

**BNC Connectors**

Specifications	93
Flexible Cable	95
Panel Mount	99
Bulkhead	100
PCB Mount	101
In Series Adaptors	103

Other Information

Assembly Instructions	176
Cable Assembly	166
Cable Information	168
Numerical Index	184

Prices, specifications, statement of warranty, and other terms and conditions are subject to change without notice by Lighthouse Technologies, Inc.

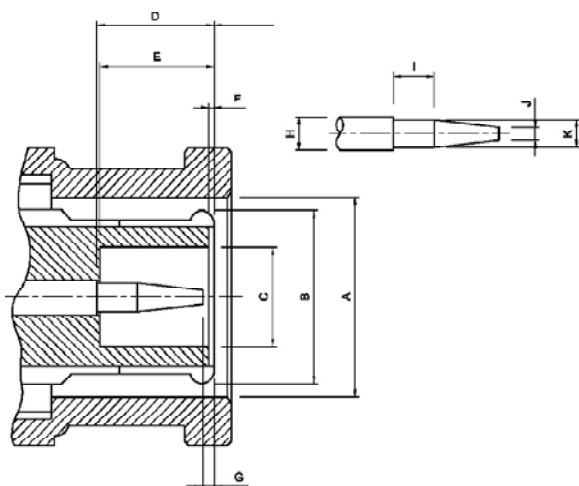


BNC connectors are the most popular coaxial connector. The special bayonet design allows easy mating and unmating. BNC 50 ohm connectors provide repeatable electronic performance from DC to 4 GHz. BNC 75 ohm connectors are suitable for applications up to 1 GHz. All 50 and 75 ohm connectors are intermatable. BNC connectors are designed to accommodate a large variety of RG and industry standard cables. They are available in crimp, clamp, and twist on cable styles. A full line of printed circuit board receptacles, bulkhead receptacles, and other accessories complement the product offering. LTI BNC connectors are designed to conform to MIL-C-39012 specifications.

The BNC series coaxial connector works well in lower microwave frequency applications including monitors, LAN, telecommunication devices and test equipment.

Interface Mating Dimensions

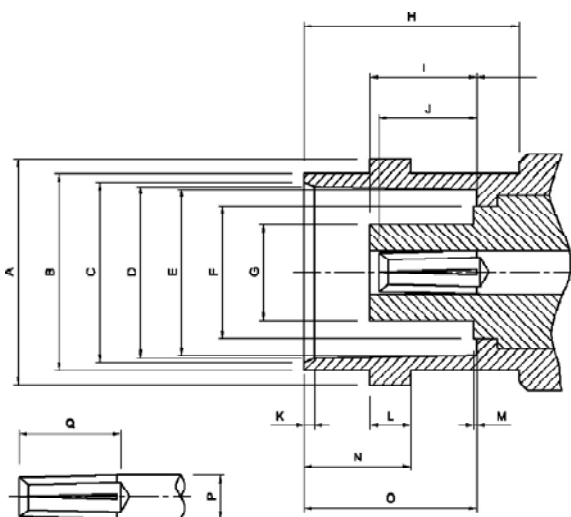
PLUG



Letter	Minimum	Maximum
A	9.78	9.91
B	Slotted and flared to meet electrical and mechanical requirements	
C	4.83	-
D	5.33	5.84
E	5.28	5.79
F	0.15	0.46
G	0.08	1.02
H	2.06	2.21
I	1.98	-
J	-	0.64
K	1.32	1.37

JACK

Letter	Minimum	Maximum
A	10.97	11.07
B	9.60	9.70
C	8.79	9.04
D	8.31	8.46
E	8.10	8.15
F	-	6.50
G	-	4.72
H	10.52	-
I	4.78	5.28
J	4.72	5.23
K	0.38	0.76
L	1.91	2.06
M	-	0.15
N	5.18	5.28
O	8.31	8.51
P	2.06	2.21
Q	4.95	-





ELECTRICAL RATINGS

Impedance	50 ohm	75 ohm
Frequency Range	DC to 4 GHz	DC to 1 GHz
VSWR	<i>Straight</i>	<i>Right Angle</i>
	1.3 max	1.35 max
Voltage Rating (at sea level, in R rms, 50Hz)	500 max	
Dielectric Withstanding Voltage (at sea level, in R rms, 50Hz)	1500	
Insulation Resistance	5000 M Ω min	
Insertion Loss	0.2 dB max @ 3.0 GHz	
Contact Resistance	<i>Center Contact</i>	<i>Outer Contact</i>
	2.0 m Ω max	2.0 m Ω max

MECHANICAL RATINGS

Mating	Bayonet style snap-on coupling	
Durability	500 matings max	
Coupling Nut Torque	0.6 to 2.5 in-lbs	
Coupling Nut Retention Force	101.2 lbs max	
Contact Captivation	6.1 lbs max	
Cable Retention	<i>RG-174, 188, 316, 179</i>	<i>RG-58, 59</i>
	12.1 lbs. minimum	28.7 lbs. minimum

ENVIRONMENTAL RATINGS

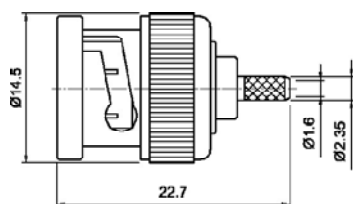
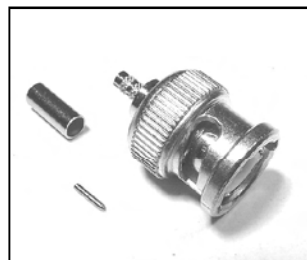
Temperature Range	-65°C to + 165°C
Thermal Shock	MIL-STD-202F, Method 1017G, Condition A
Vibration	MIL-STD-202F, Method 204D, Condition A
Corrosion	MIL-STD-202F, Method 101D, Condition B
Mechanical Shock	MIL-STD-202F, Method 213B, Condition A

MATERIALS

	<i>Material</i>	<i>Plating</i>
Connector Body	Brass per QQ-B-626	Nickel
Center Contact	Brass per QQ-B-626	Gold
	Beryllium Copper per QQ-C-530	Gold
Insulator	Teflon, Delrin, Polypropylene	None
Gasket	Silicone Rubber	None
Crimp Ferrule	Annealed Copper per WW-T-799	Same as body



Straight Crimp Plug

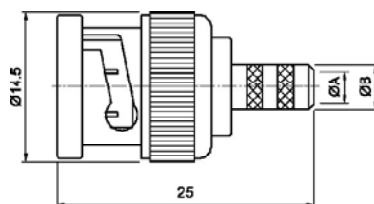


Part Number	Cable Type
LTI-BSM11NT-XXX	RG-316,174,188;Q1,D316
LTI-7BSM11NT-179	RG-179 (75 ohm)

TO CREATE COMPLETE PART NUMBER: Fill in Cable Type where XXX is. See Part Numbering Chart on page 3 for more info.

ASSEMBLY INST.: Page 176
Recommended Stripping DIMS:
Page 172, Line 16

Straight Crimp Plug

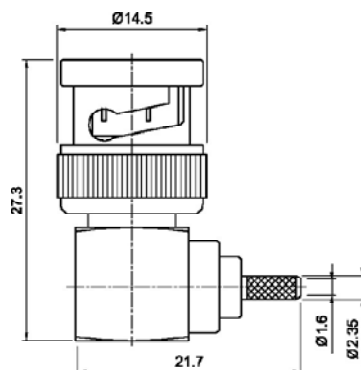
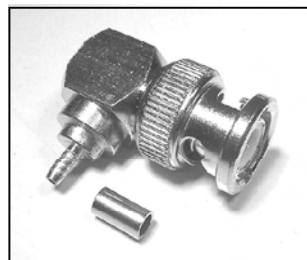


Part Number	Cable Type	Dimension
LTI-BSM11NT-XXX	RG-58,141,142,223,400	A: 3.1 B: 4.4
LTI-7BSM11NT-59	RG-59 (75 ohm)	A: 3.9 B: 5.6

TO CREATE COMPLETE PART NUMBER: Fill in Cable Type where XXX is.
See Part Numbering Chart on page 3 for more info.

ASSEMBLY INST.: Page 176
Recommended Stripping DIMS:
Page 172, Line 16

Right Angle Crimp Plug



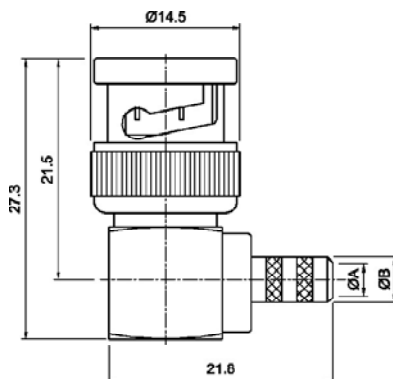
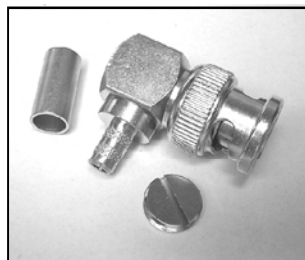
Part Number	Cable Type
LTI-BLM11NT-XXX	RG-316,174,188;Q1,D316
LTI-7BLM11NT-179	RG-179 (75 ohm)

TO CREATE COMPLETE PART NUMBER: Fill in Cable Type where XXX is. See Part Numbering Chart on page 3 for more info.

ASSEMBLY INST.: Page 177
Recommended Stripping DIMS:
Page 172, Line 17



Right Angle Crimp Plug

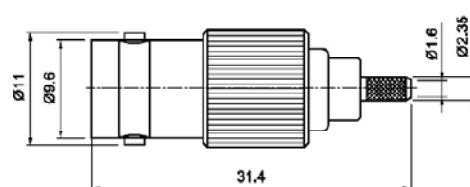


Part Number	Cable Type	Dimension	
LTI-BLM11NT-XXX	RG-58,141,142,223,400	A: 3.1	B: 4.4
LTI-7BLM11NT-59	RG-59 (75 ohm)	A: 3.9	B: 5.6

TO CREATE COMPLETE PART NUMBER: Fill in Cable Type where XXX is.
See Part Numbering Chart on page 3 for more info.

ASSEMBLY INST.: Page 177
Recommended Stripping DIMS:
Page 172, Line 17

Straight Crimp Jack

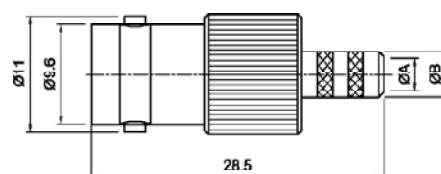


Part Number	Cable Type
LTI-BSF11NT-XXX	RG-316,174,188;Q1,D316
LTI-7BSF11NT-179	RG-179 (75 ohm)

TO CREATE COMPLETE PART NUMBER: Fill in Cable Type where XXX is. See Part Numbering Chart on page 3 for more info.

ASSEMBLY INST.: Page 176
Recommended Stripping DIMS:
Page 172, Line 16

Straight Crimp Jack



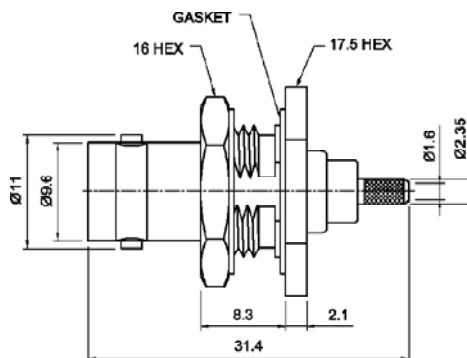
Part Number	Cable Type	Dimension	
LTI-BSF11NT-XXX	RG-58,141,142,223,400	A: 3.1	B: 4.4
LTI-7BSF11NT-59	RG-59 (75 ohm)	A: 3.9	B: 5.6

TO CREATE COMPLETE PART NUMBER: Fill in Cable Type where XXX is.
See Part Numbering Chart on page 3 for more info.

ASSEMBLY INST.: Page 176
Recommended Stripping DIMS:
Page 172, Line 16



Bulkhead Crimp Jack

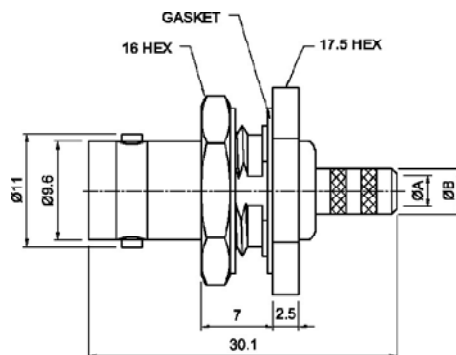


Part Number	Cable Type	M.H.
LTI-BSF13RNT-XXX	RG-316,174,188;Q1,D316	14
LTI-7BSF13RNT-179	RG-179 (75 ohm)	14

TO CREATE COMPLETE PART NUMBER: Fill in Cable Type where XXX is. See Part Numbering Chart on page 3 for more info.

ASSEMBLY INST.: Page 176
Recommended Stripping DIMS:
Page 172, Line 18

Bulkhead Crimp Jack

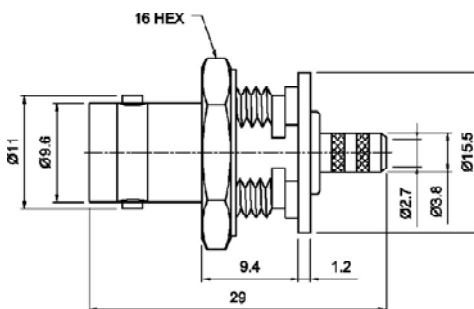


Part Number	Cable Type	M.H.	Dimension
LTI-BSF13RNT-XXX	RG-58,141,142,223,400	14	A: 3.1 B: 4.4
LTI-7BSF13RNT-59	RG-59 (75 ohm)	14	A: 3.9 B: 5.6

TO CREATE COMPLETE PART NUMBER: Fill in Cable Type where XXX is. See Part Numbering Chart on page 3 for more info.

MOUNTING HOLE (M.H.): Page 174
ASSEMBLY INST.: Page 176
Recommended Stripping DIMS:
Page 172, Line 18

Isolated Bulkhead Crimp Jack



Part Number	Cable Type	M.H.
LTI-BSF13RENT-XXX	RG-316,174,188;Q1,D316	14
LTI-7BSF13RENT-179	RG-179 (75 ohm)	14

TO CREATE COMPLETE PART NUMBER: Fill in Cable Type where XXX is. See Part Numbering Chart on page 3 for more info.

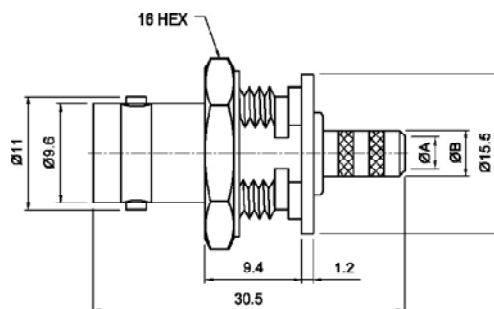
MOUNTING HOLE (M.H.): Page 174
ASSEMBLY INST.: Page 176
Recommended Stripping DIMS:
Page 172, Line 18



Isolated Bulkhead Crimp Jack

Part Number	Cable Type	M.H.	Dimension
LTI-BSF13RENT-XXX	RG-58,141,142,223,400	14	A: 3.1 B: 4.4
LTI-7BSF13RENT-59	RG-59 (75 ohm)	14	A: 3.9 B: 5.6

TO CREATE COMPLETE PART NUMBER: Fill in Cable Type where XXX is. See Part Numbering Chart on page 3 for more info.

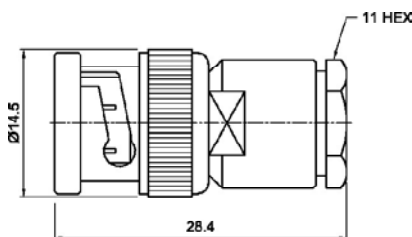
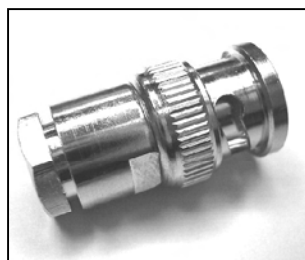


MOUNTING HOLE (M.H.): Page 174
ASSEMBLY INST.: Page 176
Recommended Stripping DIMs:
Page 172, Line 18

Straight Clamp Plug

Part Number	Cable Type
LTI-BSM21NT-XXX	RG-58,141,142,223,400
LTI-7BSM21NT-59	RG-59 (75 ohm)

TO CREATE COMPLETE PART NUMBER:
Fill in Cable Type where XXX is.
See Part Numbering Chart on page 3 for more info.

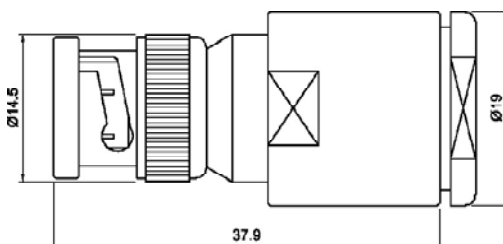


ASSEMBLY INST.: Page 178
Recommended Stripping DIMs:
Page 172, Line 19

Straight Clamp Plug

Part Number	Cable Type
LTI-BSM21NT-XXX	RG-8,213,214; Q
LTI-7BSM21NT-11	RG-11 (75 ohm)

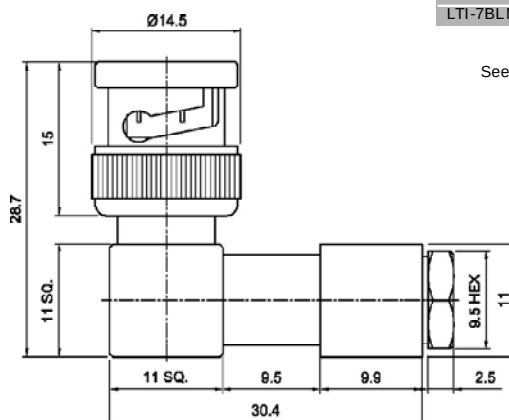
TO CREATE COMPLETE PART NUMBER:
Fill in Cable Type where XXX is.
See Part Numbering Chart on page 3 for more info.



ASSEMBLY INST.: Page 178
Recommended Stripping DIMs:
Page 172, Line 19



Right Angle Clamp Plug

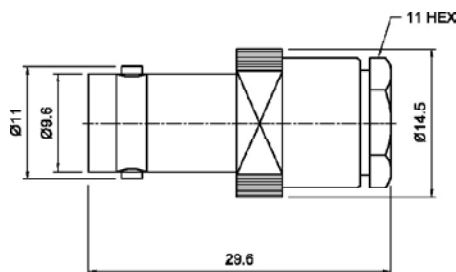


Part Number	Cable Type
LTI-BLM21N T-XXX	RG-58,141,142,223,400
LTI-7BLM21N T-59	RG-59 (75 ohm)

TO CREATE COMPLETE PART NUMBER:
Fill in Cable Type where XXX is.
See Part Numbering Chart on page 3 for more info.

ASSEMBLY INST.: Page 179
Recommended Stripping DIMs:
Page 172, Line 20

Straight Clamp Jack

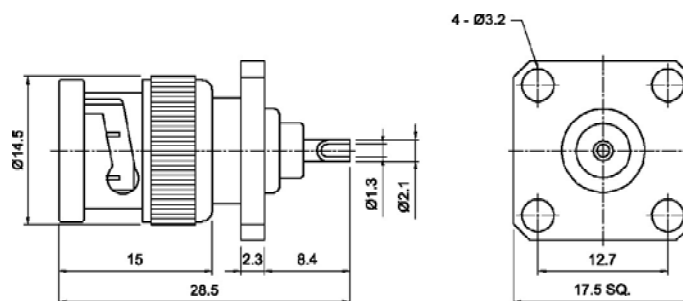


Part Number	Cable Type
LTI-BSF21NT-XXX	RG-58,141,142,223,400
LTI-7BSF21NT-59	RG-59 (75 ohm)

TO CREATE COMPLETE PART NUMBER:
Fill in Cable Type where XXX is.
See Part Numbering Chart on page 3 for more info.

ASSEMBLY INST.: Page 179
Recommended Stripping DIMs:
Page 172, Line 21

Panel Mount Plug with Solder Cup Termination



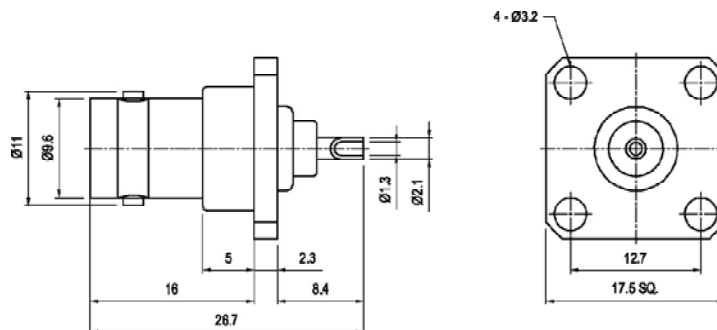
Part Number	M.H.
LTI-BSM42N T	39
LTI-7BSM42N T (75 ohm)	39

MOUNTING HOLE (M.H.): Page 175



Panel Mount Jack with Solder Cup Termination

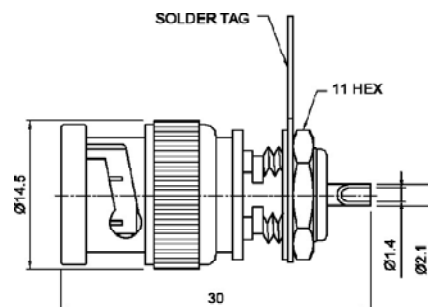
Part Number	M.H.
LTI-BSF42N T	39
LTI-7BSF42N T (75 ohm)	39



MOUNTING HOLE (M.H.): Page 175

Front Mount Bulkhead Plug with Solder Cup Termination

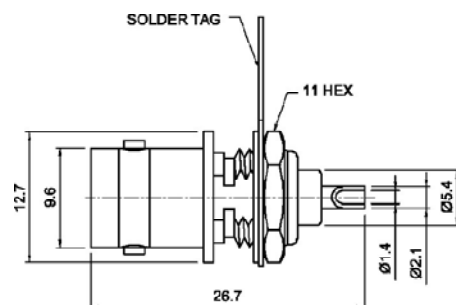
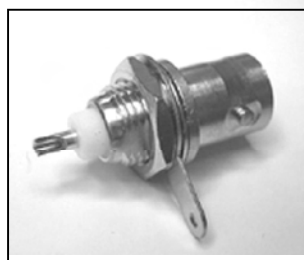
Part Number	M.H.
LTI-BSM43N T	10
LTI-7BSM43N T (75 ohm)	10



MOUNTING HOLE (M.H.): Page 174

Front Mount Bulkhead Jack with Solder Cup Termination

Part Number	M.H.
LTI-BSF43N T	10
LTI-7BSF43N T (75 ohm)	10

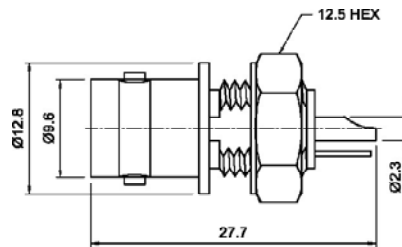


MOUNTING HOLE (M.H.): Page 174



Isolated Front Mount Bulkhead Jack with Solder Cup Termination

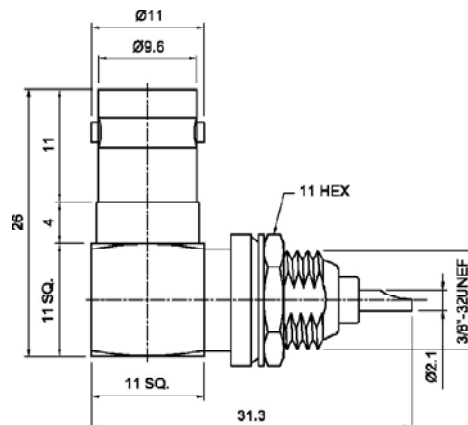
Part Number	M.H.
LTI-BSF43ENT	10
LTI-7BSF43ENT (75 ohm)	10



MOUNTING HOLE (M.H.): Page 174

Right Angle Bulkhead Jack with Solder Cup Termination

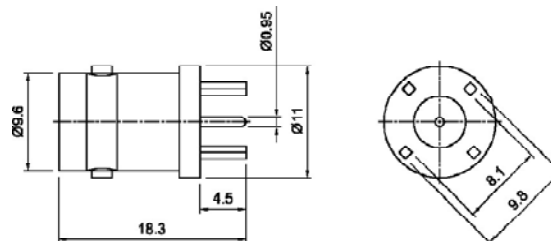
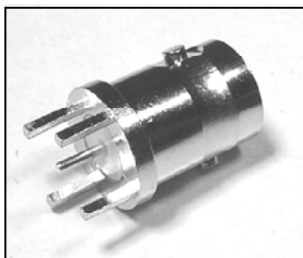
Part Number	M.H.
LTI-BLF43NT	10
LTI-7BLF43NT (75 ohm)	10



MOUNTING HOLE (M.H.): Page 174

Vertical PCB Thru Hole Jack, Short

Part Number	M.H.
LTI-BSF54ZNT	28
LTI-7BSF54ZNT (75 ohm)	28

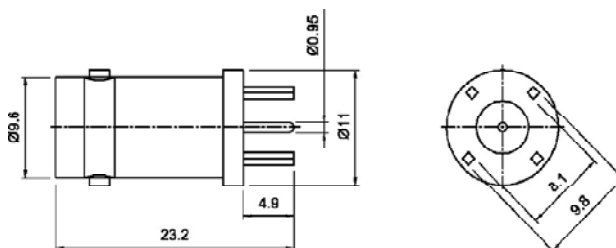


MOUNTING HOLE (M.H.): Page 174



Vertical PCB Thru Hole Jack, Medium

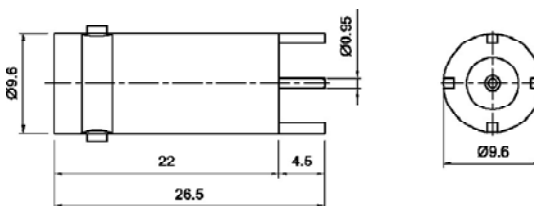
Part Number	M.H.
LTI-BSF54 MNT	28
LTI-7BSF54 MNT (75 ohm)	28



MOUNTING HOLE (M.H.): Page 174

Vertical PCB Thru Hole Jack, Tall

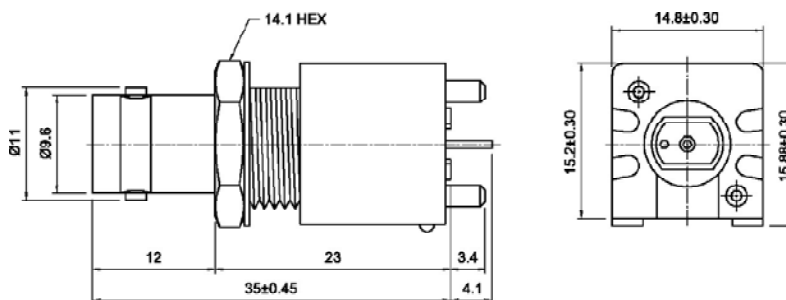
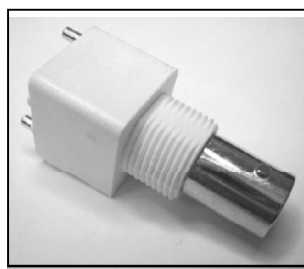
Part Number	M.H.
LTI-BSF54LNT	28
LTI-7BSF54LNT (75 ohm)	28



MOUNTING HOLE (M.H.): Page 174

Vertical PCB Thru Hole Jack, Commercial High Profile

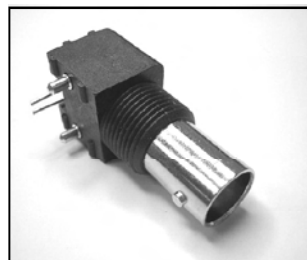
Part Number	M.H.	Housing
LTI-BSF54HNPB	12, 33	Black
LTI-BSF54HNPW	12, 33	White
LTI-7BSF54HNPB (75 ohm)	12, 33	Black
LTI-7BSF54HNPW (75 ohm)	12, 33	White



MOUNTING HOLE (M.H.): Page 174, 175

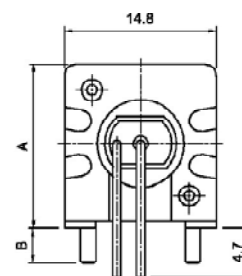
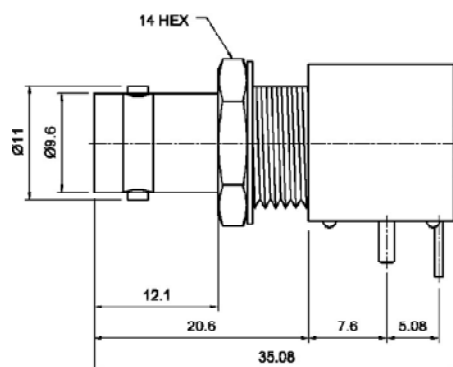


Right Angle PCB Thru Hole Jack, Commercial



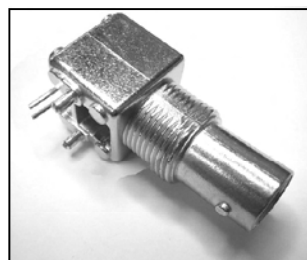
Part Number		M.H.	Profile	Housing
LTI-BLF54_NP_	LTI-7BLF54_NP_ (75 ohm)	12, 33	Z	Dim A: 12.5 B: Black W: White
LTI-BLF54_NP_	LTI-7BLF54_NP_ (75 ohm)	12, 33	M	Dim A: 13.1 B: Black W: White
LTI-BLF54_NP_	LTI-7BLF54_NP_ (75 ohm)	12, 33	H	Dim A: 15.88 B: Black W: White

TO CREATE PART NUMBER: Insert the corresponding letter from the required profile in the space after the "4", at the center of the part number. Insert the letter from the desired housing color at the end of the part number.



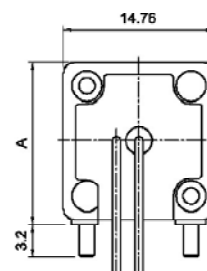
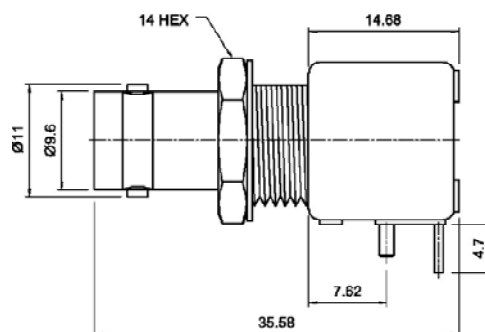
MOUNTING HOLE (M.H.): Page 174, 175

Right Angle Commercial PCB Thru Hole Jack, Metal Housing



Part Number		M.H.	Profile
LTI-BLF54_NPM	LTI-7BLF54_NPM (75 ohm)	12, 33	M Dim A: 13.1
LTI-BLF54_NPM	LTI-7BLF54_NPM (75 ohm)	12, 33	H Dim A: 15.88

TO CREATE PART NUMBER: Insert the letter from the desired housing color at the end of the part number.

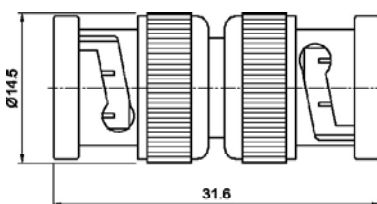


MOUNTING HOLE (M.H.): Page 174, 175



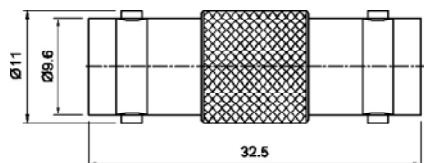
Straight Plug to Plug Adapter

Part Number
LTI-A2BSMMNT
LTI-7A2BSMMNT (75 ohm)



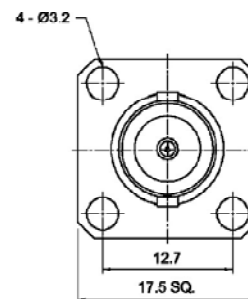
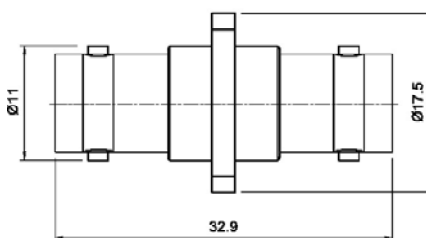
Straight Jack to Jack Adapter

Part Number
LTI-A2BSFFNT
LTI-7A2BSFFNT (75 ohm)



Panel Mount Jack to Jack Adapter

Part Number	M.H.
LTI-A2BSFF2NT	39
LTI-7A2BSFF2NT (75 ohm)	39

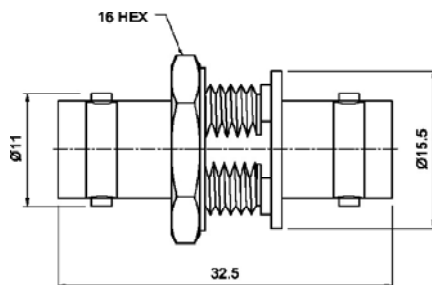


MOUNTING HOLE (M.H.): Page 175



Straight Bulkhead Jack to Jack Adapter

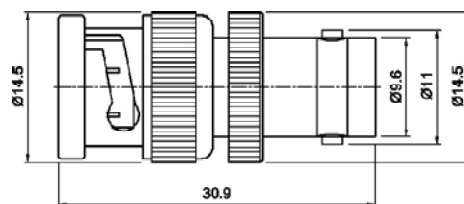
Part Number	M.H.
LTI-A2BSFF3NT	14
LTI-7A2BSFF3NT (75 ohm)	14



MOUNTING HOLE (M.H.): Page 174

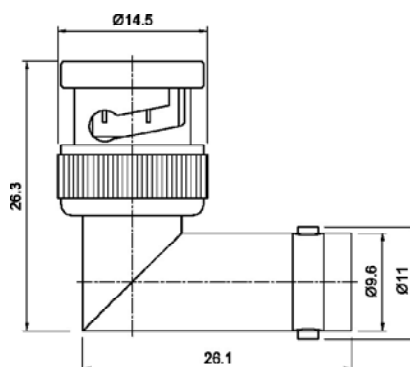
Straight Jack to Plug Adapter

Part Number
LTI-A2BSFMNT
LTI-7A2BSFMNT (75 ohm)



Right Angle Jack to Plug Adapter

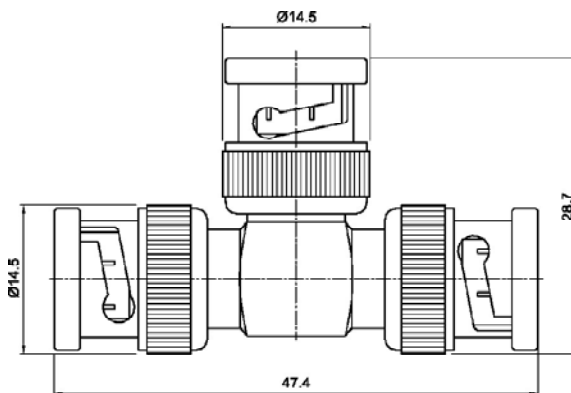
Part Number
LTI-A2BLFMNT
LTI-7A2BLFMNT (75 ohm)





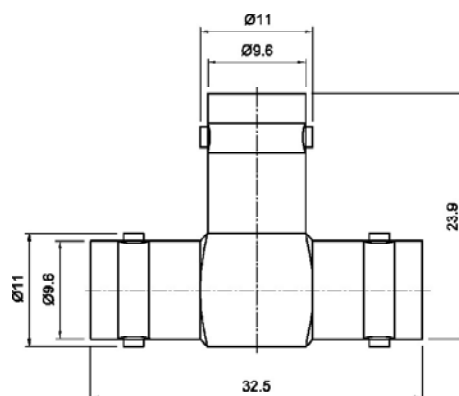
T Adapter, Plug to Plug to Plug

Part Number
LTI-A3BTMMNT
LTI-7A3BTMMNT (75 ohm)



T Adapter, Jack to Jack to Jack

Part Number
LTI-A3BTFFNT
LTI-7A3BTFFNT (75 ohm)



T Adapter, Jack to Plug to Jack

Part Number
LTI-A3BTFFNT
LTI-7A3BTFFNT (75 ohm)

