

# Snap-Lock SMA Series

## DESCRIPTION

**Snap-on version of popular SMA Series Connector.**

- Snap-on interface facilitates assembly
- Same dependable performance as standard SMA connection

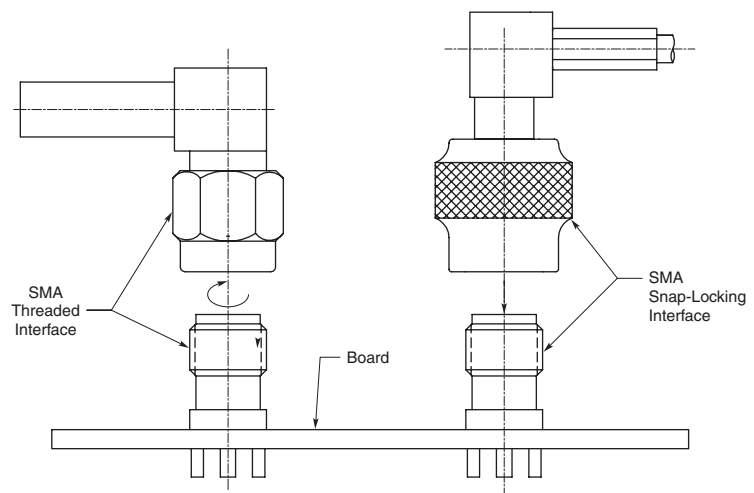
## APPLICATIONS

- Mobile Base station filters and cable assemblies
- Telephony applications, Wireless LAN
- Instrumentation and remote measuring equipment
- Mil Aero, SatCom, Radar

## KEY FEATURES

- Similar performance and applications to standard SMA Series
- Mates with standard SMA threaded jacks
- Time saving and user friendly snap on/off mating
- Excellent performance to 6 GHz
- No torquing of connector required
- Free rotation of mated connection
- Higher packaging density can be achieved
- Backwards compatibility with existing systems

Tyco Electronics Snap-Lock SMA is fully intermatable with standard SMA jacks and Tyco Electronics SMA bulkhead jacks.



- Product Specification/Design Objectives: 108-2268
- Snap-Lock SMA Sample Kit: 3-1773447-5

## ELECTRICAL

- Characteristic Impedance: 50 Ohms
- Frequency Range: DC to 6 GHz
- VSWR:
  - Straight Plug (RG316 cable or equivalent)  
1.25 max. DC — 6 GHz
  - Right-Angle Plug (RG316 cable or equivalent)  
1.38 max. DC — 6 GHz
- Rated Voltage: 335 VAC rms, 60 Hz (at sea level)
- Dielectric Withstanding Voltage: 1000 VAC rms, 60 Hz (at sea level)
- Insulation Resistance: 5000 Megohms min.
- Contact Resistance:
  - 3 milliohms max. (center contact)
  - 2 milliohms max. (outer contact)

## MECHANICAL

- Engagement Force: 15 lbs. max. (cable applied plugs)
- Disengagement Force: 1 lb. min. (cable applied plugs)
- Interface Retention Force: 15 lbs. min.
- Mating: Mates with standard SMA thread length of  $.200 \pm .005$
- Durability: 500 cycles min.
- Vibration: EIA-364-28, Method VII
- Shock: EIA-364-27, Method H
- Cable Retention: 20 lbs. min. (cable dependent)

## ENVIRONMENTAL

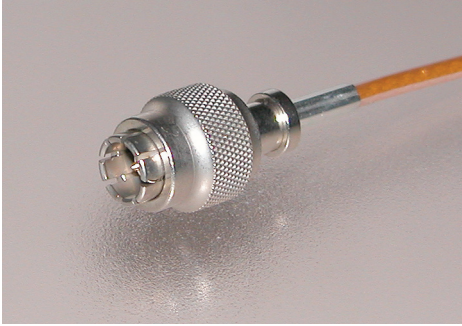
- Operating Temperature:  $-65^{\circ}\text{C}$  to  $+165^{\circ}\text{C}$  (cable dependent)
- Thermal Shock: EIA-364-32, 5 cycles,  $-65^{\circ}\text{C}$  and  $+85^{\circ}\text{C}$
- Humidity: EIA-364-31, Method II, Condition B
- Mixed Flowing Gas: EIA-364-65, Class IIA

## MATERIAL AND FINISH

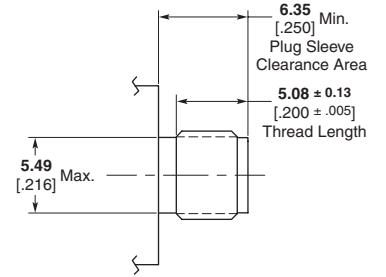
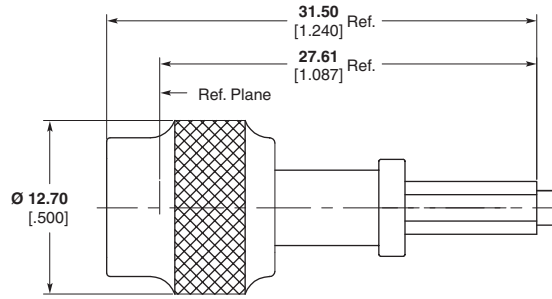
| Part Description                | Material        | Plating Finish |
|---------------------------------|-----------------|----------------|
| • Outer Contact                 | Copper Alloy    | Gold           |
| • Outer Sleeve                  |                 |                |
| Cable Plug                      | Brass           | Nickel         |
| Adapter                         | Stainless Steel | Passivate      |
| • Center Contact                |                 |                |
| Cable Plug                      | Brass           | Gold           |
| Adapter                         | Copper Alloy    | Gold           |
| • Inner Locking Collar          | Copper Alloy    | Nickel         |
| • Insulator                     | PTFE            |                |
| • Retaining Ring (Adapter Only) | Carbon Steel    | Nickel         |

## Flexible Cable – Crimp Attachment

### Straight Cable Plug



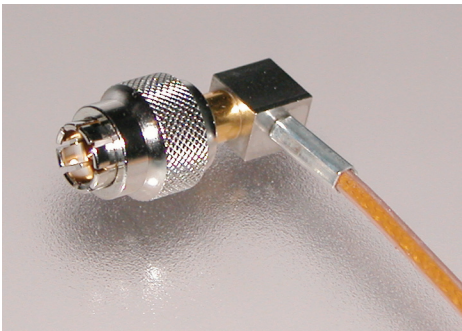
| Part Number | Cable                |
|-------------|----------------------|
| 1408541-1   | RG-316 or equivalent |



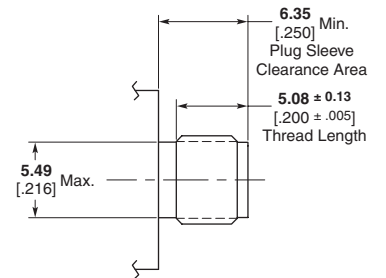
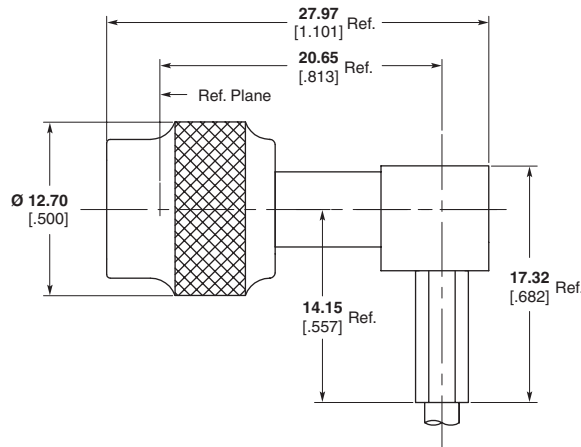
#### Mating Part Detail

**Note:** Product is designed and qualified to mate with gold plated SMA jacks.

### Right-Angle Cable Plug



| Part Number | Cable                |
|-------------|----------------------|
| 1274694-1   | RG-316 or equivalent |



#### Mating Part Detail

**Note:** Product is designed and qualified to mate with gold plated SMA jacks.

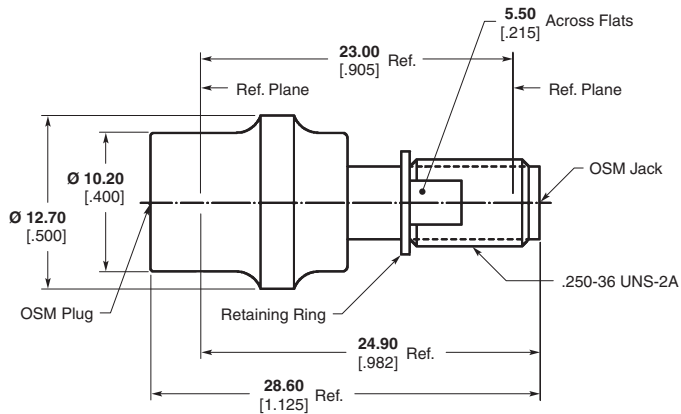
Dimensions are millimeters over inches unless otherwise specified.

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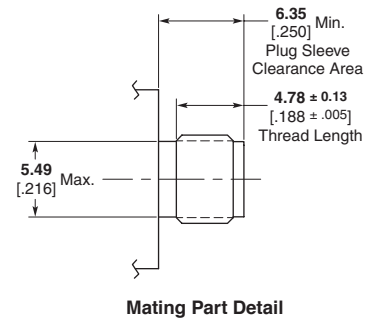
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## Adapters — Between Series

### Snap-Lock SMA Plug to SMA Series Jack



| Part Number |
|-------------|
| 1053780-1   |



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