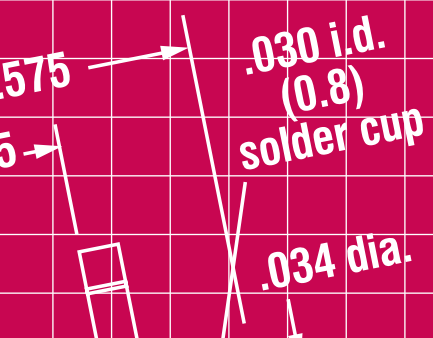


BNC SECTION

COAXIAL COMPONENTS CORP.

POST-MILLENNIUM EDITION



BNC SPECIFICATIONS

coaxicom

COAXICOM BNC CONNECTORS are miniature units that feature a quick disconnect 2-stud bayonet lock coupling mechanism. They are available in a variety of flexible and semirigid cable termination styles. Bulkhead and panel mount cable connectors and receptacles are also featured, as well as straight and right angle PCB jacks. Most connectors are available in 75 Ω by adding a -75 suffix to the end of the part number.

This catalog summarizes a small cross-section of COAXICOM's BNC connectors and adapters. We can also supply reverse polarized connectors, bulkhead mounted hermetically sealed adapters, as well as bulkhead adapters with isolated ground. Coaxicom also offers a selection of twinaxial (TWBNC) BNC type connectors with 2-stud coupling. They are similar in size to BNC connectors, and are best suited for use with RG-108/U and similar cables. Twinaxial connectors have a nominal impedance of 78 Ω and a frequency range of DC-500 MHz. All other specifications are the same as those of standard BNC's.

MILITARY SPECIFICATIONS

MIL-PRF-39012, MIL-A-55339, MIL-C-83517 and MIL-STD-348 as applicable.

MATERIAL

Body parts, Male Contacts	Brass per ASTM-B16
Female Contacts	Beryllium Copper per ASTM-B196
Insulators	TFE per ASTM-D-1457
Gaskets	Silicon rubber per ZZ-R-765
Ferrules	Brass 1/2 Hard, QQ-B-626

MECHANICAL

Max. Force to Engage/Disengage	Axial: 3 lbs. Torque: 2.5 in-lbs.
Coupling Mechanism	2-Stud Bayonet, IAW MIL-STD-348
Coupling Nut Retention	100 lbs. min (plugs only)
Durability	500 cycles min.

ENVIRONMENTAL

Temperature Range	-65° C to 165° C
Vibration	Method 204, Test Condition B
Shock	Method 213, Test Condition C
Thermal Shock	Method 107, Test Condition B
Corrosion [Salt Spray]	Method 101, Test Condition B
Moisture Resistance	Method 106 (High Humidity N/A)
Altitude	Method 105, Test Condition C
Hermeticity	Helium Leak Test, 10 ⁻⁷ cc/sec

FINISH

Nickel plating is standard on most connectors. Gold and silver are also available. Center contacts are gold plated per MIL-PRF-39012, IAW MIL-G-45204.

ELECTRICAL

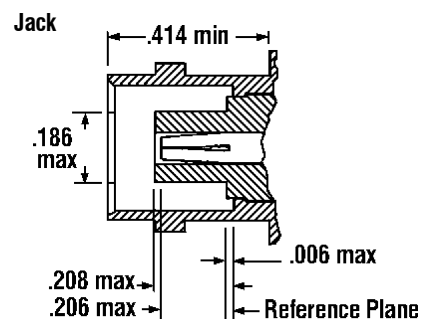
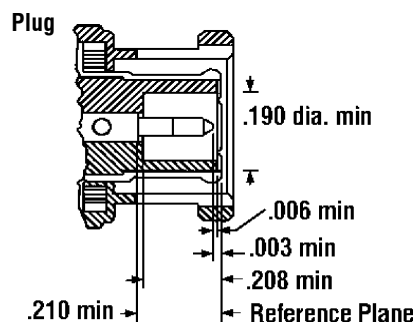
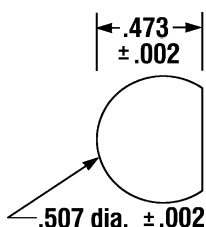
Frequency Range	50 Ω : DC-4 GHz. 75 Ω : DC-1GHz. TWBNC: DC-500 MHz.
Nominal Impedance	50, 75, and 78 Ω (TWBNC)
VSWR	50 Ω : 1.3:1 max, 75 Ω 1.15:1
Insertion Loss (50 Ω)	0.2 dB max @ 3 GHz.
RF Leakage (50 Ω)	-55 dB min, 2-3 GHz.
Dielectric Withstanding Voltage	1500 VRMS @ Sea Level
Insulation Resistance	5000 Megohms min
Voltage Rating	500 VRMS @ Sea Level
Center Contact Resistance	1.5 milliohms max. initial

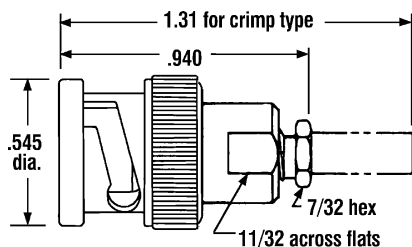
CABLE GROUPS

22	22A	RG55A, 142, 142A, 223, 400, M17/60, M17/128	27	27B	RG303, M17/111
	22B	RG55, 55B, 142B, M17/184, LMR195	28	28A	RG59, 59A, 59B, 62, 62A, 62B, 62C, 210, M17/29, M17/30, M17/97
23		RG178, 178A, 178B, 196, 196A, 404		28B	RG71, 71A, 71B, 302, M17/90, M17/110, RG59DS
24	24A	RG174, 178, 188A, 316, M17/172, M17/173, LMR100, 101	29		RG174DS, RG316DS, RG188DS, TIMES RD316
	24B	RG161, 179, 179A, 179B, 187, 187A, M17/94, M17/136, Belden 9221	30		.141 Semirigid and ULTRA-FLEX, RG402, M17/130
26		RG178DS, RG196DS, Microdot 250-3908	31		.085 Semirigid and ULTRA-FLEX, RG405, M17/133
27	27A	RG58, 58A, 58C, 141, 141A, M17/28, M17/155, M17/170	32	32B	RG11, 11A, M17/6

BNC INTERFACE DIMENSIONS

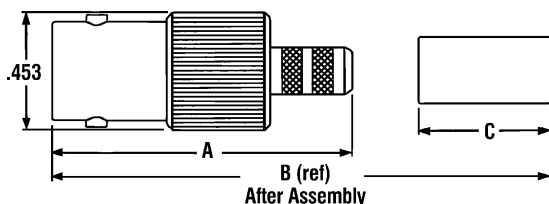
RECOMMENDED BULKHEAD MOUNTING HOLE



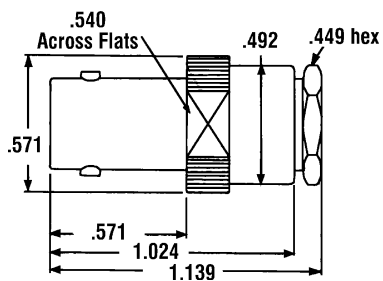
STRAIGHT PLUG

FOR FLEXIBLE, SEMI-RIGID OR ULTRA-FLEX CABLE

MODEL	2541-5XX-*	2541-7XX-*	2541-4XX-*
CABLE GROUP	23, 24, 26, 29	23, 24, 26, 29	30, 31
NOTES	clamp type for flexible cable	crimp type for flexible cable	solder clamp for semi-rigid or ultra-flex cable

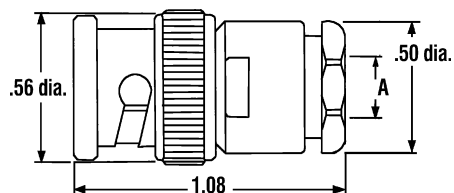
XX: Insert Cable Group code into Part Number from above table where applicable.

STRAIGHT CRIMP JACK

FOR FLEXIBLE CABLE

MODEL	2091CC-22A-*		2091CC-24A-*	
CABLE	RG55, 142		RG188, 316	
DIM	A	1.135	A	1.076
	B	1.323	B	1.375
	C	.500	C	.522
NOTES	non-captive center contact crimp type		non-captive center contact crimp type	

STRAIGHT CLAMP JACK

FOR FLEXIBLE CABLE

MODEL	2091FCC-22A/27A-*	2091FCC-28A-*
CABLE	RG55, 58, 141	RG59, 62
NOTES	captive center contact	captive center contact

STRAIGHT CLAMP PLUG

FOR FLEXIBLE CABLE

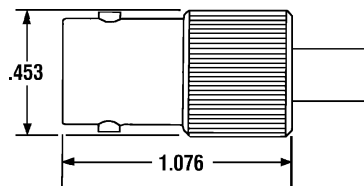
MODEL	2917-22/27A-*	2917-28A-*	2917-24A-*
CABLE	RG55, 58, 141, 142	RG59, 61, 71, 210	RG188, 316
DIM A:	.224	.258	.115
NOTES	silver plated center contact	silver plated center contact	silver plated center contact

*-1 indicates gold plating, -4 indicates silver plating, -7 indicates nickel plating.

BNC COAXIAL CONNECTORS

coaxicom

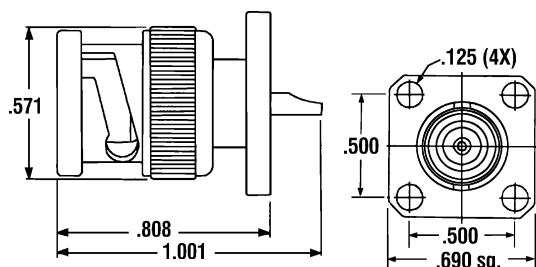
STRAIGHT JACK



FOR SEMI-RIGID OR ULTRA-FLEX CABLE

MODEL	2202-30-*	2202-31-*
CABLE	RG402, M17/130, Ultra-Flex	RG405, M17/133, Ultra-Flex
NOTES	direct solder attach	direct solder attach

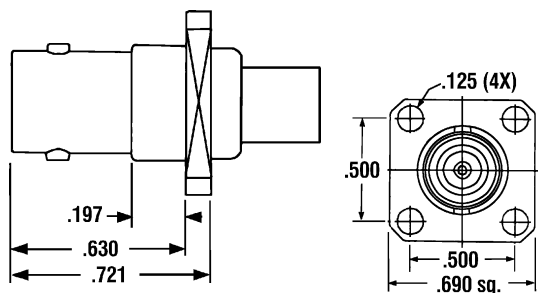
FLANGE MOUNT PLUG



RECEPTACLE

MODEL	2111-*
NOTES	captured center contact solder pot flush rear terminal

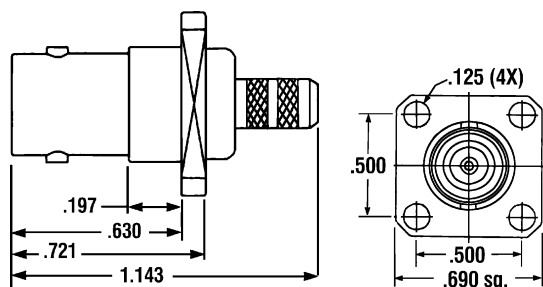
FLANGE MOUNT JACK



FOR SEMI-RIGID OR ULTRA-FLEX CABLE

MODEL	2206-30-*	2206-31-*
CABLE	RG402, M17/130, Ultra-Flex	RG405, M17/133, Ultra-Flex
DIM A:	.144	.089
DIM B:	.180	.120
NOTES	direct solder	direct solder

FLANGE MOUNT JACK CRIMP



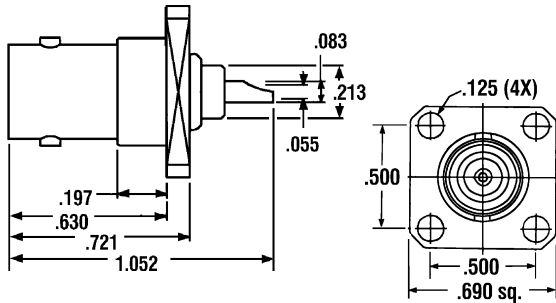
FOR FLEXIBLE CABLE

MODEL	2046-CC-27-*	2046-CC-22-*	2046-CC-24A-*	2046-CC-24B-*
CABLE	RG58, 141, 303	RG55, 142, 223, 400	RG174, 188, 316	RG179, 187

NOTE: Total length after assembly = 1.34 REF.

*-1 indicates gold plating, -4 indicates silver plating, -7 indicates nickel plating.

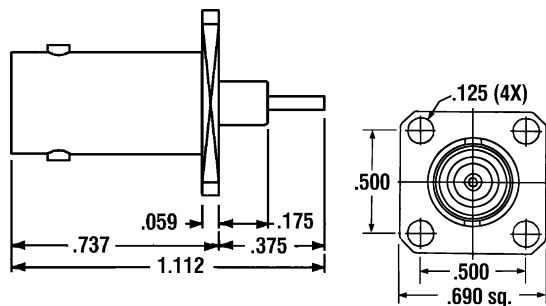
FLANGE MOUNT JACK



RECEPTACLE

MODEL	2215A-*
NOTES	captured center contact extended teflon solder pot terminal

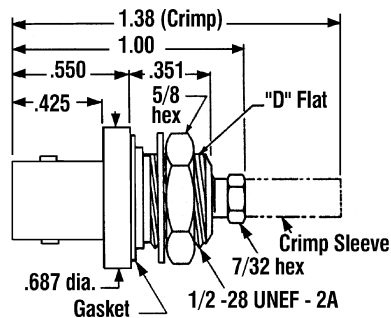
FLANGE MOUNT JACK



RECEPTACLE

MODEL	2204-CC-*
NOTES	captured center contact blunt post

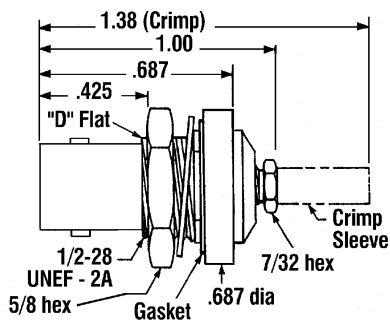
FRONT MOUNT BULKHEAD JACK



FOR FLEXIBLE, SEMI-RIGID OR ULTRA-FLEX CABLE

MODEL	2578-5XX-*	2578-7XX-*	2578-4XX-*
CABLE GROUP	23, 24, 26, 29	23, 24, 26, 29	30, 31
NOTES	clamp type for flexible cable	crimp type for flexible cable	solder-clamp for semi-rigid and Ultra-Flex cable

REAR MOUNT BULKHEAD JACK



FOR FLEXIBLE, SEMI-RIGID OR ULTRA-FLEX CABLE

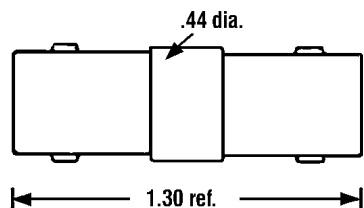
MODEL	2540-5XX-*	2540-7XX-*	2540-4XX-*
CABLE GROUP	23, 24, 26, 29	23, 24, 26, 29	30, 31
NOTES	clamp type for flexible cable	crimp type for flexible cable	solder-clamp for semi-rigid and Ultra-Flex cable

*-1 indicates gold plating, -4 indicates silver plating, -7 indicates nickel plating.

BNC INTRA-SERIES ADAPTERS

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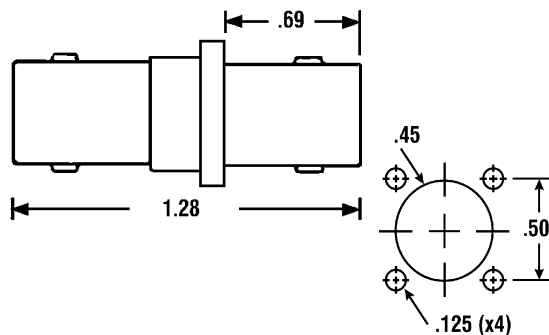
FEMALE TO FEMALE ADAPTER



STRAIGHT IN-LINE

MODEL	2217-*	2217-75-*
NOTES	50 Ohms silver plated center conductor	75 Ohms silver plated center conductor

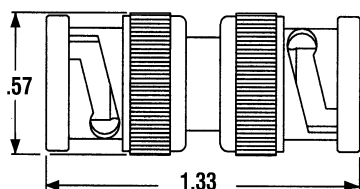
FEMALE TO FEMALE ADAPTER



PANEL MOUNT

MODEL	2145-*	2145-75-*
NOTES	50 Ohms silver plated center conductor	75 Ohms silver plated center conductor

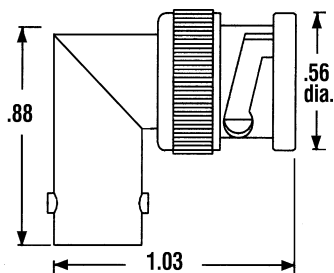
MALE TO MALE ADAPTER



STRAIGHT IN-LINE

MODEL	2218-*	2218-75-*
NOTES	50 Ohms	75 Ohms

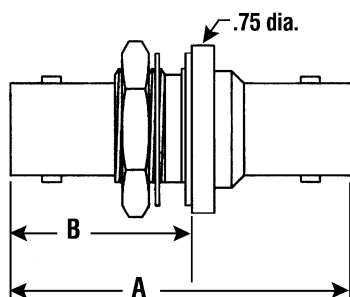
MALE TO FEMALE ADAPTER



RIGHT ANGLE

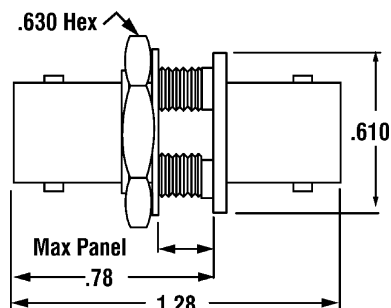
MODEL	2219-*	2219-75-*
NOTES	50 Ohms silver plated center conductor	75 Ohms silver plated center conductor

*-1 indicates gold plating, -4 indicates silver plating, -7 indicates nickel plating.

FEMALE TO FEMALE ADAPTER

BULKHEAD MOUNTING

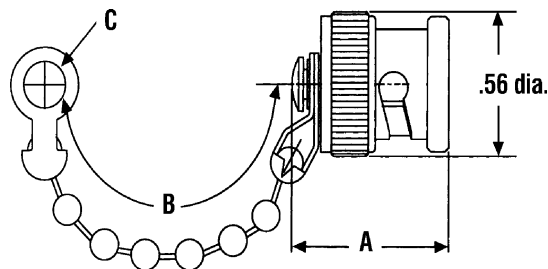
MODEL	2208-*	2209A-*-1A	2209A-*-1B	2209A-*-1C
DIM A:	1.53	1.55	1.40	1.28
DIM B:	.88	.88	.85	.79
Max. Panel	.315	.315	.276	.217
NOTES	Hermetic silver contact	gold plated contact	gold plated contact	gold plated contact

For 75 Ohms, insert -75 after basic part number. (Example: 2209A-7-1C-75)

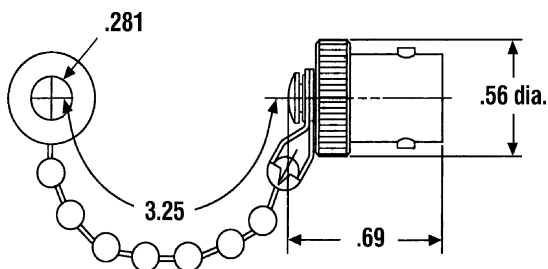
FEMALE TO FEMALE ADAPTER

ISOLATED BULKHEAD MOUNTING

MODEL	2209A-*-1C	2209A-*-1A
Max. Panel	.217	.177
NOTES:	isolated from ground	isolated bushing

For 75 Ohms, insert -75 after basic part number. (Example: 2209A-7-1C-75)

MALE CAP

SHORTING AND DUST CAP

MODEL	2230-*	2230-*-C	2228-*	2228-*-C
DIM A:	.66	.55	.70	.58
DIM B:	2.25	—	2.25	—
DIM C:	.144	—	.144	—
NOTES	dust cap with bead chain	dust cap without bead chain	shorting cap with chain, silver plated contact	shorting cap without chain, silver plated contact

FEMALE CAP

DUST CAP

MODEL	2230F-*
NOTES	with bead chain

NOTE Female shorting caps are also available.

*-1 indicates gold plating, -4 indicates silver plating, -7 indicates nickel plating.