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SMA



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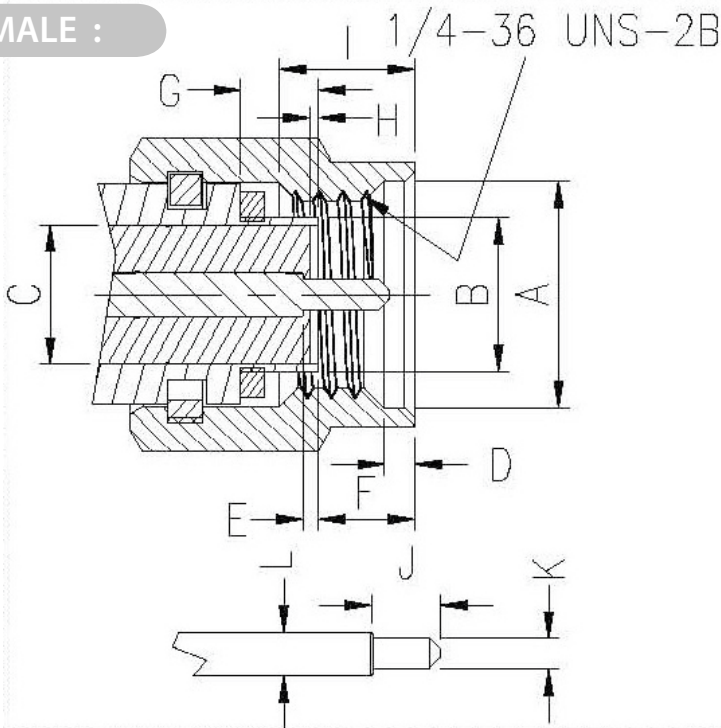
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<http://www.aliner.com.tw>

SMA - Description

Aliner SMA connectors are precision connectors for microwave application up to 18 GHz and higher. The high mechanical strength, high durability and low VSWR indicate the characters. Together with semi-rigid cable, hi-grade lines can be installed. SMA receptacles (launchers) are used to provide transition to coax from stripline or microstrip on PCB.

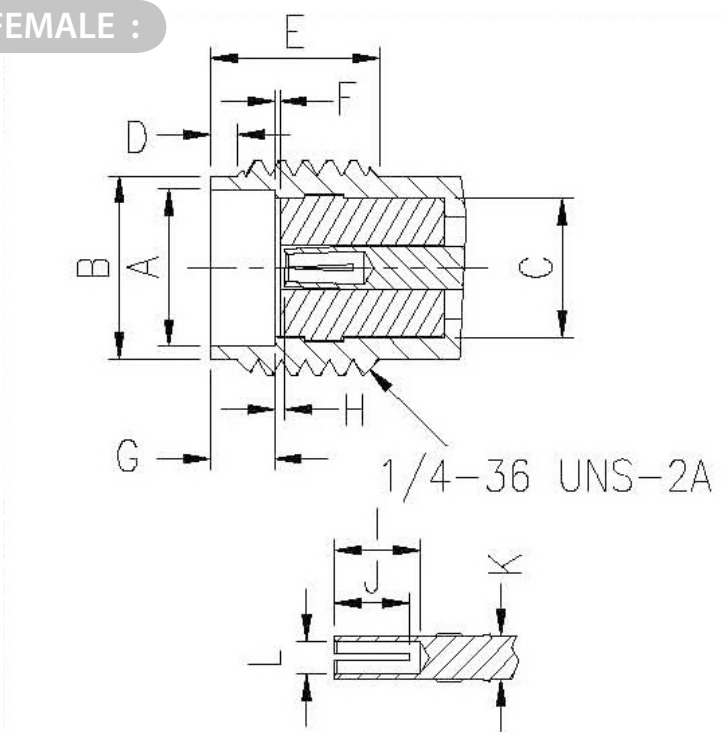
Interface Mating Dimensions

MALE :



LTR.	Millimeters / Inches			
	MINIMUM		MAXIMUM	
A -	Ø 6.48	Ø .255	Ø 6.73	Ø .265
B -	Ø 4.34	Ø .171	Ø 4.59	Ø .181
C -	Ø 4.10	Ø .162	Ø 4.15	Ø .163
D -	0.64	.025	1.14	.045
E -	0.00	.000	0.25	.010
F -	2.59	.102	3.35	.132
G -	2.03	.080		
H -	0.00	.000	0.25	.010
I -	3.71	.146	4.32	.170
J -	2.03	.080	2.29	.090
K -	Ø 0.90	Ø .036	Ø 0.93	Ø .037
L -	Ø 1.25	Ø .049	Ø 1.29	Ø .051

FEMALE :



LTR.	Millimeters / Inches			
	MINIMUM		MAXIMUM	
A -	Ø 4.60	Ø .181	Ø 4.67	Ø .184
B -	Ø 5.28	Ø .208	Ø 5.49	Ø .216
C -	Ø 4.10	Ø .162	Ø 4.15	Ø .163
D -	0.38	.015	1.14	.045
E -	3.81	.150		
F -	0.00	.000	0.25	.010
G -	1.88	.074	1.98	.078
H -	0.00	.000	0.25	.010
I -	2.54	.100		
J -	1.91	.075	2.41	.095
K -	Ø 1.25	Ø .049	Ø 1.29	Ø .051
L -	Ø 0.94	Ø .037	Ø 0.99	Ø .039



Technical Data

Material / Finish :

	Material	Finish
Connector body	Brass per (QQ-B-626 or JIS-C3604B) Zinc alloy (Zinc 5)	Nickel or gold plating
	Stainless steel per (QQ-S-764 class 303)	Passivated
Center contact male	Brass per (QQ-B-626 or JIS-C3604B)	Gold plating
Center contact female	Beryllium copper per (QQ-C-530 or JIS-C1730)	Gold plating
Insulator	PTFE	None
Crimp ferrule	Annealed copper	Same as body
Gasket	Silicone rubber	None

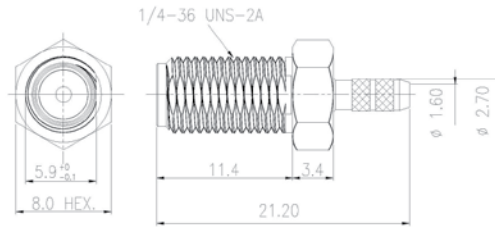
Electrical :

Nominal impedance	50 Ω
Frequency up to	12.4 GHz flexible cable, 18 GHz semi-rigid cable
VSWR	1.15 + 0.02 x f GHz for straight connector typical 1.25 + 0.025 x f GHz for right angle connector typical
Working voltage	335 Volts rms.
Dielectric withstanding voltage	500 Volts rms.
Insulation resistance	5000 M Ω min.
Contact resistance	center conductor 3.0 m Ω outer conductor 2.0 m Ω

Mechanical & Environmental :

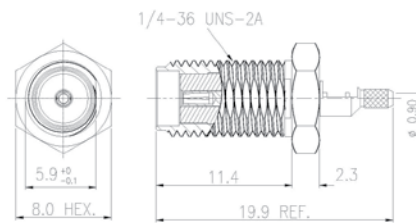
Mating	1/4"-36 UNS thread coupling
Cable retention	6 kgf typical
Durability	\geq 500 cycles
Coupling nut retention	\geq 18 kgf
Temperature range	-55 $^{\circ}$ C to 1+55 $^{\circ}$ C
Vibration	Per MIL-STD-202 Method 204 Test Condition D
Corrosion	Per MIL-STD-202 Method 101 Test Condition B

Bulkhead Jack(female)



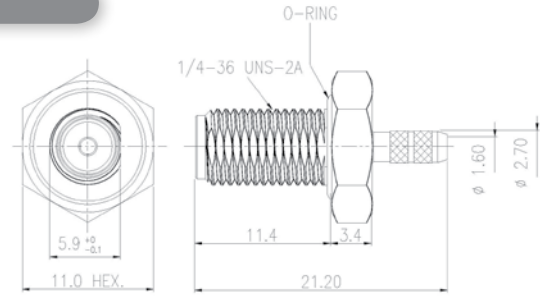
Aliner P/N	Impedance	Plating	Packaging	Cable Type	Note
20-130BH-B	50	Gold	Bulk	Belden H155	Standard
20-130AE-B	50	Gold	Bulk	Filotex 296769	Standard
20-130AF-B	50	Gold	Bulk	Filotex 296769	Reverse Polarity
20-130AD-B	50	Gold	Bulk	RD-316	Standard
20-130BS-B	50	Passivation	Bulk	RD-316	Standard
20-130AW-B	50	Nickel	Bulk	RG-174/U;RG-188 A/U;RG-316/U	Standard
20-130AV-B	50	Gold	Bulk	RG-174/U;RG-188 A/U;RG-316/U	Standard
20-130RV-B	50	Gold	Bulk	RG-174/U;RG-188 A/U;RG-316/U	Reverse Polarity
20-130AS-B	50	Gold	Bulk	RG-58 C/U;RG-303/U	Standard
20-130AR-B	50	Gold	Bulk	RG-58 C/U;RG-303/U	Reverse Polarity
20-130T0-B	50	Gold	Bulk	TZC-500-25	Standard

Bulkhead Jack(female)



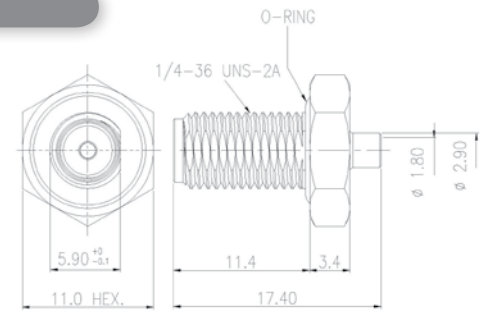
Aliner P/N	Impedance	Plating	Packaging	Cable Type	Note
20-130AB-B	50	Gold	Bulk	1.13 mini coaxial	Standard
20-130AM-B	50	Nickel	Bulk	1.13 mini coaxial	Standard
20-131AR-B	50	Gold	Bulk	1.13 mini coaxial	Reverse Polarity
20-130AA-B	50	Gold	Bulk	1.37 mini coaxial	Standard
20-130AN-B	50	Nickel	Bulk	1.37 mini coaxial	Standard
20-130AC-B	50	Gold	Bulk	RG-178 B/U;RG-196 A/U	Standard
20-132AR-B	50	Gold	Bulk	RG-178 B/U;RG-196 A/U	Reverse Polarity

Bulkhead Jack(female)



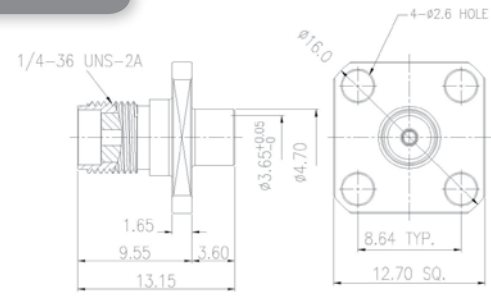
Aliner P/N	Impedance	Plating	Packaging	Cable Type	Note
20-130DV-B	50	Nickel	Bulk	RD-316	Standard
20-130NV-B	50	Nickel	Bulk	RG-174/U;RG-188 A/U;RG-316/U	Standard
20-130BV-B	50	Gold	Bulk	RG-174/U;RG-188 A/U;RG-316/U	Standard
20-130EV-B	50	Gold	Bulk	RG-178 B/U;RG-196 A/U	Standard

Bulkhead Jack(female)



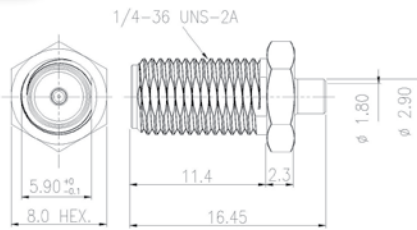
Aliner P/N	Impedance	Plating	Packaging	Cable Type	Note
20-130BY-B	50	Gold	Bulk	1.37 mini coaxial	Standard
20-130BR-B	50	Gold	Bulk	1.37 mini coaxial	Reverse Polarity
20-130BA-B	50	Gold	Bulk	1.48 mini coaxial	Standard
20-130BB-B	50	Gold	Bulk	.085 semi-rigid	Standard

Straight Jack(female)



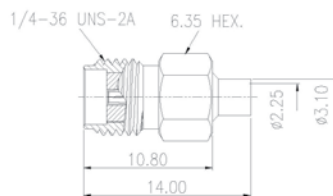
Aliner P/N	Impedance	Plating	Packaging	Cable Type	Note
20-231A0-B	50	Gold	Bulk	.085 semi-rigid	Standard
20-102AA-B	50	Gold	Bulk	.141 semi-rigid	Standard

Bulkhead Jack(female)



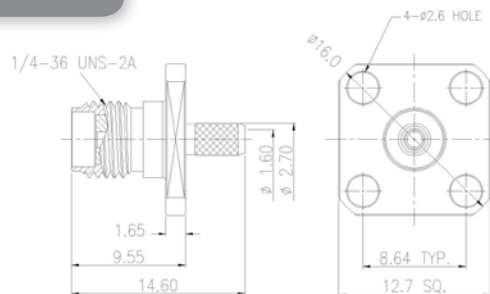
Aliner P/N	Impedance	Plating	Packaging	Cable Type	Note
20-136AB-B	50	Gold	Bulk	0.81 mini coaxial	Standard
20-136AA-B	50	Gold	Bulk	1.13 mini coaxial	Standard
20-136RE-B	50	Nickel	Bulk	1.13 mini coaxial	Reverse Polarity
20-136RD-B	50	Gold	Bulk	1.13 mini coaxial	Reverse Polarity
20-136A0-B	50	Gold	Bulk	1.37 mini coaxial	Standard
20-136AD-B	50	Nickel	Bulk	1.37 mini coaxial	Standard
20-136RF-B	50	Nickel	Bulk	1.37 mini coaxial	Reverse Polarity
20-136AE-B	50	Gold	Bulk	1.48 mini coaxial	Standard
20-130C0-B	50	Gold	Bulk	RG-178 B/U;RG-196 A/U	Standard
20-130CR-B	50	Gold	Bulk	RG-178 B/U;RG-196 A/U	Reverse Polarity
20-230C0-B	50	Gold	Bulk	.085 semi-rigid	Standard

Straight Jack(female)



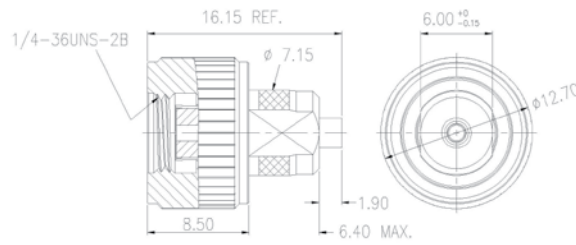
Aliner P/N	Impedance	Plating	Packaging	Cable Type	Note
20-212BA-B	50	Gold	Bulk	.085 semi-rigid	Standard

Straight Jack(female)



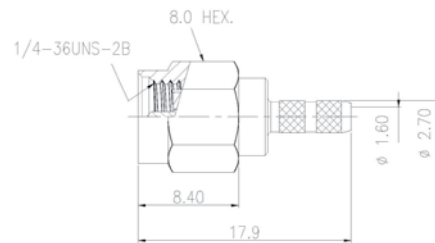
Aliner P/N	Impedance	Plating	Packaging	Cable Type	Note
20-112A0-B	50	Gold	Bulk	RG-174/U;RG-188 A/U;RG-316/U	Standard
20-112AR-B	50	Gold	Bulk	RG-174/U;RG-188 A/U;RG-316/U	Reverse Polarity

Straight Plug(male)



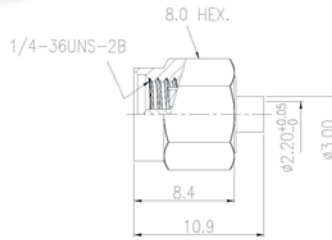
Aliner P/N	Impedance	Plating	Packaging	Cable Type	Note
20-003RV-T	50	Nickel	Tray	RG-178 B/U;RG-196 A/U	Reverse Polarity
20-009AR-T	75	Nickel	Tray	RG-179 B/U; RG-187 A/U	Reverse Polarity

Straight Plug(male)



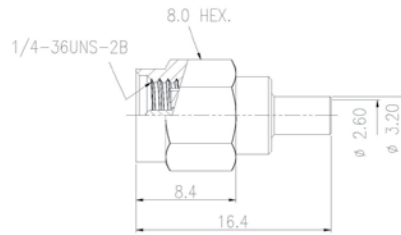
Aliner P/N	Impedance	Plating	Packaging	Cable Type	Note
20-101A1-B	50	Gold	Bulk	1.5D-2V	Standard
20-301A1-B	50	Gold	Bulk	1.5D-2V	Reverse Polarity
20-101BH-B	50	Gold	Bulk	Belden H155	Standard
20-101BR-B	50	Gold	Bulk	Belden H155	Reverse Polarity
20-101J0-B	50	Gold	Bulk	Filotex 296769	Standard
20-101JR-B	50	Gold	Bulk	Filotex 296769	Reverse Polarity
20-101KR-B	50	Gold	Bulk	LMR-200	Reverse Polarity
20-101AF-B	50	Gold	Bulk	LMR-240	Standard
20-101AD-B	50	Gold	Bulk	RD-316	Standard
20-101AS-B	50	Passivation	Bulk	RD-316	Standard
20-101A0-B	50	Gold	Bulk	RG-174/U;RG-188 A/U;RG-316/U	Standard
20-101AA-B	50	Nickel	Bulk	RG-174/U;RG-188 A/U;RG-316/U	Standard
20-301A0-B	50	Gold	Bulk	RG-174/U;RG-188 A/U;RG-316/U	Reverse Polarity
20-101CA-B	50	Gold	Bulk	RG-142 B/U;RG-223/U;RG-400/U	Standard
20-301CA-B	50	Gold	Bulk	RG-142 B/U;RG-223/U;RG-400/U	Reverse Polarity
20-101C0-B	50	Gold	Bulk	RG-58 C/U;RG-303/U	Standard
20-101N0-B	50	Nickel	Bulk	RG-58 C/U;RG-303/U	Standard
20-301C0-B	50	Gold	Bulk	RG-58 C/U;RG-303/U	Reverse Polarity
20-101T0-B	50	Gold	Bulk	TZC-500-25	Standard

Straight Plug(male)



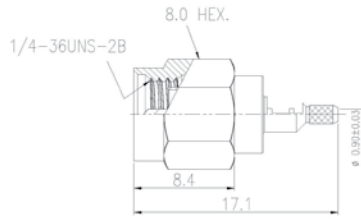
Aliner P/N	Impedance	Plating	Packaging	Cable Type	Note
20-101DB-B	50	Gold	Bulk	.047 semi-rigid	Standard
20-101D0-B	50	Gold	Bulk	.085 semi-rigid	Standard
20-101DN-B	50	Nickel	Bulk	.085 semi-rigid	Standard
20-101E0-B	50	Gold	Bulk	.141 semi-rigid	Standard
20-101EA-B	50	Gold	Bulk	SS-402	Standard
20-101DA-B	50	Gold	Bulk	SS-405	Standard

Straight Plug(male)



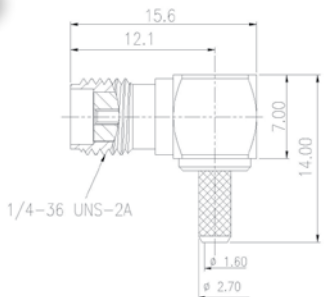
Aliner P/N	Impedance	Plating	Packaging	Cable Type	Note
20-101FB-B	50	Gold	Bulk	1.13 mini coaxial	Standard
20-101FD-B	50	Gold	Bulk	1.13 mini coaxial	Reverse Polarity
20-101FA-B	50	Gold	Bulk	1.37 mini coaxial	Standard
20-101FC-B	50	Nickel	Bulk	1.37 mini coaxial	Reverse Polarity
20-101FF-B	50	Gold	Bulk	1.37 mini coaxial	Reverse Polarity
20-101F0-B	50	Gold	Bulk	RG-178 B/U;RG-196 A/U	Standard
20-101FR-B	50	Gold	Bulk	RG-178 B/U;RG-196 A/U	Reverse Polarity

Straight Plug(male)



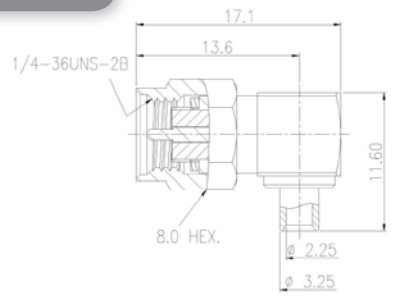
Aliner P/N	Impedance	Plating	Packaging	Cable Type	Note
20-101H0-B	50	Gold	Bulk	1.13 mini coaxial	Standard
20-101HP-B	50	Gold	Bulk	1.13 mini coaxial	Reverse Polarity
20-101HC-B	50	Gold	Bulk	1.37 mini coaxial	Standard
20-101HA-B	50	Gold	Bulk	RG-178 B/U;RG-196 A/U	Standard
20-101HR-B	50	Gold	Bulk	RG-178 B/U;RG-196 A/U	Reverse Polarity

Right Angle Jack(female)



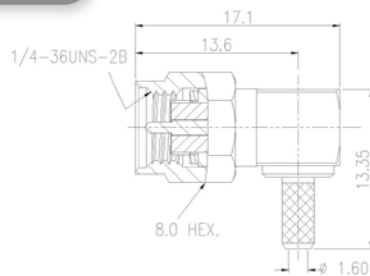
Aliner P/N	Impedance	Plating	Packaging	Cable Type	Note
20-209C0-B	50	Gold	Bulk	RG-174/U;RG-188 A/U;RG-316/U	Standard

Right Angle Plug(male)



Aliner P/N	Impedance	Plating Body	Packaging	Cable Type	Note
20-109E0-B	50	Gold	Bulk	.085 semi-rigid	Standard
20-109EN-B	50	Nickel	Bulk	.085 semi-rigid	Standard
20-109F0-B	50	Gold	Bulk	.141 semi-rigid	Standard
20-109FR-B	50	Gold	Bulk	.141 semi-rigid	Reverse Polarity
20-109EA-B	50	Gold	Bulk	SS-405	Standard

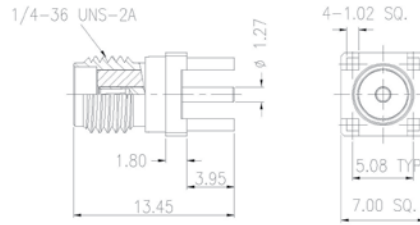
Right Angle Plug(male)



Aliner P/N	Impedance	Plating	Packaging	Cable Type	Note
20-109DA-B	50	Gold	Bulk	1.13 mini coaxial	Standard
20-109D0-B	50	Gold	Bulk	1.37 mini coaxial	Standard
20-109B2-B	50	Nickel	Bulk	1.5D-2V	Standard
20-109BA-B	50	Gold	Bulk	LMR-100	Standard
20-109BD-B	50	Gold	Bulk	RD-316	Standard
20-109BS-B	50	Passivation	Bulk	RD-316	Standard
20-109B1-B	50	Nickel	Bulk	RG-174/U;RG-188 A/U;RG-316/U	Standard
20-109B0-B	50	Gold	Bulk	RG-174/U;RG-188 A/U;RG-316/U	Standard
20-109BR-B	50	Gold	Bulk	RG-174/U;RG-188 A/U;RG-316/U	Reverse Polarity
20-109EB-B	50	Gold	Bulk	RG-178 B/U;RG-196 A/U	Standard
20-109ER-B	50	Gold	Bulk	RG-178 B/U;RG-196 A/U	Reverse Polarity
20-109C0-B	50	Gold	Bulk	RG-142 B/U;RG-223/U;RG-400/U	Standard
20-109C1-B	50	Gold	Bulk	RG-58 C/U;RG-303/U	Standard
20-109CR-B	50	Gold	Bulk	RG-58 C/U;RG-303/U	Reverse Polarity

Straight Jack(female)

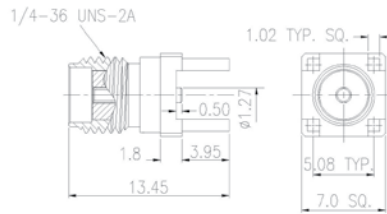
PCB MOUNT



Aliner P/N	Impedance	Plating	Packaging	Mounting Pattern	Note
20-001A0-B	50	Gold	Bulk	B24	Standard
20-001A0-T	50	Gold	Tray	B24	Standard

Straight Jack(female)

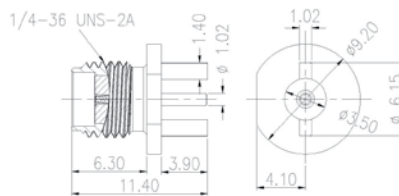
PCB MOUNT



Aliner P/N	Impedance	Plating	Packaging	Mounting Pattern	Note
20-001AB-T	50	Gold	Tray	B25	Standard

Straight Jack(female)

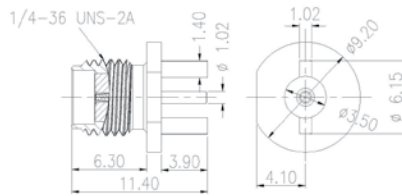
PCB MOUNT



Aliner P/N	Impedance	Plating	Packaging	Mounting Pattern	Note
20-001AD-B	50	Gold	Bulk	B27	Standard

Straight Jack(female)

PCB MOUNT

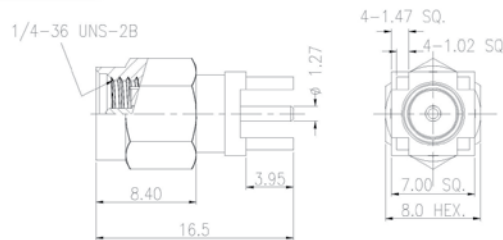


Aliner P/N
20-001D1-B

Impedance	Plating	Packaging	Mounting Pattern	Note
50	Gold	Bulk	B24	Standard

Straight Plug(male)

PCB MOUNT

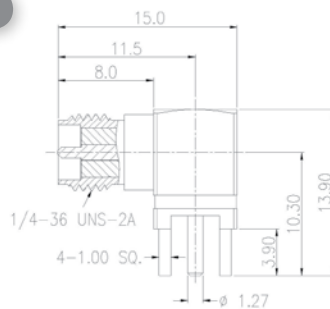


Aliner P/N
20-401D0-T
20-401D0-B

Impedance	Plating	Packaging	Mounting Pattern	Note
50	Gold	Tray	B24	Standard
50	Gold	Bulk	B24	Standard

Right Angle Jack(female)

PCB MOUNT

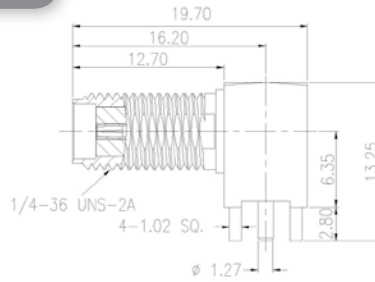


Aliner P/N
20-109GA-T
20-109GA-B
20-109GK-T

Impedance	Plating	Packaging	Mounting Pattern	Note
50	Gold	Tray	B11	Standard
50	Gold	Bulk	B11	Standard
50	Gold	Tray	B11	Reverse Polarity

Right Angle Bulkhead Jack (female)

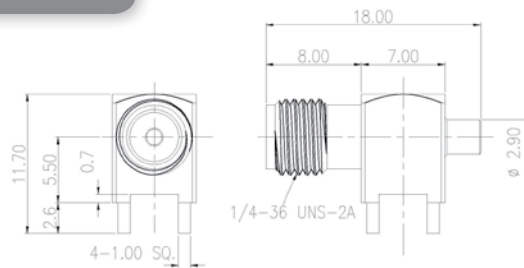
PCB MOUNT



Aliner P/N	Impedance	Plating	Packaging	Mounting Pattern	Note
20-109HA-B	50	Gold	Bulk	B80	Standard
20-109HA-T	50	Gold	Tray	B80	Standard
20-109HR-B	50	Gold	Bulk	B80	Reverse Polarity

Right Angle Jack(female)

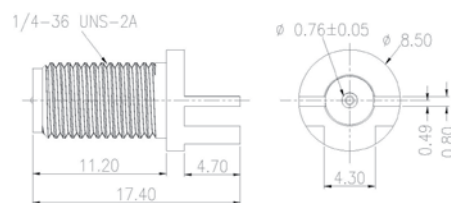
PCB MOUNT & CABLE



Aliner P/N	Impedance	Plating	Packaging	Mounting Pattern & Cable Type	Note
20-114AB-B	50	Gold	Bulk	B12 & 1.13 mini coaxial	Standard
20-114AR-B	50	Gold	Bulk	B12 & 1.37 mini coaxial	Reverse Polarity
20-114AS-B	50	Gold	Bulk	B12 & 1.37 mini coaxial	Standard

Bulkhead Jack(female)

PCB EDGE MOUNT

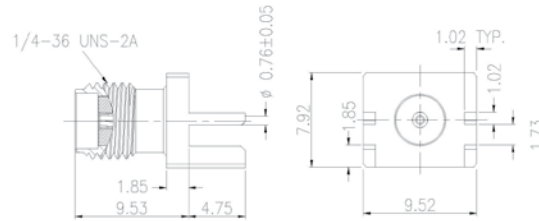


Aliner P/N	Impedance	Plating	Packaging	Mounting Pattern	Note
20-001E0-B	50	Gold	Bulk	B38	Reverse Polarity



Straight Jack(female)

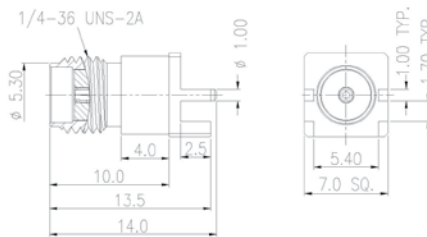
PCB EDGE MOUNT



Aliner P/N	Impedance	Plating Body	Packaging	Mounting Pattern	Note
20-001D0-B	50	Gold	Bulk	B37	Standard
20-001D0-T	50	Gold	Tray	B37	Standard

Straight Jack(female)

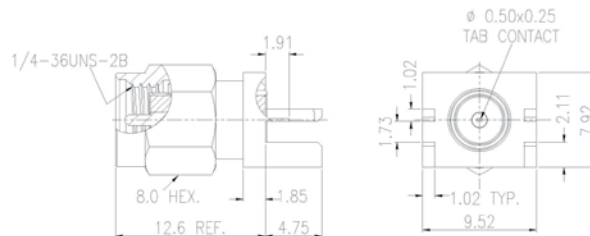
PCB EDGE MOUNT



Aliner P/N	Impedance	Plating	Packaging	Mounting Pattern	Note
20-402A0-B	50	Gold	Bulk	B39	Reverse Polarity
20-402A0-T	50	Gold	Tray	B39	Reverse Polarity
20-402D0-B	50	Gold	Bulk	B39	Standard

Straight Plug(male)

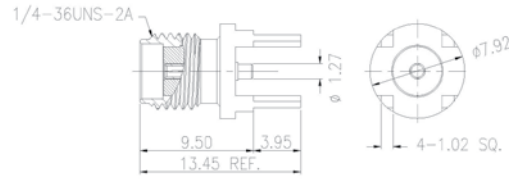
PCB EDGE MOUNT



Aliner P/N	Impedance	Plating	Packaging	Mounting Pattern	Note
20-401E0-T	50	Gold	Tray	B78	Standard
20-401EN-T	50	Nickel	Tray	B78	Standard

Straight Jack(female)

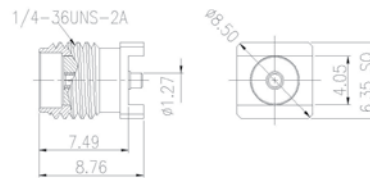
PCB MOUNT



Aliner P/N	Impedance	Plating Body	Packaging	Mounting Pattern	Note
20-001AA-B	50	Gold	Bulk	B24	Standard

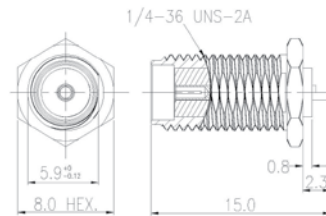
Straight Jack(female)

SMD



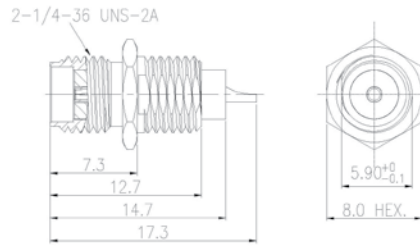
Aliner P/N	Impedance	Plating	Packaging	Mounting Pattern	Note
20-002AA-B	50	Gold	Bulk	B41	Standard

Bulkhead Jack(female)



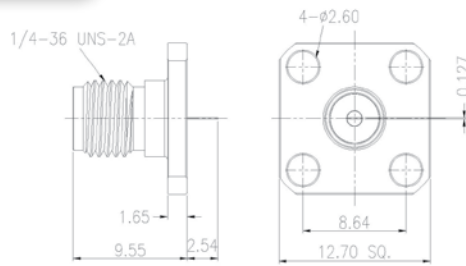
Aliner P/N	Impedance	Plating	Packaging	Note
20-104K0-B	50	Gold	Bulk	Standard
20-104KP-B	50	Gold	Bulk	Reverse Polarity

Bulkhead Jack(female)



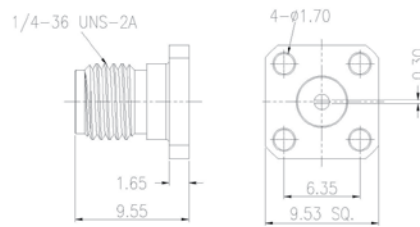
Aliner P/N	Impedance	Plating	Packaging	Note
20-104NV-B	50	Gold	Bulk	Standard

Straight Jack(female)



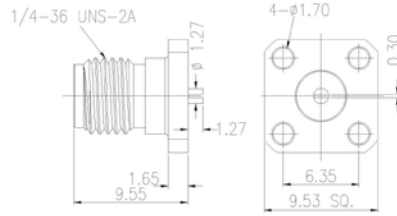
Aliner P/N	Impedance	Plating	Packaging	Note
20-102C0-B	50	Passivation	Bulk	Standard
20-102C0-V	50	Passivation	Single	Standard

Straight Jack(female)



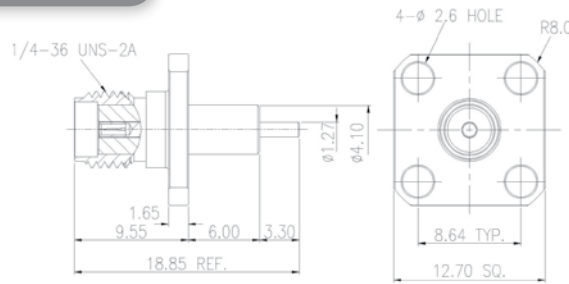
Aliner P/N	Impedance	Plating	Packaging	Note
20-102DA-B	50	Passivation	Bulk	Standard

Straight Jack(female)



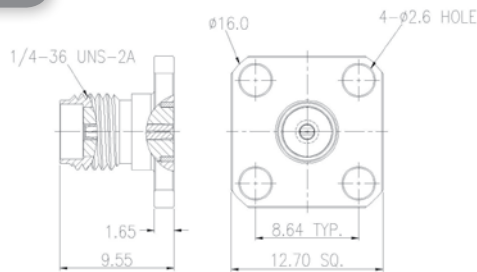
Aliner P/N	Impedance	Plating	Packaging	Note
20-102DB-B	50	Passivation	Bulk	Standard

Straight Jack(female)



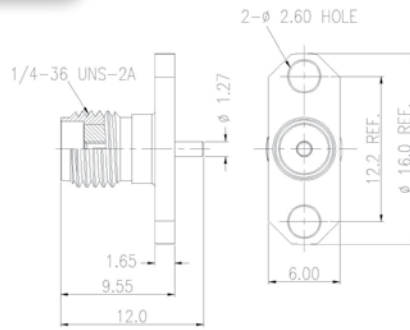
Aliner P/N	Impedance	Plating	Packaging	Note
20-102KA-B	50	Gold	Bulk	Standard

Straight Jack(female)



Aliner P/N	Impedance	Plating	Packaging	Note
20-102KG-V	50	Passivation	Single	Standard

Straight Jack(female)



Aliner P/N

Impedance

Plating

Packaging

Note

20-102LB-T

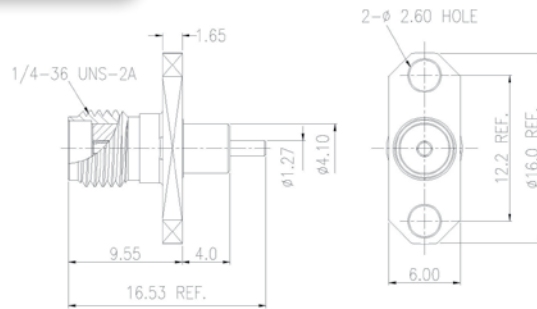
50

Gold

Tray

Standard

Straight Jack(female)



Aliner P/N

Impedance

Plating

Packaging

Note

20-102LC-B

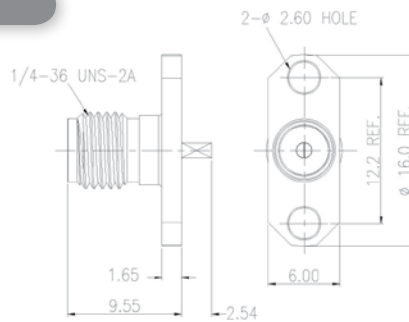
50

Gold

Bulk

Standard

Straight Jack(female)



Aliner P/N

Impedance

Plating

Packaging

Note

20-102LK-B

50

Gold

Bulk

Standard

20-102LK-T

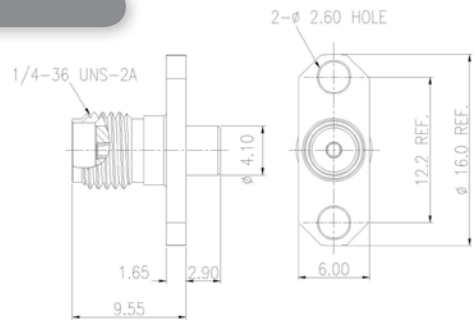
50

Gold

Tray

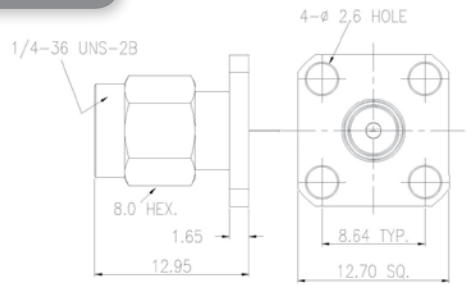
Standard

Straight Jack(female)



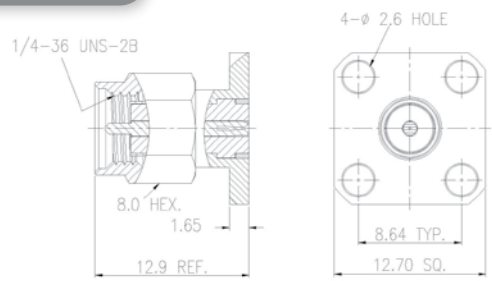
Aliner P/N	Impedance	Plating	Packaging	Note
20-102LM-B	50	Gold	Bulk	Standard

Straight Plug(male)



Aliner P/N	Impedance	Plating	Packaging	Note
20-103A0-B	50	Passivation	Bulk	Standard

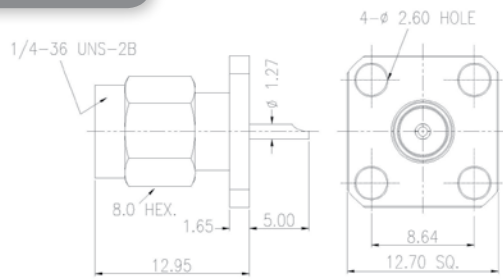
Straight Plug(male)



Aliner P/N	Impedance	Plating	Packaging	Note
20-103AE-V	50	Passivation	Single	Standard



Straight Plug(male)



Aliner P/N
20-103C0-T

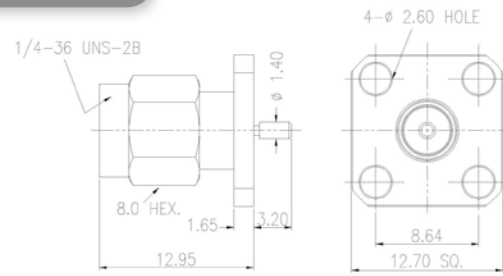
Impedance
50

Plating
Gold

Packaging
Tray

Note
Standard

Straight Plug(male)



Aliner P/N
20-103D0-T

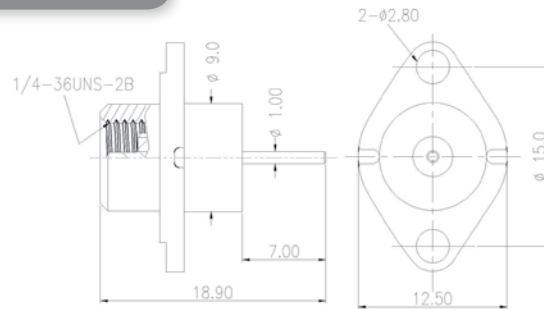
Impedance
50

Plating
Gold

Packaging
Tray

Note
Standard

Straight Plug(male)



Aliner P/N
20-202D0-T

Impedance
50

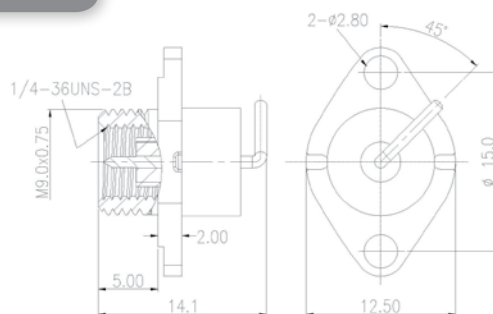
Plating
Nickel

Packaging
Tray

Note
Standard



Straight Plug(male)

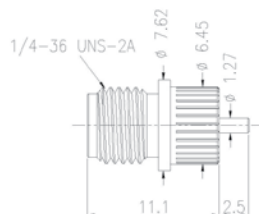


Aliner P/N	Impedance	Plating	Packaging	Note
20-203D0-T	50	Nickel	Tray	Standard

SMA PRESS FIT



Straight Jack(female)

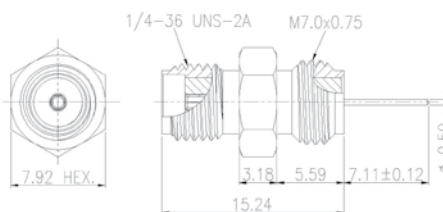


Aliner P/N	Impedance	Plating	Packaging	Note
20-104A0-B	50	Nickel	Bulk	Standard
20-104B0-T	50	Nickel	Tray	Standard

SMA FEED THROUGH



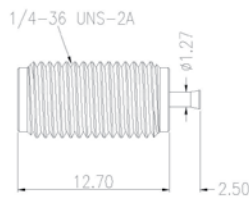
Straight Bulkhead Jack (female)



Aliner P/N	Impedance	Plating	Packaging	Note
20-104BP-T	50	Passivation	Tray	Standard



Straight Jack(female)



Aliner P/N
20-102G0-B

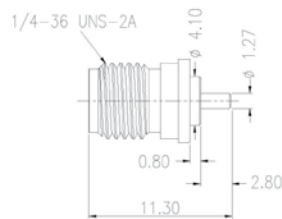
Impedance
50

Plating
Nickel

Packaging
Bulk

Note
Standard

Straight Jack(female)



Aliner P/N
20-106A0-B

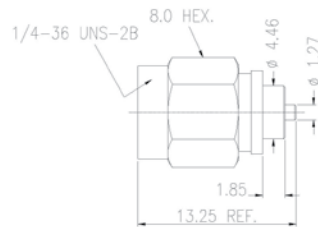
Impedance
50

Plating
Gold

Packaging
Bulk

Note
Standard

Straight Plug(male)



Aliner P/N
20-107A0-B

Impedance
50

Plating
Gold

Packaging
Bulk

Note
Standard