

## F Series and G Series Connectors

### Product Facts

- Designs meet SCTE requirements where applicable
- Plugs, jacks and adapters available
- Board mount and cable mount available
- Surface mount connectors available
- Sealed product available
- High current carrying capabilities



Tyco Electronics F Series connectors offer performance, which is driven by evolving OEM requirements and expectations. Improved VSWR beyond 1 GHz, high current carrying capability, and pressure sealed products are now part of the standard product offering. Designs compliant with ANSI/SCTE, Bellcore, UL/CSA, and various other

industry and agency standards are also available.

Both cable applied and PCB terminated products are offered in a variety of styles. The cable connectors are designed for fast, accurate termination with tools common to the industry. Application cost reductions can be achieved using Tyco Electronics PCB terminated products; press-fit designs eliminate the

need for soldering. Center of gravity control and PCB retention designs prevent tipping and eliminate fixturing during soldering. Integral mechanical keys and "D flats" prevent rotation in panels.

These products provide the highly reliable, cost-effective solutions demanded by today's evolving marketplace.

### Product Specification

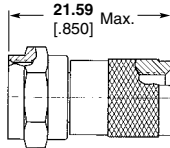
108-1518 — Connector Coaxial, F Series, RF, Single Crimp Plug  
 108-1643 — Connector Coaxial, F Series, RF, PCB Mounted  
 108-1755 — Connector Economy, F Series, RF Coaxial, PCB  
 108-1757 — Connector, 15 amp, G Series Jack, PCB  
 108-1758 — Connector, F Series Jack, PCB, Surface Mount  
 108-1629 — Feedthrough, Sealed F Port Jack

### Instruction Sheets

408-9221 — Coaxial Series F Plug Connectors  
 408-4402 — Series F & G Coaxial Cable Bulkhead Jack Connector  
 408-4291 — PRO-CRIMPER II Hand Tool Assembly 58622-1 and 58622-2

## F Series Connectors

### Plugs



**Crimp Style  
A**



**Screw-On Style  
B**



**Crimp Style, Hex  
C**

| RG/U Cable               | Termination Type | Body Plating | Style | "B" Threads | PRO-CRIMPER† Hand Tool Assembly | Part No. |
|--------------------------|------------------|--------------|-------|-------------|---------------------------------|----------|
| 6                        | Crimp            | Nickel       | A     | —           | 58425-3, 58436-2, or 58621-2    | 221539-2 |
| 6                        | Screw-On         | Nickel       | B     | M7x1        | —                               | 221540-2 |
| 59<br>BELDEN 9104, 9100* | Crimp            | Nickel       | C     | —           | 58425-3, 58436-2, or 58621-2    | 414766-1 |
| 59                       | Crimp            | Nickel       | C     | —           | 58425-3, 58436-2, or 58621-2    | 414766-8 |

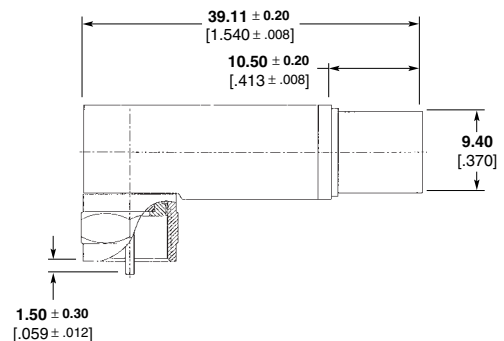
\*NID to inside cable.

† 8.23 [.324] Hex Crimp.



| RG/U Cable                 | Termination Type | Center Contact Plating | Body Plating | Termination Tooling                                                                                                    | Part No.  |
|----------------------------|------------------|------------------------|--------------|------------------------------------------------------------------------------------------------------------------------|-----------|
| 179<br>Headend Patch Panel | Crimp            | Tin                    | Nickel       | Braid: M 22520/5-01 w/ DANIELS Die Set Hx4-1637 (.128 Hex)<br>Contact: M 22520/2-01 w/ DANIELS Positioner K727, Pos. 2 | 5415226-1 |

### Right-Angle Plugs, Crimp



| RG/U Cable      | Termination Type | Center Contact Plating | Body Plating | Termination Tooling | Part No. |
|-----------------|------------------|------------------------|--------------|---------------------|----------|
| 6<br>Std. Cable | Crimp            | Tin                    | Nickel       | use .324 inch Hex   | 887098-1 |

BELDEN is a trademark of Belden Wire and Cable Company.

DANIELS is a trademark of Daniels Manufacturing Corporation.

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

## F Series Connectors (Continued)

### Bulkhead Jacks, Crimp, Rear Mount



| RG/U Cable | Center Contact Plating | Body Plating | Die Set   | Part No.  |
|------------|------------------------|--------------|-----------|-----------|
| 179        | Bright Tin             | Nickel       | 220210-1* | 5415712-1 |

\*Use with hand tool 354940-1

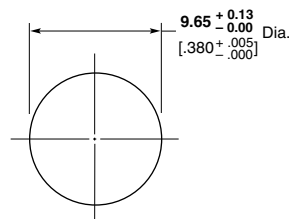
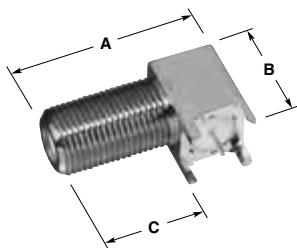
### Bulkhead Jacks, Crimp, Splash Resistant, Front Mount



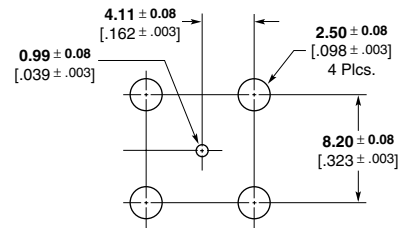
| RG/U Cable | Center Contact Plating | Body Plating | Die Set   | Part No.  |
|------------|------------------------|--------------|-----------|-----------|
| 179        | Bright Tin             | Nickel       | 220210-1* | 5415569-2 |

\*Use with hand tool 354940-1

### Right-Angle PC Board Mount Jacks

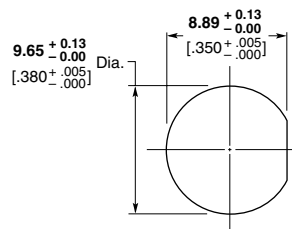
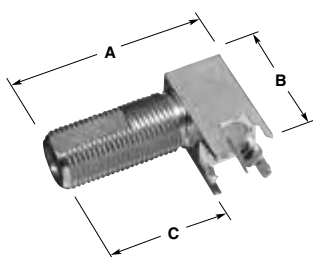


Recommended Panel Cutout

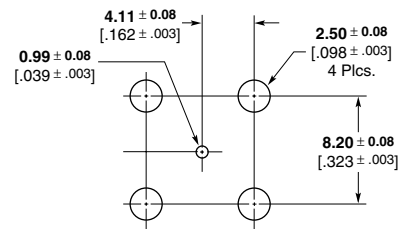


PC Board Layout

| Body Plating |      | Center Contact Plating | Dimensions     |               |               | Part No.  |
|--------------|------|------------------------|----------------|---------------|---------------|-----------|
| Barrel       | Base |                        | A              | B             | C             |           |
| Nickel       | Tin  | Tin                    | 25.40<br>1.00  | 14.48<br>.570 | 15.90<br>.626 | 5415302-1 |
| Nickel       | Tin  | Tin                    | 31.75<br>1.250 | 14.48<br>.570 | 22.25<br>.876 | 5415302-2 |



Recommended Panel Cutout



PC Board Layout

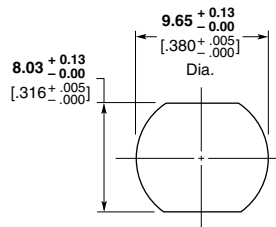
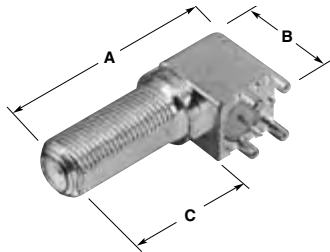
| Body Plating |      | Center Contact Plating | Dimensions     |               |               | Part No.  |
|--------------|------|------------------------|----------------|---------------|---------------|-----------|
| Barrel       | Base |                        | A              | B             | C             |           |
| Nickel       | Tin  | Tin                    | 29.97<br>1.180 | 17.53<br>.690 | 12.19<br>.480 | 5887078-1 |

\*Connectors will accept a center conductor, diameter of **0.51-1.19** [.020-.047]

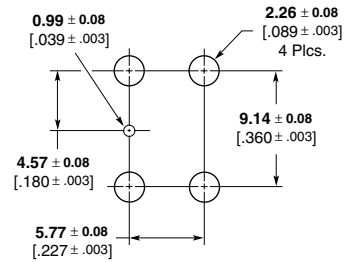
**Note:** Part Numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant.

## F Series Connectors (Continued)

### Right-Angle PC Board Mount Jacks (Continued)



Recommended Panel Cutout



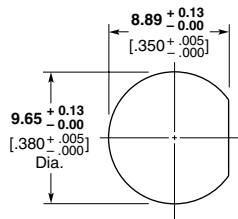
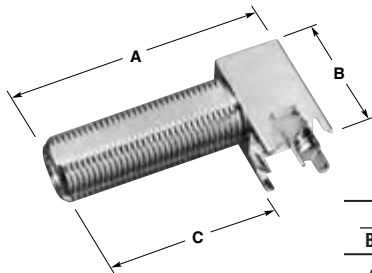
PC Board Layout

| Body Plating |      | Center Contact Plating | Dimensions     |               |               | Part No.   |
|--------------|------|------------------------|----------------|---------------|---------------|------------|
| Barrel       | Base |                        | A              | B             | C             |            |
| Nickel       | Tin  | Tin                    | 33.81<br>1.331 | 15.75<br>.620 | 19.86<br>.782 | 5415276-2* |

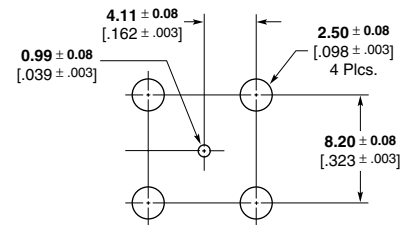
\*Connector will accept center conductor diameter range of 0.56-1.19 [0.022-.047].

### Right-Angle PC Board Mount Jack, High Temperature

\*High temperature versions use PTFE dielectric (see table)



Recommended Panel Cutout



PC Board Layout

| Dielectric |        |               | Solder Post Plating | Dimensions     |               |                | Part No.   |
|------------|--------|---------------|---------------------|----------------|---------------|----------------|------------|
| Bottom     | Middle | Front         |                     | A              | B             | C              |            |
| Acetal     | Acetal | Polypropylene | Nickel              | 35.61<br>1.402 | 16.89<br>.665 | 26.11<br>1.028 | 5415024-1  |
| Acetal     | Acetal | Polypropylene | Tin                 | 35.61<br>1.402 | 16.89<br>.665 | 26.11<br>1.028 | 5415024-3  |
| PTFE       | PTFE   | PTFE          | Tin                 | 25.40<br>1.00  | 17.91<br>.705 | 14.99<br>.590  | 5415214-1* |

\*Pin in paste reflow / high temperature processing.

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

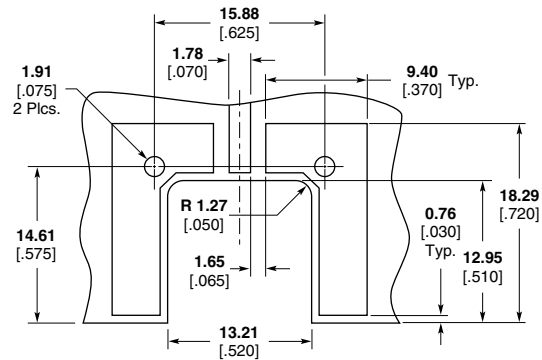
## F Series Connectors (Continued)

### Surface Mount, Straddle Jack

Contact will accept center conductor diameter range **0.56–1.19** [.022–.047]  
Center of gravity balanced for automated pick and place and anti-tipping during solder reflow process.



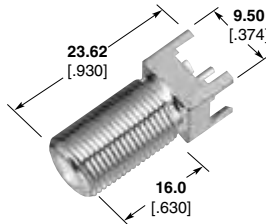
Part No. 5415322-2



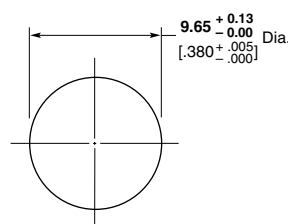
Recommended PC Board Layout

### Vertical PC Board Mount Jacks

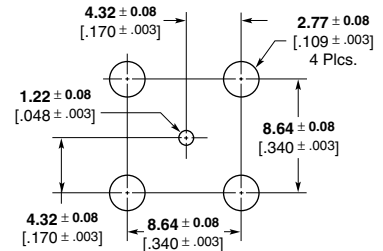
Connector will accept a center conductor diameter of **0.56–1.19** [.022–.047]



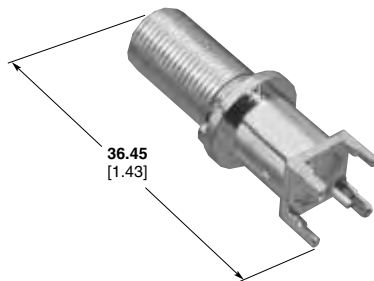
Part No. 5887046-1



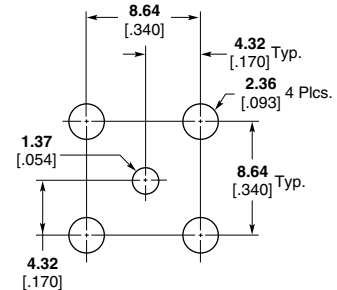
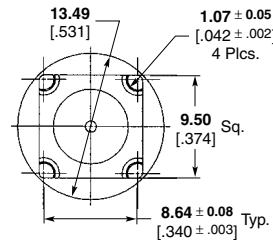
Recommended Panel Cutout



PC Board Layout



Part No. 6274020-1



PC Board Layout

### Adapters

#### Jack to Jack Feed through Adapter



Part No. 282938-2

#### Jack to Plug Right-Angle Adapter



Part No. 5887089-1

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

## G Series Connectors

### Bulkhead Jack, Crimp



| RG/U Cable | Termination Type | Body Plating | Part No.  |
|------------|------------------|--------------|-----------|
| 179        | Crimp            | Nickel       | 5415683-1 |

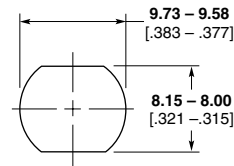
Termination Tooling: Use 220210-1 die set for Contact only.  
Use Certi-Crimp Hand Tool 220009-1 for ferrule.

### Bulkhead Jack, PC Board

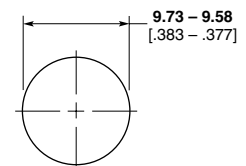
Connector will accept center conductor diameter range **0.97–1.65** [.038–.065] (415332-1 only)



Part No. 5415332-1 (15 Amp)  
Part No. 6274032-1



Recommended Panel Cutout  
for 5415332-1



Recommended Panel Cutout  
for 6274032-1

### Jack, Bulkhead PC Board

Connector will accept center conductor diameter range **0.97–1.07** [.038–.042]



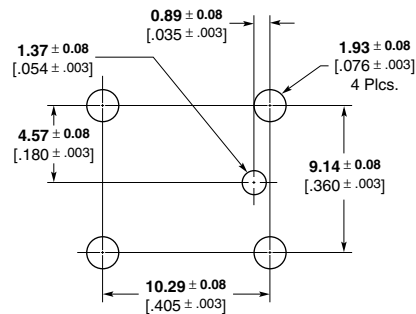
Part No. 5887000-1

### Right-Angle PC Board Mount Plug

Includes board retention feature to prevent tipping during solder process.



Part No. 5415406-2

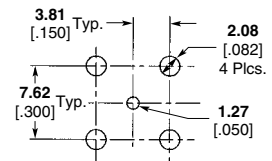
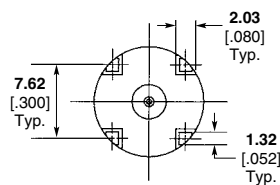


PC Board Layout

### Vertical PC Board Mount Plug



Part No. 6274045-1



PC Board Layout

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

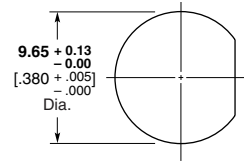
## G Series Connectors (Continued)

### Adapters

#### F Jack to G Jack Bulkhead Adapter



Part No. 415327-1



Recommended Panel Cutout

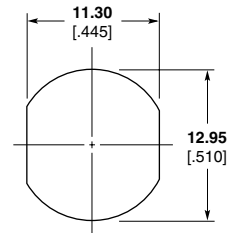
#### F Jack to G Plug Bulkhead Adapter

Connector will accept center conductor diameter range of **0.51–1.19** [.020–.047].

Panel nut 887003-3 available for float mounting.



Part No. 415523-1



Recommended Panel Cutout

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