

## SMA Connectors

### Product Facts

- Performance to 12.4 GHz and beyond
- Available in various base metal options, including stainless steel, brass and zinc diecast
- Uses industry standard crimp tools and processes
- Available with corrosion resistant, non-magnetic White Bronze plating
- Meets all performance requirements for MIL-C-39012.



Tyco Electronics offers a complete line of SMA connectors designed for performance to 18 GHz to satisfy the growing demand for SMA connectors in the wireless communications industry. The SMA product line offers stainless steel bodies, as well as non-ferrous metals. Various plating options are available, including Gold and White Bronze. The SMA interface is fully compatible with Mil-C-39012.

While still offering various options on military (QPL) approved connectors, Tyco Electronics has developed a complete offering tailored to the commercial Communications industry. This includes 3 piece flexible cable products for popular RG 316, 142 and RD

316 cable utilizing industry standard HEX crimps.

The SMA series meets the performance, quality and application requirements of the commercial marketplace. This includes White Bronze plating, a unique finish developed by Tyco Electronics to address the performance needs of the telecommunications market. This plating is highly resistant to wear, and contains no ferrous metals, thus displaying excellent inter-modulation characteristics.

To satisfy the broad range of commercial applications, SMA connectors are available in a broad range of standard configurations including; straight and right-angle cable applied plugs, bulkhead cable jacks, two and four hole

flange mount panel jacks, straight and right-angle pcb mount jacks and various between and in series adapters. Numerous packaging and testing options are also available to meet specific system criteria as well.

Additionally, standard military approved (QPL) interfaces are offered as well. Including connectors for semi-rigid cable and micro strip applications.

The 3 Piece SMA offering is designed especially for applications in cellular infrastructure where InterModulation Products (IMP) must be minimized. By limiting non-linearities within the connectors, IMP is reduced and increased channel capacity can be offered.

### Between Series Adapters

For SMA Between Series Adapters, see pages 251-260.

## SMA Connectors (Continued)

### Specifications

| MIL-C-39012<br>Applicable Paragraph |       |                                                                                                                                                                                                                                                                             |
|-------------------------------------|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>General</b>                      |       |                                                                                                                                                                                                                                                                             |
| Material                            | 3.3   | Steel corrosion resistant per ASTM-A-582 and ASTM-A-484, Type 303. Beryllium copper per ASTM-B-196. PTFE Fluorocarbon per ASTM-D-1710.                                                                                                                                      |
| Finish                              | 3.3.1 | Center contacts shall be gold plated to a min. thickness of .00127 [.00005] in accordance with MIL-G-45204, ASTM-B-488. All other metal parts shall be finished as to provide a connector which meets the corrosion requirements.                                           |
| Design                              | 3.4   | The design shall be such that the outline shown in this catalog and the interface dimensions of MIL-STD-348A are met.                                                                                                                                                       |
| <b>Electrical</b>                   |       |                                                                                                                                                                                                                                                                             |
| Insulation Resistance               | 3.11  | The insulation resistance shall not be less than 10,000 megohms.                                                                                                                                                                                                            |
| Corona Level                        | 3.22  | Refer to applicable military slash sheet, product drawing or spec.                                                                                                                                                                                                          |
| Dielectric Withstanding Voltage     | 3.17  | Refer to applicable military slash sheet, product drawing or spec.                                                                                                                                                                                                          |
| RF High Potential                   | 3.23  | Refer to applicable military slash sheet, product drawing or spec.                                                                                                                                                                                                          |
| Contact Resistance                  | 3.16  | Refer to applicable military slash sheet, product drawing or spec.                                                                                                                                                                                                          |
| VSWR                                | 3.14  | Refer to applicable military slash sheet, product drawing or spec. Frequency range dependent on cable used.                                                                                                                                                                 |
| RF Leakage                          | 3.26  | Refer to applicable military slash sheet, product drawing or spec.                                                                                                                                                                                                          |
| Insertion Loss                      | 3.27  | Refer to applicable military slash sheet, product drawing or spec. Frequency range dependent on cable used.                                                                                                                                                                 |
| <b>Mechanical</b>                   |       |                                                                                                                                                                                                                                                                             |
| Force to Engage                     | 3.5.1 | The torque required to engage and disengage shall not exceed 2 in.-lbs. The longitudinal force is not applicable.                                                                                                                                                           |
| Coupling Nut Retention              | 3.25  | 60 lbs. min. Applicable for plug connectors only.                                                                                                                                                                                                                           |
| Coupling Proof Torque               | 3.6   | 15 in.-lbs. min. Applicable for plug connectors only.                                                                                                                                                                                                                       |
| Cable Retention                     | 3.24  | Refer to applicable military slash sheet or consult factory.                                                                                                                                                                                                                |
| Mating Characteristics              | 3.7   | Applicable to jack connectors only. Reference MIL-STD-348A for dimensions; oversize test pin .953 [.0375] min. dia., .76 - 1.14 [.030-.045] deep, insertion force 3 lbs. max. with .940 [.0370] min. dia. pin, withdrawal force 1 oz. min. with .902 [.0355] max. dia. pin. |
| Connector Durability                | 3.15  | The connector to be tested and its mating connector shall be subjected to 500 insertion and withdrawal cycles at 12 cycles per minute max. The connector shall show no evidence of mechanical failure and shall meet the mating characteristic requirements.                |
| Recommended Mating Torque           | —     | 7 to 10 in.-lbs.                                                                                                                                                                                                                                                            |
| <b>Environmental</b>                |       |                                                                                                                                                                                                                                                                             |
| Vibration                           | 3.18  | Specification MIL-STD-202, method 204, test condition D                                                                                                                                                                                                                     |
| Shock                               | 3.19  | Specification MIL-STD-202, method 213, test condition I                                                                                                                                                                                                                     |
| Thermal Shock                       | 3.20  | Refer to applicable military slash sheet or consult factory.                                                                                                                                                                                                                |
| Corrosion (Salt Spray)              | 3.13  | Specification MIL-STD-202, method 101, test condition B.                                                                                                                                                                                                                    |
| Moisture Resistance                 | 3.21  | Specification MIL-STD-202, method 106. No measurements at high humidity. Insulation resistance shall be at least 200 megohms within 5 minutes of removal from humidity.                                                                                                     |

## SMA Connectors (Continued)

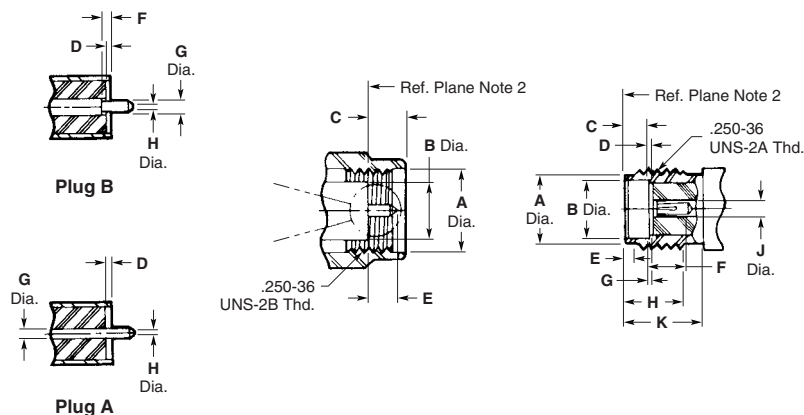
### Electrical

| Connector Type                                                  | Cable                                   | Frequency<br>Max.<br>(GHz) | VSWR<br>x (fGHz) | Contact Resistance<br>(milliohms max.) |                  | Insulation<br>Resistance<br>(megohms<br>min.) | Dielectric<br>Withstanding<br>Voltage<br>(Volts RMS) | Corona<br>Extinction<br>Voltage at<br>70,000 Ft.<br>(V RMS min.) | RF<br>Transmission<br>Loss | RF High<br>Potential<br>at 5 MHz<br>(V RMS) | RF<br>Leakage<br>(dB min.) |
|-----------------------------------------------------------------|-----------------------------------------|----------------------------|------------------|----------------------------------------|------------------|-----------------------------------------------|------------------------------------------------------|------------------------------------------------------------------|----------------------------|---------------------------------------------|----------------------------|
|                                                                 |                                         |                            |                  | Center<br>Contact                      | Outer<br>Contact |                                               |                                                      |                                                                  |                            |                                             |                            |
| Straight Cable Plug<br>without Contact                          | RG 402 (3.58 [.141])                    | Note 1                     | 1.02 + .005      | N/A                                    | 2.0              | 10,000                                        | N/A                                                  | 250                                                              | N/A                        | 670                                         | -(90-fGHz)                 |
| Straight Cable Plugs<br>& Jacks Solder<br>Attachment            | RG 405 (2.16 [.085])                    | 18.0                       | 1.05 + .005      | 2.0                                    | 2.0              | 10,000                                        | 1000                                                 | 250                                                              | .03 $\sqrt{f}$ (GHz)       | 670                                         | -(90-fGHz)                 |
|                                                                 | RG 402 (3.58 [.141])                    | 18.0                       | 1.05 + .005      | 2.0                                    | 2.0              | 10,000                                        | 1500                                                 | 375                                                              | .03 $\sqrt{f}$ (GHz)       | 1000                                        | -(90-fGHz)                 |
|                                                                 | 3.58 [.141] Microporous                 | 18.0                       | 1.05 + .005      | 2.0                                    | 2.0              | 10,000                                        | 1500                                                 | 375                                                              | .03 $\sqrt{f}$ (GHz)       | 1000                                        | -(90-fGHz)                 |
|                                                                 | RG 401 (6.35 [.250])                    | 18.0                       | 1.07 + .007      | 2.0                                    | 2.0              | 10,000                                        | 1500                                                 | 375                                                              | .03 $\sqrt{f}$ (GHz)       | 1000                                        | -(90-fGHz)                 |
|                                                                 | RG 174, 188, 316                        | Note 1                     | 1.15 + .01       | 2.0                                    | 2.0              | 10,000                                        | 750                                                  | 190                                                              | .06 $\sqrt{f}$ (GHz)       | 500                                         | -(60-fGHz)                 |
| Straight Cable Plugs<br>& Jacks Solder<br>Clamp Attachment      | RG 55, 58, 141, 142,<br>223, 303, 400   | Note 1                     | 1.10 + .005      | 2.0                                    | 2.0              | 10,000                                        | 1000                                                 | 250                                                              | .06 $\sqrt{f}$ (GHz)       | 670                                         | -(60-fGHz)                 |
|                                                                 | RG 405 (2.16 [.085])                    | 12.4                       | 1.10 + .015      | 2.0                                    | 2.0              | 10,000                                        | 1000                                                 | 250                                                              | .03 $\sqrt{f}$ (GHz)       | 670                                         | -(90-fGHz)                 |
| Straight Cable Plugs<br>& Jacks Solder<br>Clamp Attachment      | RG 402 (3.58 [.141])                    | 12.4                       | 1.07 + .01       | 2.0                                    | 2.0              | 10,000                                        | 1500                                                 | 375                                                              | .03 $\sqrt{f}$ (GHz)       | 1000                                        | -(90-fGHz)                 |
|                                                                 | RG 55, 58, 141, 142,<br>223, 400        | Note 1                     | 1.10 + .005      | 2.0                                    | 2.0              | 10,000                                        | 1000                                                 | 250                                                              | .06 $\sqrt{f}$ (GHz)       | 670                                         | -(60-fGHz)                 |
| Straight Cable Plugs<br>& Jacks Clamp<br>Attachment             | RG 174, 188, 316                        | Note 1                     | 1.15 + .01       | 2.0                                    | 2.0              | 10,000                                        | 750                                                  | 190                                                              | .06 $\sqrt{f}$ (GHz)       | 500                                         | -(60-fGHz)                 |
|                                                                 | RG 180, 195                             | Note 1                     | —                | 2.0                                    | 2.0              | 10,000                                        | 750                                                  | 190                                                              | —                          | 500                                         | -(60-fGHz)                 |
|                                                                 | RG 55, 142, 223, 400                    | Note 1                     | 1.10 + .005      | 2.0                                    | 2.0              | 10,000                                        | 1000                                                 | 250                                                              | .06 $\sqrt{f}$ (GHz)       | 670                                         | -(60-fGHz)                 |
| Straight Cable Plugs<br>& Jacks Crimp<br>Attachment             | RG 58, 141, 303                         | Note 1                     | 1.10 + .005      | 2.0                                    | 2.0              | 10,000                                        | 1000                                                 | 250                                                              | .06 $\sqrt{f}$ (GHz)       | 670                                         | -(60-fGHz)                 |
|                                                                 | RG 174, 188, 316                        | Note 1                     | 1.15 + .01       | 2.0                                    | 2.0              | 10,000                                        | 750                                                  | 190                                                              | .06 $\sqrt{f}$ (GHz)       | 500                                         | -(60-fGHz)                 |
|                                                                 | RG 180, 195                             | Note 1                     | —                | 2.0                                    | 2.0              | 10,000                                        | 750                                                  | 190                                                              | —                          | 500                                         | -(60-fGHz)                 |
|                                                                 | RG 178, 196                             | Note 1                     | 1.2 + .02        | 2.0                                    | 2.0              | 10,000                                        | 500                                                  | 125                                                              | .06 $\sqrt{f}$ (GHz)       | 335                                         | -(60-fGHz)                 |
|                                                                 | RG 401 (6.35 [.250])                    | 18.0                       | 1.07 + .01       | 2.0                                    | 2.0              | 10,000                                        | 1500                                                 | 375                                                              | .05 $\sqrt{f}$ (GHz)       | 1000                                        | -70 dB min.                |
| Straight Cable Plugs<br>& Jacks Compression<br>Clamp Attachment | 6.35 [.250] Microporous                 | 18.0                       | 1.07 + .01       | 2.0                                    | 2.0              | 10,000                                        | 1500                                                 | 375                                                              | .05 $\sqrt{f}$ (GHz)       | 1000                                        | -70 dB min.                |
|                                                                 | 6.35 [.250] 3 Spline                    | 18.0                       | 1.07 + .01       | 2.0                                    | 2.0              | 10,000                                        | 1500                                                 | 375                                                              | .05 $\sqrt{f}$ (GHz)       | 1000                                        | -70 dB min.                |
|                                                                 | 6.35 [.250] 5 Spline                    | 18.0                       | 1.07 + .01       | 2.0                                    | 2.0              | 10,000                                        | 1500                                                 | 375                                                              | .05 $\sqrt{f}$ (GHz)       | 1000                                        | -70 dB min.                |
|                                                                 | RG 405 (2.16 [.085])                    | 12.4                       | 1.18 + .015      | 2.0                                    | 2.0              | 10,000                                        | 1000                                                 | 250                                                              | .04 $\sqrt{f}$ (GHz)       | 670                                         | -(90-fGHz)                 |
| Right-Angle Cable<br>Plugs Solder<br>Attachment                 | RG 405 (2.16 [.085])                    | 18.0                       | 1.18 + .015      | 2.0                                    | 2.0              | 10,000                                        | 1000                                                 | 250                                                              | .04 $\sqrt{f}$ (GHz)       | 670                                         | -(90-fGHz)                 |
|                                                                 | RG 402 (3.58 [.141])                    | 12.4                       | 1.15 + .015      | 2.0                                    | 2.0              | 10,000                                        | 1500                                                 | 325                                                              | .04 $\sqrt{f}$ (GHz)       | 1000                                        | -(90-fGHz)                 |
|                                                                 | RG 402 (3.58 [.141])                    | 18.0                       | 1.10 + .010      | 2.0                                    | 2.0              | 10,000                                        | 1500                                                 | 250                                                              | .05 $\sqrt{f}$ (GHz)       | 1000                                        | -(90-fGHz)                 |
|                                                                 | RG 55, 58, 141, 142,<br>223, 303, 400   | Note 1                     | 1.15 + .01       | 2.0                                    | 2.0              | 10,000                                        | 1000                                                 | 250                                                              | .07 $\sqrt{f}$ (GHz)       | 670                                         | -(60-fGHz)                 |
|                                                                 | RG 174, 188, 316                        | Note 1                     | 1.15 + .02       | 2.0                                    | 2.0              | 10,000                                        | 750                                                  | 190                                                              | .07 $\sqrt{f}$ (GHz)       | 500                                         | -(60-fGHz)                 |
| Right-Angle Cable<br>Plugs Crimp<br>Attachment                  | RG 55, 142, 223, 400                    | Note 1                     | 1.15 + .02       | 2.0                                    | 2.0              | 10,000                                        | 1000                                                 | 250                                                              | .07 $\sqrt{f}$ (GHz)       | 670                                         | -(60-fGHz)                 |
|                                                                 | RG 58, 141, 303                         | Note 1                     | 1.15 + .02       | 2.0                                    | 2.0              | 10,000                                        | 1000                                                 | 250                                                              | .07 $\sqrt{f}$ (GHz)       | 670                                         | -(60-fGHz)                 |
|                                                                 | RG 174, 188, 316                        | Note 1                     | 1.18 + .02       | 2.0                                    | 2.0              | 10,000                                        | 750                                                  | 190                                                              | .07 $\sqrt{f}$ (GHz)       | 500                                         | -(60-fGHz)                 |
|                                                                 | RG 180, 195                             | Note 1                     | —                | 2.0                                    | 2.0              | 10,000                                        | 750                                                  | 190                                                              | —                          | 500                                         | -(60-fGHz)                 |
|                                                                 | RG 178, 196                             | Note 1                     | 1.25 + .025      | 2.0                                    | 2.0              | 10,000                                        | 500                                                  | 125                                                              | .07 $\sqrt{f}$ (GHz)       | 335                                         | -(60-fGHz)                 |
| Right-Angle Cable<br>Plugs Clamp<br>Attachment                  | RG 55, 58, 141, 142,<br>223, 303        | Note 1                     | 1.10 + .005      | 2.0                                    | 2.0              | 10,000                                        | 1000                                                 | 250                                                              | .08 $\sqrt{f}$ (GHz)       | 670                                         | -(60-fGHz)                 |
|                                                                 | RG 174, 188, 316                        | Note 1                     | 1.15 + .01       | 2.0                                    | 2.0              | 10,000                                        | 750                                                  | 190                                                              | .08 $\sqrt{f}$ (GHz)       | 500                                         | -(60-fGHz)                 |
|                                                                 | RG 180, 195                             | Note 1                     | —                | 2.0                                    | 2.0              | 10,000                                        | 750                                                  | 190                                                              | —                          | 500                                         | -(60-fGHz)                 |
| Flange Mount Plugs<br>& Jacks Panel or<br>Bulkhead Mount        | Non-Captured                            | 18.0                       | 1.03 + .004      | 2.0                                    | 2.0              | 10,000                                        | 1000                                                 | 250                                                              | .03 $\sqrt{f}$ (GHz)       | 670                                         | -(100-fGHz)                |
|                                                                 | Epoxy Captured                          | 18.0                       | 1.05 + .005      | 2.0                                    | 2.0              | 10,000                                        | 1000                                                 | 250                                                              | .03 $\sqrt{f}$ (GHz)       | 670                                         | -(60-fGHz)                 |
|                                                                 | Mechanical Capture                      | 18.0                       | 1.04 + .004      | 2.0                                    | 2.0              | 10,000                                        | 1000                                                 | 250                                                              | .03 $\sqrt{f}$ (GHz)       | 670                                         | -(100-fGHz)                |
|                                                                 | Field Replaceable<br>Hermetic Launchers | 18.0                       | 1.04 + .006      | 2.0                                    | 2.0              | 10,000                                        | 1000                                                 | 250                                                              | .04 $\sqrt{f}$ (GHz)       | 670                                         | -(100-fGHz)                |
|                                                                 | Epoxy Captured                          | 18.0                       | 1.07 + .010      | 2.0                                    | 2.0              | 10,000                                        | 1000                                                 | 250                                                              | .04 $\sqrt{f}$ (GHz)       | 670                                         | -(60-fGHz)                 |
| Bulkhead<br>Feedthrough Jacks                                   | Mechanical Capture                      | 18.0                       | 1.07 + .010      | 2.0                                    | 2.0              | 10,000                                        | 1000                                                 | 250                                                              | .04 $\sqrt{f}$ (GHz)       | 670                                         | -(100-fGHz)                |
| Right-Angle Flange<br>Mount Jacks                               | N/A                                     | 18.0                       | 1.07 + .015      | 2.0                                    | 2.0              | 10,000                                        | 1000                                                 | 250                                                              | .08 $\sqrt{f}$ (GHz)       | 670                                         | -(90-fGHz)                 |
|                                                                 | N/A                                     | 12.4                       | 1.15 + .015      | 2.0                                    | 2.0              | 10,000                                        | 1000                                                 | 250                                                              | .08 $\sqrt{f}$ (GHz)       | 670                                         | -(90-fGHz)                 |
| Printed Circuit Board<br>Mount Straight Terminal                | N/A                                     | 18.0                       | N/A              | 2.0                                    | 2.0              | 10,000                                        | 1000                                                 | 250                                                              | N/A                        | 670                                         | N/A                        |
| Right-Angle<br>Printed Circuit                                  | N/A                                     | 12.4                       | N/A              | 2.0                                    | 2.0              | 10,000                                        | 1000                                                 | 250                                                              | N/A                        | 670                                         | N/A                        |
| End Launch<br>Stripline Circuit                                 | N/A                                     | 18.0                       | 1.05 + .005      | 2.0                                    | 2.0              | 10,000                                        | 1000                                                 | 250                                                              | .03 $\sqrt{f}$ (GHz)       | 670                                         | -(60-fGHz)                 |
| Surface Launch<br>Stripline Circuit                             | N/A                                     | 18.0                       | 1.05 + .005      | 2.0                                    | 2.0              | 10,000                                        | 1000                                                 | 250                                                              | .03 $\sqrt{f}$ (GHz)       | 670                                         | -(60-fGHz)                 |
| Right-Angle Surface<br>Launch Stripline Circuit                 | N/A                                     | 12.4                       | 1.15 + .015      | 2.0                                    | 2.0              | 10,000                                        | 1000                                                 | 250                                                              | .08 $\sqrt{f}$ (GHz)       | 670                                         | -(60-fGHz)                 |
|                                                                 | N/A                                     | 18.0                       | 1.07 + .015      | 2.0                                    | 2.0              | 10,000                                        | 1000                                                 | 250                                                              | .08 $\sqrt{f}$ (GHz)       | 670                                         | -(60-fGHz)                 |

1. Maximum operating frequency of cable per MIL-C-17.
2. Specifications do not apply to hermetic or compression crimp connectors.
3. For Brass SMA: Frequency Range DC-6GHz, Impedance 50 Ohms, Insulation Resistance.

## SMA Connectors (Continued)

### Interface Mating Dimensions



#### Plug

| Dimension | Minimum              | Maximum              |
|-----------|----------------------|----------------------|
| A         | <b>6.35</b><br>.250  | —                    |
| B         | —                    | <b>4.59</b><br>.1808 |
| C         | —                    | <b>3.43</b><br>.135  |
| D         | <b>0.00</b><br>.000  | <b>0.25</b><br>.010  |
| E         | —                    | <b>2.54</b><br>.100  |
| F         | <b>0.00</b><br>.000  | <b>0.25</b><br>.010  |
| G         | <b>0.90</b><br>.0355 | <b>0.94</b><br>.037  |
| H         | <b>0.00</b><br>.000  | <b>0.38</b><br>.015  |

#### Jack

| Dimension | Minimum             | Maximum             |
|-----------|---------------------|---------------------|
| A         | <b>5.28</b><br>.208 | <b>5.49</b><br>.216 |
| B         | <b>4.60</b><br>.181 | —                   |
| C         | <b>1.91</b><br>.075 | <b>1.98</b><br>.078 |
| D         | <b>0.00</b><br>.000 | <b>0.25</b><br>.010 |
| E         | <b>0.38</b><br>.015 | <b>1.43</b><br>.045 |
| F         | <b>2.92</b><br>.115 | —                   |
| G         | <b>0.00</b><br>.000 | <b>0.25</b><br>.010 |
| H         | <b>4.32</b><br>.170 | —                   |
| J         | <b>.124</b><br>.049 | <b>1.30</b><br>.051 |
| K         | <b>5.54</b><br>.218 | —                   |

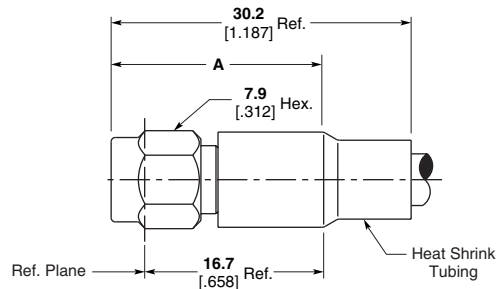
#### Notes:

1. ID to meet VSWR and contact resistance when mated with 0.51  $\pm$  0.025  $\pm$  0.013 [.036  $\pm$  0.0010  $\pm$  0.0005] Dia. Pin.
2. When fully engaged, the two reference planes must coincide with metal to metal contact.
3. Metric equivalents (to the nearest 0.01mm) are given for general information only.

## SMA Connectors (Continued)

### Flexible Cable

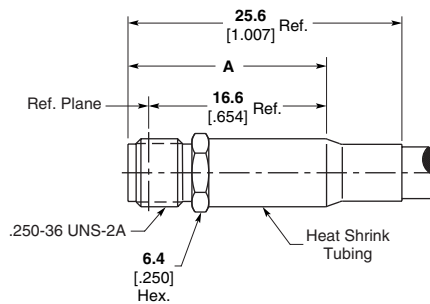
#### Straight Cable Plug, Solder



| Cable Type<br>RG/U                 | Body Material<br>& Finish    | Contact<br>Captivation | Contact<br>Attachment | Dimension<br>A | Instruction<br>Sheet | Part<br>No. |
|------------------------------------|------------------------------|------------------------|-----------------------|----------------|----------------------|-------------|
| 55, 58, 141, 142,<br>223, 303, 400 | Stainless, Gold <sup>1</sup> | No                     | Solder                | 19.7<br>.775   | 408-4821             | 1051638-1   |
| 174, 188, 316                      | Stainless, Gold <sup>1</sup> | No                     | Solder                | 17.5<br>.690   | 408-4756             | 1051644-1   |

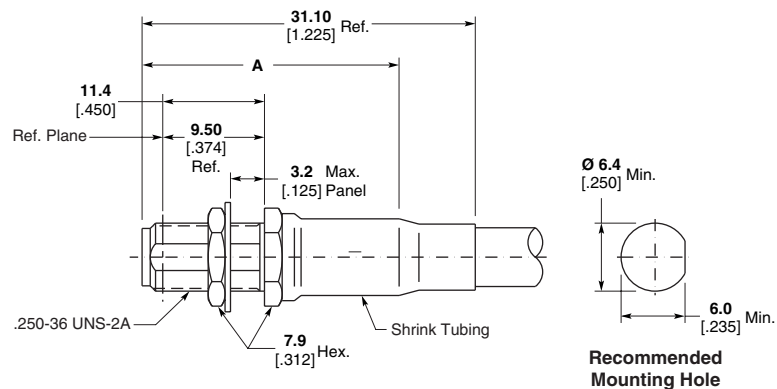
<sup>1</sup>Coupling nut is passivated stainless steel.

#### Straight Cable Jack, Solder



| Cable Type<br>RG/U                 | Body Material<br>& Finish | Contact<br>Captivation | Contact<br>Attachment | Dimension<br>A | Instruction<br>Sheet | Part<br>No. |
|------------------------------------|---------------------------|------------------------|-----------------------|----------------|----------------------|-------------|
| 55, 58, 141, 142,<br>223, 303, 400 | Stainless, Gold           | No                     | Solder                | 18.5<br>.730   | 408-4820             | 1051852-1   |

#### Bulkhead Cable Jack, Solder



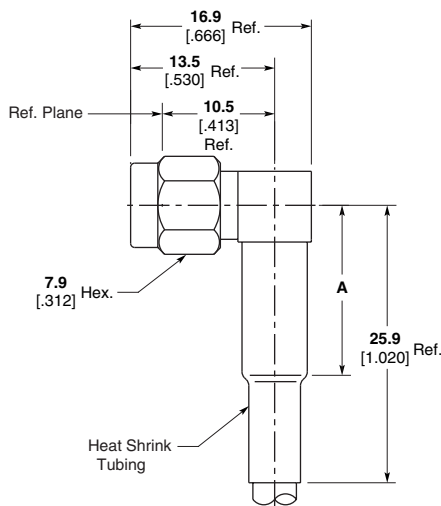
| Cable Type<br>RG/U          | Body Material<br>& Finish | Contact<br>Captivation | Contact<br>Attachment | Dimension<br>A | Instruction<br>Sheet | Part<br>No. |
|-----------------------------|---------------------------|------------------------|-----------------------|----------------|----------------------|-------------|
| RG 55, 58,<br>141, 142, 300 | Stainless, Gold           | No                     | Solder                | 24.0<br>.945   | 408-4817             | 1051861-1   |
| 174, 188, 316               | Stainless, Gold           | No                     | Solder                | 21.0<br>.825   | 408-4817             | 1051942-1   |

**Note:** Part Numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant.

## SMA Connectors (Continued)

### Flexible Cable (Continued)

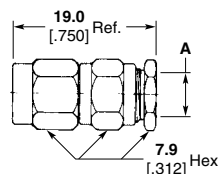
#### Right-Angle Cable Plug, Solder



| Cable Type<br>RG/U                 | Body Material<br>& Finish    | Contact<br>Captivation | Contact<br>Attachment | Dimension<br>A | Instruction<br>Sheet | Part<br>No. |
|------------------------------------|------------------------------|------------------------|-----------------------|----------------|----------------------|-------------|
| 55, 58, 141, 142,<br>223, 303, 400 | Stainless, Gold <sup>1</sup> | Yes                    | Solder                | 16.0<br>.630   | 408-4816             | 1052063-1   |
| 174, 188, 316                      | Stainless, Gold <sup>1</sup> | Yes                    | Solder                | 11.2<br>.440   | 408-4815             | 1052067-1   |

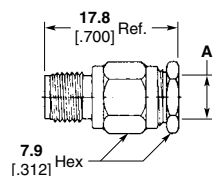
<sup>1</sup>Coupling nut is passivated stainless steel.

#### Straight Cable Plug, Clamp



| Cable Type<br>RG/U | Body Material<br>& Finish | Contact<br>Captivation | Contact<br>Attachment | Dimension<br>A | Instruction<br>Sheet | Part<br>No. |
|--------------------|---------------------------|------------------------|-----------------------|----------------|----------------------|-------------|
| 174, 188, 316      | Stainless, Pass.          | Yes                    | Solder                | 2.9<br>.116    | 408-4906             | 1050721-1   |

#### Straight Cable Jack, Clamp



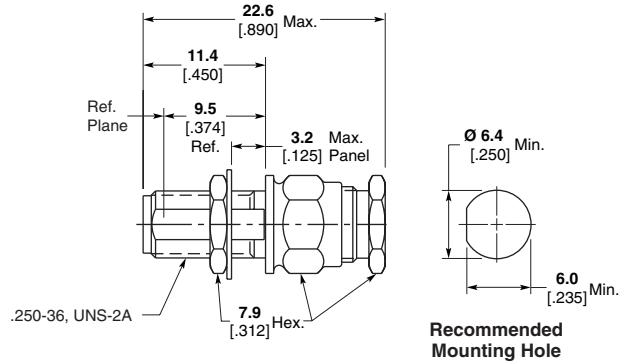
| Cable Type<br>RG/U | Body Material<br>& Finish | Contact<br>Captivation | Contact<br>Attachment | Dimension<br>A | Instruction<br>Sheet | Part<br>No. |
|--------------------|---------------------------|------------------------|-----------------------|----------------|----------------------|-------------|
| 174, 188, 316      | Stainless, Pass.          | Yes                    | Solder                | 2.9<br>.116    | 408-4906             | 1050903-1   |

**Note:** Part Numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant.

## SMA Connectors (Continued)

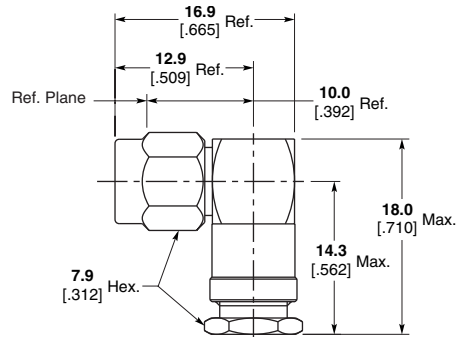
### Flexible Cable (Continued)

#### Bulkhead Feedthrough Cable Jack, Clamp



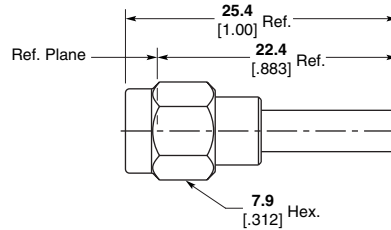
| Cable Type<br>RG/U | Body Material<br>& Finish | Contact<br>Captivation | Contact<br>Attachment | Instruction<br>Sheet | Part<br>No. |
|--------------------|---------------------------|------------------------|-----------------------|----------------------|-------------|
| 174, 188, 316      | Stainless, Pass.          | Yes                    | Solder                | 408-4704             | 1050996-1   |

#### Right-Angle Cable Plug, Clamp



| Cable Type<br>RG/U | Body Material<br>& Finish | Contact<br>Captivation | Contact<br>Attachment | Instruction<br>Sheet | Part<br>No. |
|--------------------|---------------------------|------------------------|-----------------------|----------------------|-------------|
| 174, 188, 316      | Stainless, Pass.          | Mechanical             | Solder                | 408-4965             | 1051140-1   |

#### Straight Cable Plug, Crimp



| Cable Type<br>RG/U         | Body Material<br>& Finish | Contact<br>Captivation | Contact<br>Attachment     | Crimp<br>Tooling<br>Part No. | Instruction<br>Sheet | Part<br>No. |
|----------------------------|---------------------------|------------------------|---------------------------|------------------------------|----------------------|-------------|
| 174, 179, 187,<br>188, 316 | Stainless, Pass.          | Mechanical             | Solder/Crimp <sup>2</sup> | 1055236-1                    | 408-4661             | 1056443-1   |
| RD316                      | Stainless, Pass.          | Mechanical             | Solder/Crimp <sup>2</sup> | 1055236-1 <sup>1</sup>       | 408-4661             | 1056436-1   |
| 55, 142, 223, 400          | Stainless, Pass.          | Mechanical             | Solder/Crimp <sup>2</sup> | 1055236-1                    | 408-4661             | 1056438-1   |
| 174, 179, 187,<br>188, 316 | Brass,<br>White Bronze    | Mechanical             | Solder/Crimp <sup>2</sup> | 1055236-1                    | 408-4661             | 1082034-1   |

<sup>1</sup>Use die 1055270-1 to crimp RD316 ferrule.

<sup>2</sup>Use die 1055880-1 to crimp center contact.

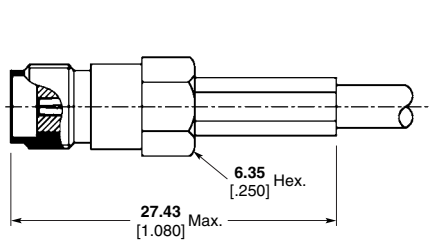
**Note:** Part Numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant.



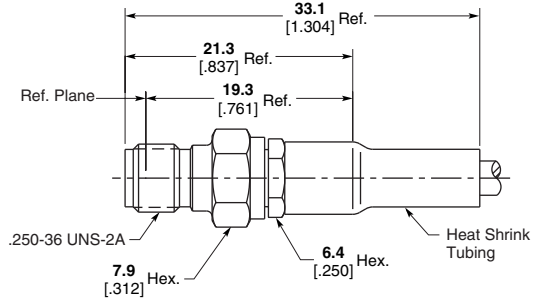
## SMA Connectors (Continued)

### Flexible Cable (Continued)

#### Straight Cable Jack, Crimp



Style A

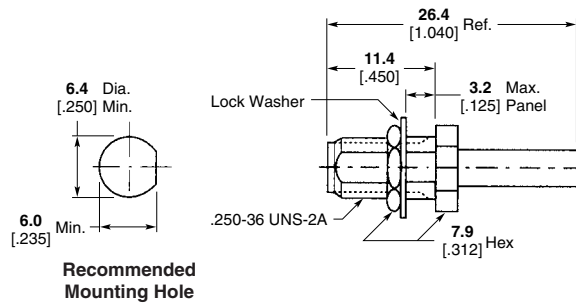


Style B

| Cable Type<br>RG/U | Body Material<br>& Finish | Contact<br>Captivation | Contact<br>Attachment | Crimp<br>Tooling<br>Part No. | Instruction<br>Sheet | Style | Part<br>No.      |
|--------------------|---------------------------|------------------------|-----------------------|------------------------------|----------------------|-------|------------------|
| 174, 316           | Brass, Nickel             | Mechanical             | Solder                | 1                            | 408-4032             | A     | <b>5447648-3</b> |
| 58, 141, 303       | Stainless, Pass.          | Mechanical             | Solder                | 1055236-1                    | 408-4704             | B     | <b>1051867-1</b> |
| 174, 188, 316      | Stainless, Pass.          | Mechanical             | Solder                | 1055236-1                    | 408-4708             | B     | <b>1051855-1</b> |
| 178, 196           | Stainless, Pass.          | Mechanical             | Solder                | 1055236-1                    | 408-4806             | B     | <b>1051869-1</b> |

<sup>1</sup>Refer to Tyco Electronics Customer Print for tooling requirement. DANIELS Mil Tooling used for contact and ferrule crimp.

#### Bulkhead Feedthrough Cable Jack, Crimp



| Cable Type<br>RG/U         | Body Material<br>& Finish | Contact<br>Captivation | Contact<br>Attachment     | Crimp<br>Tooling<br>Part No. | Instruction<br>Sheet | Part<br>No.      |
|----------------------------|---------------------------|------------------------|---------------------------|------------------------------|----------------------|------------------|
| 174, 179, 187,<br>188, 316 | Stainless, Pass.          | Mechanical             | Solder/Crimp <sup>2</sup> | 1055236-1                    | 408-4661             | <b>1056452-1</b> |
| RD316                      | Stainless, Pass.          | Mechanical             | Solder/Crimp <sup>2</sup> | 1055236-1 <sup>3</sup>       | 408-4661             | <b>1056445-1</b> |
| 58, 141, 303               | Stainless, Pass.          | Mechanical             | Solder/Crimp <sup>2</sup> | 1055236-1                    | 408-4661             | <b>1056450-1</b> |
| 55, 142,<br>223, 400       | Stainless, Pass.          | Mechanical             | Solder/Crimp <sup>2</sup> | 1055236-1                    | 408-4661             | <b>1056447-1</b> |
| 174, 188, 316              | Brass, Nickel             | Mechanical             | Crimp                     | 1                            | 408-4032             | <b>5448103-2</b> |

<sup>1</sup>Refer to Tyco Electronics Customer Print for tooling requirement. DANIELS Mil Tooling used for contact and ferrule crimp.

<sup>2</sup>Use die 1055880-1 to crimp center contact.

<sup>3</sup>Use die 1055270-1 to crimp RD316 ferrule.

DANIELS is a trademark of Daniels Manufacturing Corporation.

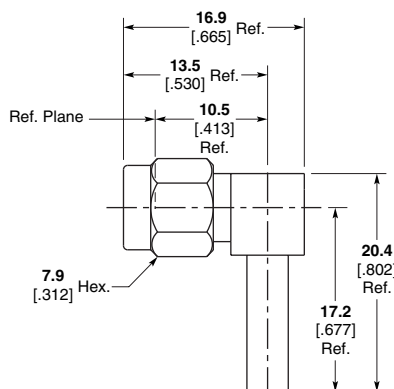
**Note:** Part Numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant.



## SMA Connectors (Continued)

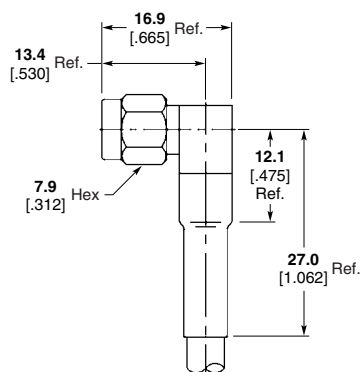
### Flexible Cable (Continued)

**Right-Angle Cable Plug, Crimp**



| Cable Type<br>RG/U         | Body Material<br>& Finish | Contact<br>Captivation | Contact<br>Attachment | Crimp<br>Tooling<br>Part No. | Instruction<br>Sheet | Part<br>No.      |
|----------------------------|---------------------------|------------------------|-----------------------|------------------------------|----------------------|------------------|
| 174, 179, 187,<br>188, 316 | Stainless, Pass.          | Mechanical             | Solder                | 1055236-1                    | 408-4659             | <b>1056462-1</b> |
| 58, 141, 303               | Stainless, Pass.          | Mechanical             | Solder                | 1055236-1                    | 408-4659             | <b>1056456-1</b> |

**Right-Angle Cable Plug, Crimp**



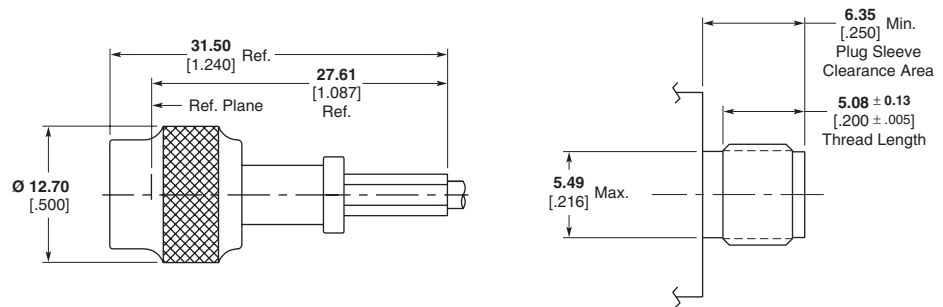
| Cable Type<br>RG/U   | Body Material<br>& Finish | Contact<br>Captivation | Contact<br>Attachment | Crimp<br>Tooling<br>Part No. | Instruction<br>Sheet | Part<br>No.      |
|----------------------|---------------------------|------------------------|-----------------------|------------------------------|----------------------|------------------|
| 55, 142,<br>223, 400 | Stainless, Pass.          | Epoxy                  | Solder                | 1055236-1                    | 408-4681             | <b>1052072-1</b> |
| 174, 188, 316        | Stainless, Pass.          | Epoxy                  | Solder                | 1055236-1                    | 408-4683             | <b>1052076-1</b> |
| 178, 196             | Stainless, Pass.          | Epoxy                  | Solder                | 1055236-1                    | 408-4801             | <b>1052098-1</b> |

**Note:** Part Numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant.

## SMA Connectors (Continued)

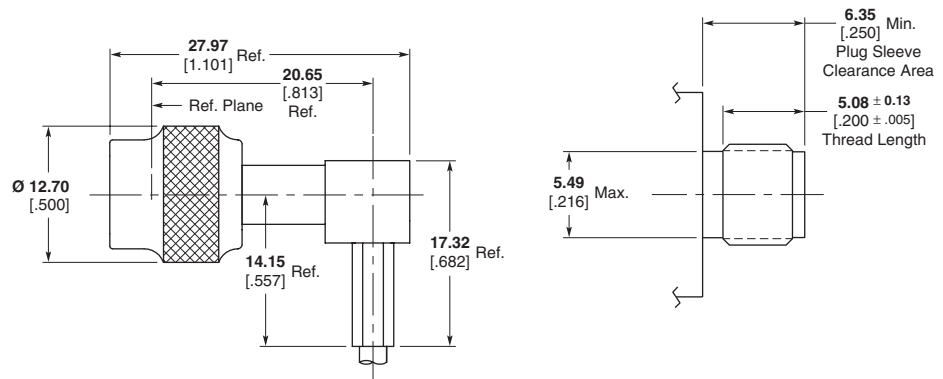
### Flexible Cable (Continued)

#### Straight Push-On



| Cable Type<br>RG/U | Body Material<br>& Finish | Contact<br>Captivation | Contact<br>Attachment | Part<br>No. |
|--------------------|---------------------------|------------------------|-----------------------|-------------|
| 316                | Beryllium Copper, Gold    | Mechanical             | Crimp                 | 1408541-1   |

#### Right-Angle Push-On



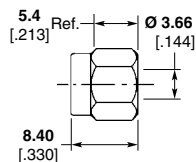
| Cable Type<br>RG/U | Body Material<br>& Finish | Contact<br>Captivation | Contact<br>Attachment | Part<br>No. |
|--------------------|---------------------------|------------------------|-----------------------|-------------|
| 316                | Beryllium Copper, Gold    | Mechanical             | Solder/Crimp          | 1274694-1   |

**Note:** Part Numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant.

## SMA Connectors (Continued)

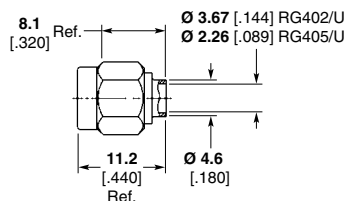
### Direct Solder Attachment, Semi-Rigid Cable

#### Straight Cable Plug



| Cable Type<br>RG/U | Body Material<br>& Finish | Contact<br>Captive   | Contact<br>Attachment | Solder<br>Assembly Kit<br>Part No. | Instruction<br>Sheet | Part<br>No.      |
|--------------------|---------------------------|----------------------|-----------------------|------------------------------------|----------------------|------------------|
| 402 (3.58 [0.141]) | Stainless, Pass.          | No Center<br>Contact | No Center<br>Contact  | 1055420-1                          | 408-4761             | <b>1050757-1</b> |

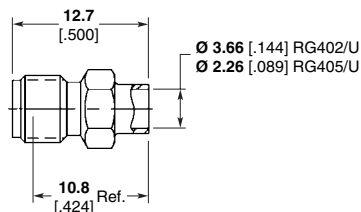
#### Straight Cable Plug



| Cable Type<br>RG/U | Body Material<br>& Finish    | Contact<br>Captive   | Contact<br>Attachment | Solder<br>Assembly Kit<br>Part No. | Instruction<br>Sheet | Part<br>No.      |
|--------------------|------------------------------|----------------------|-----------------------|------------------------------------|----------------------|------------------|
| 402 (3.58 [0.141]) | Stainless, Gold <sup>1</sup> | No                   | Solder                | 1055420-1                          | 408-4764             | <b>1050525-1</b> |
| 405 (2.16 [0.085]) | Stainless, Gold <sup>1</sup> | No                   | Solder                | 1055420-1                          | 408-4765             | <b>1050770-1</b> |
| 402 (3.58 [0.141]) | Stainless, Gold <sup>1</sup> | No Center<br>Contact | No Center<br>Contact  | N/A                                | —                    | <b>1050542-1</b> |
| 405 (2.16 [0.085]) | Stainless, Gold <sup>1</sup> | No                   | Solder                | 1055420-1                          | —                    | <b>1050548-1</b> |

<sup>1</sup>Coupling nut is passivated stainless steel.

#### Straight Cable Jack



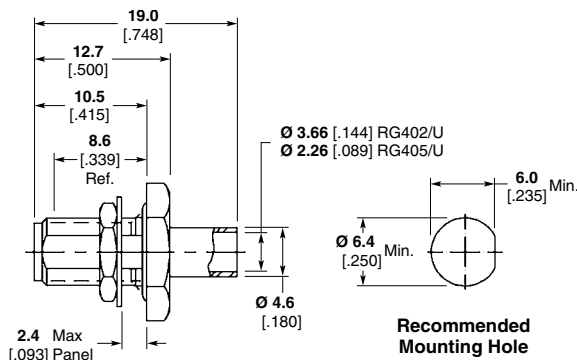
| Cable Type<br>RG/U | Body Material<br>& Finish | Contact<br>Captive | Contact<br>Attachment | Solder<br>Assembly Kit<br>Part No. | Instruction<br>Sheet | Part<br>No.      |
|--------------------|---------------------------|--------------------|-----------------------|------------------------------------|----------------------|------------------|
| 402 (3.58 [0.141]) | Stainless, Gold           | No                 | Solder                | 1055420-1                          | 408-4767             | <b>1050854-1</b> |
| 405 (2.16 [0.085]) | Stainless, Gold           | No                 | Solder                | 1055420-1                          | 408-4833             | <b>1050859-1</b> |

**Note:** Part Numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant.

## SMA Connectors (Continued)

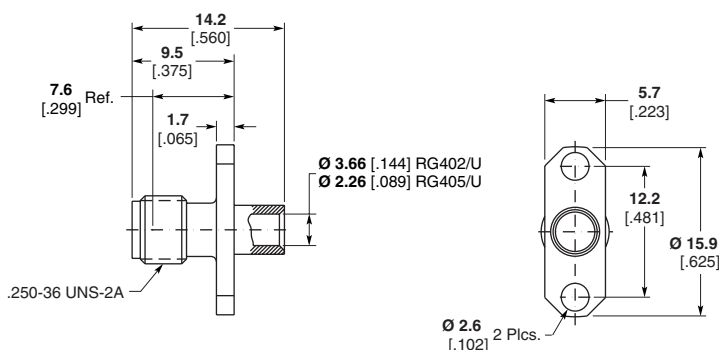
### Direct Solder Attachment, Semi-Rigid Cable (Continued)

#### Bulkhead Cable Jack



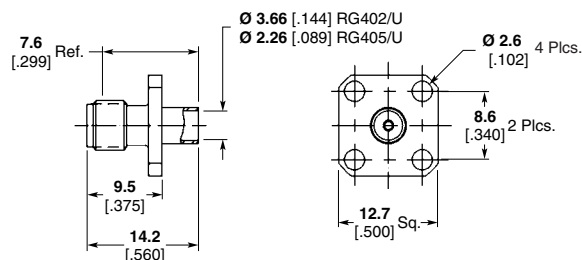
| Cable Type<br>RG/U | Body Material<br>& Finish | Contact<br>Captivation | Contact<br>Attachment | Solder<br>Assembly Kit<br>Part No. | Instruction<br>Sheet | Part<br>No. |
|--------------------|---------------------------|------------------------|-----------------------|------------------------------------|----------------------|-------------|
| 402 (3.58 [1.41])  | Brass, Gold               | No                     | Solder                | 1055420-1                          | 408-4768             | 1082029-1   |

#### 2 Hole Flange Mount Cable Jack



| Cable Type<br>RG/U | Body Material<br>& Finish | Contact<br>Captivation | Contact<br>Attachment | Solder<br>Assembly Kit<br>Part No. | Instruction<br>Sheet | Part<br>No. |
|--------------------|---------------------------|------------------------|-----------------------|------------------------------------|----------------------|-------------|
| 402 (3.58 [1.41])  | Stainless, Gold           | No                     | Solder                | 1055420-1                          | 408-4767             | 1051052-1   |
| 405 (2.16 [1.085]) | Stainless, Gold           | No                     | Solder                | 1055420-1                          | 408-4883             | 1051046-1   |

#### 4 Hole Flange Mount Cable Jack



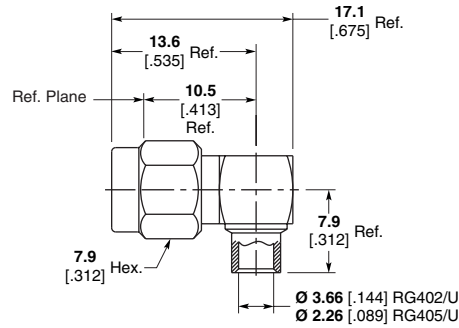
| Cable Type<br>RG/U | Body Material<br>& Finish | Contact<br>Captivation | Contact<br>Attachment | Solder<br>Assembly Kit<br>Part No. | Instruction<br>Sheet | Part<br>No. |
|--------------------|---------------------------|------------------------|-----------------------|------------------------------------|----------------------|-------------|
| 402 (3.58 [1.41])  | Stainless, Gold           | No                     | Solder                | 1055420-1                          | 408-4767             | 1051081-1   |
| 405 (2.16 [1.085]) | Stainless, Gold           | No                     | Solder                | 1055420-1                          | 408-4883             | 1051085-1   |

**Note:** Part Numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant.

## SMA Connectors (Continued)

### Semi-Rigid Cable

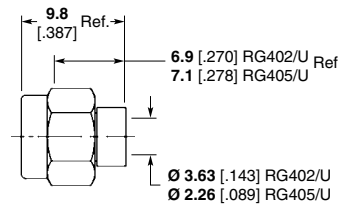
#### Right-Angle Cable Plug, Direct Solder Attachment



| Cable Type<br>RG/U | Body Material<br>& Finish    | Contact<br>Captivation | Contact<br>Attachment | Solder<br>Assembly Kit<br>Part No. | Instruction<br>Sheet | Part<br>No.      |
|--------------------|------------------------------|------------------------|-----------------------|------------------------------------|----------------------|------------------|
| 402 (3.58 [.141])  | Stainless, Gold <sup>1</sup> | Epoxy                  | Solder                | 1055420-1                          | 408-4831             | <b>1051151-1</b> |
| 405 (2.16 [.085])  | Stainless, Gold <sup>1</sup> | Epoxy                  | Solder                | 1055420-1                          | 408-4831             | <b>1051157-1</b> |
| 405 (2.16 [.085])  | Brass, Gold                  | Mechanical             | Solder                | 1055420-1                          | 408-4831             | <b>1088312-1</b> |

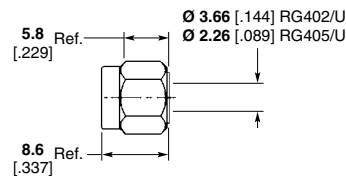
<sup>1</sup>Coupling nut is passivated stainless steel.

#### Straight Cable Plug, Crimp



| Cable Type<br>RG/U | Body Material<br>& Finish | Contact<br>Captivation | Contact<br>Attachment | Crimp<br>Tooling<br>Part No. | Instruction<br>Sheet | Part<br>No.      |
|--------------------|---------------------------|------------------------|-----------------------|------------------------------|----------------------|------------------|
| 405 (2.16 [.085])  | Stainless, Pass.          | Mechanical             | Solderless            | 1055835-1                    | 408-4695             | <b>1050598-1</b> |
| 402 (3.58 [.141])  | Stainless, Pass.          | No Center<br>Contact   | Solderless            | 1055835-1                    | 408-4690             | <b>1050740-1</b> |

#### Straight Cable Plug — Low Profile, Crimp



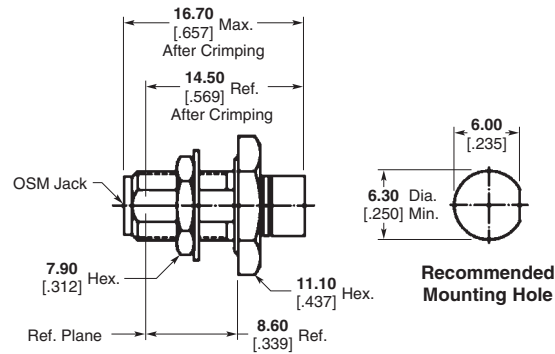
| Cable Type<br>RG/U | Body Material<br>& Finish | Contact<br>Captivation | Contact<br>Attachment | Crimp<br>Tooling<br>Part No. | Instruction<br>Sheet | Part<br>No.      |
|--------------------|---------------------------|------------------------|-----------------------|------------------------------|----------------------|------------------|
| 402 (3.58 [.141])  | Stainless, Pass.          | Mechanical             | Solderless            | 1055835-1                    | 408-4696             | <b>1050602-1</b> |
| 405 (2.16 [.085])  | Stainless, Pass.          | Mechanical             | Solderless            | 1055835-1                    | 408-4697             | <b>1050611-1</b> |

**Note:** Part Numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant.

## SMA Connectors (Continued)

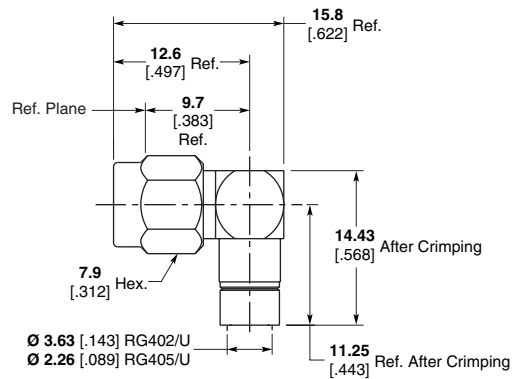
### Semi-Rigid Cable (Continued)

#### 2 Hole Flange, Crimp



| Cable Type<br>RG/U | Body Material<br>& Finish | Contact<br>Captivation | Contact<br>Attachment | Crimp<br>Tooling<br>Part No. | Instruction<br>Sheet | Part<br>No.      |
|--------------------|---------------------------|------------------------|-----------------------|------------------------------|----------------------|------------------|
| 402 (3.58 [.141])  | Stainless, Pass.          | Mechanical             | Solderless            | 1055835-1                    | 408-4954             | <b>1051005-1</b> |
| 405 (2.16 [.085])  | Stainless, Pass.          | Mechanical             | Solderless            | 1055835-1                    | 408-4689             | <b>1051007-1</b> |

#### Right-Angle Cable Plug, Crimp



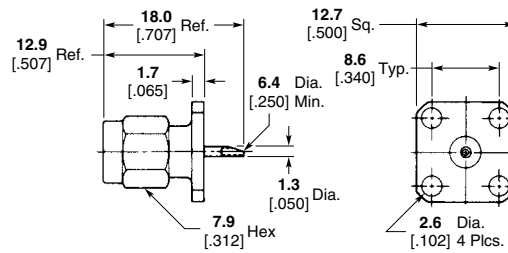
| Cable Type<br>RG/U | Body Material<br>& Finish | Contact<br>Captivation | Contact<br>Attachment | Crimp<br>Tooling<br>Part No. | Instruction<br>Sheet | Part<br>No.      |
|--------------------|---------------------------|------------------------|-----------------------|------------------------------|----------------------|------------------|
| 402 (3.58 [.141])  | Stainless, Pass.          | Mechanical             | Solderless            | 1055835-1                    | 408-4691             | <b>1051145-1</b> |
| 405 (2.16 [.085])  | Stainless, Pass.          | Mechanical             | Solderless            | 1055835-1                    | 408-4692             | <b>1051147-1</b> |

**Note:** Part Numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant.

## SMA Connectors (Continued)

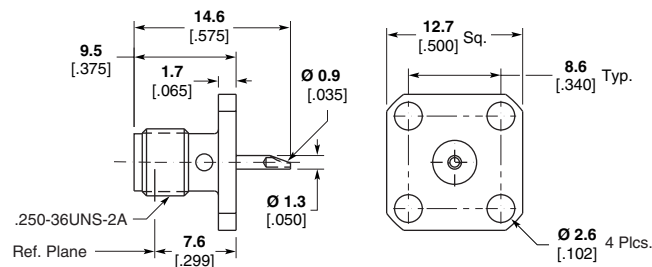
### Panel Mount, Solder Pot Terminal

#### 4 Hole Flange Mount Plug Receptacle



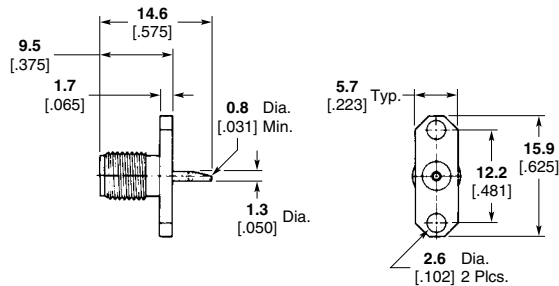
| Body Material & Finish | Contact Captivation | RF Leakage db min. | Temperature Range | Part No.  |
|------------------------|---------------------|--------------------|-------------------|-----------|
| Stainless, Passivated  | Epoxy               | N/A                | -65 to 125° C     | 1052324-1 |

#### 4 Hole Flange Mount Jack Receptacle



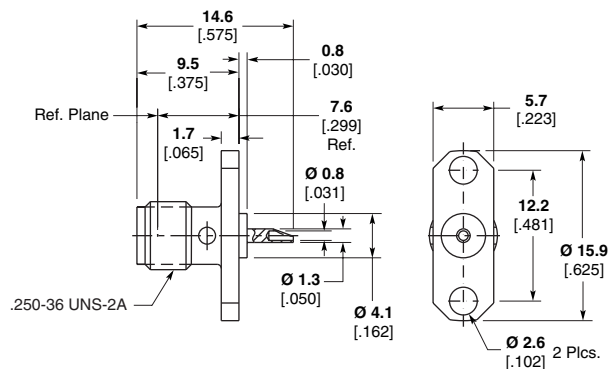
| Body Material & Finish | Contact Captivation | RF Leakage db min. | Temperature Range | Part No.  |
|------------------------|---------------------|--------------------|-------------------|-----------|
| Stainless, Passivated  | Epoxy               | -(60-fGHz)         | -65 to 125° C     | 1052422-1 |

#### 2 Hole Flange Mount Jack Receptacle



| Body Material & Finish | Contact Captivation | RF Leakage db min. | Temperature Range | Part No.  |
|------------------------|---------------------|--------------------|-------------------|-----------|
| Stainless, Passivated  | Epoxy               | -(60-fGHz)         | -65 to 125° C     | 1052544-1 |

#### 2 Hole Flange Mount Jack Receptacle



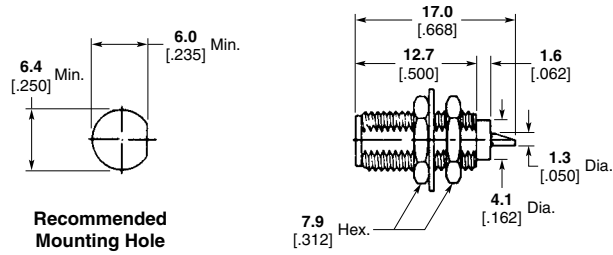
| Body Material & Finish | Contact Captivation | RF Leakage db min. | Temperature Range | Part No.  |
|------------------------|---------------------|--------------------|-------------------|-----------|
| Stainless, Passivated  | Epoxy               | -(60-fGHz)         | -65 to 125° C     | 1052534-1 |

**Note:** Part Numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant.



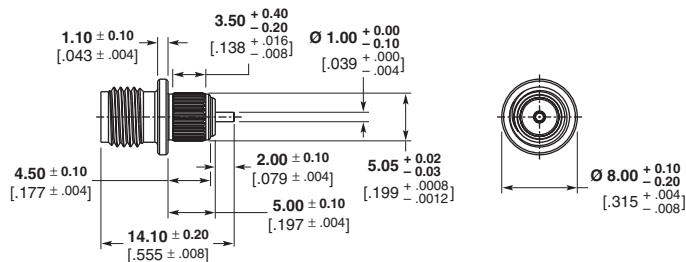
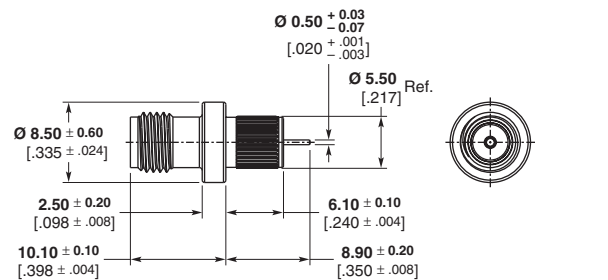
## SMA Connectors (Continued) Panel Mount

### Bulkhead Feedthrough Jack Receptacle, Solder Pot Terminal



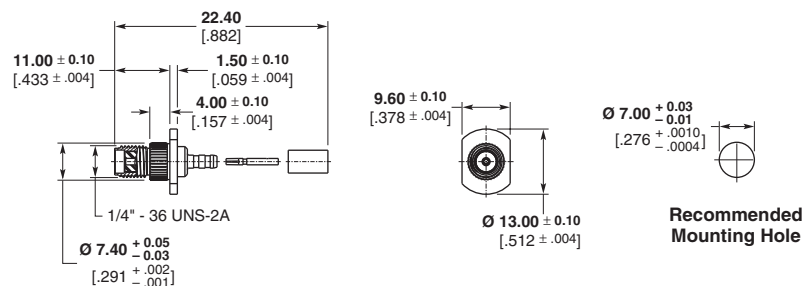
| Body Material & Finish | Contact Captivation | RF Leakage db min. | Temperature Range | Part No.  |
|------------------------|---------------------|--------------------|-------------------|-----------|
| Stainless, Passivated  | Epoxy               | N/A                | -65 to 125° C     | 1053092-1 |

### Press-In Jacks, Straight Terminal



| Body Material & Finish | Contact Captivation | RF Leakage db min. | Temperature Range | Part No.  |
|------------------------|---------------------|--------------------|-------------------|-----------|
| Brass, White Bronze    | Mechanical          | N/A                | -65 to 125° C     | 1460468-1 |
| Brass, Gold            | Mechanical          | N/A                | -65 to 125° C     | 1460469-1 |

### Press-In Cable, Jack Panel

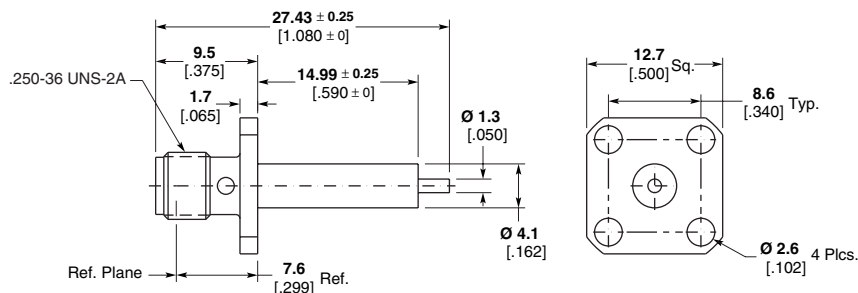


**Note:** Part Numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant.

| Cable Type RG/U | Body Material & Finish | Contact Captivation | Temperature Range | Part No. |
|-----------------|------------------------|---------------------|-------------------|----------|
| 316 D           | Brass, Gold            | Mechanical          | -65 to 125° C     | 619115-1 |

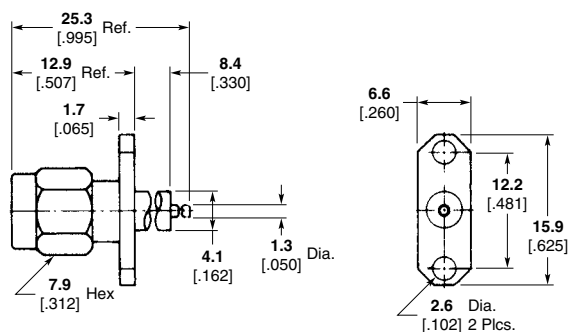
## SMA Connectors (Continued) Panel Mount, Straight Terminal

### 4 Hole Flange Mount Jack Receptacle



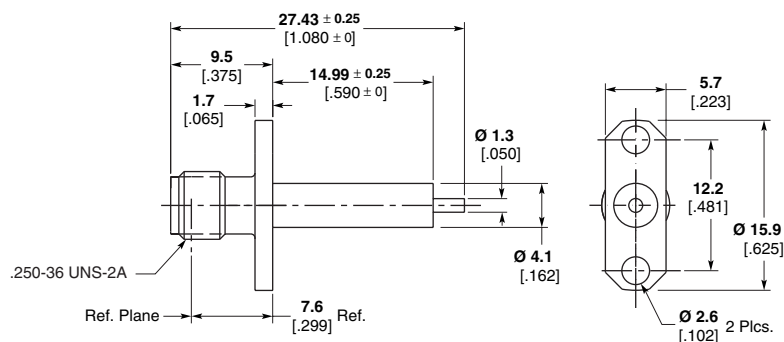
| Body Material & Finish | Contact Captivation | RF Leakage db min. | Temperature Range | Part No.  |
|------------------------|---------------------|--------------------|-------------------|-----------|
| Stainless, Passivated  | None                | -(100-fGHz)        | -65 to 165° C     | 1052518-1 |
| Stainless, Passivated  | Epoxy               | -(60-fGHz)         | -65 to 125° C     | 1052523-1 |
| Stainless, Gold        | Epoxy               | -(60-fGHz)         | -65 to 125° C     | 1052522-1 |

### 2 Hole Flange Mount Plug Receptacle



| Body Material & Finish | Contact Captivation | RF Leakage db min. | Temperature Range | Part No.  |
|------------------------|---------------------|--------------------|-------------------|-----------|
| Stainless, Passivated  | Epoxy               | -(60-fGHz)         | -65 to 125° C     | 1052349-1 |

### 2 Hole Flange Mount Jack Receptacle



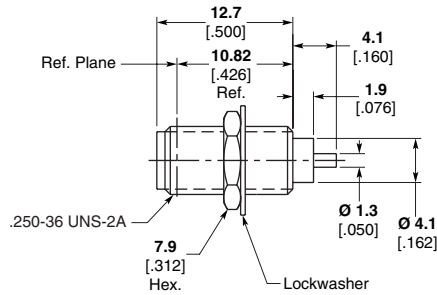
| Body Material & Finish | Contact Captivation | RF Leakage db min. | Temperature Range | Part No.  |
|------------------------|---------------------|--------------------|-------------------|-----------|
| Stainless, Passivated  | Epoxy               | -(60-fGHz)         | -65 to 125° C     | 1052552-1 |

**Note:** Part Numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant.

## SMA Connectors (Continued)

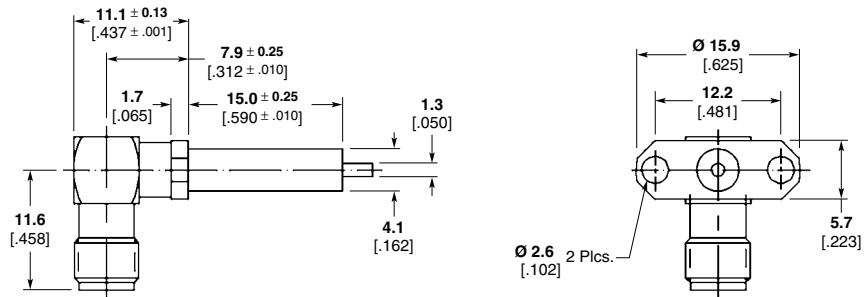
### Panel Mount, Straight Terminal (Continued)

#### Bulkhead Feedthrough Jack Receptacle



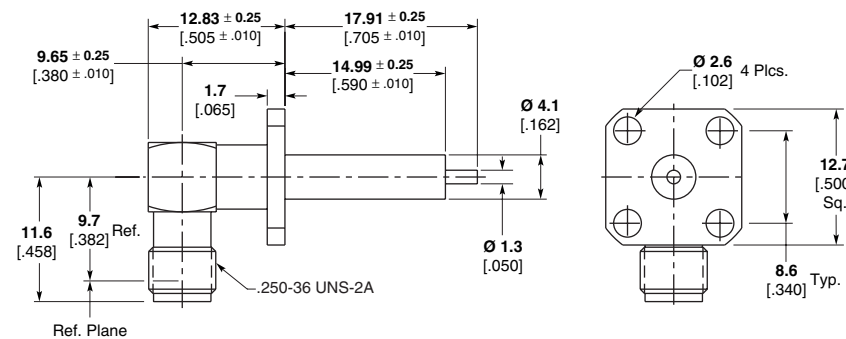
| Body Material & Finish | Contact Captivation | RF Leakage db min. | Temperature Range | Part No.  |
|------------------------|---------------------|--------------------|-------------------|-----------|
| Stainless, Passivated  | Epoxy               | -(60-fGHz)         | -65 to 125° C     | 1053222-1 |

#### 2 Hole Flange Mount Right-Angle Jack Receptacle



| Body Material & Finish | Contact Captivation | RF Leakage db min. | Temperature Range | Part No.  |
|------------------------|---------------------|--------------------|-------------------|-----------|
| Stainless, Passivated  | Mechanical          | -(90-fGHz)         | -65 to 165° C     | 1052986-1 |

#### 4 Hole Flange Mount Right-Angle Jack Receptacle



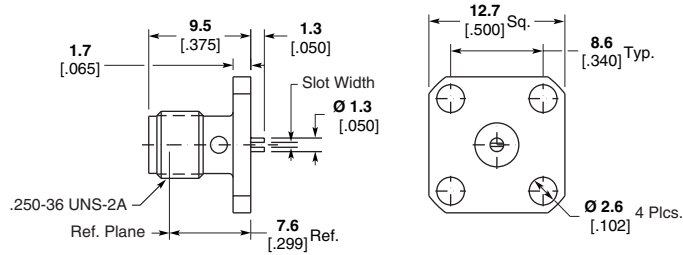
| Body Material & Finish | Contact Captivation | RF Leakage db min. | Temperature Range | Part No.  |
|------------------------|---------------------|--------------------|-------------------|-----------|
| Stainless, Passivated  | Mechanical          | -(90-fGHz)         | -65 to 165° C     | 1052978-1 |
| Stainless, Passivated  | Mechanical          | -(90-fGHz)         | -65 to 165° C     | 1052982-1 |

**Note:** Part Numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant.

## SMA Connectors (Continued)

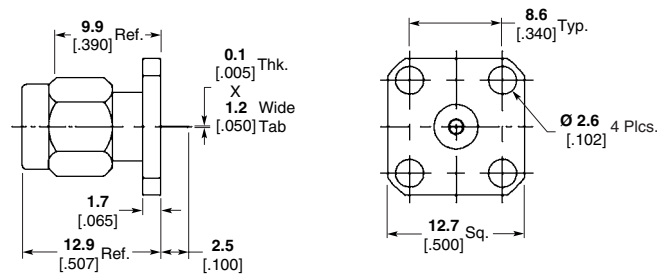
### Panel Mount

#### 4 Hole Flange Mount Jack Receptacle, Straight Terminal



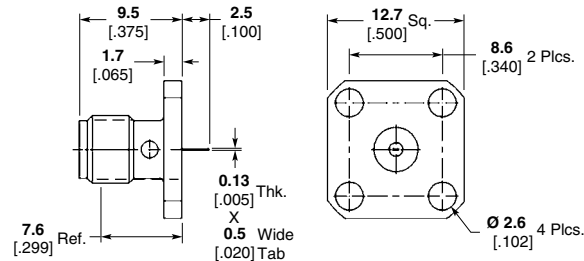
| Body Material & Finish | Contact Captivation | Slot Width<br>+.076/-0.025<br>[+.003/-0.001] | RF Leakage<br>db min. | Temperature<br>Range | Part<br>No. |
|------------------------|---------------------|----------------------------------------------|-----------------------|----------------------|-------------|
| Stainless, Passivated  | Epoxy               | 0.5 [0.018]                                  | -(60-fGHz)            | -65 to 125° C        | 1052563-1   |

#### 4 Hole Flange Mount Plug Receptacle, Tab Terminal



| Body Material & Finish | Contact Captivation | Tab Width   | RF Leakage<br>db min. | Temperature<br>Range | Part<br>No. |
|------------------------|---------------------|-------------|-----------------------|----------------------|-------------|
| Stainless, Passivated  | Epoxy               | 1.3 [0.050] | -(60-fGHz)            | -65 to 125° C        | 1052360-1   |

#### 4 Hole Flange Mount Jack Receptacle, Tab Terminal

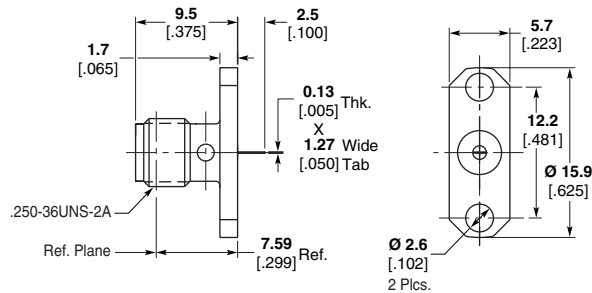


| Body Material & Finish | Contact Captivation | Tab Width   | RF Leakage<br>db min. | Temperature<br>Range | Part<br>No. |
|------------------------|---------------------|-------------|-----------------------|----------------------|-------------|
| Stainless, Passivated  | Epoxy               | .51 [0.020] | -(60-fGHz)            | -65 to 125° C        | 1052898-1   |

**Note:** Part Numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant.

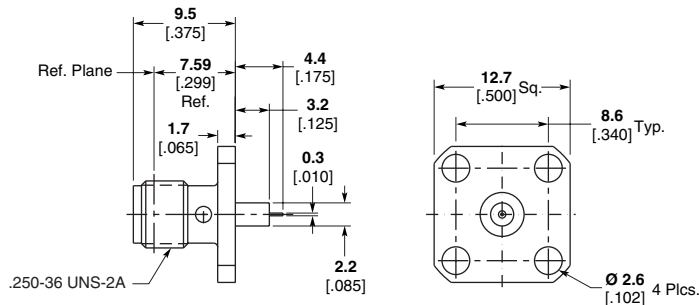
## SMA Connectors (Continued)

### 2 Hole Flange Mount Jack Receptacle, Panel Mount, Tab Terminal



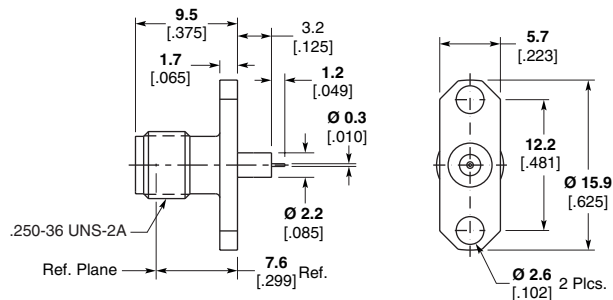
| Body Material & Finish | Contact Captivation | Horizontal Tab | RF Leakage db min. | Temperature Range | Part No.  |
|------------------------|---------------------|----------------|--------------------|-------------------|-----------|
| Stainless, Passivated  | Epoxy               | ↗              | -(60-fGHz)         | -65 to 125° C     | 1052577-1 |

### 4 Hole Flange Mount Jack Receptacle, for Microstrip Transmission Line Circuits



| Body Material & Finish | Contact Captivation | RF Leakage db min. | Temperature Range | Part No.  |
|------------------------|---------------------|--------------------|-------------------|-----------|
| Stainless, Passivated  | Epoxy               | -(60-fGHz)         | -65 to 125° C     | 1052528-1 |

### 2 Hole Flange Mount Jack Receptacle, for Microstrip Transmission Line Circuits



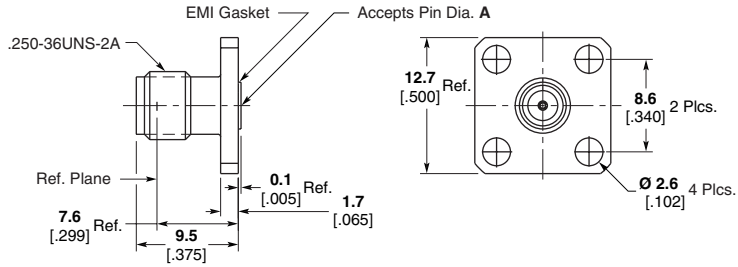
| Body Material & Finish | Contact Captivation | RF Leakage db min. | Temperature Range | Part No.  |
|------------------------|---------------------|--------------------|-------------------|-----------|
| Stainless, Passivated  | Epoxy               | -(60-fGHz)         | -65 to 125° C     | 1052902-1 |

**Note:** Part Numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant.

## SMA Connectors (Continued)

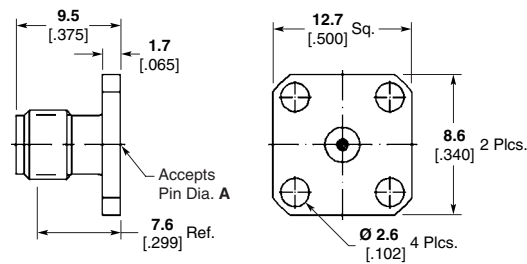
### Field Replaceable Hermetic Launchers (Continued)

#### 4 Hole Flange Mount Jack Receptacle with EMI/RFI Gasket



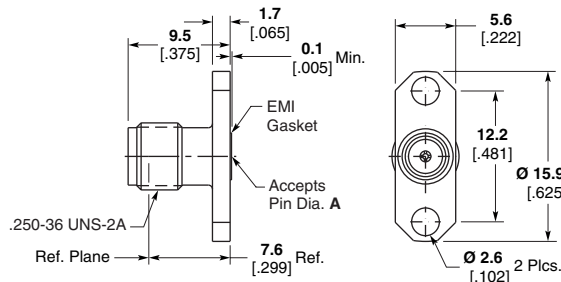
| Material & Finish     | Captivation | Pin Diameter A | Part No.  |
|-----------------------|-------------|----------------|-----------|
| Stainless, Passivated | Mechanical  | .38 [.015]     | 1052684-1 |

#### 4 Hole Flange Mount Jack Receptacle without EMI/RFI Gasket



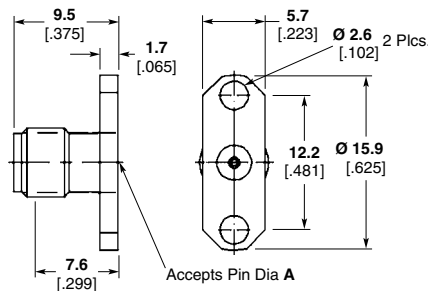
| Material & Finish     | Captivation | Pin Diameter A | Part No.  |
|-----------------------|-------------|----------------|-----------|
| Stainless, Passivated | Mechanical  | .91 [.036]     | 1052643-1 |

#### 2 Hole Flange Mount Jack Receptacle with EMI/RFI Gasket



| Material & Finish     | Captivation | Pin Diameter A | Part No.  |
|-----------------------|-------------|----------------|-----------|
| Stainless, Passivated | Mechanical  | .30 [.012]     | 1052628-1 |
| Stainless, Passivated | Mechanical  | .38 [.015]     | 1052689-1 |
| Stainless, Passivated | Mechanical  | .46 [.018]     | 1052634-1 |

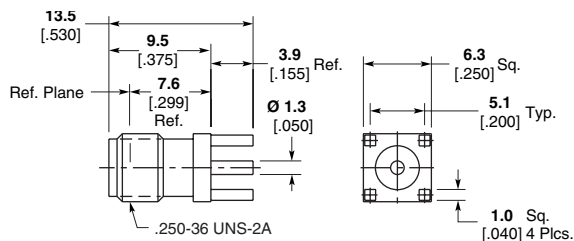
#### 2 Hole Flange Mount Jack Receptacle without EMI/RFI Gasket, Field Replaceable Hermetic Launchers



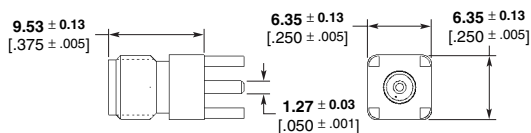
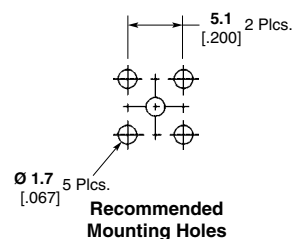
| Material & Finish     | Captivation | Pin Diameter A | Part No.  |
|-----------------------|-------------|----------------|-----------|
| Stainless, Passivated | Mechanical  | .51 [.020]     | 1052652-1 |
| Stainless, Passivated | Mechanical  | .91 [.036]     | 1052646-1 |

**Note:** Part Numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant.

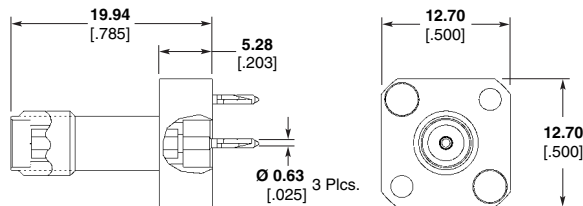
## PC Board Mount Vertical Jack



### Style 1



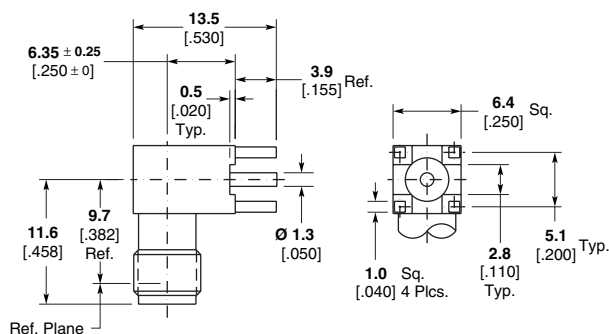
### Style 2



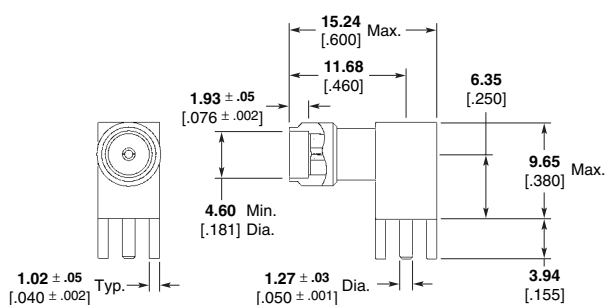
### Style 3

| Material & Finish   | Style No. | Part No.  |
|---------------------|-----------|-----------|
| Stainless, Gold     | 1         | 1053354-1 |
| Brass, Gold         | 2         | 221789-1  |
| Brass, Gold         | 2         | 221789-3  |
| Brass, Nickel Plate | 3         | 6274096-1 |

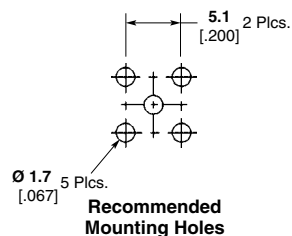
## PC Board Mount Right-Angle Jack



### Style 1



### Style 2



| Material & Finish | Style No. | Part No.  |
|-------------------|-----------|-----------|
| Stainless, Gold   | 1         | 1053378-1 |
| Stainless, Gold   | 2         | 221790-1  |

Catalog 1307191  
Revised 3-07  
[www.tycoelectronics.com](http://www.tycoelectronics.com)

Dimensions are in millimeters and inches unless otherwise specified. Values in brackets are standard equivalents.

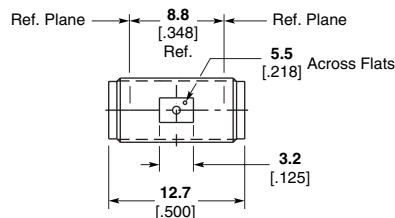
Dimensions are shown for reference purposes only.  
Specifications subject to change.

USA: 1-800-522-6752  
Canada: 1-905-470-4425  
Mexico: 01-800-733-8926  
C. America: 52-55-1106-0803

South America: 55-11-2103-6000  
Hong Kong: 852-2735-1628  
Japan: 81-44-844-8013  
UK: 44-8706-080-208

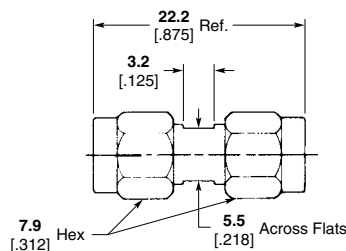
## SMA Connectors (Continued)

### In-Series Adapter, Jack to Jack



| Frequency  | Material & Finish | Captivation | Part No.  |
|------------|-------------------|-------------|-----------|
| DC-18.0GHz | Stainless, Gold   | Epoxy*      | 1053488-1 |

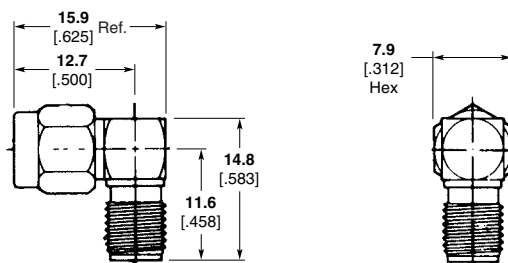
### In-Series Adapter, Plug to Plug



| Frequency  | Material & Finish     | Captivation | Part No.  |
|------------|-----------------------|-------------|-----------|
| DC-18.0GHz | Stainless, Passivated | Epoxy*      | 1053635-1 |

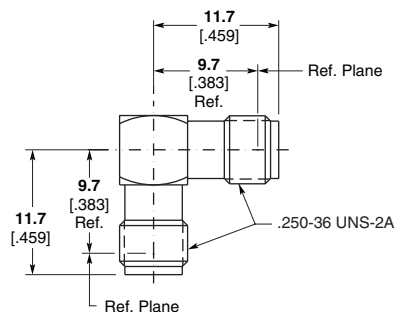
\*All adapters listed above employ epoxy captivation. Mechanically captivated versions are also available. Please consult Tyco Electronics.

### In-Series Adapter, Jack to Plug, Right-Angle



| Frequency  | Material & Finish     | Captivation | Part No.  |
|------------|-----------------------|-------------|-----------|
| DC-12.4GHz | Stainless, Passivated | Mechanical  | 1055065-1 |

### In-Series Adapter, Jack to Jack, Right-Angle



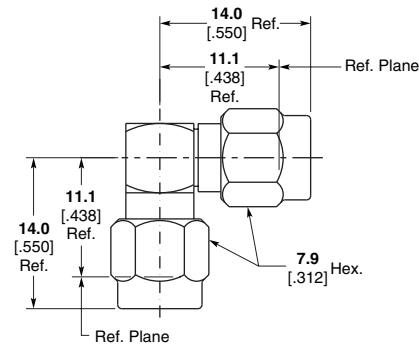
| Frequency  | Material & Finish     | Captivation | Part No.  |
|------------|-----------------------|-------------|-----------|
| DC-12.4GHz | Stainless, Passivated | Mechanical  | 1055018-1 |

**Note:** Part Numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant.



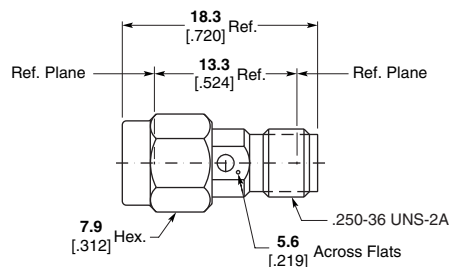
## SMA Connectors (Continued)

### In-Series Adapter, Plug to Plug, Right-Angle



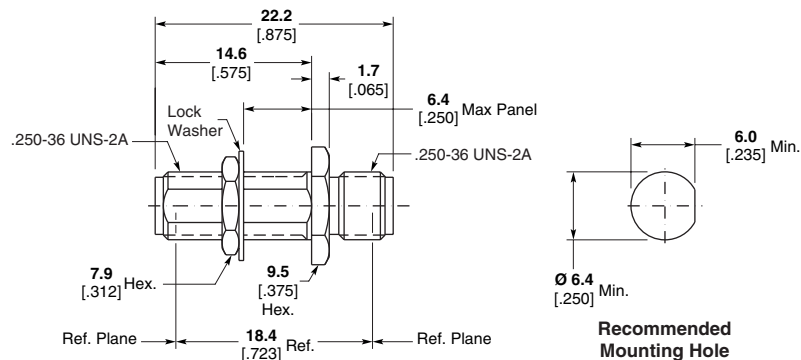
| Frequency  | Material & Finish     | Captivation | Part No.  |
|------------|-----------------------|-------------|-----------|
| DC-18.0GHz | Stainless, Passivated | Mechanical  | 1055047-1 |

### In-Series Adapter, Jack to Plug, Connector Saver



| Frequency  | Material & Finish     | Captivation | Part No.  |
|------------|-----------------------|-------------|-----------|
| DC-18.0GHz | Stainless, Passivated | Epoxy       | 1054426-1 |

### In-Series Adapter, Jack to Jack, Bulkhead Feedthrough

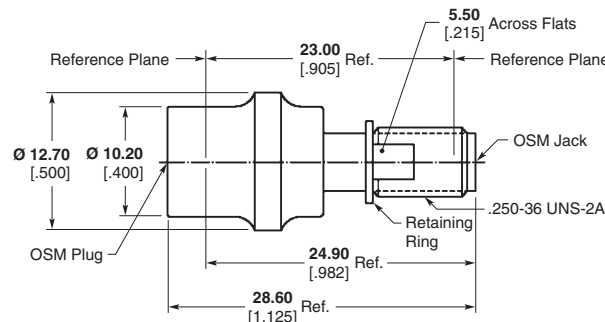


**Recommended  
Mounting Hole**

| Frequency  | Material & Finish     | Captivation | Part No.  |
|------------|-----------------------|-------------|-----------|
| DC-18.0GHz | Stainless, Passivated | Epoxy*      | 1054869-1 |

\*Mechanically captivated version available. Please consult Tyco Electronics.

### Test Adapter, Plug to Jack, Quick Release



| Frequency  | Material & Finish     | Captivation | Part No.  |
|------------|-----------------------|-------------|-----------|
| DC-18.0GHz | Stainless, Passivated | Epoxy       | 1053780-1 |

**Note:** Part Numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant.

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[TE Connectivity:](#)

[1052902-1](#)