



Specifications for "F" Connectors

F style connectors are the least expensive, general purpose connectors with non-constant impedance for use at 500 volts or less, and for use with low frequencies to 500Mhz. These coaxial connectors are widely used in Cable TV, MATV, CCTV, and related consumer television products. They are available in a limited selection to fit various cable sizes. **NOTE: See [V-Bite 861V509ER6 -40dB @ 2.3GHz](#)**

MATERIALS	
Connector Parts	Material
Connector Body and Parts	Brass
Male Contact Pin	Brass
Insulators	Polypropylene
Plating	Nickel
Ferrule	Annealed Copper

ELECTRICAL	
Requirement	Performance
Impedance	Non Constant
Frequency Range	0-500MHz (see below 861V509ER6 to 3GHz)
VSWR	1.5 Max.
Working Voltage (At Sea level)	500V rms
Insulation Resistance	5000 Megohm Min.
Contact Resistance	3 mW Max.
Test Voltage	1000V r.m.s

MECHANICAL & ENVIRONMENTAL	
Requirement	Performance
Durability	500 Matings
Shock	30 G
Cable Retention	40 Lbs. Min.
Temperature Range	-40 to +65°C.
Moisture Range	Continuous Test

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FOR TECHNICAL SUPPORT: PHONE 973-347-4040 / FAX 973-347-2111

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"F" Connectors

Plugs, Jacks, Adapters

F type plugs are available in three different crimp styles: two piece with separate ferrules, one piece crimp with a short crimp body and a one piece crimp with a long body. Also, a twist-on type for tool-less installations. Jacks for bulkhead, inline, or PC board, and a variety of adapters are all machined brass construction.

Part Number	RoHS	Description	RG/U Cable	Fig. No.
810A209A	✓	2 Piece Crimp Plug, Short Ferrule	6	117
810A209D	✓	2 Piece Crimp Plug, Short Ferrule	11	117
810A209G	✓	2 Piece Crimp Plug, Short Ferrule	59	117
810B209G	✓	2 Piece Crimp Plug, Long Ferrule	59	118
810D209A	✓	2 Piece Crimp Plug, Short Ferrule	6	117
810A209MV	✓	4 Pc Crimp Mini Coax. Uses BD11007 Tool	174	117A
810D209D	✓	1 Piece Crimp Plug, Short Ferrule	11	119
810D209G	✓	1 Piece Crimp Plug, Short Ferrule	59	119
810E209A	✓	1 Piece Crimp Plug, Long Ferrule	6	120
810E209D	✓	1 Piece Crimp Plug, Long Ferrule	11	120
810E209G	✓	1 Piece Crimp Plug, Long Ferrule	59	120
810A409A	✓	Twist-On	6	121
810A409G	✓	Twist-On	59	121
810P209A	✓	Push-On	6	122
810P209G	✓	Push-On	59	122
816B519	✓	Male Bulkhead Receptacle, 3/8-32 THD I.D.	Any	130A
826B519	✓	Bulkhead Jack, Solder Tab	Any	123
832A519N	✓	Inline Female/Female W/Nut & Washer	N/A	124
830A509	✓	Inline, Male/Male	N/A	125
831B509	✓	Inline Female/Male Push-On	N/A	125A
832A519	✓	Inline Female/Female	N/A	126
843A509	✓	"T" Adapter, Female/Male/Female	N/A	127
845A509	✓	"T" Adapter, Female/Female/Female	N/A	128
851A509	✓	Right Angle Adapter, Male/Female	N/A	129
F0884	✓	75 Ohm Male Terminator	N/A	130

✓ RoHS compliant

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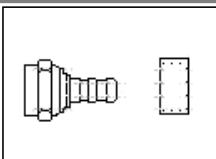


Fig. 117

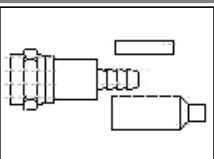


Fig. 117A

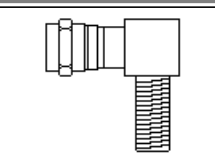


Fig. 118

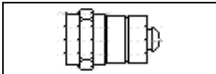


Fig. 119

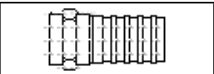


Fig. 120

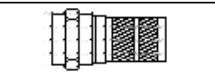


Fig. 121

Also See Push-EZ™ Next Page

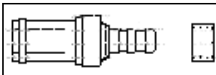


Fig. 122

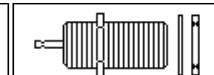


Fig. 123

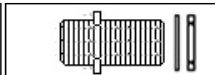


Fig. 124

Adapters & Terminators

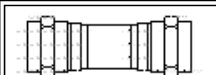


Fig. 125

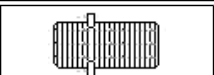


Fig. 126

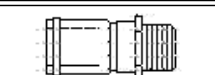


Fig. 125A

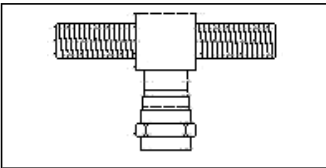


Fig. 127

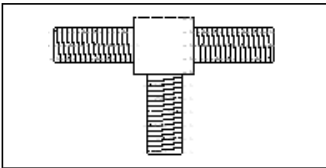


Fig. 128

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This recessed male acts as a jack & allows for a replaceable female end by using a 832A519 adapter. Also, this can be used to accommodate any adapter with a female F interface on one side. The other end can be BNC, TNC, or any style available. (See adapter pages)

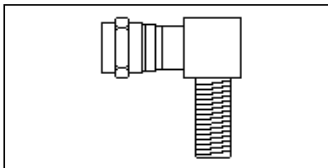


Fig. 129

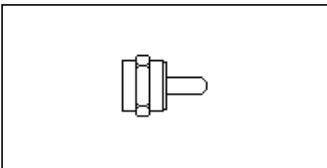


Fig. 130

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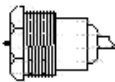


Fig. 130A2

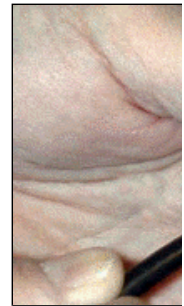
3/8 - 32 Internal Thd. 1/2 - External Thd.



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Push EZ™ “F” Plugs With LIFT™

Bomar's exclusive LIFT® Technology (Low Insertion Force Termination) is used in the patented Push-EZ™ connector. It installs by simply stripping the cable and inserting it into the connector. That's it. And it will not pull out.
No crimp tooling required.



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Part Number	RoHS	Description	RG/U Cable	Body Plating
810PE209A	✓	Push-EZ™ Plug with LIFT® Technology	6	Nickel
810PE209G	✓	Push-EZ™ Plug with LIFT® Technology	59	Nickel
810PE205A	✓	Push-EZ™ Plug with LIFT® Technology	6	Gold
810PE205G	✓	Push-EZ™ Plug with LIFT® Technology	59	Gold
✓ RoHS compliant REQUEST QUOTE REQUEST DRAWING				

PC Board Connectors

Part Number	RoHS	Description	RG/U Cable	Fig. No.
861A509	✓	PC Board Jack, Vertical	N/A	131
861V509E	✓	V-Bite™ Edge Mount PC Jack	N/A	131V
861V509ER	✓	V-Bite™ Reflow Type w/ TFE Insulator RG59	N/A	131V
861V509ER6	✓	V-Bite™ Reflow Type w/ TFE Insulator RG6/59 (3GHz)	N/A	131V
864B509	✓	PC Board Jack, Right Angle, Long	N/A	132
864B509HF	✓	PC Board Jack, Right Angle, Long (3GHz)	N/A	132
864B509S	✓	PC Board Jack, Right Angle, Short	N/A	133
866B509	✓	PC Board Male, Right Angle The Eliminator™	N/A	136B
✓ RoHS compliant reflow or wave solder only ✓ RoHS compliant wave solder REQUEST QUOTE REQUEST DRAWING				





Fig. 131



Fig. 132



Fig. 135B

The V-Bite™



Fig. 131V

V-Bite™ Mounts on the PC board edge and is extremely anti-rotational. It locks into the board for soldering. Available in reflow soldering version.

V-Bite™ Mounts on the PC board edge and is extremely anti-rotational. It locks into the board for soldering. Available in reflow soldering version.

PCB Layout 864B Series

