

CONNECTOR TYPE SMA SPECIFICATIONS



ELECTRICAL RATINGS

Impedance: 50 ohms

Frequency Range:

Flexible cable connectors 0-12.4 GHz

Uncabled receptacles, and brass adapters 0-18.0 GHz

Semi-rigid cable connectors

and stainless steel adapters 0-26.5 GHz

VSWR: (f = GHz)

	Straight Cabled Connectors	Right Angle Cabled Connectors
RG-178 cable	1.20 + .025f	1.20 + .03f
RG-316 cable	1.15 + .02f	1.15 + .03f
RG-58 cable	1.15 + .01f	1.15 + .02f
RG-142 cable	1.15 + .01f	1.15 + .02f
.086 semi-rigid cable	1.07 + .008f	1.10 + .01f
.141 semi-rigid cable (w/contact)	1.05 + .008f	1.10 + .01f
.141 semi-rigid cable (w/o contact)	1.035 + .005f	
Jack-bulkhead jack adapter and plug-plug adapter	1.05 + .01f	
Jack-jack adapter and plug-jack adapter	1.05 + .005f	
Uncabled receptacles	N/A	

Working Voltage: (Vrms maximum) †

Connectors for Cable Type	Sea Level	70K Feet
RG-178	170	45
RG-316	250	65
RG-58, RG-142, .086 semi-rigid, uncabled receptacles, .141 semi-rigid w/o contact	335	85
.141 semi-rigid with contact and adapters	500	125

Insertion Loss: (dB maximum)

Straight flexible cable connectors

and adapters $0.06\sqrt{f(\text{GHz})}$ tested at 6 GHz

Right angle flexible cable

connectors $0.15\sqrt{f(\text{GHz})}$ tested at 6 GHz

Straight semi-rigid

cable connectors with contact $0.03\sqrt{f(\text{GHz})}$ tested at 10 GHz

Right angle semi-rigid

cable connectors $0.05\sqrt{f(\text{GHz})}$ tested at 10 GHz

Uncabled receptacles

Straight semi-rigid cable

connectors w/o contact $0.03\sqrt{f(\text{GHz})}$ tested at 16 GHz

Insulation Resistance: 5000 Megohms minimum

Contact Resistance: (milliohms maximum)

	Initial	After Environmental
Center contact (straight cabled connectors and uncabled receptacles)	3.0*	4.0*
Center contact (right angle cabled connectors and adapters)	4.0	6.0
Outer contact (all connectors)	2.0	N/A
Braid to body (gold plated connectors)	0.5	N/A
Braid to body (passivated or nickel plated connectors)	5.0	N/A

MECHANICAL RATINGS

Engagement Design: MIL-C-39012, Series SMA

Engagement/Disengagement Force: 2 inch-pound maximum

Mating Torque: 7 to 10 inch-pounds

Coupling Proof Torque: 15 inch-pounds minimum

Coupling Nut Retention: 60 pounds minimum

Contact Retention: 6 lbs. minimum axial force (captivated contacts)

4 inch-ounce minimum torque (uncabled receptacles)

Cable Retention:

	Axial Force** (pounds)	Torque (in-oz)
Connectors for RG-178	10	N/A
Connectors for RG-316	20	N/A
Connectors for RG-58	40	N/A
Connectors for RG-142	45	N/A
Connectors for .086 semi-rigid	30	16
Connectors for .141 semi-rigid	60	55

** Or cable breaking strength whichever is less.

Durability: 500 cycles minimum

100 cycles minimum for .141 semi-rigid connectors w/o contact

ENVIRONMENTAL RATINGS (Meets or exceeds the applicable paragraph of MIL-C-39012)

Temperature Range: -65°C to +165°C

Thermal Shock: MIL-STD-202, Method 107, Condition B

Corrosion: MIL-STD-202, Method 101, Condition B

Shock: MIL-STD-202, Method 213, Condition I

Vibration: MIL-STD-202, Method 204, Condition D

Moisture Resistance: MIL-STD-202, Method 106

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† Avoid user injury due to misapplication.
See safety advisory and definitions, page 2.

MATERIAL SPECIFICATIONS

141 SERIES CONNECTORS

Bodies: Stainless steel per QQ-S-763, gold plated* per MIL-G-45204 .00005" min. for soldered bodies and .00001" min. for unsoldered bodies or passivated per MIL-F-14072

Contacts: Male - brass per QQ-B-626, gold plated per MIL-G-45204 .00005" min.
 Female - beryllium copper per QQ-C-530, gold plated per MIL-G-45204 .00005" min.

Nut Retention Spring: Beryllium copper per QQ-C-533. Unplated

Insulators: PTFE fluorocarbon per ASTM D 1710 and ASTM D 1457 or Tefzel per ASTM D 3159

Expansion Caps: Brass per QQ-B-613, gold plated per MIL-G-45204 .00001" min. or nickel plated per QQ-N-290

Crimp Sleeves: Copper per WW-T-799 or brass per QQ-B-613, gold plated per MIL-G-45204 .00001" min. or nickel plated per QQ-N-290

Mounting Hardware: Stainless steel per QQ-S-763, gold plated per MIL-G-45204 .00001" min. or passivated per MIL-F-14072

Gasket and Seal Rings: Silicone rubber per ZZ-R-765

142 SERIES CONNECTORS

Bodies: Brass per QQ-B-626, gold plated* per MIL-G-45204 .00001" min. or nickel plated per QQ-N-290

Contacts: Male - brass per QQ-B-626, gold plated per MIL-G-45204 .00003" min.
 Female - beryllium copper per QQ-C-530, gold plated per MIL-G-45204 .00003" min.

Nut Retention Spring: Beryllium copper per QQ-C-533. Unplated

Insulators: PTFE fluorocarbon per ASTM D 1710 and ASTM D 1457 or Tefzel per ASTM D 3159

Expansion Caps: Brass per QQ-B-613, gold plated per MIL-G-45204 .00001" min. or nickel plated per QQ-N-290

Crimp Sleeves: Copper per WW-T-799 or brass per QQ-B-613, gold plated per MIL-G-45204 .00001" min. or nickel plated per QQ-N-290

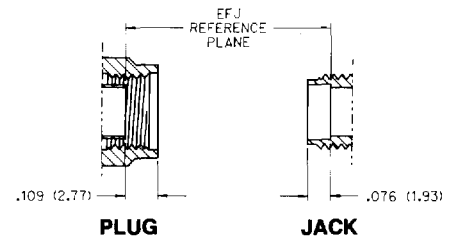
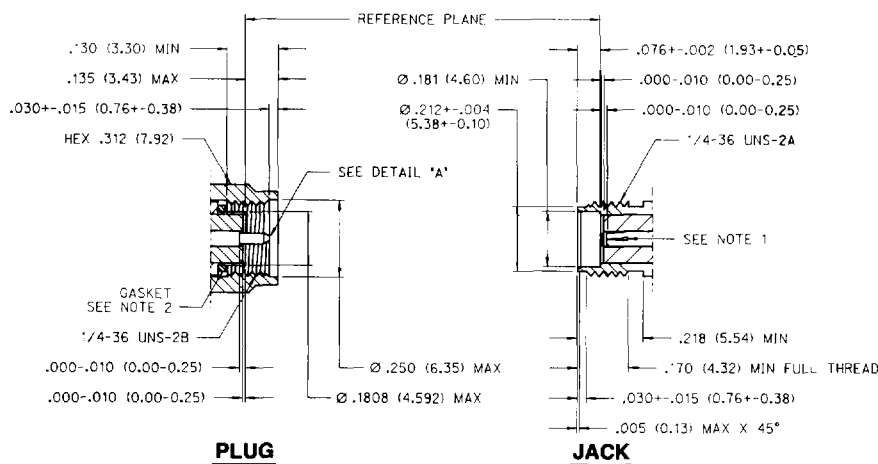
Mounting Hardware: Brass per QQ-B-626 or QQ-B-613, gold plated per MIL-G-45204 .00001" min. or nickel plated per QQ-N-290

Gaskets: Not supplied with brass connectors

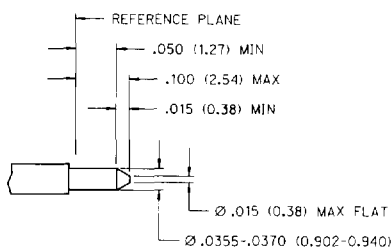
Seal Rings: Silicone rubber per ZZ-R-765

*All gold plated parts include a .00005" min. nickel underplate barrier layer.

MATING ENGAGEMENT FOR SMA SERIES PER MIL-C-39012



DETAIL "A"



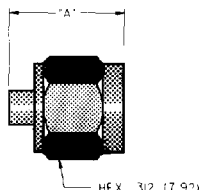
NOTES

1. ID TO MEET VSWR, CONTACT RESISTANCE AND INSERTION WITHDRAWAL FORCES WHEN MATED WITH A DIA .0355-.0370 MALE PIN
2. GASKET IS NOT SUPPLIED WITH BRASS CONNECTORS

Straight Solder Type Plug - with contact, captive nut
 Inches (millimeters)
 customer drawings available upon request

Thin Wall (.141)

Thick Wall (.086)



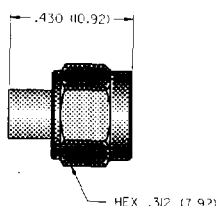
CABLE TYPE	VSWR & FREQ. RANGE	PRODUCT SERIES	GOLD PLATED	NICKEL PLATED	PASSIVATED (nut only)
.086 Semi-Rigid "A" = .405 (10.29)	0-18 GHz: 1.07 + .008 f (GHz) 26.5 GHz: 1.35 Max	Brass	142-0693-001	142-0693-006	
		Stainless Steel	141-0693-001		141-0693-002
.141 Semi-Rigid "A" = .440 (11.18)	0-26.5 GHz: 1.05+.008 f (GHz)	Brass	142-0694-001*	142-0694-006*	
		Stainless Steel	141-0694-001		141-0694-002

Assembly instructions Page 64.

*Coupling proof torque 8 inch-pounds maximum.

Straight Solder Type Plug - without contact, thread-on nut

Thin Wall



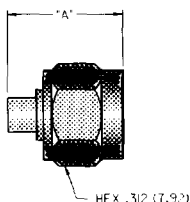
CABLE TYPE	VSWR & FREQ. RANGE	PRODUCT SERIES	GOLD PLATED	NICKEL PLATED	PASSIVATED (nut only)
.141 Semi-Rigid	1.035 + .005 f (GHz) 0-26.5 GHz	Brass	142-0694-011	142-0694-016	
		Stainless Steel	141-0694-011		141-0694-012

Assembly instructions Page 64.

Center conductor of cable serves as contact.

Straight Solder Type Plug - with contact, thread-on nut

Thick Wall



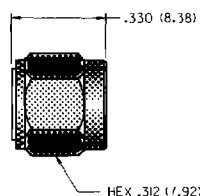
CABLE TYPE	VSWR & FREQ. RANGE	PRODUCT SERIES	GOLD PLATED	NICKEL PLATED	PASSIVATED (nut only)
.086 Semi-Rigid "A" = .405 (10.29)	0-18 GHz: 1.07 + .008 f (GHz) 26.5 GHz: 1.35 Max	Brass	142-0693-051	142-0693-056	
		Stainless Steel	141-0693-051		141-0693-052
.141 Semi-Rigid "A" = .438 (11.13)	0-26.5 GHz: 1.05+.008 f (GHz)	Brass	142-0694-051	142-0694-056	
		Stainless Steel	141-0694-051		141-0694-052

Assembly instructions Page 66.

Center conductor of cable serves as contact.

Straight Solder Type Plug - Short Profile - without contact, captive nut

Thin Wall



CABLE TYPE	VSWR & FREQ. RANGE	PRODUCT SERIES	GOLD PLATED	NICKEL PLATED	PASSIVATED (nut only)
.141 Semi-Rigid	1.035 + .005 f (GHz) 0-26.5 GHz	Brass	142-0694-031	142-0694-036	
		Stainless Steel	141-0694-031		141-0694-032

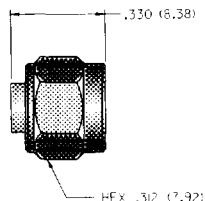
Assembly instructions Page 65.

Center conductor of cable serves as contact.

SMA

FOR SEMI-RIGID CABLE

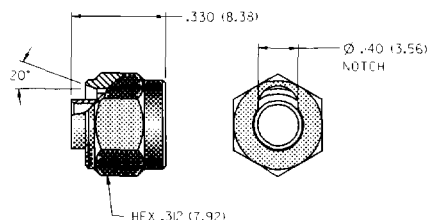
Straight Solder Type Plug - without contact, slide-on nut Thick Wall

 Inches (millimeters)
 customer drawings available upon request


CABLE TYPE	VSWR & FREQ. RANGE	PRODUCT SERIES	GOLD PLATED	NICKEL PLATED	PASSIVATED (nut only)
.141 Semi-Rigid	1.035 + .005 f (GHz) 0-26.5 GHz	Brass	142-0694-021	142-0694-026	
		Stainless Steel	141-0694-021		141-0694-022

 Assembly instructions Page 65.
 Center conductor of cable serves as contact.

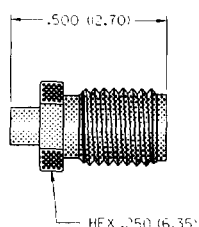
Straight Solder Type Plug - without contact, slide-on notched nut Thick Wall



CABLE TYPE	VSWR & FREQ. RANGE	PRODUCT SERIES	GOLD PLATED	NICKEL PLATED	PASSIVATED (nut only)
.141 Semi-Rigid	1.035 + .005 f (GHz) 0-26.5 GHz	Brass	142-0694-041	142-0694-046	
		Stainless Steel	141-0694-041		141-0694-042

 Assembly instructions Page 65.
 Center conductor of cable serves as contact.

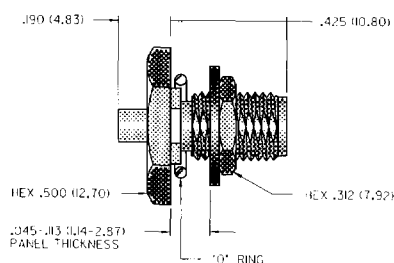
Straight Solder Type Jack



CABLE TYPE	VSWR & FREQ. RANGE	PRODUCT SERIES	GOLD PLATED	NICKEL PLATED
.086 Semi-Rigid	0-18 GHz: 1.07 + .008 f (GHz) 26.5 GHz: 1.35 Max	Brass	142-0593-001	142-0593-006
		Stainless Steel	141-0593-001	
.141 Semi-Rigid	0-26.5 GHz: 1.05+.008 f (GHz)	Brass	142-0594-001	142-0594-006
		Stainless Steel	141-0594-001	

 Assembly instructions Page 64.
 Center conductor of cable serves as contact.

Straight Solder Type Bulkhead Jack



CABLE TYPE	VSWR & FREQ. RANGE	PRODUCT SERIES	GOLD PLATED	NICKEL PLATED
.086 Semi-Rigid	0-18 GHz: 1.07 + .008 f (GHz) 26.5 GHz: 1.35 Max	Brass	142-0593-401	142-0593-406
		Stainless Steel	141-0593-401	
.141 Semi-Rigid	0-26.5 GHz: 1.05+.008 f (GHz)	Brass	142-0594-401	142-0594-406
		Stainless Steel	141-0594-401	

 Assembly Instructions Page 64.
 Mounting hole layout Figure 1 Page 76.

CONNECTOR TYPE

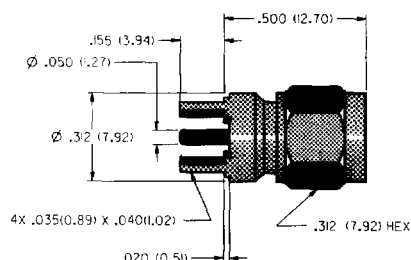
SMA

PC MOUNT



Straight Plug Receptacle

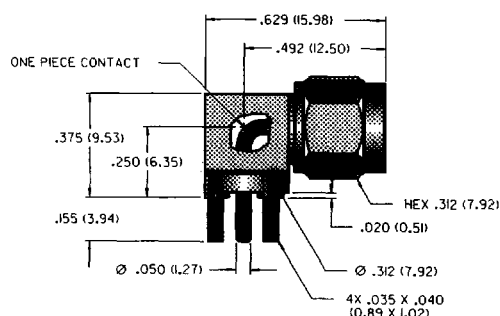
Inches (millimeters)
customer drawings available upon request



VSWR & FREQ. RANGE	PRODUCT SERIES	GOLD PLATED	NICKEL PLATED	PASSIVATED (nut only)
VSWR: N/A 0-18 GHz	Brass	142-0801-201	142-0801-206	
	Stainless Steel	141-0801-201		141-0801-202

Mounting hole layout Fig. 2 Page 76.

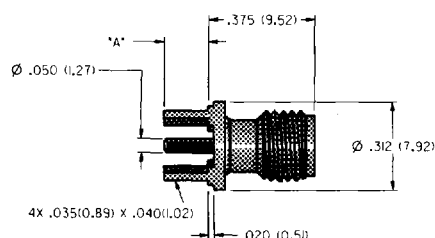
Right Angle Plug Receptacle



VSWR & FREQ. RANGE	PRODUCT SERIES	GOLD PLATED	NICKEL PLATED	PASSIVATED (nut only)
VSWR: N/A 0-18 GHz	Brass	142-0801-301	142-0801-306	
	Stainless Steel	141-0801-301		141-0801-302

Mounting hole layout Fig. 2 Page 76.

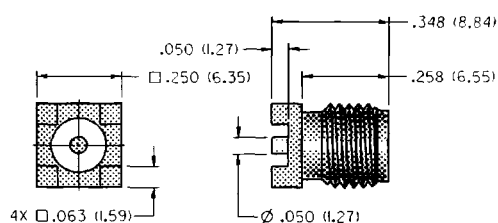
Straight Jack Receptacle



VSWR & FREQ. RANGE	PRODUCT SERIES	GOLD PLATED	NICKEL PLATED	IR COMPATIBLE	DIMENSION "A"
VSWR: N/A 0-18 GHz	Brass	142-0701-201 142-0701-231	142-0701-206 142-0701-236	142-0701-235*	.155 (3.94) .110 (2.79)
	Stainless Steel	141-0701-201			.155 (3.94)

* Tin/Lead solder dipped legs for IR Reflow Compatibility.
Mounting hole layout Fig. 2 Page 76.

Straight Jack Receptacle - Surface Mount



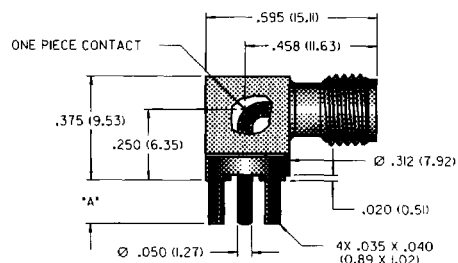
VSWR & FREQ. RANGE	PRODUCT SERIES	GOLD PLATED	NICKEL PLATED
VSWR: N/A 0-18 GHz	Brass	142-0711-201	142-0711-205 Δ

Δ Connector Mounting Pads 60%/40% Tin/Lead Coated (Solder Plated)
Recommended Land Pattern Fig. 9 Page 76.

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RightAngle Jack Receptacle



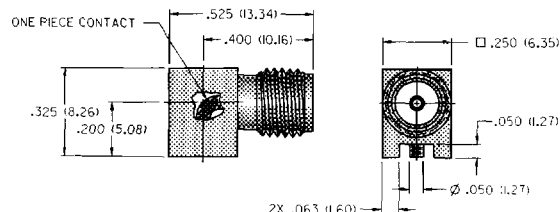
VSWR & FREQ. RANGE	PRODUCT SERIES	GOLD PLATED	NICKEL PLATED	DIMENSION "A"
VSWR: N/A 0-18 GHz	Brass	142-0701-301	142-0701-306	.155 (3.94)
	Stainless Steel	141-0701-301		.155 (3.94)

Mounting hole layout Fig. 2 Page 76.

RightAngle Jack Receptacle - Surface Mount

VSWR & FREQ. RANGE	PRODUCT SERIES	GOLD PLATED	NICKEL PLATED
VSWR: N/A 0-18 GHz	Brass	142-0711-301	142-0711-305 Δ

Δ Connector Mounting Rails 60%/40% Tin/Lead Coated (Solder Plated)
 Recommended Land Pattern Fig. 9 Page 76.

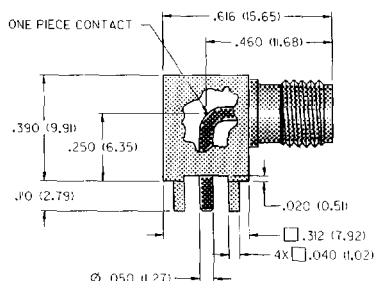


RightAngle Jack Receptacle - Moisture Seal*

VSWR & FREQ. RANGE	NICKEL BODY, GOLD INTERFACE IR COMPATIBLE*
VSWR: N/A 0-18 GHz	142-0701-335*

*Tin/Lead solder dipped legs and Moisture Sealed for IR Reflow
 Compatibility.

Mounting hole layout Fig. 2 Page 76.



CONNECTOR TYPE
SMA
PC MOUNT



RightAngle Bulkhead Jack Receptacle

Inches (millimeters)
customer drawings available upon request

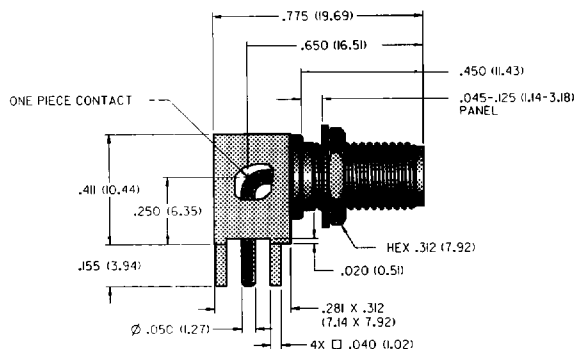


Fig. 1

VSWR & FREQ. RANGE	PRODUCT SERIES	GOLD PLATED	NICKEL PLATED
VSWR: N/A 0-18 GHz	Brass (Fig. 1)	142-0701-501	142-0701-506
	Stainless Steel (Fig. 2)	141-0701-501	

Mounting hole layout Fig. 1 & 2 Page 76.

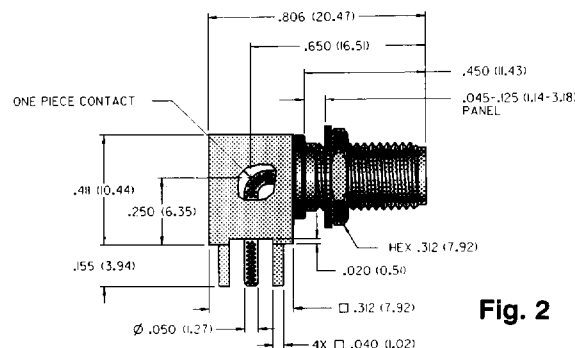
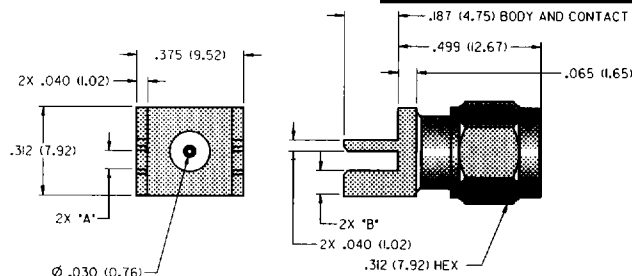


Fig. 2

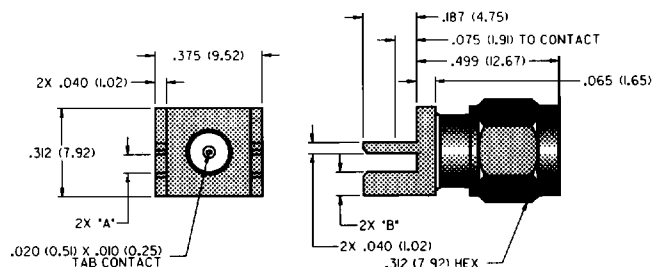
End Launch Plug Receptacle - Round Contact

VSWR & FREQ. RANGE	PRODUCT SERIES	GOLD PLATED	NICKEL PLATED	DIMENSION "A"	DIMENSION "B"
VSWR: N/A 0-18 GHz	Brass	142-0801-801	142-0801-806	.068 (1.73)	.073 (1.85)
		142-0801-821	142-0801-826	.048 (1.22)	.093 (2.36)



End Launch Plug Receptacle - Tab Contact

VSWR & FREQ. RANGE	PRODUCT SERIES	GOLD PLATED	NICKEL PLATED	DIMENSION "A"	DIMENSION "B"
VSWR: N/A 0-18 GHz	Brass	142-0801-811	142-0801-816	.068 (1.73)	.083 (2.11)
		142-0801-831	142-0801-836	.048 (1.22)	.103 (2.62)



End Launch Jack Receptacle - Round Contact

 Inches (millimeters)
 customer drawings available upon request

VSWR (GHz) FREQ. RANGE	PRODUCT SERIES	GOLD PLATED	NICKEL PLATED	DIMENSION "A"	DIMENSION "B"
VSWR: N/A 0-18 GHz	(Fig. 1)	142-0701-801	142-0701-806	.068 (1.73)	.073 (1.85)
	Brass (Fig. 1)	142-0701-831	142-0701-836	.048 (1.22)	.093 (2.36)
	(Fig. 2)	142-0701-881	142-0701-886	.037 (.94)	.104 (2.64)
	Stainless Steel (Fig. 1)	141-0701-801		.068 (1.73)	.073 (1.85)

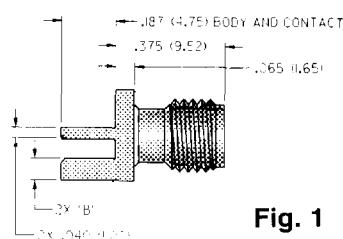
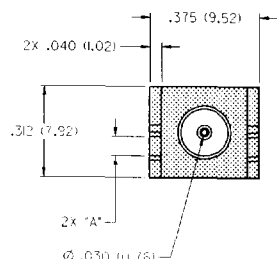


Fig. 1

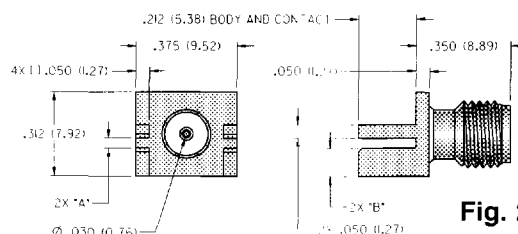
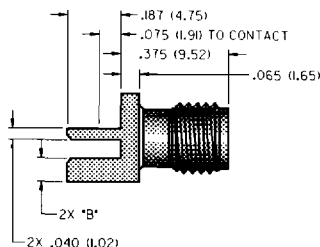
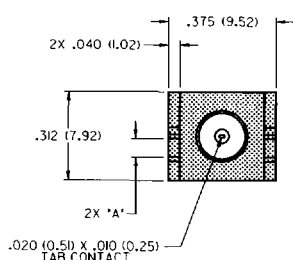


Fig. 2

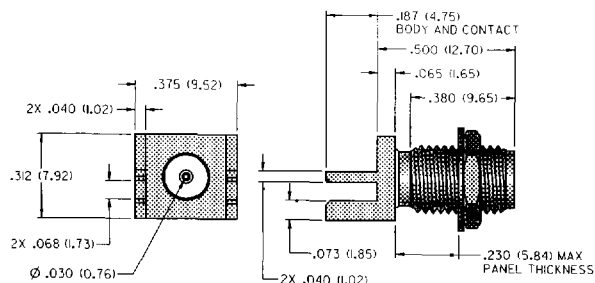
End Launch Jack Receptacle - Tab Contact

VSWR & FREQ. RANGE	PRODUCT SERIES	GOLD PLATED	NICKEL PLATED	DIMENSION "A"	DIMENSION "B"
VSWR: N/A 0-18 GHz	Brass	142-0701-851	142-0701-856	.068 (1.73)	.083 (2.11)
		142-0701-841	142-0871-846	.048 (1.22)	.103 (2.62)



End Launch Bulkhead Jack Receptacle - Round Contact

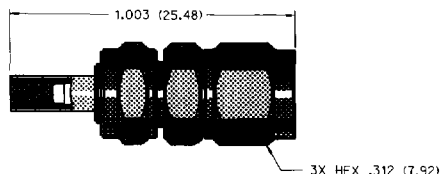
VSWR & FREQ. RANGE	PRODUCT SERIES	GOLD PLATED	NICKEL PLATED	DIMENSION "A"	DIMENSION "B"
VSWR: N/A 0-18 GHz	Brass	142-0701-871	142-0701-876	.068 (1.73)	.073 (1.85)



SMA

FOR FLEXIBLE CABLE

Straight Crimp Type Plug

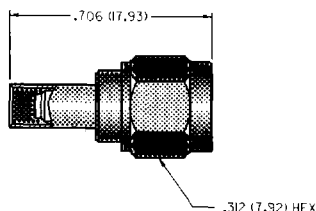
 Inches (millimeters)
 customer drawings available upon request


CABLE TYPE	VSWR & FREQ. RANGE	PRODUCT SERIES	GOLD PLATED	NICKEL PLATED	PASSIVATED
RG-178/U, 196	1.20 + .025 f (GHz) 0-12.4 GHz	Brass	142-0402-001	142-0402-006	
		Stainless Steel	141-0402-001		141-0402-002
RG-161/U, 174, 188, 316	1.15 + .02 f (GHz) 0-12.4 GHz	Brass	142-0403-001	142-0403-006	
		Stainless Steel	141-0403-001		141-0403-002
RG-188 DS RG-316 DS	1.15 + .02 f (GHz) 0-12.4 GHz	Brass	142-0404-001	142-0404-006	
		Stainless Steel	141-0404-001		141-0404-002
RG-58/U, 141, 303	1.15 + .01 f (GHz) 0-12.4 GHz	Brass	142-0407-001	142-0407-006	
		Stainless Steel	141-0407-001		141-0407-002
RG-55/U, 142, 223, 400	1.15 + .01 f (GHz) 0-12.4 GHz	Brass	142-0408-001	142-0408-006	
		Stainless Steel	141-0408-001		141-0408-002

Assembly instructions Page 68.

See Page 61 for Cable Assembly Tools.

Straight Crimp Type Plug - Solder or Crimp Contact



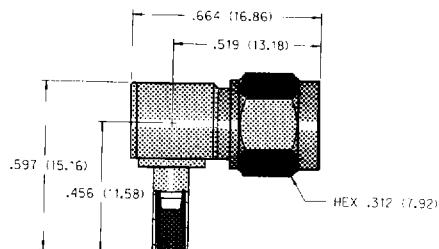
CABLE TYPE	VSWR & FREQ. RANGE	PRODUCT SERIES	GOLD PLATED	NICKEL PLATED	PASSIVATED
RG-161/U, 174, 188, 316	1.15 + .02 f (GHz) 0-12.4 GHz	Brass	142-0403-011	142-0403-016	
		Stainless Steel	141-0403-011		141-0403-012
RG-188 DS RG-316 DS	1.15 + .02 f (GHz) 0-12.4 GHz	Brass	142-0404-011	142-0404-016	
		Stainless Steel	141-0404-011		141-0404-012
RG-58/U, 141, 303	1.15 + .01 f (GHz) 0-12.4 GHz	Brass	142-0407-011	142-0407-016	
		Stainless Steel	141-0407-011		141-0407-012
RG-55/U, 142, 223, 400	1.15 + .01 f (GHz) 0-12.4 GHz	Brass	142-0408-011	142-0408-016	
		Stainless Steel	141-0408-011		141-0408-012
RG-179/U, 187	N/A	Brass	142-0433-011	142-0433-016	

Assembly instructions Page 67.

See Pages 61 & 62 for Cable Assembly Tools.

Right Angle Crimp Type Plug

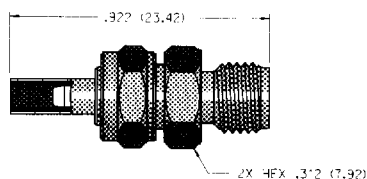
Inches (millimeters)
customer drawings available upon request



CABLE TYPE	VSWR & FREQ. RANGE	PRODUCT SERIES	GOLD PLATED	NICKEL PLATED	PASSIVATED
RG-178/U, 196	1.20 + .03 f (GHz) 0-12.4 GHz	Brass	142-0402-101	142-0402-106	
		Stainless Steel	141-0402-101		141-0402-102
RG-161/U, 174 188, 316	1.15 + .03 f (GHz) 0-12.4 GHz	Brass	142-0403-101	142-0403-106	
		Stainless Steel	141-0403-101		141-0403-102
RG-188 DS RG-316 DS	1.15 + .03 f (GHz) 0-12.4 GHz	Brass	142-0404-101	142-0404-106	
		Stainless Steel	141-0404-101		141-0404-102
RG-58/U, 141, 303	1.15 + .02 f (GHz) 0-12.4 GHz	Brass	142-0407-101	142-0407-106	
		Stainless Steel	141-0407-101		141-0407-102
RG-55/U, 142, 223, 400	1.15 + .02 f (GHz) 0-12.4 GHz	Brass	142-0408-101	142-0408-106	
		Stainless Steel	141-0408-101		141-0408-102
RG-179/U, 187	N/A	Brass	142-0433-101	142-0433-106	

Assembly instructions Page 69.
See Page 61 for Cable Assembly Tools.

Straight Crimp Type Jack



CABLE TYPE	VSWR & FREQ. RANGE	PRODUCT SERIES	GOLD PLATED	NICKEL PLATED	PASSIVATED
RG-178/U, 196	1.20 + .025 f (GHz) 0-12.4 GHz	Brass	142-0302-001	142-0302-006	
		Stainless Steel	141-0302-001		141-0302-002
RG-161/U, 174, 188, 316	1.15 + .02 f (GHz) 0-12.4 GHz	Brass	142-0303-001	142-0303-006	
		Stainless Steel	141-0303-001		141-0303-002
RG-188 DS RG-316 DS	1.15 + .02 f (GHz) 0-12.4 GHz	Brass	142-0304-001	142-0304-006	
		Stainless Steel	141-0304-001		141-0304-002
RG-58/U, 141, 303	1.15 + .01 f (GHz) 0-12.4 GHz	Brass	142-0307-001	142-0307-006	
		Stainless Steel	141-0307-001		141-0307-002
RG-55/U, 142, 223, 400	1.15 + .01 f (GHz) 0-12.4 GHz	Brass	142-0308-001	142-0308-006	
		Stainless Steel	141-0308-001		141-0308-002

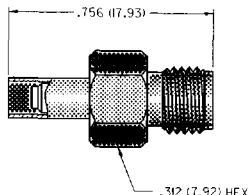
Assembly instructions Page 68.
See Page 61 for Cable Assembly Tools.

SMA

FOR FLEXIBLE CABLE

Straight Crimp Type Jack - Solder or Crimp Contact

Inches (millimeters)
customer drawings available upon request

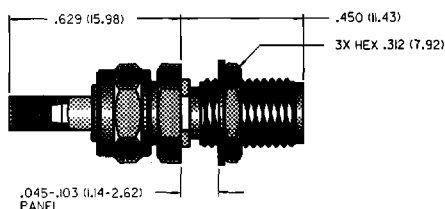


CABLE TYPE	VSWR & FREQ. RANGE	PRODUCT SERIES	GOLD PLATED	NICKEL PLATED	PASSIVATED
RG-161/U, 174, 188, 316	1.15 + .02 f (GHz) 0-12.4 GHz	Brass	142-0303-011	142-0303-016	
		Stainless Steel	141-0303-011		141-0303-012
RG-188 DS RG-316 DS	1.15 + .02 f (GHz) 0-12.4 GHz	Brass	142-0304-011	142-0304-016	
		Stainless Steel	141-0304-011		141-0304-012
RG-58/U, 141, 303	1.15 + .01 f (GHz) 0-12.4 GHz	Brass	142-0307-011	142-0307-016	
		Stainless Steel	141-0307-011		141-0307-012
RG-55/U, 142, 223, 400	1.15 + .01 f (GHz) 0-12.4 GHz	Brass	142-0308-011	142-0308-016	
		Stainless Steel	141-0308-011		141-0308-012
RG-179, 187	N/A	Brass	142-0333-011	142-0333-016	

Assembly instructions Page 67.

See Page 61 for Cable Assembly Tools.

Straight Crimp Type Bulkhead Jack



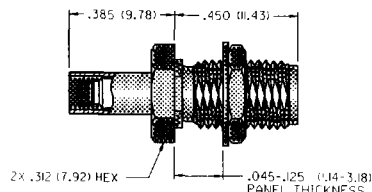
CABLE TYPE	VSWR & FREQ. RANGE	PRODUCT SERIES	GOLD PLATED	NICKEL PLATED	PASSIVATED
RG-178/U, 196	1.20 + .025 f (GHz) 0-12.4 GHz	Brass	142-0302-401	142-0302-406	
		Stainless Steel	141-0302-401		141-0302-402
RG-161/U, 174, 188, 316	1.15 + .02 f (GHz) 0-12.4 GHz	Brass	142-0303-401	142-0303-406	
		Stainless Steel	141-0303-401		141-0303-402
RG-188 DS RG-316 DS	1.15 + .02 f (GHz) 0-12.4 GHz	Brass	142-0304-401	142-0304-406	
		Stainless Steel	141-0304-401		141-0304-402
RG-58/U, 141, 303	1.15 + .01 f (GHz) 0-12.4 GHz	Brass	142-0307-401	142-0307-406	
		Stainless Steel	141-0307-401		141-0307-402
RG-55/U, 142, 223, 400	1.15 + .01 f (GHz) 0-12.4 GHz	Brass	142-0308-401	142-0308-406	
		Stainless Steel	141-0308-401		141-0308-402

Assembly instructions Page 68.

Mounting Hole layout Figure 1 Page 76.

See Page 61 for Cable Assembly Tools.

Straight Crimp Type Bulkhead Jack - Solder or Crimp Contact



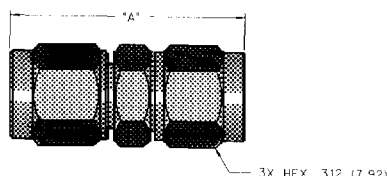
CABLE TYPE	VSWR & FREQ. RANGE	PRODUCT SERIES	GOLD PLATED	NICKEL PLATED	PASSIVATED
RG-161/U, 174, 188, 316	1.15 + .02 f (GHz) 0-12.4 GHz	Brass	142-0303-411	142-0303-416	
		Stainless Steel	141-0303-411		141-0303-412
RG-188 DS RG-316 DS	1.15 + .02 f (GHz) 0-12.4 GHz	Brass	142-0304-411	142-0304-416	
		Stainless Steel	141-0304-411		141-0304-412
RG-58/U, 141, 303	1.15 + .01 f (GHz) 0-12.4 GHz	Brass	142-0307-411	142-0307-416	
		Stainless Steel	141-0307-411		141-0307-412
RG-55/U, 142, 223, 400	1.15 + .01 f (GHz) 0-12.4 GHz	Brass	142-0308-411	142-0308-416	
		Stainless Steel	141-0308-411		141-0308-412
RG-179U/, 187	N/A	Brass	142-0333-411	142-0333-416	

Assembly instructions Page 67.

Mounting hole layout Figure 1 Page 76.

See Page 61 & 62 for Cable Assembly Tools.

Straight Clamp Type Plug

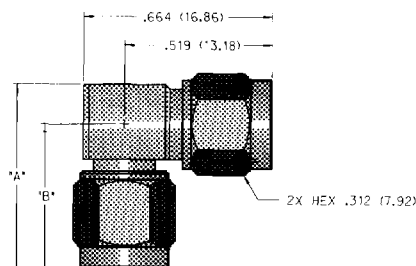


CABLE TYPE	VSWR & FREQ. RANGE	PRODUCT SERIES	GOLD PLATED	NICKEL PLATED	PASSIVATED
RG-178/U, 196 "A" = .826(20.98)	1.20 + .025 f (GHz) 0-12.4 GHz	Brass	142-0202-011	142-0202-016	
		Stainless Steel	141-0202-001		141-0202-002
RG-161/U, 174, 188, 316 "A" = .861(21.87)	1.15 + .02 f (GHz) 0-12.4 GHz	Brass	142-0203-011	142-0203-016	
		Stainless Steel	141-0203-001		141-0203-002
RG-58/U, 141, 303, 55, 142, 223, 400 "A" = .895(22.73)	1.15 + .01 f (GHz) 0-12.4 GHz	Brass	142-0207-011	142-0207-016	
		Stainless Steel	141-0207-001		141-0207-002

Assembly instructions Page 71.

Mounting hold layout Figure 1 Page 76.

RightAngle Clamp Type Plug



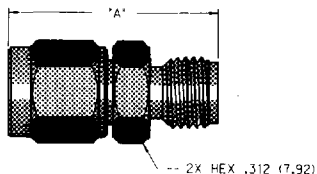
CABLE TYPE	VSWR & FREQ. RANGE	PRODUCT SERIES	GOLD PLATED	NICKEL PLATED	PASSIVATED
RG-178/U, 196 "A" = .569(14.45) "B" = .428(10.81)	1.20 + .03 f (GHz) 0-12.4 GHz	Brass	142-0202-101	142-0202-106	
		Stainless Steel	141-0202-101		141-0202-102
RG-161/U, 174, 188, 316 "A" = .574 (14.58) "B" = .433(11.00)	1.15 + .03 f (GHz) 0-12.4 GHz	Brass	142-0203-101	142-0203-106	
		Stainless Steel	141-0203-101		141-0203-102
RG-58/U, 141, 303, 55, 142, 223, 400 "A" = .686 (17.42) "B" = .545(13.84)	1.15 + .02 f (GHz) 0-12.4 GHz	Brass	142-0207-101	142-0207-106	
		Stainless Steel	141-0207-101		141-0207-102

Assembly instructions Page 72.

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Straight Clamp Type Jack



CABLE TYPE	VSWR & FREQ. RANGE	PRODUCT SERIES	GOLD PLATED	NICKEL PLATED	PASSIVATED
RG-178/U, 196 "A" = .745(18.92)	1.20 + .025 f (GHz) 0-12.4 GHz	Brass	142-0102-011	142-0102-016	
		Stainless Steel	141-0102-001		141-0102-002
RG-161/U, 174, 188, 316 "A" = .780(19.81)	1.15 + .02 f (GHz) 0-12.4 GHz	Brass	142-0103-011	142-0103-016	
		Stainless Steel	141-0103-001		141-0103-002
RG-58/U, 141, 303, 55, 142, 223, 400 "A" = .824(20.93)	1.15 + .01 f (GHz) 0-12.4 GHz	Brass	142-0107-011	142-0107-016	
		Stainless Steel	141-0107-001		141-0107-002

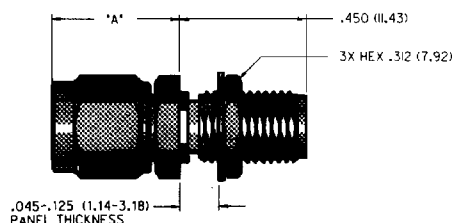
Assembly instructions Page 71.

Straight Clamp Type Bulkhead Jack

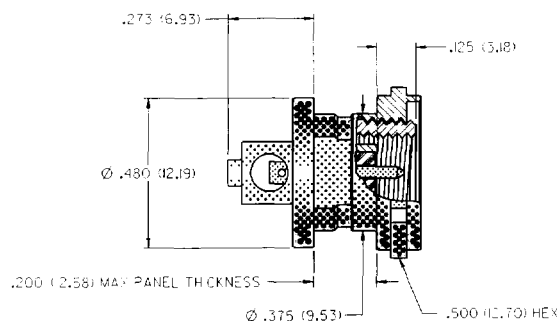
CABLE TYPE	VSWR & FREQ. RANGE	PRODUCT SERIES	GOLD PLATED	NICKEL PLATED	PASSIVATED
RG-178/U, 196 "A" = .452(11.48)	1.20 + .025 f (GHz) 0-12.4 GHz	Brass	142-0102-401	142-0102-406	
		Stainless Steel	141-0102-401		141-0102-402
RG-161/U, 174, 188, 316 "A" = .487(12.37)	1.15 + .02 f (GHz) 0-12.4 GHz	Brass	142-0103-401	142-0103-406	
		Stainless Steel	141-0103-401		141-0103-402
RG-58/U, 141, 303, 55, 142, 223, 400 "A" = .531(13.49)	1.15 + .01 f (GHz) 0-12.4 GHz	Brass	142-0107-401	142-0107-406	
		Stainless Steel	141-0107-401		141-0107-402

Assembly instructions Page 71.

Mounting hold layout Figure 1 Page 76.



Rear Mount Bulkhead Plug - Antenna Connector

 Inches (millimeters)
 customer drawings available upon request


CABLE TYPE	VSWR & FREQ. RANGE	PRODUCT SERIES	GOLD PLATED*
RG-178/U .047 Semi-Rigid	VSWR: N/A 0-4 GHz	Brass	142-0801-421*

* With Nickel mounting nut.

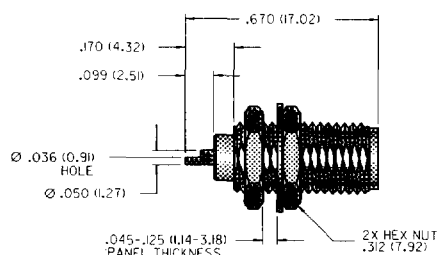
Mounting hole layout Figure 8 Page 76.

Mates with SMA Jack Antenna Interface.

Front Mount Bulkhead Jack Receptacle

VSWR & FREQ. RANGE	PRODUCT SERIES	GOLD PLATED	NICKEL PLATED	PASSIVATED
VSWR: N/A 0-18 GHz	Brass	142-0701-411	142-0701-416	
	Stainless Steel	141-0701-411		141-0701-412

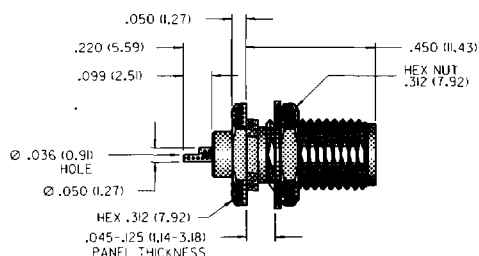
Mounting hole layout Figure 1 Page 76.

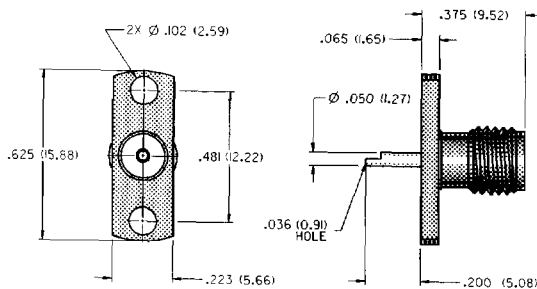


Rear Mount Bulkhead Jack Receptacle

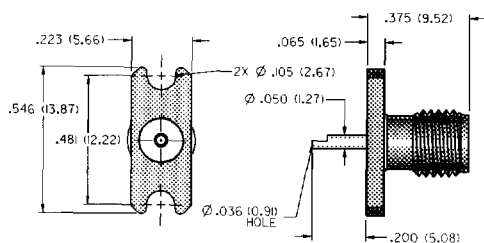
VSWR & FREQ. RANGE	PRODUCT SERIES	GOLD PLATED	NICKEL PLATED	PASSIVATED
VSWR: N/A 0-18 GHz	Brass	142-0701-401	142-0701-406	
	Stainless Steel	141-0701-401		141-0701-402

Mounting hole layout Figure 1 Page 76.

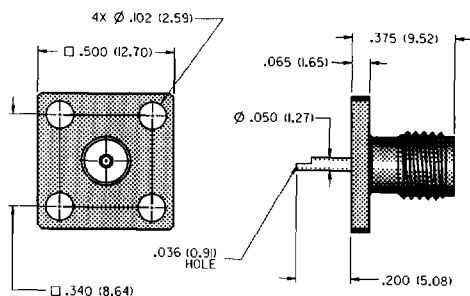


2-Hole Flange Mount Jack Receptacle

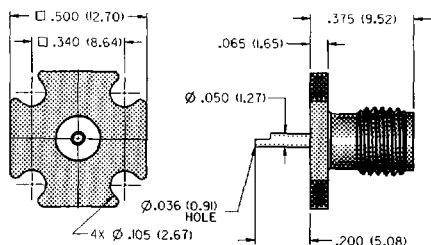
VSWR & FREQ. RANGE	PRODUCT SERIES	GOLD PLATED	NICKEL PLATED	PASSIVATED
VSWR: N/A 0-18 GHz	Brass	142-0701-621	142-0701-626	
	Stainless Steel	141-0701-601		141-0701-602

2-Hole Flange Mount Jack Receptacle - Economy Version

VSWR & FREQ. RANGE	PRODUCT SERIES	GOLD PLATED	NICKEL PLATED
VSWR: N/A 0-18 GHz	Brass	142-0701-611	142-0701-616

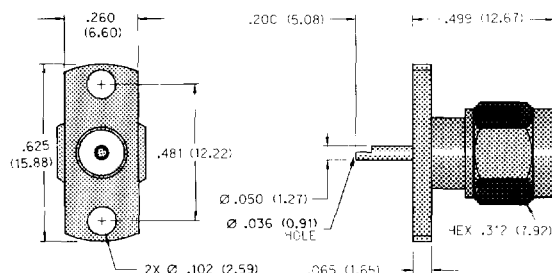
4-Hole Flange Mount Jack Receptacle

VSWR & FREQ. RANGE	PRODUCT SERIES	GOLD PLATED	NICKEL PLATED	PASSIVATED
VSWR: N/A 0-18 GHz	Brass	142-0701-631	142-0701-636	
	Stainless Steel	141-0701-611		141-0701-612

4-Hole Flange Mount Jack Receptacle - Economy Version

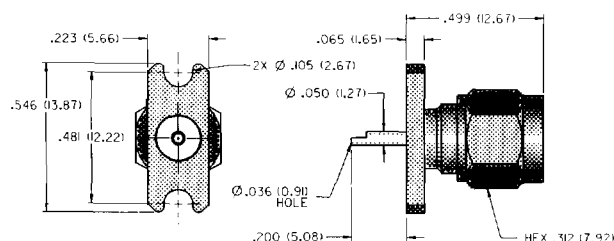
VSWR & FREQ. RANGE	PRODUCT SERIES	GOLD PLATED	NICKEL PLATED
VSWR: N/A 0-18 GHz	Brass	142-0701-601	142-0701-606

2-Hole Flange Mount Plug Receptacle

 Inches (millimeters)
 customer drawings available upon request


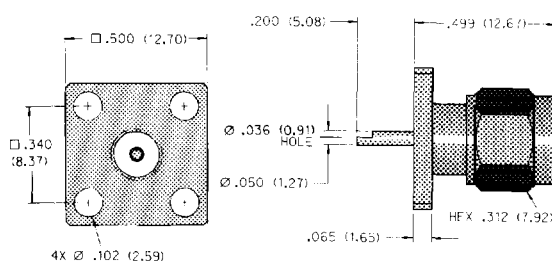
VSWR & FREQ. RANGE	PRODUCT SERIES	GOLD PLATED	NICKEL PLATED	PASSIVATED
VSWR: N/A 0-18 GHz	Brass	142-0801-601	142-0801-606	
	Stainless Steel	141-0801-601		141-0801-602

2-Hole Flange Mount Plug Receptacle - Economy Version



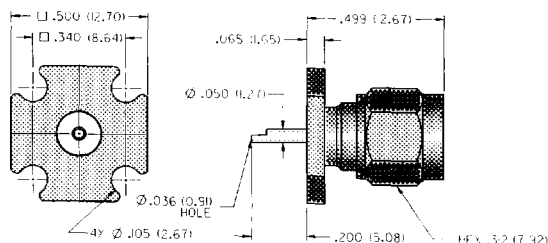
VSWR & FREQ. RANGE	PRODUCT SERIES	GOLD PLATED	NICKEL PLATED
VSWR: N/A 0-18 GHz	Brass	142-0801-621	142-0801-626

4-Hole Flange Mount Plug Receptacle



VSWR & FREQ. RANGE	PRODUCT SERIES	GOLD PLATED	NICKEL PLATED	PASSIVATED
VSWR: N/A 0-18 GHz	Brass	142-0801-611	142-0801-616	
	Stainless Steel	141-0801-611		141-0801-612

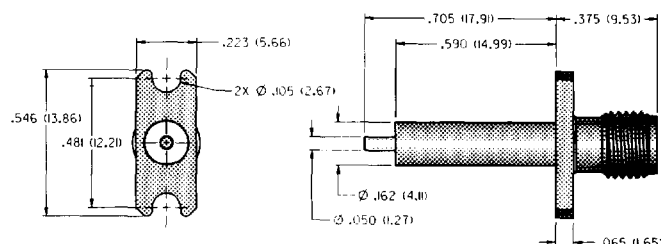
4-Hole Flange Mount Plug Receptacle - Economy Version



VSWR & FREQ. RANGE	PRODUCT SERIES	GOLD PLATED	NICKEL PLATED
VSWR: N/A 0-18 GHz	Brass	142-0801-631	142-0801-636

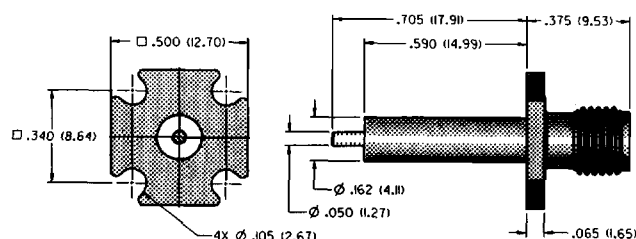
2-Hole Flange Mount Jack Receptacle - Extended Dielectric

VSWR & FREQ. RANGE	PRODUCT SERIES	GOLD PLATED	NICKEL PLATED
VSWR: 1.15 + .02 f (GHz) 0-18 GHz	Brass	142-1701-021	142-1701-026



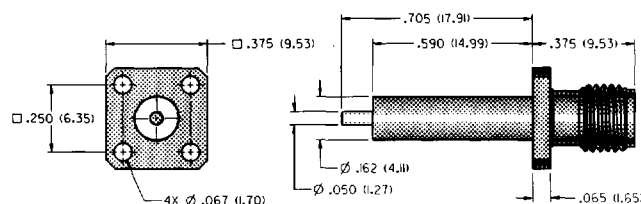
4-Hole Flange Mount Jack Receptacle - Extended Dielectric

VSWR & FREQ. RANGE	PRODUCT SERIES	GOLD PLATED	NICKEL PLATED
VSWR: 1.15 + .02 f (GHz) 0-18 GHz	Brass	142-1701-001	142-1701-006



4-Hole Flange Mount Jack Receptacle - Extended Dielectric

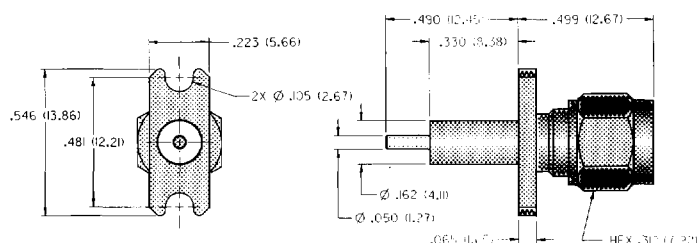
VSWR & FREQ. RANGE	PRODUCT SERIES	GOLD PLATED	NICKEL PLATED
VSWR: 1.15 + .02 f (GHz) 0-18 GHz	Brass	142-1701-011	142-1701-016



2-Hole Flange Mount Plug Receptacle - Extended Dielectric

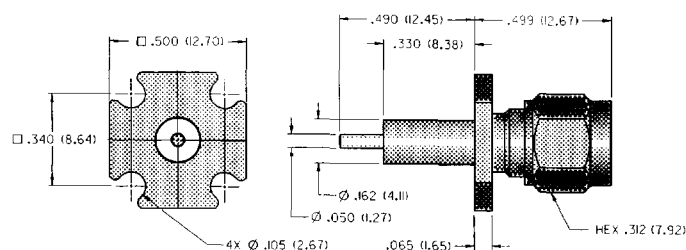
 Inches (millimeters)
 customer drawings available upon request

VSWR & FREQ. RANGE	PRODUCT SERIES	GOLD PLATED	NICKEL PLATED
VSWR: 1.15 + .02 f (GHz) 0-18 GHz	Brass	142-1801-011	142-1801-016



4-Hole Flange Mount Plug Receptacle - Extended Dielectric

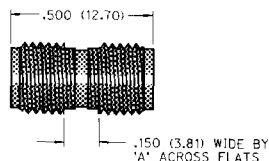
VSWR & FREQ. RANGE	PRODUCT SERIES	GOLD PLATED	NICKEL PLATED
VSWR: 1.15 + .02 f (GHz) 0-18 GHz	Brass	142-1801-001	142-1801-006



SMA

IN-SERIES ADAPTERS

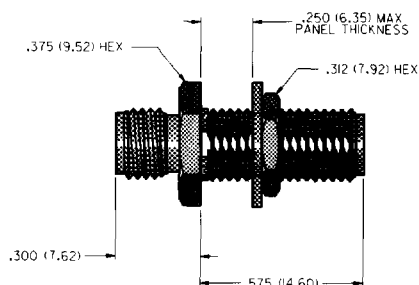
Jack - Jack

 Inches (millimeters)
 customer drawings available upon request


VSWR & FREQ. RANGE	PRODUCT SERIES	GOLD PLATED	NICKEL PLATED	PASSIVATED	DIMENSION "A"
1.05 + .005 f (GHz) 0-18 GHz	Brass	142-0901-801	142-0901-806		.197 (5.00)
1.05 + .005 f (GHz) 0-26.5 GHz	Stainless Steel*	141-0901-801		141-0901-802	.218 (5.54)

*Center contact epoxy staked.

Jack - Bulkhead Jack

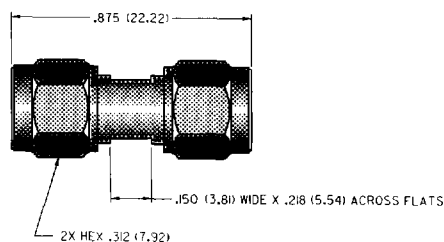


VSWR & FREQ. RANGE	PRODUCT SERIES	GOLD PLATED	NICKEL PLATED	PASSIVATED
1.05 + .01 f (GHz) 0-18 GHz	Brass	142-0901-401	142-0901-406	
1.05 + .005 f (GHz) 0-26.5 GHz	Stainless Steel*	141-0901-401		141-0901-402

*Center contact epoxy staked.

Mounting Hole layout Figure 1 Page 76.

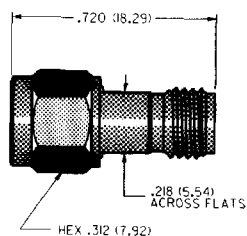
Plug - Plug



VSWR & FREQ. RANGE	PRODUCT SERIES	GOLD PLATED	NICKEL PLATED	PASSIVATED
1.05 + .01 f (GHz) 0-18 GHz	Brass	142-0901-811	142-0901-816	
1.05 + .005 f (GHz) 0-26.5 GHz	Stainless Steel*	141-0901-811		141-0901-812

*Center contact epoxy staked.

Plug - Jack



VSWR & FREQ. RANGE	PRODUCT SERIES	GOLD PLATED	NICKEL PLATED	PASSIVATED
1.05 + .005 f (GHz) 0-18 GHz	Brass	142-0901-821	142-0901-826	
1.05 + .005 f (GHz) 0-26.5 GHz	Stainless Steel*	141-0901-821		141-0901-822

*Center contact epoxy staked.