

# SMA Connectors, Adapters & Receptacles

Amphenol Fiber Optics was a pioneer in developing the first industry standard fiber optic interconnect system by introducing the SMA connector system. The 905 and 906 series were the first fiber optic interconnect system to gain industry wide acceptance for military, industrial, data communications and medical applications. Even today, Amphenol Fiber Optics continues to support these markets with a wide variety of products to meet the continuing need for the SMA family of products.

The SMA connector family utilizes a threaded coupling nut system for mating and unmating. Available with zirconia or stainless steel ferrules with custom hole sizes, the SMA is an excellent choice for robust, low-cost and reliable system.

Amphenol's long standing history and development of the SMA product insures exceptional quality and long term reliability. We continue to support further development and improvement with our standard and custom product offering.

## Features

- Reliable, robust and time-tested interface as one of the first industry standard fiber optic interfaces.
- Threaded, metal coupling nut for maximum retention.
- Stainless steel ferrules available in custom, precision drilled fiber holes for specialized applications.
- Available with hexagonal coupling nut upon request.



SMA Connectors

## Common Specifications

**Insertion Loss:** 128um & 144um SMArt ferrule  
(ceramic, 905 series):  
 $\leq 0.8\text{dB}$  typical

128um & 144um stainless steel ferrule:  
 $\leq 3.0\text{dB}$  typical

### Tolerances for custom micro-drilled holed for stainless steel ferrules:

| Fiber Hole Size | Tolerance |
|-----------------|-----------|
| 128 & 144um     | +5/-0um   |
| 145 to 200um    | +10/-0um  |
| 201 to 500um    | +5%/-0um  |

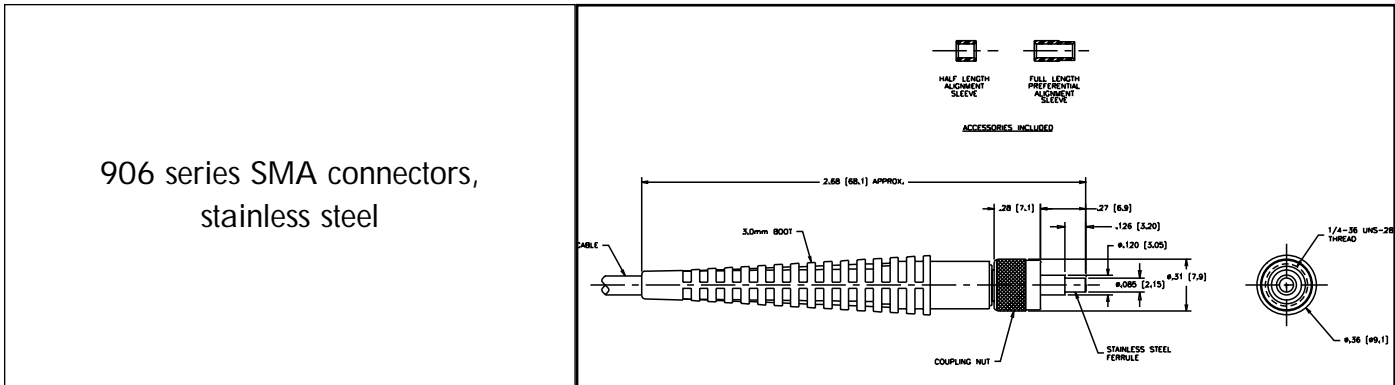
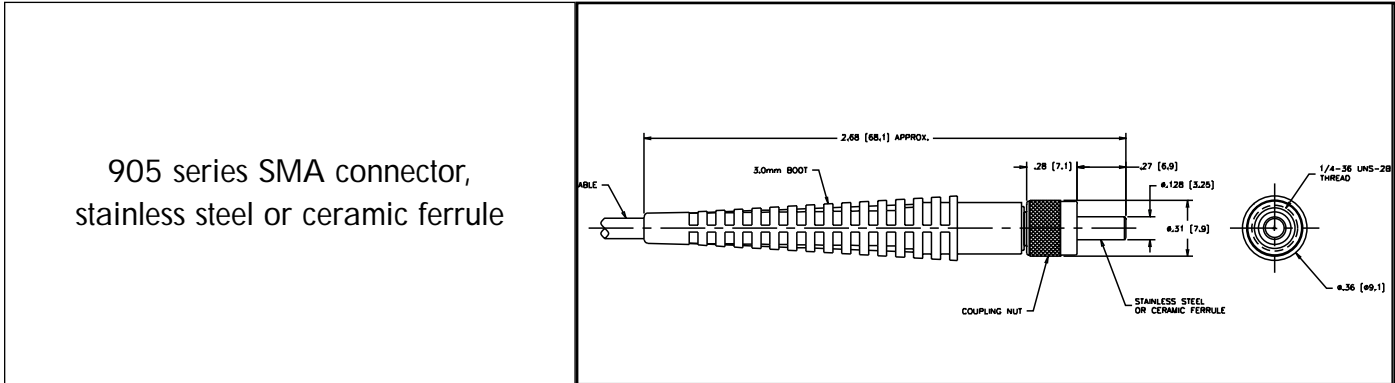
## SMA Connector Part Numbers

| SMA Connectors   |   |            |
|--|---|------------|
| Part #   | Description   | Boot Color |
| 905-400-5007   | SMArt Connector, multimode, 144µm zirconia ferrule, round metal coupling nut              | Black      |
| 905-405-5007   | SMArt Connector, multimode, 128µm zirconia ferrule, round metal coupling nut              | Black      |
| 905-150-5001   | SMA Connector, multimode, 128µm stainless steel ferrule, round metal coupling nut         | Black      |
| 905-150-5002   | SMA Connector, multimode, 144µm stainless steel ferrule, round metal coupling nut         | Black      |
| 905-150-5003   | SMA Connector, multimode, 231µm stainless steel ferrule, round metal coupling nut         | Black      |
| *SMA 905 Series stainless steel ferrules are available in custom drill-out sizes. Contact Customer Service for additional information. |   |            |
| Part #   | Description   | Boot Color |
| 906-150-5001   | SMA Connector, multimode, stepped 128µm stainless steel ferrule, round metal coupling nut | Black      |
| 905-150-5002   | SMA Connector, multimode, stepped 144µm stainless steel ferrule, round metal coupling nut | Black      |
| 905-150-5003   | SMA Connector, multimode, stepped 231µm stainless steel ferrule, round metal coupling nut | Black      |
| *SMA 906 Series stainless steel ferrules are available in custom drill-out sizes. Contact Customer Service for additional information. |   |            |
| **SMA 906 Series packaged with half and full length alignment sleeves.   |   |            |

## SMA Adapter & Receptacle Part Numbers

| SMA Adapters    |   |
|-----------------|---|
| Part #          | Description   |
| 905-120-5000    | 905/906 SMA adapter, bulkhead feed-thru type, D-hole mount, jack-jack, nut and washer                                       |
| 905-120-5003    | 905/906SMA adapter, in-line type, jack-jack, 2 nuts and 2 washers   |
| 905-120-5004    | 905/906 SMA adapter, half-length type, nut and washer   |
| 905-120-5008    | 905/906 SMA adapter, environmentally-sealed, bulkhead feed-thru type, D-hole mount, jack-jack, nut and washer               |
| 905-120-5016    | 905/906 SMA adapter, bulkhead feed-thru type, D-hole mount, jack-jack, nut and washer                                       |
| SMA Receptacles |   |
| Part #          | Description   |
| 905-117-5000    | 905/906 SMA receptacle, flange mount type, TO-5 can or insert   |
| 905-118-5000    | 905/906 SMA receptacle, planar screw mount type, TO-5 can or insert   |
| 905-138-5001    | 905/906 SMA receptacle, planar screw mount type, TO-18, TO-46 or SE 4352 can, keyway, can alignment sleeve                  |
| 905-138-5002    | sleeve  |
| 905-145-5000    | 905/906 SMA receptacle, bulkhead mount type, TO-18, TO-46 or SE 4352 can, keyway, nut and lock washer, can alignment sleeve |
| Accessories     |   |
| Part #          | Description   |
| 905-163         | Dust cap with chain for 905/906 series connectors and adapters  |
| 906-101-3002    | Half-length alignment sleeve, mates 906 to active device receptacle or converts 906 series to 905 series connectors         |
| 906-101-3003    | Full length alignment sleeve, preferential hold, mates 906 series to 906 series connectors                                  |

# SMA Connector Line Drawings



# SMA Receptacles

|   |   |   |   |
|---|---|---|---|
| <p><b>905-120-5000</b><br/>         *905/906 adapter<br/>         *bulkhead feed-thru<br/>         *D-hole<br/>         *jack to jack<br/>         *nut and washer</p>                                      |    | <p><b>905-118-5000</b><br/>         *905/906 receptacle<br/>         *planar screw mount<br/>         *TO-5 can or insert</p>   |    |
| <p><b>905-120-5003</b><br/>         *905/906 adapter<br/>         *in-line<br/>         *jack to jack<br/>         *2 nuts and 2 washers</p>  |    | <p><b>905-138-5001</b><br/>         *905/906 receptacle<br/>         *planar screw mount<br/>         *TO-18 &amp; TO-46<br/>         *SE 4352 can<br/>         *keyway<br/>         *alignment sleeve</p>            |    |
| <p><b>905-120-5004</b><br/>         *905/906 adapter<br/>         *half-length<br/>         *nut and washer</p>   |    | <p><b>905-138-5002</b><br/>         *905/906 receptacle<br/>         *sleeve</p>  |    |
| <p><b>905-120-5008</b><br/>         *905/906 adapter<br/>         *environmentally sealed<br/>         *bulkhead feed-thru<br/>         *D-hole<br/>         *jack to jack<br/>         *nut and washer</p> |  | <p><b>905-145-5000</b><br/>         *905/906 receptacle<br/>         *bulkhead mount<br/>         *TO-18&amp; TO-46<br/>         *nut/lock washer<br/>         *SE 4352 can<br/>         *keyway*alignment sleeve</p> |  |
| <p><b>905-120-5016</b><br/>         *905/906 adapter<br/>         *bulkhead feed-thru<br/>         *D-hole<br/>         *jack to jack<br/>         *nut and washer</p>                                      |  | <p><b>905-163</b><br/>         *dustcap w/ chain<br/>         *for 905/906 connectors and adapters</p>  |  |
| <p><b>905-117-5000</b><br/>         *905/906 receptacle<br/>         *flange mount<br/>         *TO-5 can or insert</p>   |  |   |   |