

### 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; pressfit 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

Screw-On Style

Crimp Style, Hex

<b> </b>	21.59 [.850] Max>
A	

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

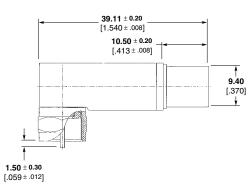
<sup>\*</sup>NID to inside cable. † **8.23** [.324] Hex Crimp.



RG/U Cable	Termination Type	Center Contact Plating	Body Plating	Termination Tooling	Part No.	
179	0-1	T:	NU-last	Braid: M 22520/5-01 w/ DANIELS Die Set Hx4-1637 (.128 Hex)	E41E006 1	
Headend Patch Panel	Crimp	Tin	Nickel	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 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.

www.tycoelectronics.com

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



# 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

<sup>\*</sup>Use with hand tool 354940-1

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

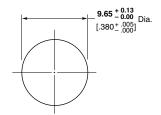


RG/U Cable	Center Contact Plating	Body Plating	Die Set	Part No.
179	Bright Tin	Nickel	220210-1*	5415569-2

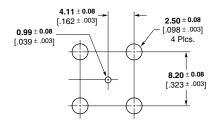
<sup>\*</sup>Use with hand tool 354940-1

## Right-Angle PC Board Mount Jacks



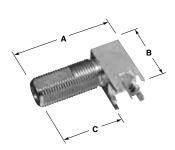




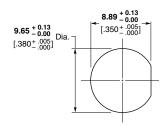


**PC Board Layout** 

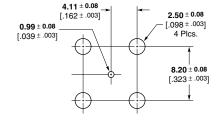
Body Plating		Center Contact		Dimensions		
Barrel	Base	Plating	Α	В	С	No.
Nickel	Tin	Tin	<b>25.40</b> 1.00	<b>14.48</b> .570	<b>15.90</b> .626	5415302-1
Nickel	Tin	Tin	<b>31.75</b> 1.250	<b>14.48</b> .570	<b>22.25</b> .876	5415302-2



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



**Recommended Panel Cutout** 



**PC Board Layout** 

Body Plating		Center Contact		Dimensions		
Barrel	Base	Plating	Α	В	С	No.
Nickel	Tin	Tin	<b>29.97</b> 1.180	<b>17.53</b> .690	<b>12.19</b> .480	5887078-1

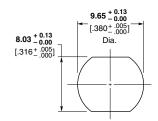
Note: Part Numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant.



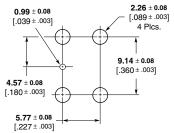
# F Series Connectors (Continued)

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





**Recommended Panel Cutout** 



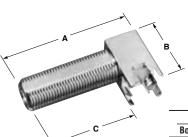
PC Board Layout

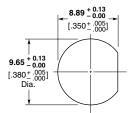
Body	Plating	Center Contact		Dimensions		Part
Barrel	Base	Plating	Α	В	С	No.
Nickel	Tin	Tin	<b>33.81</b> 1.331	<b>15.75</b> .620	<b>19.86</b> .782	5415276-2*

<sup>\*</sup>Connector will accept center conductor diameter range of 0.56-1.19 [.022-.047].

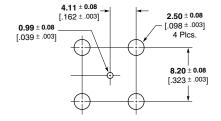
## Right-Angle PC Board Mount Jack, High Temperature

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





**Recommended Panel Cutout** 



**PC Board Layout** 

	Dielectric		Solder Post	Dimensions			Part	
Bottom	Middle	Front	Plating	Α	В	С	No.	
Acetal	Acetal	Polypropylene	Nickel	<b>35.61</b> 1.402	<b>16.89</b> .665	<b>26.11</b> 1.028	5415024-1	
Acetal	Acetal	Polypropylene	Tin	<b>35.61</b> 1.402	<b>16.89</b> .665	<b>26.11</b> 1.028	5415024-3	
PTFE	PTFE	PTFE	Tin	<b>25.40</b> 1.00	<b>17.91</b> .705	<b>14.99</b> .590	5415214-1	

<sup>\*</sup>Pin in paste reflow / high temperature processing.

 $\textbf{Note:} \ \mathsf{Part} \ \mathsf{Numbers} \ \mathsf{are} \ \mathsf{RoHS} \ \mathsf{compliant} \ \mathsf{except:} \ \blacklozenge \ \mathsf{Indicates} \ \mathsf{non-RoHS} \ \mathsf{compliant}.$ 



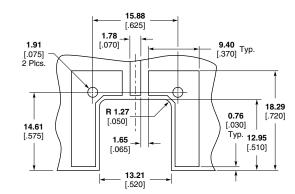
## F Series Connectors (Continued)

### 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



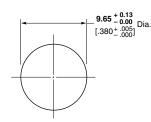
Recommended PC Board Layout

## Vertical PC Board Mount Jacks

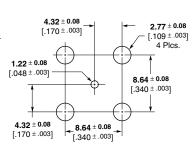
Connector will accept a center conductor diameter of **0.56–1.19** [.022–.047]



Part No. 5887046-1



Recommended Panel Cutout

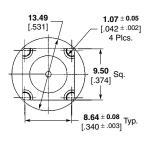


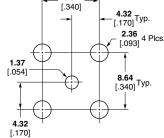
PC Board Layout

8.64



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	Termination	Body	Part No.
Cable	Type	Plating	
179	Crimp	Nickel	5415683-1

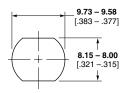
Termination Tooling: Use 220210-1 die set for Contact only.
Use Certi-Crimp Hand Tool 220009-1 for ferrule.

## Bulkhead Jack, PC Board

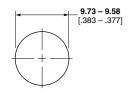
Connector will accept center conductor diameter range **0.97–1.65** [.038–.065] (415332-1 only)



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]



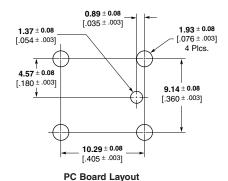
Part No. 5887000-1

## Right-Angle PC Board Mount Plug

Includes board retention feature to prevent tipping during solder process.



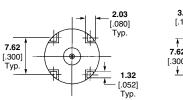
Part No. 5415406-2

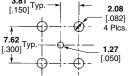


Vertical PC Board Mount Plug



Part No. 6274045-1





**PC Board Layout** 

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



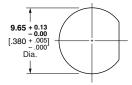
# G Series Connectors (Continued)

### **Adapters**

F Jack to G Jack Bulkhead Adapter



Part No. 415327-1



**Recommended Panel Cutout** 

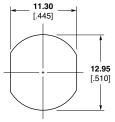
#### F Jack to G Plug Bulkhead Adapter

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** 

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TE Connectivity: 5415276-2