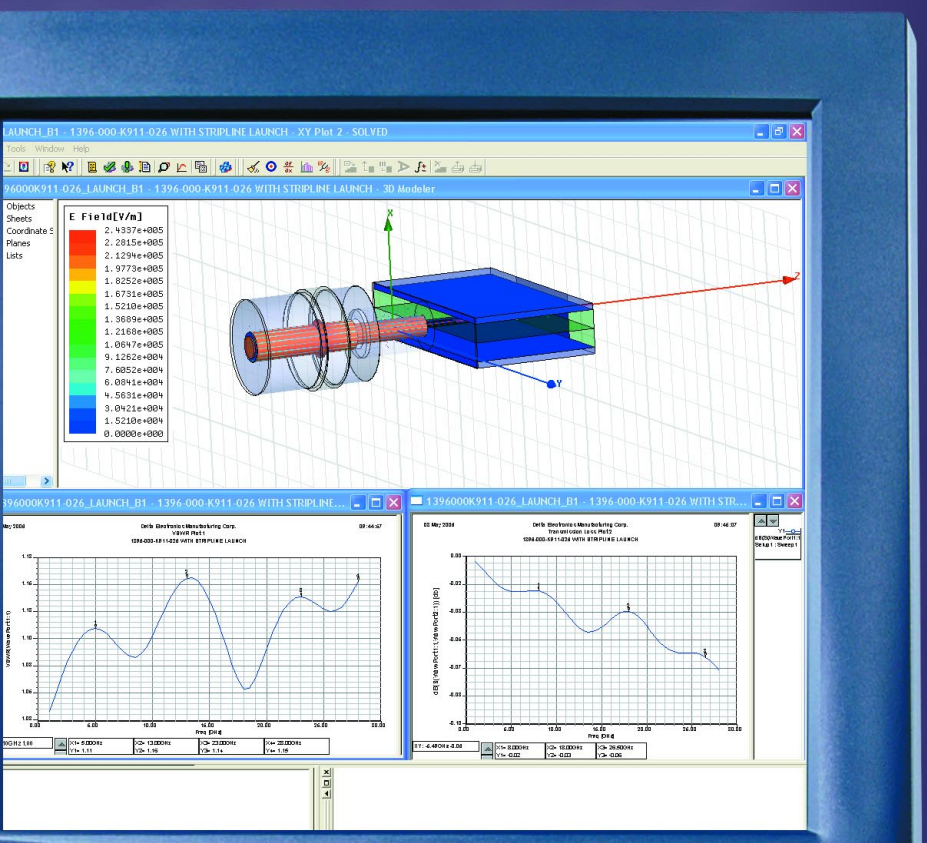
Extended-Frequency SMA Connectors

Click here for General Description

Click here for 26.5–GHz Precision

Click here for 27.0–GHz High Performance

PDF Volume 2



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Extended-Frequency SMA Connectors

This brochure introduces two new series of connectors that extend SMA performance beyond the MIL-PRF-39012 upper frequency limit of 18 GHz, while maintaining MIL-STD-348 mating characteristics for backward compatibility with standard SMA connectors when required.

With both 26.5-GHz precision types and 27.0-GHz high-performance types available, you can choose the best price / performance balance for your application, with no need to "overspecify."

This brochure features configurations to fulfill most standard applications, but any item shown can be customized for your specific needs.

SMA 26.5-GHz Connectors (Page 3)

These extended-frequency, precision SMA series connectors feature maximum VSWR of 1.15:1 from DC to 18 GHz, and 1.25:1 from 18 to 26.5 GHz.

Along with cable connectors for semi-rigid cable, our SMA 26.5-GHz line includes receptacles with post contacts and integral metal contact rings, and field-replaceable types in a variety of flange sizes. These field-replaceable receptacles are available as jacks or plugs, each with a choice of air or PTFE rear dielectric matching sections, and with or without EMI gaskets.

The field-replaceable receptacles are available for use with hermetic seals or accessory pins with diameters of .012, .015, .018, .020, or .036 inches. Standard hermetic seals are also shown in this brochure, and can be modified to a wide range of configurations to match your application requirements.

Three types of SMA 26.5-GHz adapters are also included in this series, as are bulkhead receptacles.

Performance Features:

Mode free through 26.5 GHz

Low reflection loss (VSWR)

Low Insertion Loss

Low RF Leakage > -100 dB

Consistent Unit to Unit Performance

All materials meet the Outgassing Requirements of NASA Publication 1124

SMA 27.0-GHz Connectors (Page 17)

These high-performance SMA connectors feature maximum VSWR of 1.10:1 from DC to 18 GHz, and 1.15:1 from 18 to 27.0 GHz.

They are designed to provide enhanced durability and reliability in a "field grade" production connector.

The internal design is optimized using state-of-the-art Electromagnetic Finite Element Analysis model simulation to provide low reflection coefficient, with mode free operation to 27.0 GHz.

In addition, this connector series provides -100 dB RF leakage due to the precision finish on the interface and mounting surfaces to assure a solid 360-degree contact in the critical RF return path, and the absence of epoxy holes in the connector body. The design of the internal structure provides a reliable and symmetrical axial captivation by mechanical means with a minimal disturbance to the transmission line characteristics and has a maximum continuous service temperature of 165˚ C.

SMA 27.0 GHz field replaceable connectors are available in six common mounting flange configurations. Both the field replaceable and thread-in (spark plug) connectors are available for use with hermetic seals or accessory pins with diameters of .009, .012, .015, .018, .020, and .036 inches. Standard hermetic seals are also shown in this brochure, and can be modified to a wide range of configurations to match your application requirements.

These connectors are machined to exacting tolerances and the highest quality standards on modern CNC turning centers, and assembly is tightly controlled and monitored to ensure peak consistency of performance from unit to unit.

Performance Features:

Mode free through 27.0 GHz

Low reflection loss (VSWR)

Low Insertion Loss

Low RF Leakage > -100 dB

Extended Operating Temperature (+165˚ C)

Phase Stable

Consistent Unit to Unit Performance

Rigid center contact captivation using high temperature Ultem 1000 support bead

All materials meet the Outgassing Requirements of NASA Publication 1124

General Description

These extended-frequency, precision SMA connectors feature maximum VSWR of 1.15:1 from DC to 18 GHz, and 1.25:1 from 18 to 26.5 GHz.

Along with cable connectors for semi-rigid cable, our SMA 26.5-GHz line includes receptacles with post contacts and integral metal contact rings, and field-replaceable types in a variety of flange sizes. These field-replaceable receptacles are available as jacks or plugs, each with a choice of air or PTFE rear dielectric matching sections, and with or without EMI gaskets.

The field-replaceable receptacles are available for use with hermetic seals or accessory pins with diameters of .012, .015, .018, .020, or .036 inches. Standard hermetic seals are also shown in this brochure, and can be modified to a wide range of configurations to match your application requirements.

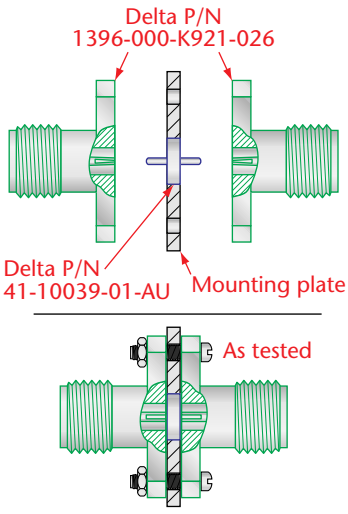
Three types of SMA 26.5-GHz adapters are also included in this series, as are bulkhead receptacles.

We are continually expanding our SMA 26.5-GHz product line and other high-frequency products, so please call if you don't see what you need.

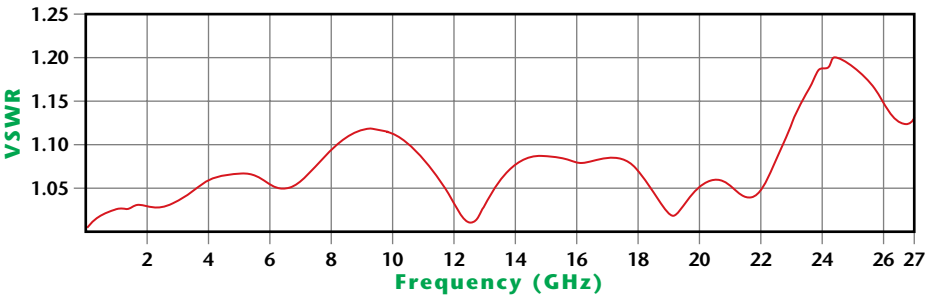
Contents (Click on any line to go to the target page.)

Test Data

Test Setup



VSWR



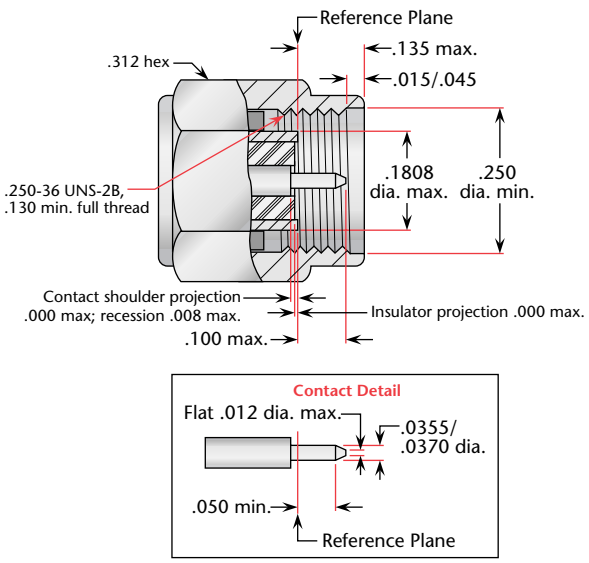
Two connectors tested, mounted back-to-back with a hermetic seal as shown at left. Maximum VSWR 1.20:1 @ 24.36 GHz (1.095:1 for each connector.)

These results are typical and valid only for connectors set up for testing in the configuration shown. Hermetic seal attachment method and other circuitry characteristics will affect VSWR of the completed component.

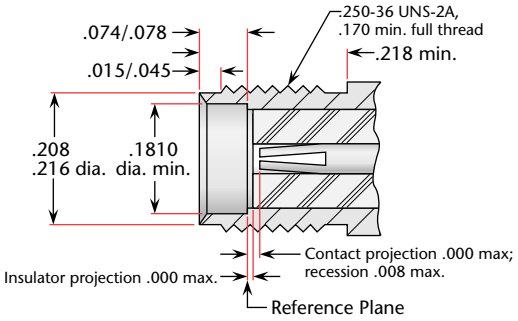
See next page for interface dimensions and specifications.

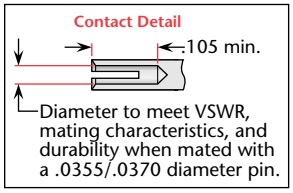
SMA 26.5 GHz Interfaces

Plug Interface**



Jack Interface**





** Per MIL-STD-348, figures 310-1 and 310-2. Some proportions altered to illustrate detail.

SMA 26.5 GHz Specifications*

Electrical:

Nominal Impedance: 50 ohms.

Frequency Range: DC–26.5 GHz.

Voltage Rating: 335 Volts RMS (@ sea level).

VSWR: DC–18 GHz: 1.15:1 maximum;
18–26.5 GHz: 1.25:1 maximum.

RF Transmission Loss: .03 $x\sqrt{f\ (GHz)}$ dB.

Dielectric Withstanding Voltage: 1000 Volts RMS (@ sea level).

RF Hipot: 670 Volts RMS @5 MHz.

Insulation Resistance: 10,000 megohms.

RF Leakage: -100 dB minimum @3 GHz.

Contact Resistance: Center contact: 3.0 milliohms maximum;
Outer contact: 2.0 milliohms maximum.

Mechanical:

Force to Engage: 2 inch-pounds maximum.

Coupling Nut Retention: 60 pounds minimum (plugs only).

Coupling Proof Torque: 15 inch-pounds minimum (plugs only).

Contact Insertion Force: Insertion: 2 pounds maximum;
withdrawal: 1 ounce minimum.

Durability: 500 mating cycles minimum.

Mating Torque: 7–10 inch-pounds.

Materials/Finishes:

Insulators: Teflon PTFE per ASTM D1710.

Contacts: Beryllium Copper (Alloy C17300) per ASTM B196.

Contact Plating: Gold per MIL-G-45204.

Other Metal Parts: Type 303 Stainless steel per ASTM A582, plated gold per MIL-G-45204 or passivated per AMS-QQ-P-35.

Gaskets: Silicone rubber per A-A-59588.

EMI Gaskets: Conductive elastomer per MIL-G-83528, type F.

Environmental:

Operating Temperature: -65 to +125˚ C.

Vibration: Per MIL-STD-202, Method 204, test condition D.

Shock: Per MIL-STD-202, Method 213, test condition I.

Thermal Shock: Per MIL-STD-202, Method 107, test condition A.

Corrosion (Salt Atmosphere): Per MIL-STD-202, Method 101, test condition B.

Moisture Resistance: Per MIL-STD-202, Method 106, no measurements at high humidity. Insulation resistance 200 megohms minimum with 5 minutes of removal from humidity.

All materials meet outgassing requirements of NASA Publication 1124.

All other specifications are in accordance with the latest issues of MIL-PRF-39012, or MIL-PRF-55339, or other applicable MIL specifications, and interfaces are in accordance with MIL-STD-348.

*These specifications are typical and may not apply to all connectors. Detailed specifications for individual connectors are available on request.

Cable Connectors—Direct Solder For Semi-Rigid Cable

Figure 1
(Straight plug)

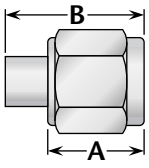


Figure 2
(Straight jack)

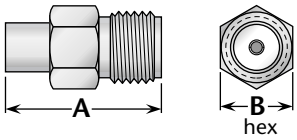
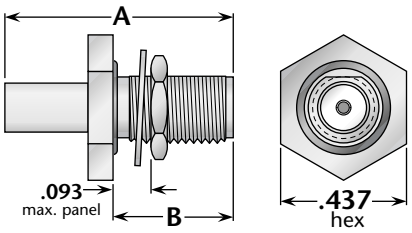
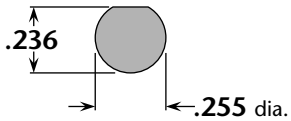


Figure 3
(Bulkhead jack, with mounting gasket)



Mounting Hole Dimensions

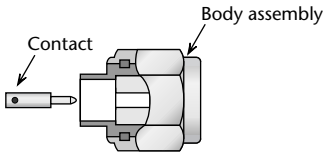


Cable Group	Figure	Dimensions		Plating		Delta P/N	Assembly Procedure/ Trim Code
		A	B	Body	Contact		
13	1	.330	.440	Gold/PCN(1)	Gold	1301-031-K003-900	H/01
13	2	.500	.250	Gold	Gold	1308-031-G003-900	H/01
13	3	.625	.415	Gold	Gold	1317-031-G673-900	H/01
14	1	.330	.440	Gold/PCN(1)	Gold	1301-025-K003-900	H/01
14	2	.500	.250	Gold	Gold	1308-025-G003-900	H/01
14	3	.625	.415	Gold	Gold	1317-025-G673-900	H/01

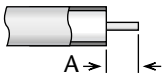
(1) Gold-plated body and passivated coupling nut.

Cable Groups	
13: .141" semi-rigid; RG-402; M17/130	14: .085" semi-rigid; RG-405; M17/133

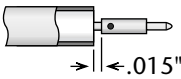
Assembly Procedure H



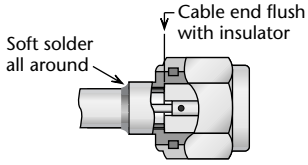
Trim Codes	
Code	A
H/01	.090



1) Trim cable as shown. Remove any burrs from jacket and center conductor.



2) Solder contact to center conductor, fixturing to maintain gap as shown. Remove any excess solder from outside of contact.



3) Insert cable into body and solder cable jacket to body, keeping end of cable flush with insulator as shown.

Plug body assembly and contact shown; procedure is identical for jack connectors.

Panel Receptacles—Post Contact

Jack Receptacles

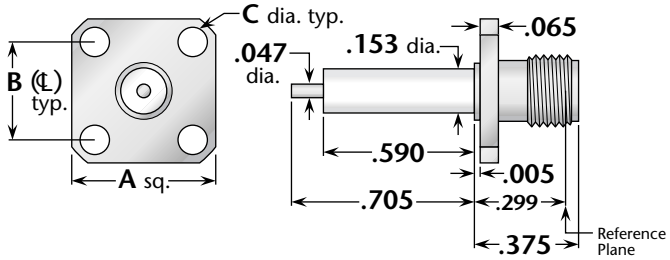


Figure 1 (1/2" square flange)

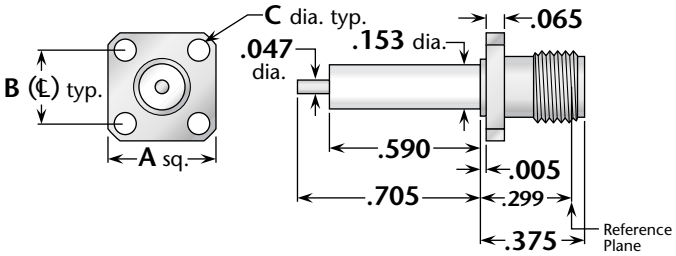


Figure 2 (3/8" square flange)

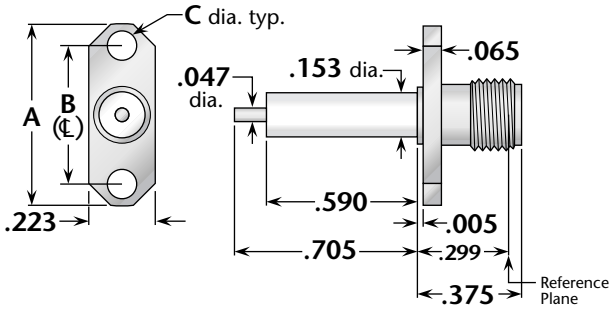


Figure 3 (2-hole flange)

Plug Receptacles

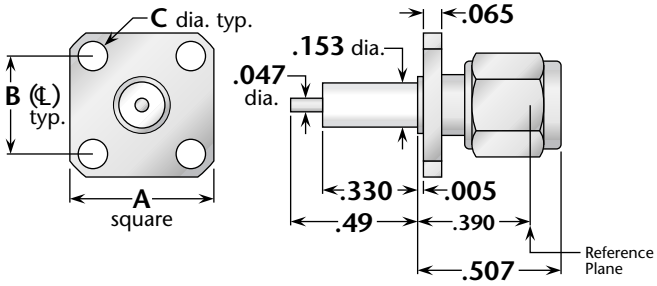


Figure 4 (1/2" square flange)

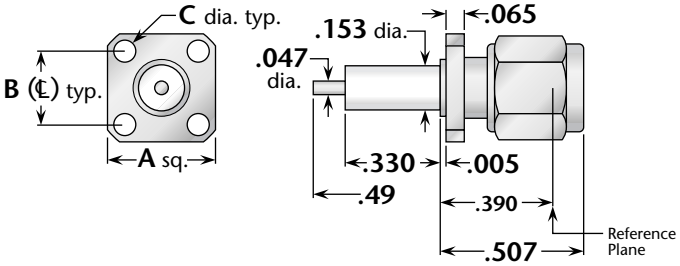


Figure 5 (3/8" square flange)

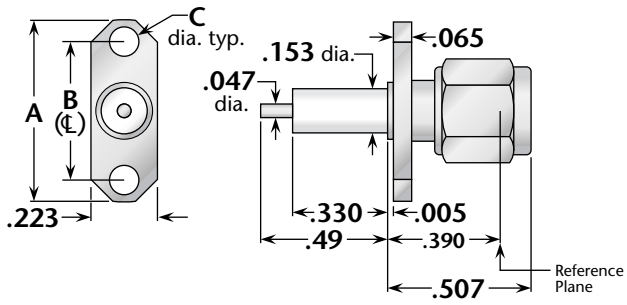


Figure 6 (2-hole flange)

Figure	Dimensions			Plating		Delta P/N
	A	B	C	Body	Contact	
1	.500	.340	.102	Gold	Gold (C)	1358-000-G051-900
1	.500	.340	.102	Passivated	Gold (C)	1358-000-K051-900
2	.375	.250	.067	Gold	Gold (C)	1358-000-G911-900
2	.375	.250	.067	Passivated	Gold (C)	1358-000-K911-900
3	.625	.481	.102	Gold	Gold (C)	1358-000-G921-900
3	.625	.481	.102	Passivated	Gold (C)	1358-000-K921-900
4	.500	.340	.102	Gold	Gold (C)	1359-000-G051-900
4	.500	.340	.102	Passivated	Gold (C)	1359-000-K051-900
5	.375	.250	.067	Gold	Gold (C)	1359-000-G911-900
5	.375	.250	.067	Passivated	Gold (C)	1359-000-K911-900
6	.625	.481	.102	Gold	Gold (C)	1359-000-G921-900
6	.625	.481	.102	Passivated	Gold (C)	1359-000-K921-900

These receptacles are also available with other flange sizes and contact / insulator configurations.
(C) in contact plating column indicates captive contact.

Panel Jack Receptacles—Field Replaceable, Air Dielectric (No EMI Gasket)

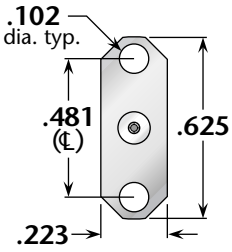


Figure 1
(Standard 2-hole flange)

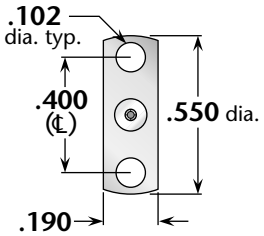
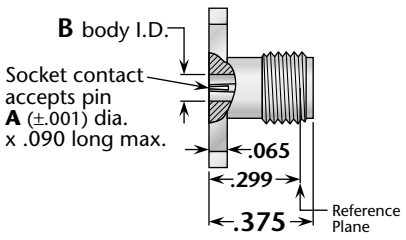


Figure 2
(Narrow 2-hole flange)



Connector Side View

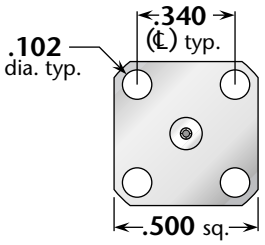


Figure 3
(1/2" square flange)

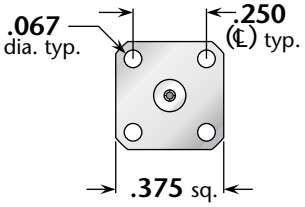


Figure 4
(3/8" square flange)

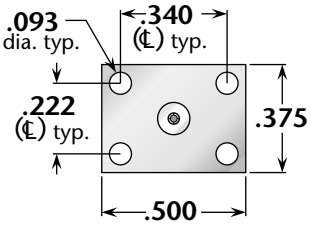


Figure 5
(1/2" x 3/8" rectangular flange)

Flange Figure	Dimensions		Plating		Delta P/N
	A (Pin Diameter)	B (Body I.D.)	Body	Contact	
1	.012	.078	Passivated	Gold (C)	1396-000-K921-025
	.015	.078	Passivated	Gold (C)	1396-000-K921-026
	.018	.078	Passivated	Gold (C)	1396-000-K921-027
	.020	.078	Passivated	Gold (C)	1396-000-K921-028
	.036	.110	Passivated	Gold (C)	1396-000-K921-029
2	.012	.078	Passivated	Gold (C)	1396-000-K911-029
	.015	.078	Passivated	Gold (C)	1396-000-K911-030
	.018	.078	Passivated	Gold (C)	1396-000-K911-031
	.020	.078	Passivated	Gold (C)	1396-000-K911-032
	.036	.110	Passivated	Gold (C)	1396-000-K911-033
3	.012	.078	Passivated	Gold (C)	1396-000-K051-015
	.015	.078	Passivated	Gold (C)	1396-000-K051-016
	.018	.078	Passivated	Gold (C)	1396-000-K051-017
	.020	.078	Passivated	Gold (C)	1396-000-K051-018
	.036	.110	Passivated	Gold (C)	1396-000-K051-019
4	.012	.078	Passivated	Gold (C)	1396-000-K911-023
	.015	.078	Passivated	Gold (C)	1396-000-K911-024
	.018	.078	Passivated	Gold (C)	1396-000-K911-025
	.020	.078	Passivated	Gold (C)	1396-000-K911-026
	.036	.110	Passivated	Gold (C)	1396-000-K911-027
5	.012	.078	Passivated	Gold (C)	1396-000-K911-042
	.015	.078	Passivated	Gold (C)	1396-000-K911-043
	.018	.078	Passivated	Gold (C)	1396-000-K911-044
	.020	.078	Passivated	Gold (C)	1396-000-K911-045
	.036	.110	Passivated	Gold (C)	1396-000-K911-046

See page 15 for accessory pins. • See page 16 for hermetic seals. • (C) indicates captive contact.

Panel Jack Receptacles—Field Replaceable, Air Dielectric (With EMI Gasket)

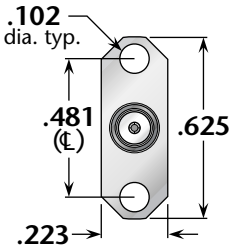


Figure 1
(Standard 2-hole flange)

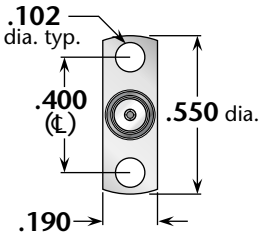
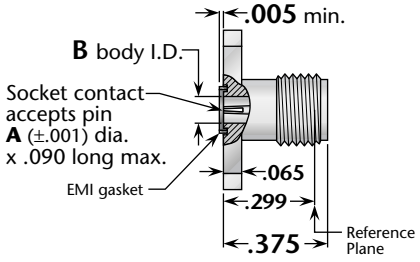


Figure 2
(Narrow 2-hole flange)



Connector Side View

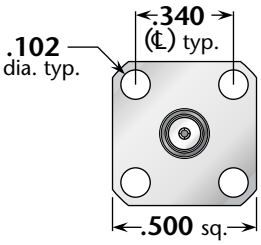


Figure 3
(1/2" square flange)

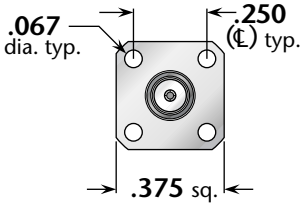


Figure 4
(3/8" square flange)

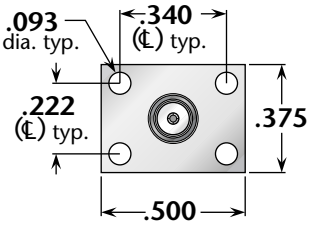


Figure 5
(1/2" x 3/8" rectangular flange)

Flange Figure	Dimensions		Plating		Delta P/N
	A (Pin Diameter)	B (Body I.D.)	Body	Contact	
1	.012	.078	Passivated	Gold (C)	1396-000-K921-025-EMI
	.015	.078	Passivated	Gold (C)	1396-000-K921-026-EMI
	.018	.078	Passivated	Gold (C)	1396-000-K921-027-EMI
	.020	.078	Passivated	Gold (C)	1396-000-K921-028-EMI
	.036	.110	Passivated	Gold (C)	1396-000-K921-029-EMI
2	.012	.078	Passivated	Gold (C)	1396-000-K911-029-EMI
	.015	.078	Passivated	Gold (C)	1396-000-K911-030-EMI
	.018	.078	Passivated	Gold (C)	1396-000-K911-031-EMI
	.020	.078	Passivated	Gold (C)	1396-000-K911-032-EMI
	.036	.110	Passivated	Gold (C)	1396-000-K911-033-EMI
3	.012	.078	Passivated	Gold (C)	1396-000-K051-015-EMI
	.015	.078	Passivated	Gold (C)	1396-000-K051-016-EMI
	.018	.078	Passivated	Gold (C)	1396-000-K051-017-EMI
	.020	.078	Passivated	Gold (C)	1396-000-K051-018-EMI
	.036	.110	Passivated	Gold (C)	1396-000-K051-019-EMI
4	.012	.078	Passivated	Gold (C)	1396-000-K911-023-EMI
	.015	.078	Passivated	Gold (C)	1396-000-K911-024-EMI
	.018	.078	Passivated	Gold (C)	1396-000-K911-025-EMI
	.020	.078	Passivated	Gold (C)	1396-000-K911-026-EMI
	.036	.110	Passivated	Gold (C)	1396-000-K911-027-EMI
5	.012	.078	Passivated	Gold (C)	1396-000-K911-042-EMI
	.015	.078	Passivated	Gold (C)	1396-000-K911-043-EMI
	.018	.078	Passivated	Gold (C)	1396-000-K911-044-EMI
	.020	.078	Passivated	Gold (C)	1396-000-K911-045-EMI
	.036	.110	Passivated	Gold (C)	1396-000-K911-046-EMI

See page 15 for accessory pins. • See page 16 for hermetic seals. • (C) indicates captive contact.

Panel Jack Receptacles—Field Replaceable, PTFE Dielectric (No EMI Gasket)

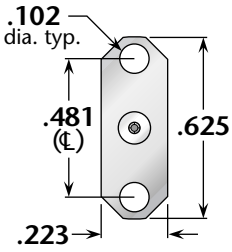


Figure 1
(Standard 2-hole flange)

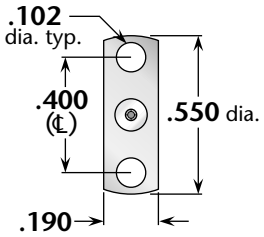
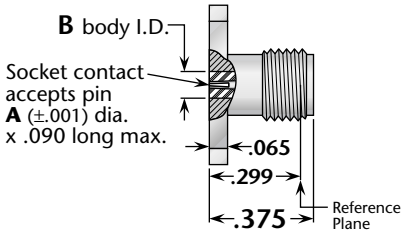


Figure 2
(Narrow 2-hole flange)



Connector Side View

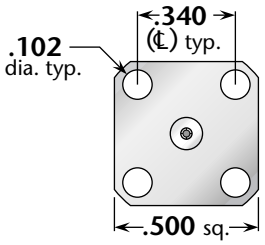


Figure 3
(1/2" square flange)

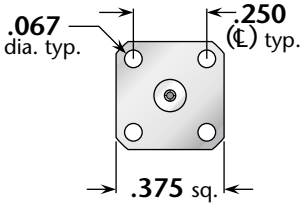


Figure 4
(3/8" square flange)

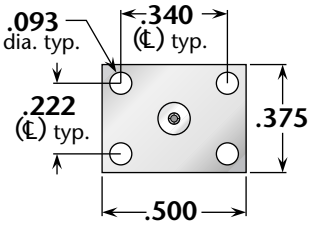


Figure 5
(1/2" x 3/8" rectangular flange)

Flange Figure	Dimensions		Plating		Delta P/N
	A (Pin Diameter)	B (Body I.D.)	Body	Contact	
1	.012	.104	Passivated	Gold (C)	1396-000-K921-021
	.015	.104	Passivated	Gold (C)	1396-000-K921-022
	.018	.104	Passivated	Gold (C)	1396-000-K921-023
	.020	.104	Passivated	Gold (C)	1396-000-K921-024
2	.012	.104	Passivated	Gold (C)	1396-000-K911-034
	.015	.104	Passivated	Gold (C)	1396-000-K911-035
	.018	.104	Passivated	Gold (C)	1396-000-K911-036
	.020	.104	Passivated	Gold (C)	1396-000-K911-037
3	.012	.104	Passivated	Gold (C)	1396-000-K051-020
	.015	.104	Passivated	Gold (C)	1396-000-K051-021
	.018	.104	Passivated	Gold (C)	1396-000-K051-022
	.020	.104	Passivated	Gold (C)	1396-000-K051-023
4	.012	.104	Passivated	Gold (C)	1396-000-K911-038
	.015	.104	Passivated	Gold (C)	1396-000-K911-039
	.018	.104	Passivated	Gold (C)	1396-000-K911-040
	.020	.104	Passivated	Gold (C)	1396-000-K911-041
5	.012	.104	Passivated	Gold (C)	1396-000-K911-047
	.015	.104	Passivated	Gold (C)	1396-000-K911-048
	.018	.104	Passivated	Gold (C)	1396-000-K911-049
	.020	.104	Passivated	Gold (C)	1396-000-K911-050

See page 15 for accessory pins. • See page 16 for hermetic seals. • (C) indicates captive contact.

Panel Jack Receptacles—Field Replaceable, PTFE Dielectric (With EMI Gasket)

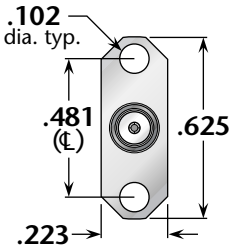


Figure 1
(Standard 2-hole flange)

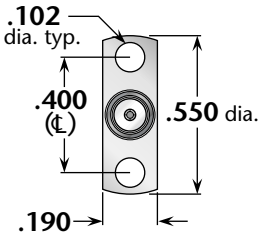
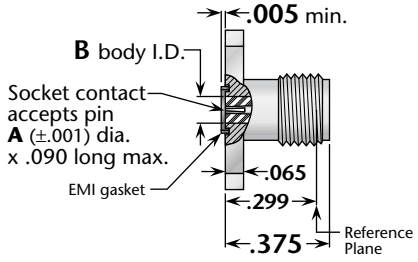


Figure 2
(Narrow 2-hole flange)



Connector Side View

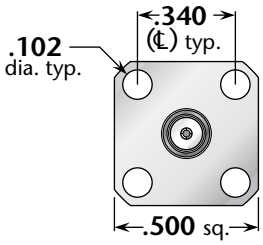


Figure 3
(1/2" square flange)

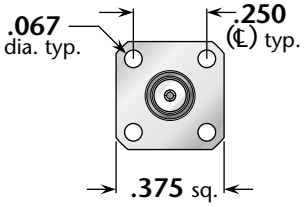


Figure 4
(3/8" square flange)

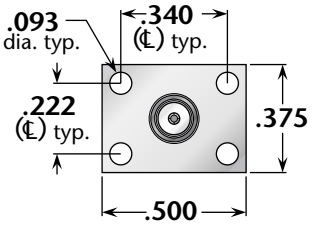


Figure 5
(1/2" x 3/8" rectangular flange)

Flange Figure	Dimensions		Plating		Delta P/N
	A (Pin Diameter)	B (Body I.D.)	Body	Contact	
1	.012	.104	Passivated	Gold (C)	1396-000-K921-021-EMI
	.015	.104	Passivated	Gold (C)	1396-000-K921-022-EMI
	.018	.104	Passivated	Gold (C)	1396-000-K921-023-EMI
	.020	.104	Passivated	Gold (C)	1396-000-K921-024-EMI
2	.012	.104	Passivated	Gold (C)	1396-000-K911-034-EMI
	.015	.104	Passivated	Gold (C)	1396-000-K911-035-EMI
	.018	.104	Passivated	Gold (C)	1396-000-K911-036-EMI
	.020	.104	Passivated	Gold (C)	1396-000-K911-037-EMI
3	.012	.104	Passivated	Gold (C)	1396-000-K051-020-EMI
	.015	.104	Passivated	Gold (C)	1396-000-K051-021-EMI
	.018	.104	Passivated	Gold (C)	1396-000-K051-022-EMI
	.020	.104	Passivated	Gold (C)	1396-000-K051-023-EMI
4	.012	.104	Passivated	Gold (C)	1396-000-K911-038-EMI
	.015	.104	Passivated	Gold (C)	1396-000-K911-039-EMI
	.018	.104	Passivated	Gold (C)	1396-000-K911-040-EMI
	.020	.104	Passivated	Gold (C)	1396-000-K911-041-EMI
5	.012	.104	Passivated	Gold (C)	1396-000-K911-047-EMI
	.015	.104	Passivated	Gold (C)	1396-000-K911-048-EMI
	.018	.104	Passivated	Gold (C)	1396-000-K911-049-EMI
	.020	.104	Passivated	Gold (C)	1396-000-K911-050-EMI

See page 15 for accessory pins. • See page 16 for hermetic seals. • (C) indicates captive contact.

Panel Plug Receptacles—Field Replaceable, Air Dielectric (No EMI Gasket)

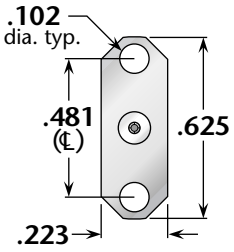


Figure 1
(Standard 2-hole flange)

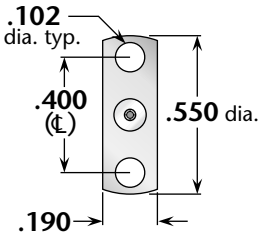
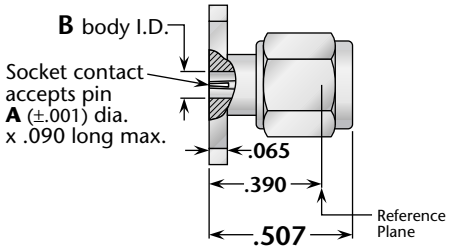


Figure 2
(Narrow 2-hole flange)



Connector Side View

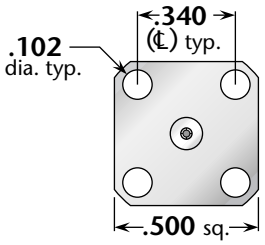


Figure 3
(1/2" square flange)

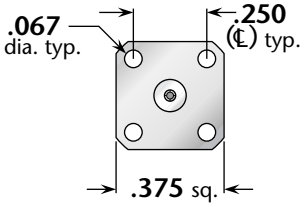


Figure 4
(3/8" square flange)

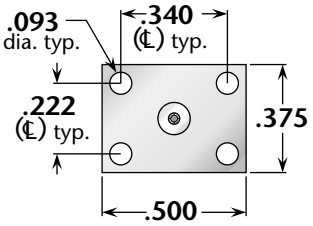


Figure 5
(1/2" x 3/8" rectangular flange)

Flange Figure	Dimensions		Plating		Delta P/N
	A (Pin Diameter)	B (Body I.D.)	Body	Contact	
1	.012	.078	Passivated	Gold (C)	1397-000-K921-017
	.015	.078	Passivated	Gold (C)	1397-000-K921-018
	.018	.078	Passivated	Gold (C)	1397-000-K921-019
	.020	.078	Passivated	Gold (C)	1397-000-K921-020
	.036	.110	Passivated	Gold (C)	1397-000-K921-021
2	.012	.078	Passivated	Gold (C)	1397-000-K911-011
	.015	.078	Passivated	Gold (C)	1397-000-K911-012
	.018	.078	Passivated	Gold (C)	1397-000-K911-013
	.020	.078	Passivated	Gold (C)	1397-000-K911-014
	.036	.110	Passivated	Gold (C)	1397-000-K911-015
3	.012	.078	Passivated	Gold (C)	1397-000-K051-011
	.015	.078	Passivated	Gold (C)	1397-000-K051-012
	.018	.078	Passivated	Gold (C)	1397-000-K051-013
	.020	.078	Passivated	Gold (C)	1397-000-K051-014
	.036	.110	Passivated	Gold (C)	1397-000-K051-015
4	.012	.078	Passivated	Gold (C)	1397-000-K911-020
	.015	.078	Passivated	Gold (C)	1397-000-K911-021
	.018	.078	Passivated	Gold (C)	1397-000-K911-022
	.020	.078	Passivated	Gold (C)	1397-000-K911-023
	.036	.110	Passivated	Gold (C)	1397-000-K911-024
5	.012	.078	Passivated	Gold (C)	1397-000-K911-029
	.015	.078	Passivated	Gold (C)	1397-000-K911-030
	.018	.078	Passivated	Gold (C)	1397-000-K911-031
	.020	.078	Passivated	Gold (C)	1397-000-K911-032
	.036	.110	Passivated	Gold (C)	1397-000-K911-033

See page 15 for accessory pins. • See page 16 for hermetic seals. • (C) indicates captive contact.

Panel Plug Receptacles—Field Replaceable, Air Dielectric (With EMI Gasket)

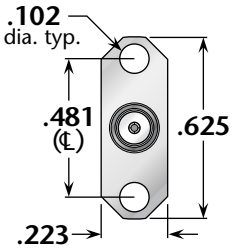


Figure 1
(Standard 2-hole flange)

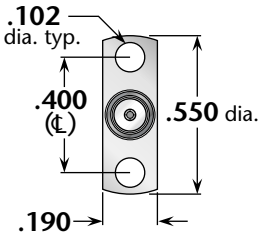
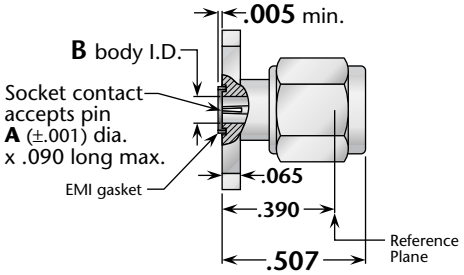


Figure 2
(Narrow 2-hole flange)



Connector Side View

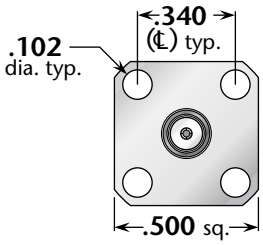


Figure 3
(1/2" square flange)

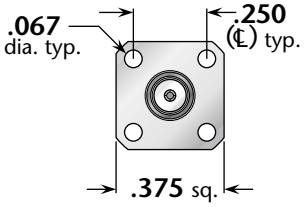


Figure 4
(3/8" square flange)

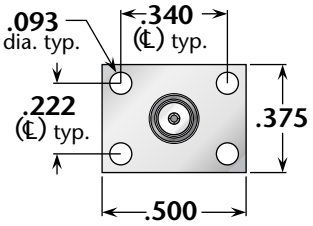


Figure 5
(1/2" x 3/8" rectangular flange)

Flange Figure	Dimensions		Plating		Delta P/N
	A (Pin Diameter)	B (Body I.D.)	Body	Contact	
1	.012	.078	Passivated	Gold (C)	1397-000-K921-017-EMI
	.015	.078	Passivated	Gold (C)	1397-000-K921-018-EMI
	.018	.078	Passivated	Gold (C)	1397-000-K921-019-EMI
	.020	.078	Passivated	Gold (C)	1397-000-K921-020-EMI
	.036	.110	Passivated	Gold (C)	1397-000-K921-021-EMI
2	.012	.078	Passivated	Gold (C)	1397-000-K911-011-EMI
	.015	.078	Passivated	Gold (C)	1397-000-K911-012-EMI
	.018	.078	Passivated	Gold (C)	1397-000-K911-013-EMI
	.020	.078	Passivated	Gold (C)	1397-000-K911-014-EMI
	.036	.110	Passivated	Gold (C)	1397-000-K911-015-EMI
3	.012	.078	Passivated	Gold (C)	1397-000-K051-011-EMI
	.015	.078	Passivated	Gold (C)	1397-000-K051-012-EMI
	.018	.078	Passivated	Gold (C)	1397-000-K051-013-EMI
	.020	.078	Passivated	Gold (C)	1397-000-K051-014-EMI
	.036	.110	Passivated	Gold (C)	1397-000-K051-015-EMI
4	.012	.078	Passivated	Gold (C)	1397-000-K911-020-EMI
	.015	.078	Passivated	Gold (C)	1397-000-K911-021-EMI
	.018	.078	Passivated	Gold (C)	1397-000-K911-022-EMI
	.020	.078	Passivated	Gold (C)	1397-000-K911-023-EMI
	.036	.110	Passivated	Gold (C)	1397-000-K911-024-EMI
5	.012	.078	Passivated	Gold (C)	1397-000-K911-029-EMI
	.015	.078	Passivated	Gold (C)	1397-000-K911-030-EMI
	.018	.078	Passivated	Gold (C)	1397-000-K911-031-EMI
	.020	.078	Passivated	Gold (C)	1397-000-K911-032-EMI
	.036	.110	Passivated	Gold (C)	1397-000-K911-033-EMI

See page 15 for accessory pins. • See page 16 for hermetic seals. • (C) indicates captive contact.

Panel Plug Receptacles—Field Replaceable, PTFE Dielectric (No EMI Gasket)

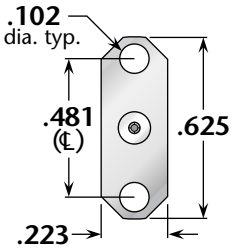


Figure 1
(Standard 2-hole flange)

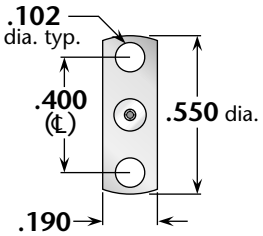
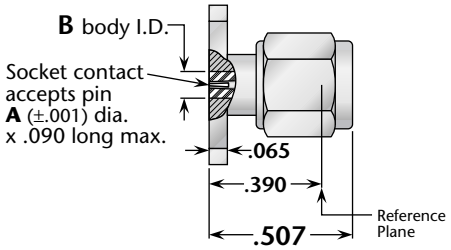


Figure 2
(Narrow 2-hole flange)



Connector Side View

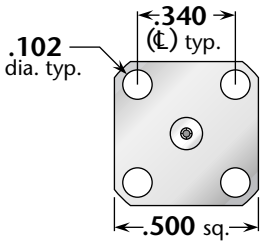


Figure 3
(1/2" square flange)

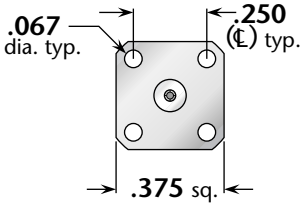


Figure 4
(3/8" square flange)

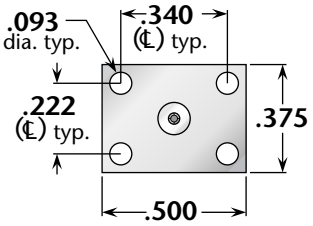


Figure 5
(1/2" x 3/8" rectangular flange)

Flange Figure	Dimensions		Plating		Delta P/N
	A (Pin Diameter)	B (Body I.D.)	Body	Contact	
1	.012	.104	Passivated	Gold (C)	1397-000-K921-022
	.015	.104	Passivated	Gold (C)	1397-000-K921-023
	.018	.104	Passivated	Gold (C)	1397-000-K921-024
	.020	.104	Passivated	Gold (C)	1397-000-K921-025
2	.012	.104	Passivated	Gold (C)	1397-000-K911-016
	.015	.104	Passivated	Gold (C)	1397-000-K911-017
	.018	.104	Passivated	Gold (C)	1397-000-K911-018
	.020	.104	Passivated	Gold (C)	1397-000-K911-019
3	.012	.104	Passivated	Gold (C)	1397-000-K051-016
	.015	.104	Passivated	Gold (C)	1397-000-K051-017
	.018	.104	Passivated	Gold (C)	1397-000-K051-018
	.020	.104	Passivated	Gold (C)	1397-000-K051-019
4	.012	.104	Passivated	Gold (C)	1397-000-K911-025
	.015	.104	Passivated	Gold (C)	1397-000-K911-026
	.018	.104	Passivated	Gold (C)	1397-000-K911-027
	.020	.104	Passivated	Gold (C)	1397-000-K911-028
5	.012	.104	Passivated	Gold (C)	1397-000-K911-034
	.015	.104	Passivated	Gold (C)	1397-000-K911-035
	.018	.104	Passivated	Gold (C)	1397-000-K911-036
	.020	.104	Passivated	Gold (C)	1397-000-K911-037

See page 15 for accessory pins. • See page 16 for hermetic seals. • (C) indicates captive contact.

Panel Plug Receptacles—Field Replaceable, PTFE Dielectric (With EMI Gasket)

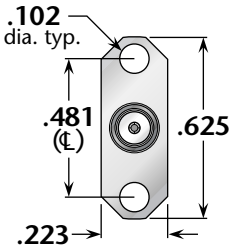


Figure 1
(Standard 2-hole flange)

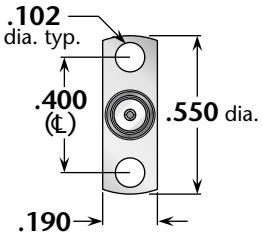
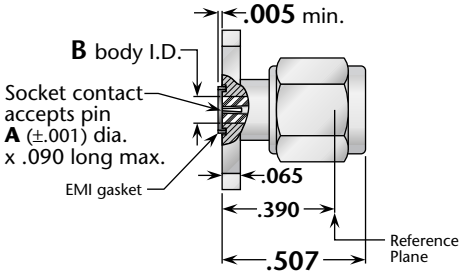


Figure 2
(Narrow 2-hole flange)



Connector Side View

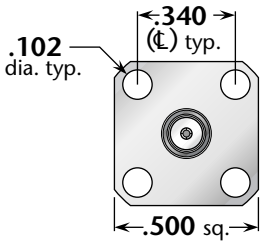


Figure 3
(1/2" square flange)

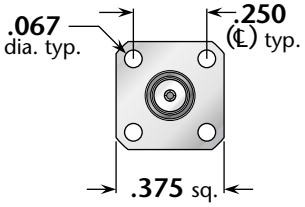


Figure 4
(3/8" square flange)

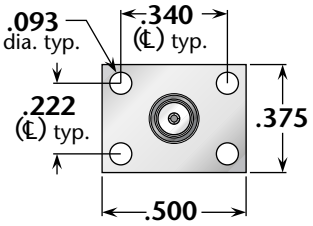


Figure 5
(1/2" x 3/8" rectangular flange)

Flange Figure	Dimensions		Plating		Delta P/N
	A (Pin Diameter)	B (Body I.D.)	Body	Contact	
1	.012	.104	Passivated	Gold (C)	1397-000-K921-022-EMI
	.015	.104	Passivated	Gold (C)	1397-000-K921-023-EMI
	.018	.104	Passivated	Gold (C)	1397-000-K921-024-EMI
	.020	.104	Passivated	Gold (C)	1397-000-K921-025-EMI
2	.012	.104	Passivated	Gold (C)	1397-000-K911-016-EMI
	.015	.104	Passivated	Gold (C)	1397-000-K911-017-EMI
	.018	.104	Passivated	Gold (C)	1397-000-K911-018-EMI
	.020	.104	Passivated	Gold (C)	1397-000-K911-019-EMI
3	.012	.104	Passivated	Gold (C)	1397-000-K051-016-EMI
	.015	.104	Passivated	Gold (C)	1397-000-K051-017-EMI
	.018	.104	Passivated	Gold (C)	1397-000-K051-018-EMI
	.020	.104	Passivated	Gold (C)	1397-000-K051-019-EMI
4	.012	.104	Passivated	Gold (C)	1397-000-K911-025-EMI
	.015	.104	Passivated	Gold (C)	1397-000-K911-026-EMI
	.018	.104	Passivated	Gold (C)	1397-000-K911-027-EMI
	.020	.104	Passivated	Gold (C)	1397-000-K911-028-EMI
5	.012	.104	Passivated	Gold (C)	1397-000-K911-034-EMI
	.015	.104	Passivated	Gold (C)	1397-000-K911-035-EMI
	.018	.104	Passivated	Gold (C)	1397-000-K911-036-EMI
	.020	.104	Passivated	Gold (C)	1397-000-K911-037-EMI

See page 15 for accessory pins. • See page 16 for hermetic seals. • (C) indicates captive contact.

Bulkhead Receptacles

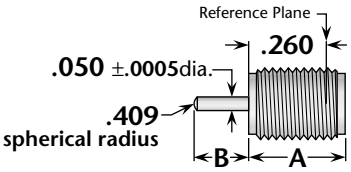


Figure 1 (Post contact)

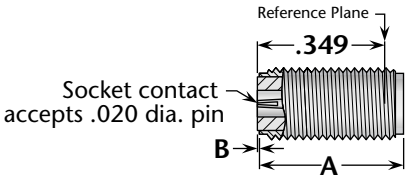


Figure 2 (For use with hermetic seal)

Figure	Dimensions		Plating		Delta P/N
	A	B	Body	Contact	
1	.336	.185	Gold	Gold (C)	1321-000-G821-900
1	.336	.185	Passivated	Gold (C)	1321-000-K821-900
2	.425	.002/.006	Gold	Gold (C)	1321-000-G821-901
2	.425	.002/.006	Passivated	Gold (C)	1321-000-K821-901

Straight Adapters

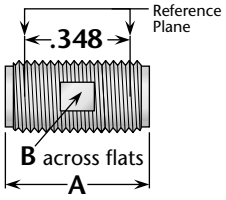


Figure 1 (Straight jack–jack; connects two plugs)

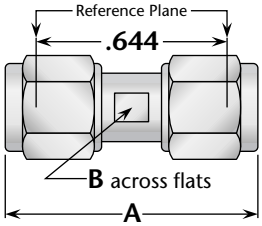


Figure 2 (Straight plug–plug; connects two jacks)

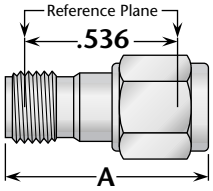


Figure 3 (Straight jack–plug; connects one plug and one jack)

Figure	Dimensions		Plating		Delta P/N
	A	B	Body	Contact	
1	.500	.218	Gold	Gold (C)	1328-000-G001-900
1	.500	.218	Passivated	Gold (C)	1328-000-K001-900
2	.875	.218	Gold	Gold (C)	1327-000-G001-900
2	.875	.218	Passivated	Gold (C)	1327-000-K001-900
3	.72	—	Gold	Gold (C)	1334-000-G001-900
3	.72	—	Passivated	Gold (C)	1334-000-K001-900

(C) indicates captive contact.

Accessory Pins

These drawings are 200% scale compared with connector drawings for clarity.
Pins are available with other tab sizes and configurations to suit your specific requirement.

Figure 1

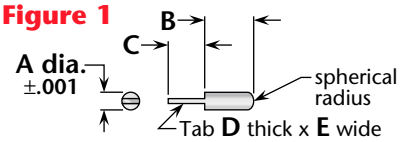


Figure 2

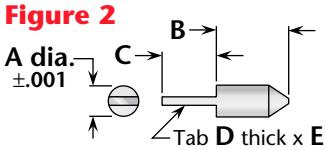
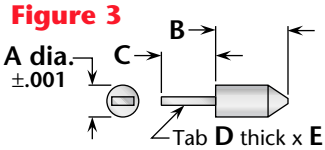


Figure 3



Material: Beryllium copper, Alloy C17300, condition H, per ASTM B196
Finish: Gold plated per MIL-G-45204 Type II, Class 1, Grade C, over nickel plate per AMS-QQ-N-290, Class 1, Grade G.

Figure	Dimensions					Delta P/N
	A	B	C	D	E	
1	.012	.050	.025	.005	.012	33-10432-01-AU
2	.015	.085	.040	.005	.015	33-10416-01-AU
2	.020	.090	.100	.005	.020	33-10415-01-AU
2	.036	.090	.100	.005	.036	33-10418-01-AU
3	.036	.090	.100	.005	.020	33-10417-01-AU

Hermetic Seals

These drawings are 200% scale compared with connector drawings for clarity.
Hermetic seals are available with other pin lengths to suit your specific requirement.

Figure 1

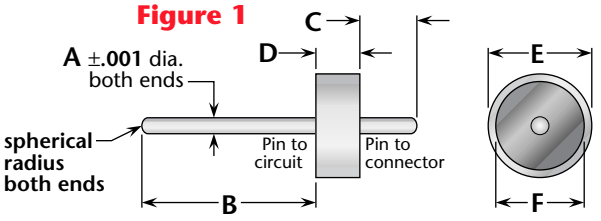
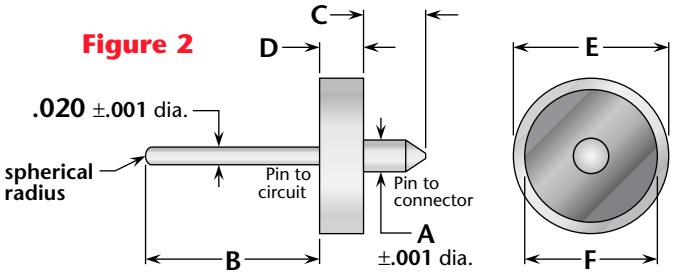


Figure 2

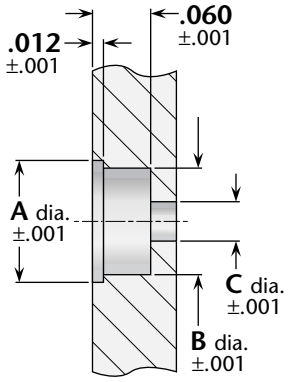


Ring and pin material: Kovar, gold plated per MIL-G-45204 Type II, Grade C, Class 1.
Leak rate: >1 x 10-8 cc/sec @at 14.7 PSIG differential, using 100% helium. **Impedance:** 50 ±2 Ω.

Figure	Dimensions						Glass Type	Frequency Range	Delta P/N
	A	B	C	D	E	F			
1	.012	.180	.072	.063	.099	.078	7052	DC–42.0 GHz	41-10038-01-AU
1	.015	.180	.080	.063	.099	.083	7052	DC–28.0 GHz	41-10039-01-AU
1	.018	.180	.080	.063	.112	.099	7070	DC–18.0 GHz	41-10040-01-AU
1	.020	.180	.080	.063	.158	.129	7052	DC–8.0 GHz	41-10041-01-AU
2	.036	.180	.080	.063	.158	.129	7052	DC–8.0 GHz	41-10042-01-AU

Drilling for Hermetic Seals—Panel Mount Receptacles

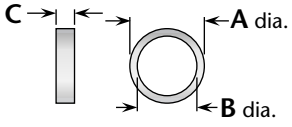
Hermetic Seal P/N	Pin Dia.	Dimensions			
		A	B	C (Air)	C (TFE)
41-10038-01-AU	.012	.127	.102	.028	.040
41-10039-01-AU	.015	.127	.102	.035	.050
41-10040-01-AU	.018	.140	.115	.041	.059
41-10041-01-AU	.020	.188	.163	.046	.066
41-10042-01-AU	.036	.188	.163	.046	.066



Note 1: Surface treatment (plating) must be compatible with soldering process.
Note 2: Front of seal and solder bead should be flush to .005" above mounting surface.

Replacement EMI Gaskets

Figure 1



Material: Conductive elastomer per MIL-G-83528, Type F.

Figure	Dimensions			Used With	Delta P/N
	A	B	C		
1	.162	.127	.040	Connectors with narrow (.190" wide) 2-hole flange	53-10025-03-NP
1	.172	.140	.040	All other connectors	53-10025-02-NP

General Description

These high-performance SMA connectors feature maximum VSWR of 1.10:1 from DC to 18 GHz, and 1.15:1 from 18 to 27.0 GHz.

They are designed to provide enhanced durability and reliability in a "field grade" production connector. Their interface dimensions meet MIL-STD-348 requirements for compatibility with all standard SMA type connectors

The internal design is optimized using state-of-the-art Electromagnetic Finite Element Analysis model simulation to provide low reflection coefficient, with mode free operation to 27.0 GHz.

In addition, this connector series provides -100 dB RF leakage due to the precision finish on the interface and mounting surfaces to assure a solid 360-degree contact in the critical RF return path, and the absence of epoxy holes in the connector body. The design of the internal structure provides a reliable and symmetrical axial captivation by mechanical means with a minimal disturbance to the transmission line characteristics and has a maximum continuous service temperature of 165˚ C.

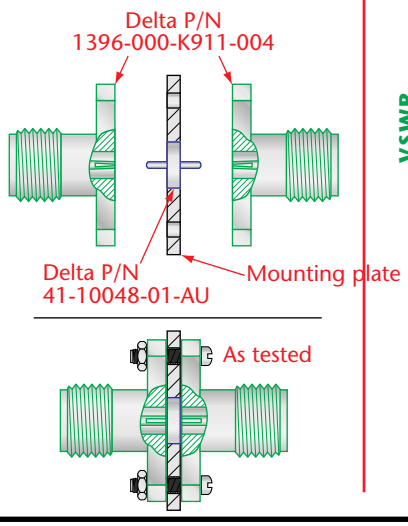
SMA 27.0 GHz field replaceable connectors are available in six common mounting flange configurations. Both the field replaceable and thread-in (spark plug) connectors are available for use with hermetic seals or accessory pins with diameters of .009, .012, .015, .018, .020, and .036 inches. The standard hermetic seals and accessory pins on page 24 can be modified to a wide range of configurations to match your application requirements.

These connectors are machined to exacting tolerances and the highest quality standards on modern CNC turning centers, and assembly is tightly controlled and monitored to ensure peak consistency of performance from unit to unit.

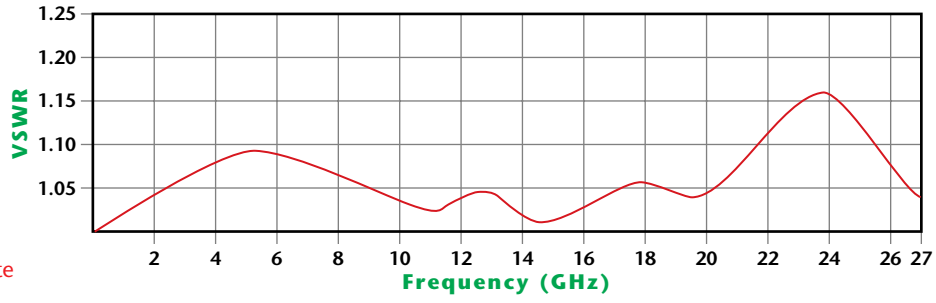
Contents (Click on any line to go to the target page.)

Test Data

Test Setup



VSWR



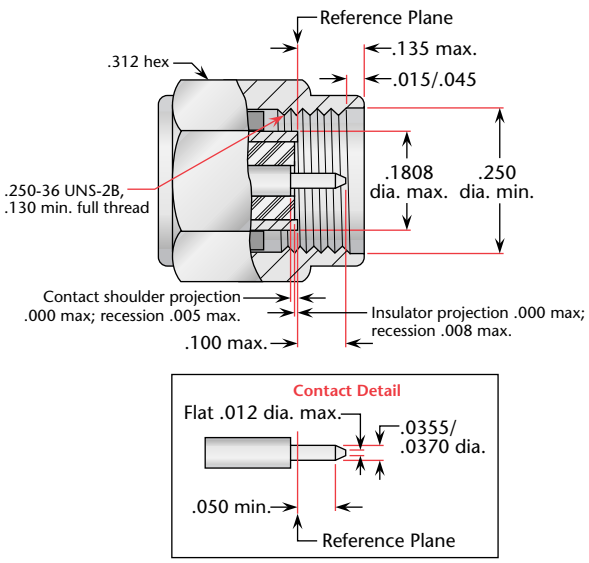
Two connectors tested, mounted back-to-back with a hermetic seal as shown at left. Maximum VSWR 1.16:1 @ 24 GHz (1.08:1 for each connector.)

These results are typical and valid only for connectors set up for testing in the configuration shown. Hermetic seal attachment method and other circuitry characteristics will affect VSWR of the completed component.

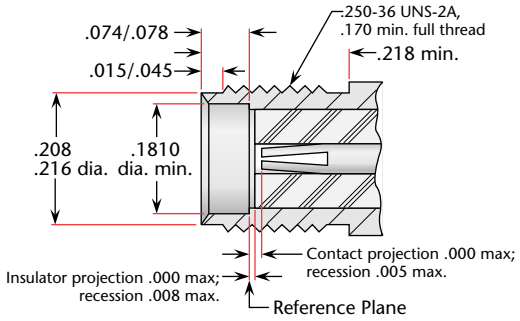
See next page for interface dimensions and specifications.

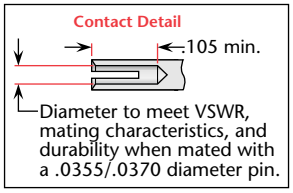
SMA 27.0 GHz Interfaces

Plug Interface**



Jack Interface**





** Per MIL-STD-348, figures 310-1 and 310-2. Some proportions altered to illustrate detail.

SMA 27.0 GHz Specifications*

Electrical:

Nominal Impedance: 50 ohms.

Frequency Range: DC–27.0 GHz.

Voltage Rating: 335 Volts RMS (@ sea level).

VSWR: DC–18 GHz: 1.10:1 maximum;
18–27.0 GHz: 1.15:1 maximum.

RF Transmission Loss: .03 $x\sqrt{f\ (GHz)}$ dB.

Dielectric Withstanding Voltage: 1000 Volts RMS (@ sea level).

RF Hipot: 670 Volts RMS minimum @5 MHz.

Insulation Resistance: 5,000 megohms minimum.

RF Leakage: -100 dB minimum @3.0 GHz.

Contact Resistance: Center contact: 3.0 milliohms maximum;
Outer contact: 2.0 milliohms maximum.

Mechanical:

Force to Engage: 2 inch-pounds maximum.

Coupling Nut Retention: 60 pounds minimum (plugs only).

Coupling Proof Torque: 15 inch-pounds minimum (plugs only).

Contact Insertion Force: Insertion: 2 pounds maximum;
withdrawal: 2 ounces minimum.

Durability: 500 mating cycles minimum.

Mating Torque: 7–10 inch-pounds.

Materials/Finishes:

Insulators: Ultem® 1000 (PEI) per ASTM D5205, and Teflon® PTFE per ASTM D1710.

Contacts: Beryllium Copper (Alloy C17300) per ASTM B196.

Contact Plating: Gold per MIL-G-45204.

Other Metal Parts: Type 303 Stainless steel per ASTM A582, passivated per AMS-QQ-P-35, or gold plated per MIL-G-45204.

Gaskets (plugs): Silicone rubber per A-A-59588.

All materials meet outgassing requirements of NASA Publication 1124.

Environmental:

Operating Temperature: -65 to +165° C.

Vibration: Per MIL-STD-202, Method 204, test condition D.

Shock: Per MIL-STD-202, Method 213, test condition I.

Thermal Shock: Per MIL-STD-202, Method 107, test condition A.

Corrosion (Salt Atmosphere): Per MIL-STD-202, Method 101, test condition B.

Moisture Resistance: Per MIL-STD-202, Method 106, no measurements at high humidity. Insulation resistance 200 megohms minimum within 5 minutes of removal from humidity.

All other specifications are in accordance with the latest issues of MIL-PRF-39012, or MIL-PRF-55339, or other applicable MIL specifications, and interfaces are in accordance with MIL-STD-348.

*These specifications are typical and may not apply to all connectors. Detailed specifications for individual connectors are available on request.

Panel Jack Receptacles—Field Replaceable, Square and Rectangular Flange

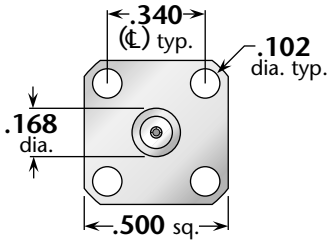
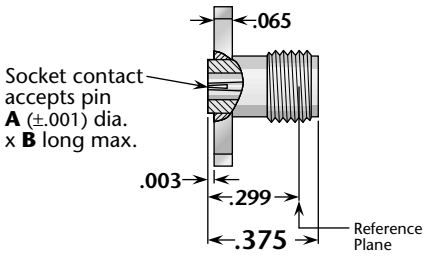


Figure 1
(1/2" square flange)



Connector Side View

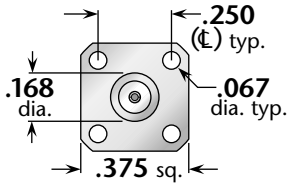


Figure 2
(3/8" square flange)

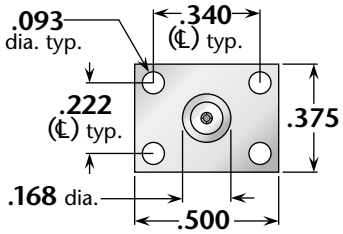


Figure 3
(1/2" x 3/8" rectangular flange)

Flange Figure	Dimensions		Plating		Delta P/N
	A (Pin Diameter)	B (Pin Length)	Body	Contact	
1	.009	.070	Passivated	Gold (C)	1396-000-K051-024
	.012	.090	Passivated	Gold (C)	1396-000-K051-006
	.015	.090	Passivated	Gold (C)	1396-000-K051-007
	.018	.095	Passivated	Gold (C)	1396-000-K051-008
	.020	.095	Passivated	Gold (C)	1396-000-K051-009
	.036	.100	Passivated	Gold (C)	1396-000-K051-010
2	.009	.070	Passivated	Gold (C)	1396-000-K911-075
	.012	.090	Passivated	Gold (C)	1396-000-K911-001
	.015	.090	Passivated	Gold (C)	1396-000-K911-002
	.018	.095	Passivated	Gold (C)	1396-000-K911-003
	.020	.095	Passivated	Gold (C)	1396-000-K911-004
	.036	.100	Passivated	Gold (C)	1396-000-K911-005
3	.009	.070	Passivated	Gold (C)	1396-000-K911-076
	.012	.090	Passivated	Gold (C)	1396-000-K911-006
	.015	.090	Passivated	Gold (C)	1396-000-K911-007
	.018	.095	Passivated	Gold (C)	1396-000-K911-008
	.020	.095	Passivated	Gold (C)	1396-000-K911-009
	.036	.100	Passivated	Gold (C)	1396-000-K911-010

See page 25 for hermetic seals and accessory pins. • (C) indicates captive contact.

Panel Jack Receptacles—Field Replaceable, 2-hole Flange

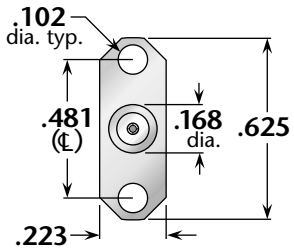
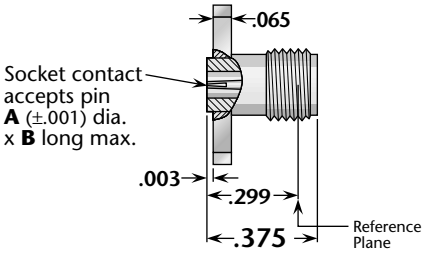


Figure 1
(Standard 2-hole flange)



Connector Side View

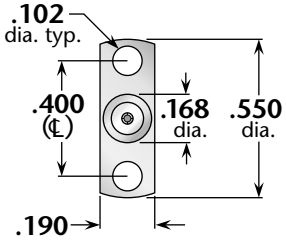


Figure 2
(Narrow 2-hole flange)

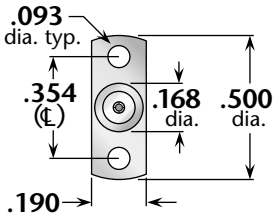


Figure 3
(Miniature 2-hole flange)

Flange Figure	Dimensions		Plating		Delta P/N
	A (Pin Diameter)	B (Pin Length)	Body	Contact	
1	.009	.070	Passivated	Gold (C)	1396-000-K921-031
	.012	.090	Passivated	Gold (C)	1396-000-K921-011
	.015	.090	Passivated	Gold (C)	1396-000-K921-012
	.018	.095	Passivated	Gold (C)	1396-000-K921-013
	.020	.095	Passivated	Gold (C)	1396-000-K921-014
	.036	.100	Passivated	Gold (C)	1396-000-K921-015
2	.009	.070	Passivated	Gold (C)	1396-000-K911-073
	.012	.090	Passivated	Gold (C)	1396-000-K911-051
	.015	.090	Passivated	Gold (C)	1396-000-K911-052
	.018	.095	Passivated	Gold (C)	1396-000-K911-053
	.020	.095	Passivated	Gold (C)	1396-000-K911-054
3	.009	.070	Passivated	Gold (C)	1396-000-K911-074
	.012	.090	Passivated	Gold (C)	1396-000-K911-055
	.015	.090	Passivated	Gold (C)	1396-000-K911-056
	.018	.095	Passivated	Gold (C)	1396-000-K911-057
	.020	.095	Passivated	Gold (C)	1396-000-K911-058

See page 25 for hermetic seals and accessory pins. • (C) indicates captive contact.

Panel Plug Receptacles—Field Replaceable, Square and Rectangular Flange

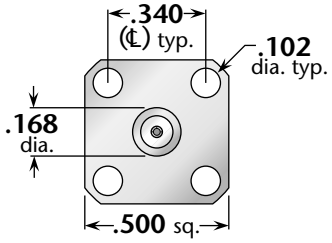
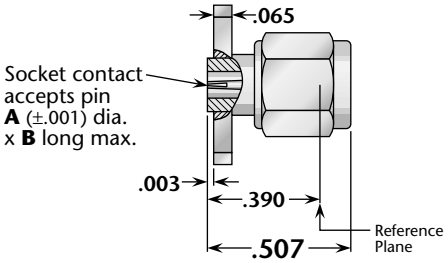


Figure 1
(1/2" square flange)



Connector Side View

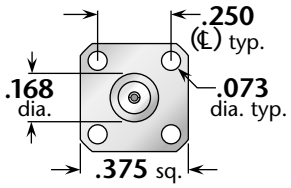


Figure 2
(3/8" square flange)

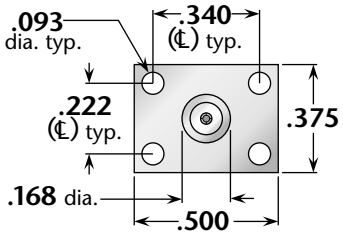


Figure 3
(1/2" x 3/8" rectangular flange)

Flange Figure	Dimensions		Plating		Delta P/N
	A (Pin Diameter)	B (Pin Length)	Body	Contact	
1	.009	.070	Passivated	Gold (C)	1397-000-K051-024
	.012	.090	Passivated	Gold (C)	1397-000-K051-006
	.015	.090	Passivated	Gold (C)	1397-000-K051-007
	.018	.095	Passivated	Gold (C)	1397-000-K051-008
	.020	.095	Passivated	Gold (C)	1397-000-K051-009
	.036	.100	Passivated	Gold (C)	1397-000-K051-010
2	.009	.070	Passivated	Gold (C)	1397-000-K911-065
	.012	.090	Passivated	Gold (C)	1397-000-K911-001
	.015	.090	Passivated	Gold (C)	1397-000-K911-002
	.018	.095	Passivated	Gold (C)	1397-000-K911-003
	.020	.095	Passivated	Gold (C)	1397-000-K911-004
	.036	.100	Passivated	Gold (C)	1397-000-K911-005
3	.009	.070	Passivated	Gold (C)	1397-000-K911-066
	.012	.090	Passivated	Gold (C)	1397-000-K911-006
	.015	.090	Passivated	Gold (C)	1397-000-K911-007
	.018	.095	Passivated	Gold (C)	1397-000-K911-008
	.020	.095	Passivated	Gold (C)	1397-000-K911-009
	.036	.100	Passivated	Gold (C)	1397-000-K911-010

See page 25 for hermetic seals and accessory pins. • (C) indicates captive contact.

Panel Plug Receptacles—Field Replaceable, 2-hole Flange

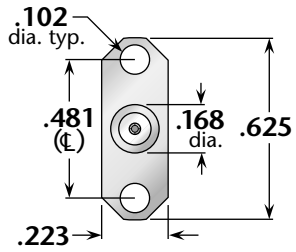
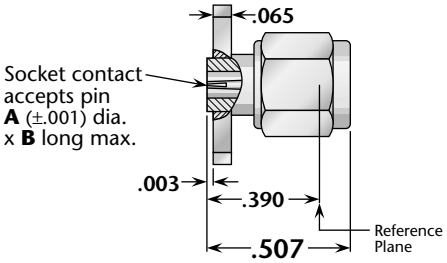


Figure 1
(Standard 2-hole flange)



Connector Side View

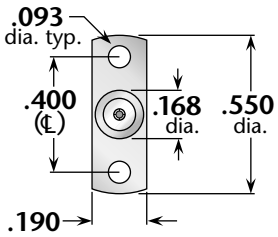


Figure 2
(Narrow 2-hole flange)

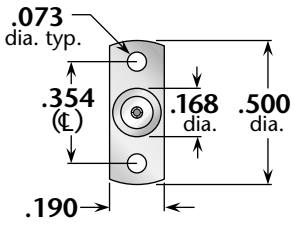


Figure 3
(Miniature 2-hole flange)

Flange Figure	Dimensions		Plating		Delta P/N
	A (Pin Diameter)	B (Pin Length)	Body	Contact	
1	.009	.070	Passivated	Gold (C)	1397-000-K921-030
	.012	.090	Passivated	Gold (C)	1397-000-K921-011
	.015	.090	Passivated	Gold (C)	1397-000-K921-012
	.018	.095	Passivated	Gold (C)	1397-000-K921-013
	.020	.095	Passivated	Gold (C)	1397-000-K921-014
	.036	.100	Passivated	Gold (C)	1397-000-K921-015
2	.009	.070	Passivated	Gold (C)	1397-000-K911-063
	.012	.090	Passivated	Gold (C)	1397-000-K911-038
	.015	.090	Passivated	Gold (C)	1397-000-K911-039
	.018	.095	Passivated	Gold (C)	1397-000-K911-040
	.020	.095	Passivated	Gold (C)	1397-000-K911-041
3	.009	.070	Passivated	Gold (C)	1397-000-K911-064
	.012	.090	Passivated	Gold (C)	1397-000-K911-042
	.015	.090	Passivated	Gold (C)	1397-000-K911-043
	.018	.095	Passivated	Gold (C)	1397-000-K911-044
	.020	.095	Passivated	Gold (C)	1397-000-K911-045

See page 25 for hermetic seals and accessory pins. • (C) indicates captive contact.

Thread-in Receptacles—Field Replaceable, Jacks and Plugs

Rear view

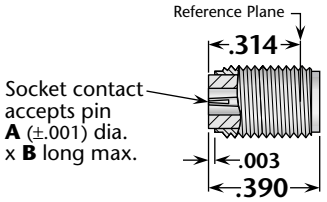


Figure 1

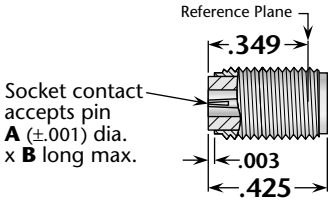


Figure 2

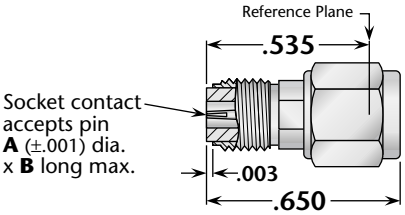
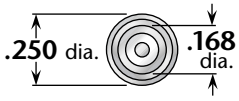


Figure 3

Figure	Dimensions		Plating		Delta P/N
	A (Pin Diameter)	B (Pin Length)	Body	Contact	
1	.012	.090	Passivated	Gold (C)	1396-000-K821-001
	.015	.090	Passivated	Gold (C)	1396-000-K821-002
	.018	.095	Passivated	Gold (C)	1396-000-K821-003
	.020	.095	Passivated	Gold (C)	1396-000-K821-004
2	.009	.070	Passivated	Gold (C)	1396-000-K821-022
	.012	.090	Passivated	Gold (C)	1396-000-K821-005
	.015	.090	Passivated	Gold (C)	1396-000-K821-006
	.018	.095	Passivated	Gold (C)	1396-000-K821-007
	.020	.095	Passivated	Gold (C)	1396-000-K821-008
	.036	.100	Passivated	Gold (C)	1396-000-K821-009
3	.009	.070	Passivated	Gold (C)	1397-000-K821-006
	.012	.090	Passivated	Gold (C)	1397-000-K821-001
	.015	.090	Passivated	Gold (C)	1397-000-K821-002
	.018	.095	Passivated	Gold (C)	1397-000-K821-003
	.020	.095	Passivated	Gold (C)	1397-000-K821-004
	.036	.100	Passivated	Gold (C)	1397-000-K821-005

Thread-in Jack Receptacles—Post Contact



Rear view

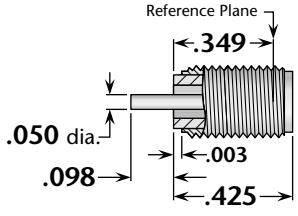


Figure 1

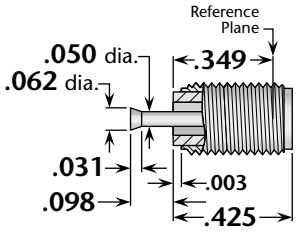


Figure 2

Figure	Contact Type	Plating		Delta P/N
		Body	Contact	
1	Straight	Passivated	Gold (C)	1321-000-K821-129
2	Flared	Passivated	Gold (C)	1321-000-K821-128

See page 25 for hermetic seals and accessory pins. • (C) indicates captive contact.

Straight Adapters

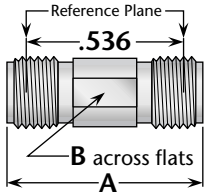


Figure 1
(Straight jack–jack; connects two plugs)

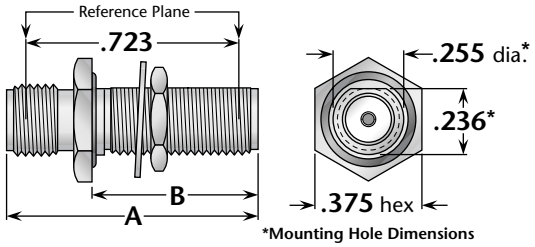


Figure 2
(Bulkhead jack–jack; connects two plugs)
Fits panel .250" thick maximum

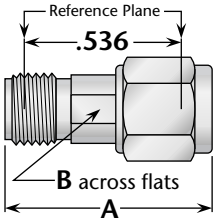


Figure 3
(Straight jack–plug; connects one plug and one jack)

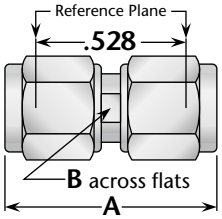


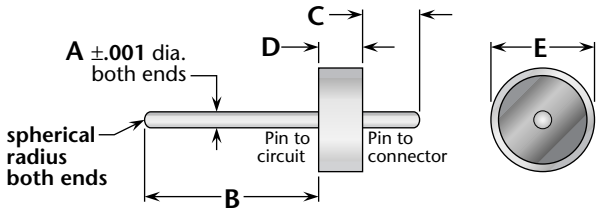
Figure 4
(Straight plug–plug; connects two jacks)

Figure	Dimensions		Plating		Delta P/N
	A	B	Body	Contact	
1	.688	.218	Passivated	Gold (C)	1328-000-K001-902
2	.875	.500	Passivated	Gold (C)	1326-000-K671-900
3	.728	.218	Passivated	Gold (C)	1334-000-K001-901
4	.759	.218	Passivated	Gold (C)	1327-000-K001-901

(C) indicates captive contact.

Hermetic Seals

These drawings are 200% scale compared with connector drawings for clarity.
Hermetic seals are available with other pin lengths to suit your specific requirement.



Ring and pin material: Kovar, gold plated per MIL-G-45204 Type II, Grade C, Class 1.
Leak rate: >1 x 10-8 cc/sec @at 14.7 PSIG differential, using 100% helium. **Impedance:** 50 ±2 Ω.

Dimensions					Glass Type	Frequency Range	Delta P/N
A	B	C	D	E			
.009	.026	.031	.055	.068	7070	DC–65.0 GHz	41-10050-01-AU
.009	.120	.031	.055	.068	7070	DC–65.0 GHz	41-10051-01-AU
.012	.180	.073	.069	.076	7070	DC–42.0 GHz	41-10044-01-AU
.012	.080	.040	.055	.076	7070	DC–42.0 GHz	41-10045-01-AU
.012	.029	.040	.055	.076	7070	DC–42.0 GHz	41-10049-01-AU
.015	.125	.050	.062	.098	7070	DC–28.0 GHz	41-10046-01-AU
.018	.180	.072	.060	.110	7070	DC–18.0 GHz	41-10047-01-AU
.020	.125	.050	.060	.158	7052	DC–8.0 GHz	41-10048-01-AU

Accessory Pins

These drawings are 200% scale compared with connector drawings for clarity.
Pins are available with other tab sizes and configurations to suit your specific requirement.

Figure 1

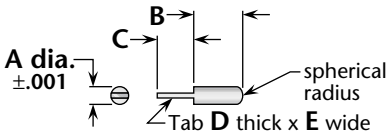
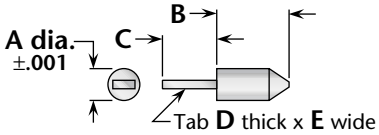


Figure 2

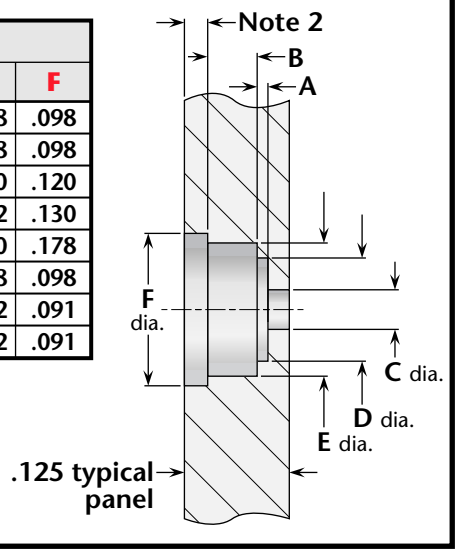


Material: Beryllium copper, Alloy C17300, condition H, per ASTM B196
Finish: Gold plated per MIL-G-45204 Type II, Class 1, Grade C, over nickel plate per AMS-QQ-N-290, Class 1, Grade G.

Figure	Dimensions					Delta P/N
	A	B	C	D	E	
1	.009	.050	.015	.005	.009	81-10293-01-AU
1	.012	.050	.025	.005	.012	33-10432-01-AU
1	.015	.085	.040	.005	.015	33-10416-01-AU
1	.018	.085	.045	.005	.018	81-10294-01-AU
1	.020	.080	.050	.006	.020	81-10260-01-AU
2	.036	.075	.050	.005	.020	81-10275-01-AU

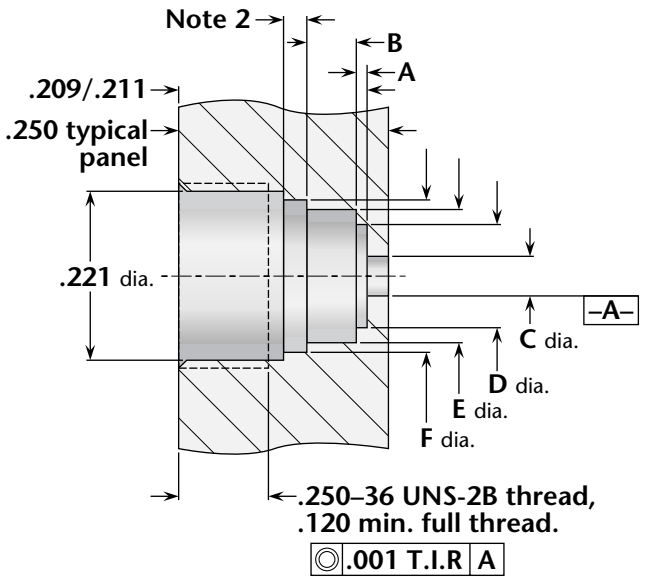
Drilling for Hermetic Seals—Panel Mount Receptacles

Hermetic Seal P/N	Pin Dia.	Dimensions					
		A	B	C	D	E	F
41-10044-01-AU	.012	.0035/.0025	.072/.071	.028/.027	.067/.065	.079/.078	.098
41-10045-01-AU	.012	.0035/.0025	.057/.056	.028/.027	.067/.065	.079/.078	.098
41-10046-01-AU	.015	.007/.005	.0645/.0635	.035/.034	.080/.078	.102/.100	.120
41-10047-01-AU	.018	.009/.007	.062/.061	.042/.041	.086/.084	.113/.112	.130
41-10048-01-AU	.020	.010/.009	.062/.061	.0465/.0455	.126/.124	.161/.160	.178
41-10049-01-AU	.012	.0035/.0025	.057/.056	.028/.027	.067/.065	.079/.078	.098
41-10050-01-AU	.009	.008/.006	.058/.057	.0211/.0205	.0322/.0302	.074/.072	.091
41-10051-01-AU	.009	.008/.006	.058/.057	.0211/.0205	.0322/.0302	.074/.072	.091



Note 1: Surface treatment (plating) must be compatible with soldering process.
Note 2: User-determined. Recommended F diameter x .025 deep to accommodate 3 solder rings, .010 diameter each.

Drilling for Hermetic Seals—Bulkhead Mount Receptacles



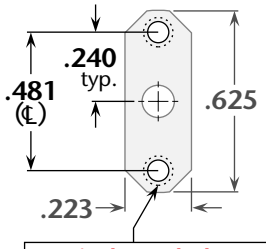
Hermetic Seal P/N	Pin Dia.	Dimensions					
		A	B	C	D	E	F
41-10044-01-AU	.012	.0035/.0025	.072/.071	.028/.027	.067/.065	.079/.078	.098
41-10045-01-AU	.012	.0035/.0025	.057/.056	.028/.027	.067/.065	.079/.078	.098
41-10046-01-AU	.015	.007/.005	.0645/.0635	.035/.034	.080/.078	.102/.100	.120
41-10047-01-AU	.018	.009/.007	.062/.061	.042/.041	.086/.084	.113/.112	.130
41-10048-01-AU	.020	.010/.009	.062/.061	.0465/.0455	.126/.124	.161/.160	.178
41-10049-01-AU	.012	.0035/.0025	.057/.056	.028/.027	.067/.065	.079/.078	.098
41-10050-01-AU	.009	.008/.006	.058/.057	.0211/.0205	.0322/.0302	.074/.072	.091
41-10051-01-AU	.009	.008/.006	.058/.057	.0211/.0205	.0322/.0302	.074/.072	.091

Note 1: Surface treatment (plating) must be compatible with soldering process.
Note 2: User-determined. Recommended F diameter x .025 deep to accommodate 3 solder rings, .010 diameter each.

Drilling Patterns—Panel-Mount Receptacles

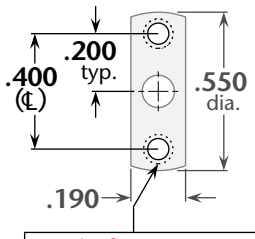
2-Hole Flanges

Standard 2-hole flange



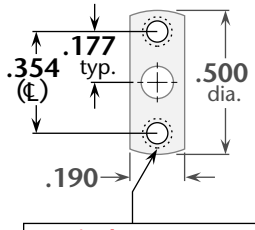
For jacks and plugs:
#2–56 thread, 2 places.

Narrow 2-hole flange



For jacks:
#2–56 thread, 2 places.
For plugs:
#1–72 thread, 2 places.

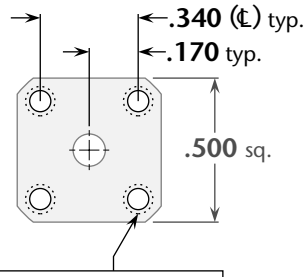
Miniature 2-hole flange



For jacks:
#1–72 thread, 2 places.
For plugs:
#0–80 thread, 2 places,
.125 max. screw length.

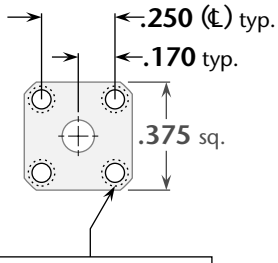
4-Hole Flanges

1/2" Square flange



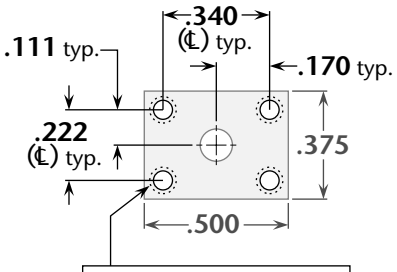
For jacks and plugs:
#2–56 thread, 4 places.

3/8" Square flange



For jacks:
#0–80 thread, 4 places.
For plugs:
#0–80 thread, 4 places,
.125 max. screw length.

1/2 X 3/8" Rectangular flange



For jacks and plugs:
#1–72 thread, 4 places.

Fillister-head screws are recommended for connector body clearance when mounting.
See next page for center hole drilling dimensions.

Competitive Cross-Reference—26.5-GHz SMA Connectors

Please note that these connectors are *functional equivalents* to the competitor part numbers shown. If you are using a competitor's connector in a critical application, please contact us for engineering assistance and samples to determine the compatibility of our connectors with your application.

AEP P/N	Delta P/N
920-55	41-10038-01-AU
920-56	41-10040-01-AU
920-69	41-10041-01-AU
920-82	41-10039-01-AU
920-92	41-10042-01-AU
9044-9513-000	1396-000-K921-021-EMI
9044-9513-001	1396-000-K921-022-EMI
9045-9513-000	1396-000-K051-020-EMI
9045-9513-001	1396-000-K051-021-EMI
9046-9513-000	1397-000-K921-022-EMI
9046-9513-001	1397-000-K921-023-EMI
9047-9513-000	1397-000-K051-016-EMI
9047-9513-001	1397-000-K051-017-EMI
9048-9513-000	1396-000-K921-023-EMI
9049-9513-000	1396-000-K051-022-EMI
9050-9513-000	1397-000-K921-024-EMI
9051-9513-000	1397-000-K051-018
9051-9513-000	1397-000-K051-018-EMI
9062-9513-000	1396-000-K911-047-EMI
9062-9513-001	1396-000-K911-048-EMI
9068-9513-000	1396-000-K911-049-EMI
9074-9513-000	1396-000-K911-040-EMI
9079-9513-000	1396-000-K911-038-EMI
9079-9513-001	1396-000-K911-039-EMI
9080-9513-000	1396-000-K911-034-EMI
9080-9513-001	1396-000-K911-035-EMI
9081-9513-000	1396-000-K911-036-EMI
9504-9113-031	1396-000-K051-023
9507-9113-003	1396-000-K911-050
9508-9113-002	1396-000-K921-024
9576-9113-001	1396-000-K911-041

Dynawave P/N	Delta P/N
9852-0081-6214	1397-000-K911-016
9852-0081-6214	1397-000-K911-017
9852-0081-6215	1397-000-K921-022
9852-0081-6215	1397-000-K921-023
9852-0081-6220	1397-000-K921-024
9852-0081-6220	1397-000-K921-025
9852-0081-6224	1397-000-K911-018
9852-0081-6224	1397-000-K911-019
9852-0781-6214	1397-000-K911-016-EMI
9852-0781-6214	1397-000-K911-017-EMI
9852-0781-6215	1397-000-K921-022-EMI
9852-0781-6215	1397-000-K921-023-EMI
9852-0781-6220	1397-000-K921-024-EMI
9852-0781-6220	1397-000-K921-025-EMI
9852-0781-6224	1397-000-K911-018-EMI
9852-0781-6224	1397-000-K911-019-EMI
9854-0081-6215	1397-000-K051-016
9854-0081-6215	1397-000-K051-017
9854-0081-6217	1397-000-K911-025
9854-0081-6217	1397-000-K911-026
9854-0081-6220	1397-000-K051-018
9854-0081-6227	1397-000-K911-027
9854-0081-6227	1397-000-K911-028
9854-0781-6215	1397-000-K051-016-EMI
9854-0781-6215	1397-000-K051-017-EMI
9854-0781-6217	1397-000-K911-025-EMI
9854-0781-6217	1397-000-K911-026-EMI

Dynawave P/N	Delta P/N
9854-0781-6220	1397-000-K051-018-EMI
9854-0781-6220	1397-000-K051-019-EMI
9854-0781-6227	1397-000-K911-027-EMI
9854-0781-6227	1397-000-K911-028-EMI
9952-0081-6214	1396-000-K911-034
9952-0081-6214	1396-000-K911-035
9952-0081-6215	1396-000-K921-021
9952-0081-6215	1396-000-K921-022
9952-0081-6220	1396-000-K921-023
9952-0081-6220	1396-000-K921-024
9952-0081-6224	1396-000-K911-036
9952-0081-6224	1396-000-K911-037
9952-0781-6214	1396-000-K911-034-EMI
9952-0781-6214	1396-000-K911-035-EMI
9952-0781-6215	1396-000-K921-021-EMI
9952-0781-6215	1396-000-K921-022-EMI
9952-0781-6220	1396-000-K921-023-EMI
9952-0781-6220	1396-000-K921-024-EMI
9952-0781-6224	1396-000-K911-036-EMI
9952-0781-6224	1396-000-K911-037-EMI
9954-0081-6215	1396-000-K051-020
9954-0081-6215	1396-000-K051-021
9954-0081-6217	1396-000-K911-038
9954-0081-6217	1396-000-K911-039
9954-0081-6219	1396-000-K911-047
9954-0081-6219	1396-000-K911-048
9954-0081-6220	1396-000-K051-022
9954-0081-6220	1396-000-K051-023
9954-0081-6227	1396-000-K911-040
9954-0081-6227	1396-000-K911-041
9954-0081-6229	1396-000-K911-049
9954-0081-6229	1396-000-K911-050
9954-0781-6215	1396-000-K051-020-EMI
9954-0781-6215	1396-000-K051-021-EMI
9954-0781-6217	1396-000-K911-038-EMI
9954-0781-6217	1396-000-K911-039-EMI
9954-0781-6219	1396-000-K911-047-EMI
9954-0781-6219	1396-000-K911-048-EMI
9954-0781-6220	1396-000-K051-022-EMI
9954-0781-6220	1396-000-K051-023-EMI
9954-0781-6227	1396-000-K911-040-EMI
9954-0781-6227	1396-000-K911-041-EMI
9954-0781-6229	1396-000-K911-049-EMI
9954-0781-6229	1396-000-K911-050-EMI

M/A-COM P/N	Delta P/N
2051-3350-02	1397-000-K051-016-EMI
2051-3352-02	1397-000-K051-018-EMI
2051-3354-02	1397-000-K921-022-EMI
2051-3356-02	1397-000-K921-024-EMI
2051-3362-02	1397-000-K051-019
2051-3363-02	1397-000-K921-025
2052-3350-02	1396-000-K051-020-EMI
2052-3352-02	1396-000-K051-022-EMI
2052-3354-02	1396-000-K921-021-EMI
2052-3356-02	1396-000-K921-023-EMI
2052-3362-02	1396-000-K051-023
2052-3363-02	1396-000-K921-024
2052-3375-02	1396-000-K911-040-EMI
2052-3393-02	1396-000-K911-038-EMI

M/A-COM P/N	Delta P/N
2052-3399-02	1396-000-K911-034-EMI
2052-3400-02	1396-000-K911-036-EMI
2052-3500-02	1396-000-K051-021-EMI
2052-3501-02	1396-000-K911-039-EMI
2052-3502-02	1396-000-K921-022-EMI
2052-3503-02	1396-000-K911-035-EMI
2098-3520-94	41-10038-01-AU
2098-3251-94	41-10040-01-AU
2098-3441-94	41-10039-01-AU

SV Microwave P/N	Delta P/N
SF2950-6780	1396-000-K921-027-EMI
SF2950-6780	1396-000-K921-028-EMI
SF2950-6786	1396-000-K921-021
SF2951-6122	1396-000-K921-022
SF2950-6784	1396-000-K921-023
SF2950-6784	1396-000-K921-024
SF2950-6720	1396-000-K921-021-EMI
SF2951-6110	1396-000-K921-022-EMI
SF2951-6121	1396-000-K911-030
SF2950-6920	1396-000-K911-034
SF2950-6955	1396-000-K911-037
SF2950-6619	1396-000-K051-020
SF2951-6125	1396-000-K051-021
SF2950-6662	1396-000-K051-022
SF2950-6662	1396-000-K051-023
SF2950-6769	1396-000-K051-020-EMI
SF2951-6146	1396-000-K051-021-EMI
SF2950-6789	1396-000-K051-022-EMI
SF2950-6789	1396-000-K051-023-EMI
SF2951-6114	1396-000-K911-038
SF2951-6124	1396-000-K911-039
SF2951-6115	1396-000-K911-040
SF2951-6106	1396-000-K911-038-EMI
SF2951-6107	1396-000-K911-040-EMI
SF2951-6107	1396-000-K911-041-EMI
SF2951-6112	1396-000-K911-039-EMI
SF2951-6115	1396-000-K911-041
SF2955-6177	1397-000-K921-022-EMI
SF2955-6178	1397-000-K051-018-EMI
SF2955-6178	1397-000-K051-019-EMI
SF2955-6197	1397-000-K921-024-EMI
SF2955-6197	1397-000-K921-025-EMI
SF2955-6296	1397-000-K051-016
SF2955-6297	1397-000-K051-018
SF2955-6298	1397-000-K921-022
SF2955-6299	1397-000-K921-024
SF2955-6299	1397-000-K921-025
SF2955-6305	1397-000-K921-023-EMI
SF2955-6306	1397-000-K051-017-EMI
SF2955-6308	1397-000-K051-016-EMI
SF2955-6320	1397-000-K911-016
SF2955-6321	1397-000-K911-017
SF2955-6322	1397-000-K911-018
SF2955-6322	1397-000-K911-019
SF2955-6323	1397-000-K911-034-EMI
SF2955-6324	1397-000-K911-035-EMI
SF2955-6325	1397-000-K911-036-EMI
SF2955-6325	1397-000-K911-037-EMI
SF2955-6326	1397-000-K911-034
SF2955-6327	1397-000-K911-036
SF2955-6327	1397-000-K911-037
SF2955-6333	1397-000-K921-023
SF2955-6334	1397-000-K911-035
SF2955-6335	1397-000-K051-017
SF2965-6297	1397-000-K051-018

Tensolite (CDI) P/N	Delta P/N
4004-5	41-10038-01-AU
4004-9	41-10039-01-AU
4004-11	41-10040-01-AU
4004-13	41-10041-01-AU
5601-1CCSF	1396-000-K911-033-EMI
5601-2CCSF	1396-000-K911-032-EMI
5601-4CCSF	1396-000-K911-029-EMI
5601-5CCSF	1396-000-K911-030-EMI
5601-6CCSF	1396-000-K911-031-EMI
5602-2CCSF	1396-000-K921-024-EMI
5602-4CCSF	1396-000-K921-021-EMI
5602-5CCSF	1396-000-K921-022-EMI
5602-6CCSF	1396-000-K921-023-EMI
5603-2CCSF	1396-000-K911-041-EMI
5603-4CCSF	1396-000-K911-038-EMI
5603-5CCSF	1396-000-K911-039-EMI
5603-6CCSF	1396-000-K911-040-EMI
5604-2CCSF	1396-000-K051-023-EMI
5604-4CCSF	1396-000-K051-020-EMI
5604-5CCSF	1396-000-K051-021-EMI
5604-6CCSF	1396-000-K051-022-EMI
5605-2CCSF	1396-000-K911-050-EMI
5605-4CCSF	1396-000-K911-047-EMI
5605-5CCSF	1396-000-K911-048-EMI
5605-6CCSF	1396-000-K911-049-EMI
5606-2CCSF	1397-000-K921-025-EMI
5606-4CCSF	1397-000-K921-022-EMI
5606-5CCSF	1397-000-K921-023-EMI
5606-6CCSF	1397-000-K921-024-EMI
5607-2CCSF	1397-000-K911-028-EMI
5607-4CCSF	1397-000-K911-025-EMI
5607-5CCSF	1397-000-K911-026-EMI
5607-6CCSF	1397-000-K911-027-EMI
5608-2CCSF	1397-000-K051-019-EMI
5608-4CCSF	1397-000-K051-016-EMI
5608-5CCSF	1397-000-K051-017-EMI
5608-6CCSF	1397-000-K051-018-EMI
5609-2CCSF	1397-000-K911-037-EMI
5609-4CCSF	1397-000-K911-034-EMI
5609-5CCSF	1397-000-K911-035-EMI
5609-6CCSF	1397-000-K911-036-EMI
5633-1CCSF	1397-000-K911-015-EMI
5633-2CCSF	1397-000-K911-014-EMI
5633-4CCSF	1397-000-K911-011-EMI
5633-5CCSF	1397-000-K911-012-EMI
5633-6CCSF	1397-000-K911-013-EMI
5634-2CCSF	1396-000-K911-037-EMI
5634-4CCSF	1396-000-K911-034-EMI
5634-5CCSF	1396-000-K911-035-EMI
5634-6CCSF	1396-000-K911-036-EMI
5635-2CCSF	1397-000-K911-019-EMI
5635-4CCSF	1397-000-K911-016-EMI
5635-5CCSF	1397-000-K911-017-EMI
5635-6CCSF	1397-000-K911-018-EMI
5663-2CCSF	1396-000-K921-024
5663-4CCSF	1396-000-K921-021
5663-5CCSF	1396-000-K921-022
5663-6CCSF	1396-000-K921-023
5664-2CCSF	1397-000-K921-025
5664-4CCSF	1397-000-K921-022
5664-5CCSF	1397-000-K921-023
5664-6CCSF	1397-000-K921-024
5665-2CCSF	1396-000-K051-023
5665-4CCSF	1396-000-K051-020
5665-5CCSF	1396-000-K051-021
5665-6CCSF	1396-000-K051-022

Tensolite (CDI) P/N	Delta P/N
5666-2CCSF	1397-000-K051-019
5666-4CCSF	1397-000-K051-016
5666-5CCSF	1397-000-K051-017
5666-6CCSF	1397-000-K051-018
5668-2CCSF	1396-000-K911-050
5668-4CCSF	1396-000-K911-047
5668-5CCSF	1396-000-K911-048
5668-6CCSF	1396-000-K911-049
5669-2CCSF	1397-000-K911-037
5669-4CCSF	1397-000-K911-034
5669-5CCSF	1397-000-K911-035
5669-6CCSF	1397-000-K911-036
5674-1CCSF	1396-000-K911-033
5674-2CCSF	1396-000-K911-032
5674-4CCSF	1396-000-K911-029
5674-5CCSF	1396-000-K911-030
5674-6CCSF	1396-000-K911-031
5675-1CCSF	1397-000-K911-015
5675-2CCSF	1397-000-K911-014
5675-4CCSF	1397-000-K911-011
5675-5CCSF	1397-000-K911-012
5675-6CCSF	1397-000-K911-013
5678-2CCSF	1396-000-K911-037
5678-4CCSF	1396-000-K911-034
5678-5CCSF	1396-000-K911-035
5678-6CCSF	1396-000-K911-036
5679-2CCSF	1397-000-K911-019
5679-4CCSF	1397-000-K911-016
5679-5CCSF	1397-000-K911-017
5679-6CCSF	1397-000-K911-018
5680-1CCSF	1396-000-K051-019
5680-2CCSF	1396-000-K051-018
5680-4CCSF	1396-000-K051-015
5680-5CCSF	1396-000-K051-016
5680-6CCSF	1396-000-K051-017
5681-1CCSF	1396-000-K921-029
5681-2CCSF	1396-000-K921-028
5681-4CCSF	1396-000-K921-025
5681-5CCSF	1396-000-K921-026
5681-6CCSF	1396-000-K921-027
5683-1CCSF	1397-000-K921-021
5683-2CCSF	1397-000-K921-020
5683-4CCSF	1397-000-K921-017
5683-5CCSF	1397-000-K921-018
5683-6CCSF	1397-000-K921-019
5684-1CCSF	1396-000-K051-019-EMI
5684-2CCSF	1396-000-K051-018-EMI
5684-4CCSF	1396-000-K051-015-EMI
5684-5CCSF	1396-000-K051-016-EMI
5684-6CCSF	1396-000-K051-017-EMI
5685-1CCSF	1396-000-K921-029-EMI
5685-2CCSF	1396-000-K921-028-EMI
5685-4CCSF	1396-000-K921-025-EMI
5685-5CCSF	1396-000-K921-026-EMI
5685-6CCSF	1396-000-K921-027-EMI
5686-1CCSF	1397-000-K051-015-EMI
5686-2CCSF	1397-000-K051-014-EMI
5686-4CCSF	1397-000-K051-011-EMI
5686-5CCSF	1397-000-K051-012-EMI
5686-6CCSF	1397-000-K051-013-EMI
5687-1CCSF	1397-000-K921-021-EMI
5687-2CCSF	1397-000-K921-020-EMI
5687-4CCSF	1397-000-K921-017-EMI
5687-5CCSF	1397-000-K921-018-EMI
5687-6CCSF	1397-000-K921-019-EMI
5715-1CCSF	1396-000-K911-046-EMI

Tensolite (CDI) P/N	Delta P/N
5715-2CCSF	1396-000-K911-045-EMI
5715-4CCSF	1396-000-K911-042-EMI
5715-5CCSF	1396-000-K911-043-EMI
5715-6CCSF	1396-000-K911-044-EMI
5716-1CCSF	1397-000-K911-033-EMI
5716-2CCSF	1397-000-K911-032-EMI
5716-4CCSF	1397-000-K911-029-EMI
5716-5CCSF	1397-000-K911-030-EMI
5716-6CCSF	1397-000-K911-031-EMI
5717-1CCSF	1396-000-K911-046
5717-2CCSF	1396-000-K911-045
5717-4CCSF	1396-000-K911-042
5717-5CCSF	1396-000-K911-043
5717-6CCSF	1396-000-K911-044
5718-1CCSF	1397-000-K911-033
5718-2CCSF	1397-000-K911-032
5718-4CCSF	1397-000-K911-029
5718-5CCSF	1397-000-K911-030
5718-6CCSF	1397-000-K911-031
5780-1CCSF	1397-000-K051-015
5780-2CCSF	1397-000-K051-014
5780-4CCSF	1397-000-K051-011
5780-5CCSF	1397-000-K051-012
5780-6CCSF	1397-000-K051-013
5923-1CCSF	1396-000-K911-027
5923-2CCSF	1396-000-K911-026
5923-4CCSF	1396-000-K911-023
5923-5CCSF	1396-000-K911-024
5923-6CCSF	1396-000-K911-025
5925-1CCSF	1397-000-K911-024
5925-2CCSF	1397-000-K911-023
5925-4CCSF	1397-000-K911-020
5925-5CCSF	1397-000-K911-021
5925-6CCSF	1397-000-K911-022
5935-1CCSF	1396-000-K911-027-EMI
5935-2CCSF	1396-000-K911-026-EMI
5935-4CCSF	1396-000-K911-023-EMI
5935-5CCSF	1396-000-K911-024-EMI
5935-6CCSF	1396-000-K911-025-EMI
5936-1CCSF	1397-000-K911-024-EMI
5936-2CCSF	1397-000-K911-023-EMI
5936-4CCSF	1397-000-K911-020-EMI
5936-5CCSF	1397-000-K911-021-EMI
5936-6CCSF	1397-000-K911-022-EMI
5941-2CCSF	1396-000-K911-041
5941-4CCSF	1396-000-K911-038
5941-5CCSF	1396-000-K911-039
5941-6CCSF	1396-000-K911-040
5942-2CCSF	1397-000-K911-028
5942-4CCSF	1397-000-K911-025
5942-5CCSF	1397-000-K911-026
5942-6CCSF	1397-000-K911-027

Competitive Cross-Reference—27.0 GHz SMA Connectors

Please note that these connectors are *functional equivalents* to the competitor part numbers shown. If you are using a competitor's connector in a critical application, please contact us for engineering assistance and samples to determine the compatibility of our connectors with your application.

Southwest P/N	Delta P/N
211-500SF	1397-000-K051-006
211-501SF	1397-000-K051-007
211-502SF	1397-000-K051-009
211-503SF	1397-000-K051-010
211-504SF	1397-000-K051-008
211-505SF	1397-000-K911-003
211-510SF	1397-000-K911-001
211-511SF	1397-000-K911-002
211-512SF	1397-000-K911-004
211-513SF	1397-000-K911-005
211-514SF	1397-000-K911-006
211-515SF	1397-000-K911-007
211-516SF	1397-000-K911-008
211-517SF	1397-000-K911-009
211-518SF	1397-000-K911-010
211-523SF	1397-000-K911-065
211-524SF	1397-000-K051-024
211-525SF	1397-000-K911-066
212-500SF	1396-000-K051-006
212-501SF	1396-000-K051-007
212-502SF	1396-000-K051-009
212-503SF	1396-000-K051-010
212-505SF	1396-000-K911-006
212-506SF	1396-000-K051-008
212-507SF	1396-000-K911-003
212-508SF	1396-000-K911-008
212-510SF	1396-000-K911-001
212-511SF	1396-000-K911-002
212-512SF	1396-000-K911-004
212-513SF	1396-000-K911-005
212-530SF	1396-000-K911-010
212-531SF	1396-000-K911-007
212-532SF	1396-000-K911-075
212-536SF	1396-000-K911-009
212-550SF	1396-000-K051-024
212-551SF	1396-000-K911-076
213-500SF	1397-000-K921-011
213-501SF	1397-000-K921-012
213-502SF	1397-000-K921-014
213-503SF	1397-000-K921-015
213-504SF	1397-000-K921-013
213-505SF	1397-000-K911-040
213-510SF	1397-000-K911-038
213-511SF	1397-000-K911-039
213-512SF	1397-000-K911-041
213-516SF	1397-000-K911-044
213-517SF	1397-000-K921-030
213-518SF	1397-000-K911-063
213-519SF	1397-000-K911-064
213-520SF	1397-000-K911-042
213-521SF	1397-000-K911-043
213-522SF	1397-000-K911-045
214-500SF	1396-000-K921-011
214-501SF	1396-000-K921-012
214-502SF	1396-000-K921-014
214-503SF	1396-000-K921-015
214-510SF	1396-000-K911-051
214-511SF	1396-000-K911-052
214-512SF	1396-000-K911-054
214-516SF	1396-000-K921-013

Southwest P/N	Delta P/N
214-517SF	1396-000-K911-053
214-518SF	1396-000-K911-057
214-520SF	1396-000-K911-055
214-521SF	1396-000-K911-056
214-522SF	1396-000-K911-058
214-537SF	1396-000-K921-031
214-538SF	1396-000-K911-073
214-539SF	1396-000-K911-074
220-500SF	1396-000-K821-005
220-501SF	1396-000-K821-006
220-502SF	1396-000-K821-008
220-503SF	1396-000-K821-009
220-506SF	1396-000-K821-007
220-507SF	1396-000-K821-022
221-500SF	1397-000-K821-001
221-501SF	1397-000-K821-002
221-502SF	1397-000-K821-004
221-503SF	1397-000-K821-005
221-504SF	1397-000-K821-003
221-505SF	1397-000-K821-006
230-506SF	1334-000-K001-901
231-502SF	1327-000-K001-901
232-502SF	1328-000-K001-902
232-510SF	1326-000-K671-900
290-00G	41-10046-01-AU
290-01G	41-10047-01-AU
290-02G	41-10048-01-AU
290-06G	41-10045-01-AU
290-07G	41-10049-01-AU
290-09G	33-10416-01-AU
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290-33G	81-10275-01-AU
1090-05G	33-10432-01-AU
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Index by Delta Part Number

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About Delta Electronics

Manufacturing Corporation

ISO9001:2008 Certified

From our early New England roots to our current global manufacturing presence, we have consistently grown with, and adapted to, the ever-changing requirements of the coaxial connector market. Beginning as a small manufacturer of UHF-frequency connectors, our growth in product lines and manufacturing capability now positions us as a premier connector supplier, with one of the broadest ranges of products in the industry.

Along with our product-line expansion, we recognized the need to keep pace with innovations such as Lean Manufacturing, precision CNC turning centers, and sophisticated CAD/CAM and HFSS design-modeling software, all geared toward providing our customers the highest-quality products available, with quick delivery and competitive prices.

As the connector market expanded in scope worldwide, we responded by developing a global presence to better serve the needs of our customers, both domestic and international.

Our wholly-owned subsidiary in Nanjing, China provides unmatched capability to meet customer requirements, particularly for low-cost, high-volume connector types.

In recognition of our customers' need to streamline their processes, we have launched our "Value Added" services, providing finished cable assemblies and integrated connectorized components that help our customers optimize their production and eliminate overhead.

Another "Value-Added" service is our new, fully-automated electroplating facility, incorporating robotic handling and computerized process controls and testing, increasing our capability to perform contract plating of a wide variety of component parts with the same quality and consistency featured on our connectors.

Call us for all your coaxial connector needs—we make over 70 different series to match your requirements exactly, including:

• 1.0/2.3 • 7/16 • Adapters Between Series* • BMA • BMMA • BNC*
• BNC Push-on • C • Cable assemblies • *E-Line* Brass SMA • GHV
• GR874 • HN • LC–LT • MC-Card • MCX • MMCX • MHV • N* • QDS
• QDL • QMA • SC • SM • SMA* • SMA 26.5 GHz • SMA 27 GHz
• SMB • SMC • SMD • SMK (2.92 MM) • SMP • SSMC • TNC*
• TPS • Triaxial BNC, C, N, TNC • Twinax BNC, HN, TNC
• Twinax HV • Twinax 3/4-20 • 75Ω BNC, TNC
• 70Ω N • UHF

*M39012/M55339 QPL available.

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