – 20 GHz |
| Working voltage | 2500V rms |
| Attenuation | 0,4 dB/m @ 1GHz/ 1,0 dB/m@ 5 GHz 1.5 dB/m @ 10 GHz/ 2.25 db/m @ 18GHz |
| Temperature | -55 ... 200°C (in air 155°C maximum) |



380-SMA18G-MM-300: Ready made RF cable for UHV use. As PTFE must be used for high frequency cables, the cable is not radiation resistant