

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

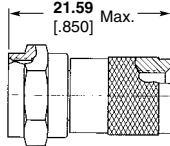
108-1518 — Connector Coaxial, F Series, RF, Single Crimp Plug
 108-1643 — Connector Coaxial, F Series, RF, PCB Mounted
 108-1755 — Connector Economy, F Series, RF Coaxial, PCB
 108-1757 — Connector, 15 amp, G Series Jack, PCB
 108-1758 — Connector, F Series Jack, PCB, Surface Mount
 108-1629 — Feedthrough,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



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 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

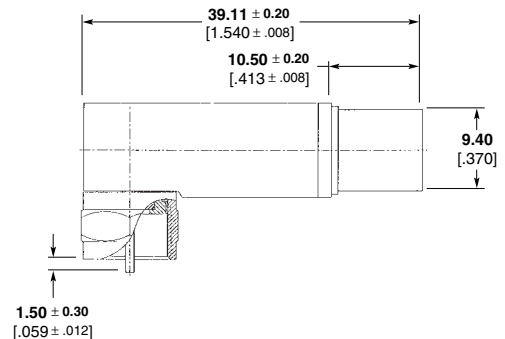
*NID to inside cable.

† 8.23 [.324] Hex Crimp.



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

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

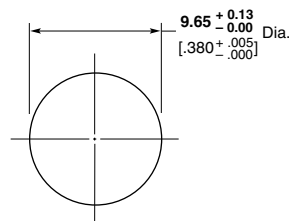
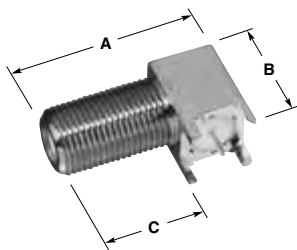
Bulkhead Jacks, Crimp, Splash Resistant, Front Mount



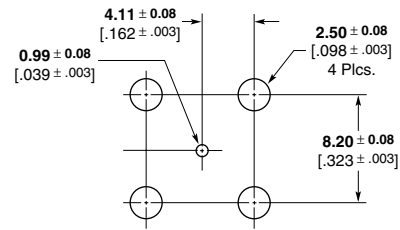
RG/U Cable	Center Contact Plating	Body Plating	Die Set	Part No.
179	Bright Tin	Nickel	220210-1*	5415569-2

*Use with hand tool 354940-1

Right-Angle PC Board Mount Jacks

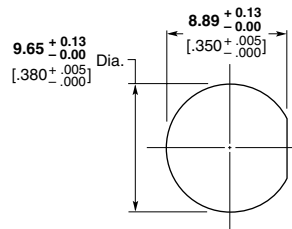
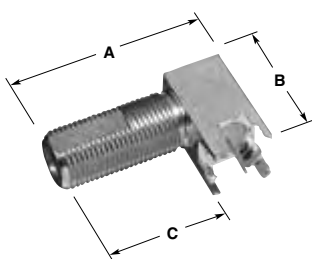


Recommended Panel Cutout

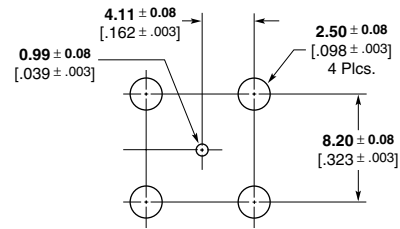


PC Board Layout

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



Recommended Panel Cutout



PC Board Layout

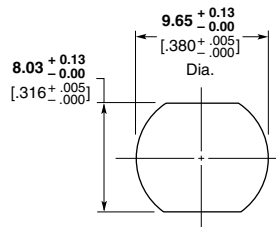
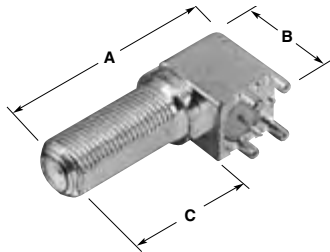
Body Plating		Center Contact Plating	Dimensions			Part No.
Barrel	Base		A	B	C	
Nickel	Tin	Tin	29.97 1.180	17.53 .690	12.19 .480	5887078-1

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

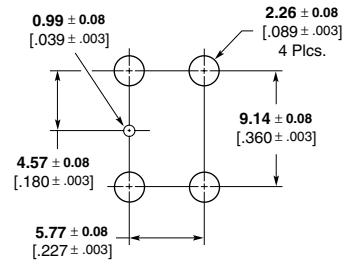
Note: Part Numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant.

F Series Connectors (Continued)

Right-Angle PC Board Mount Jacks (Continued)



Recommended Panel Cutout



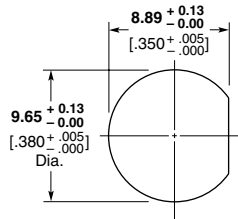
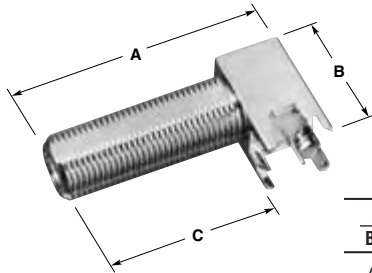
PC Board Layout

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

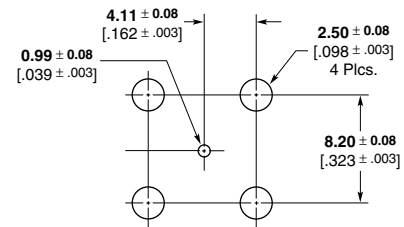
*Connector will accept center conductor diameter range of 0.56-1.19 [0.022-.047].

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 1.402	16.89 .665	26.11 1.028	5415024-1
Acetal	Acetal	Polypropylene	Tin	35.61 1.402	16.89 .665	26.11 1.028	5415024-3
PTFE	PTFE	PTFE	Tin	25.40 1.00	17.91 .705	14.99 .590	5415214-1*

*Pin in paste reflow / high temperature processing.

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

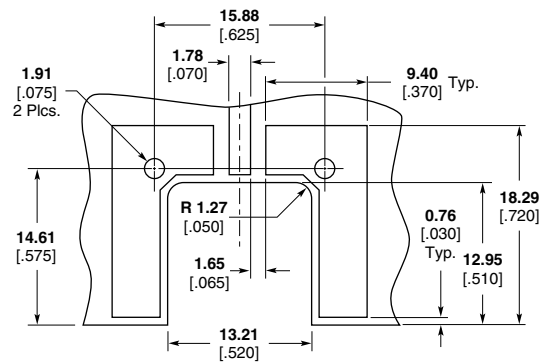
F Series Connectors (Continued)

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.



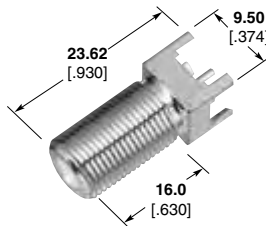
Part No. 5415322-2



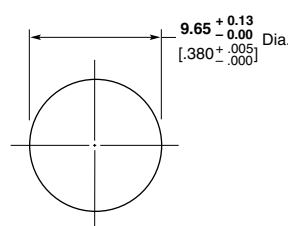
Recommended PC Board Layout

Vertical PC Board Mount Jacks

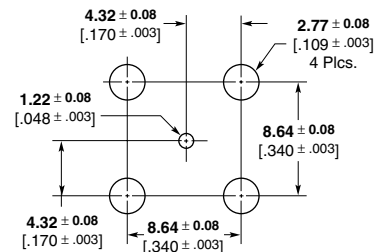
Connector will accept a center conductor diameter of **0.56–1.19** [.022–.047]



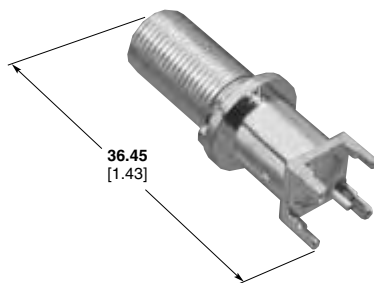
Part No. 5887046-1



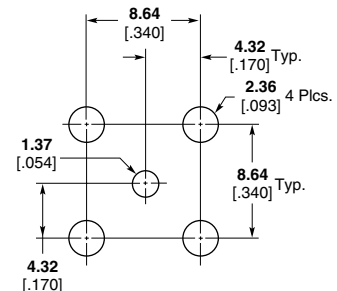
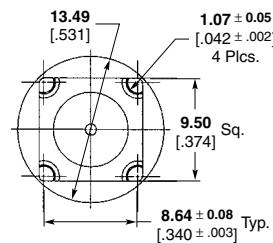
Recommended Panel Cutout



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

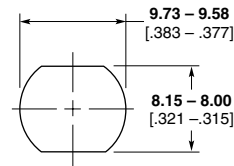
Termination Tooling: Use 220210-1 die set for Contact only.
Use Certi-Crimp Hand Tool 220009-1 for ferrule.

Bulkhead Jack, PC Board

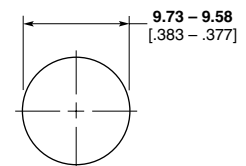
Connector will accept center conductor diameter range **0.97–1.65** [.038–.065] (415332-1 only)



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]



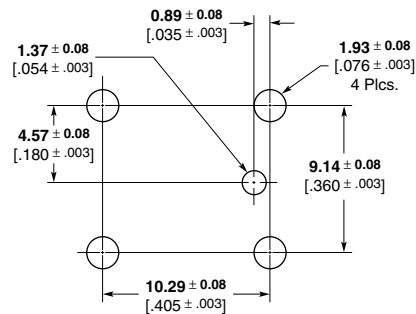
Part No. 5887000-1

Right-Angle PC Board Mount Plug

Includes board retention feature to prevent tipping during solder process.



Part No. 5415406-2

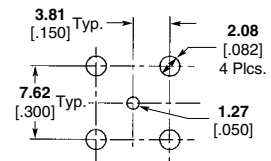
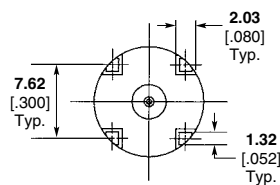


PC Board Layout

Vertical PC Board Mount Plug



Part No. 6274045-1



PC Board Layout

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

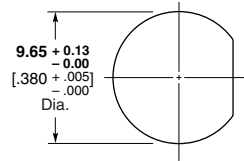
G Series Connectors (Continued)

Adapters

F Jack to G Jack Bulkhead Adapter



Part No. 415327-1



Recommended Panel Cutout

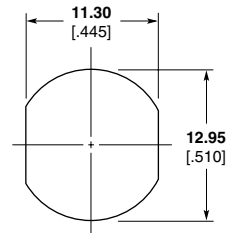
F Jack to G Plug Bulkhead Adapter

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.