

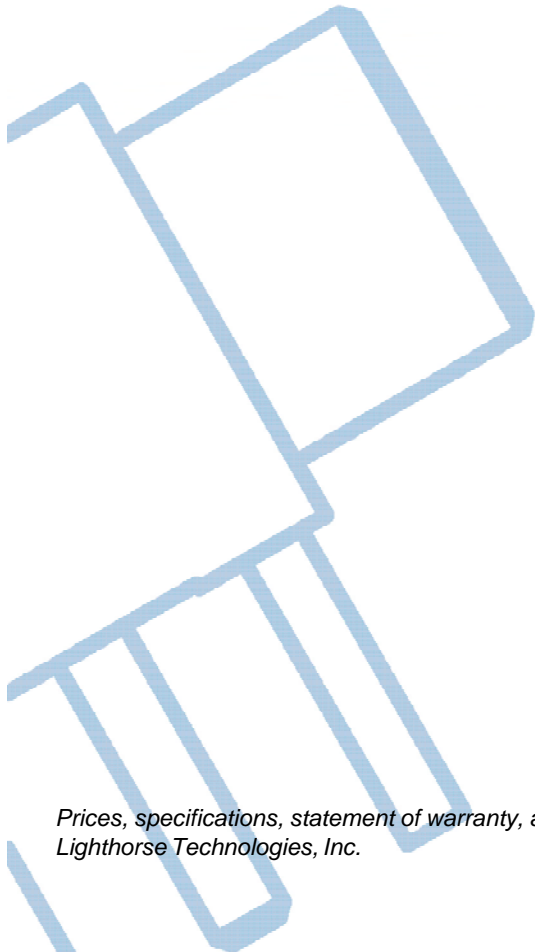
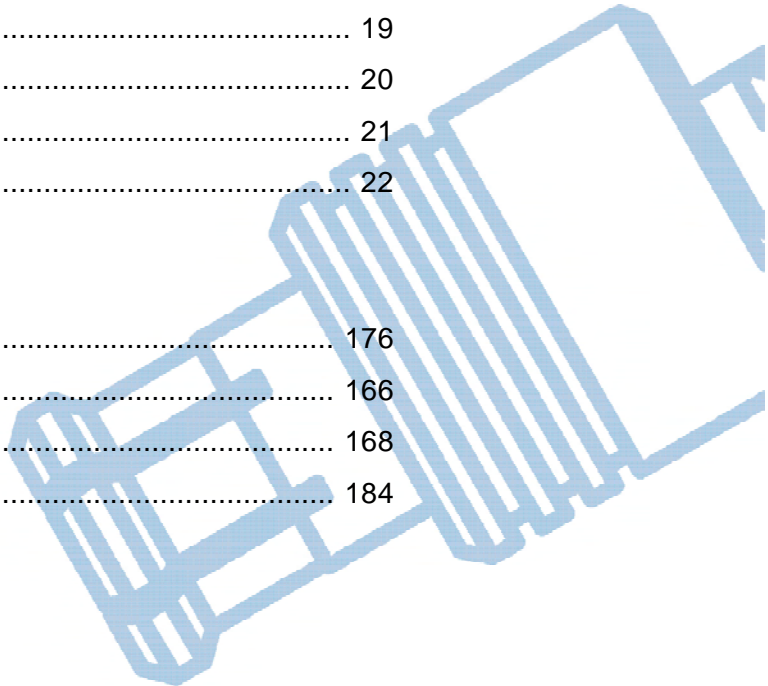


MCX Connectors

Specifications	17
Flexible Cable	19
Semi-Rigid Cable	20
Panel Mount	21
PCB Mount	22

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.

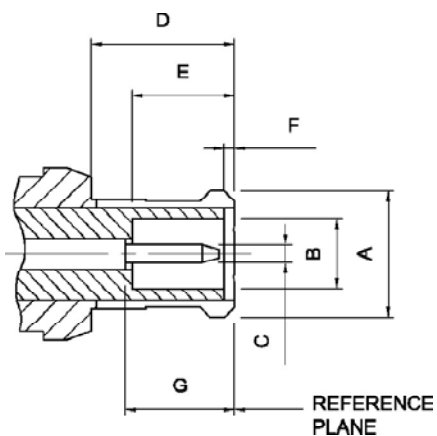


MCX microminiature connectors are suitable for 50 ohm applications and provide repeatable performance from DC to 6 GHz. The snap-on coupling feature allows ease of assembly in dense packaging layouts. The design of the connector encompasses the need for size reduction, low weight, durability and reliable performance. MCX connectors enable a 30% space reduction over similar SMB/SMC types. LTI MCX connectors are designed to conform to CECC 22220 specifications.

Typical applications for MCX connectors include GPS, wireless communications and automotive.

Interface Mating Dimensions

PLUG



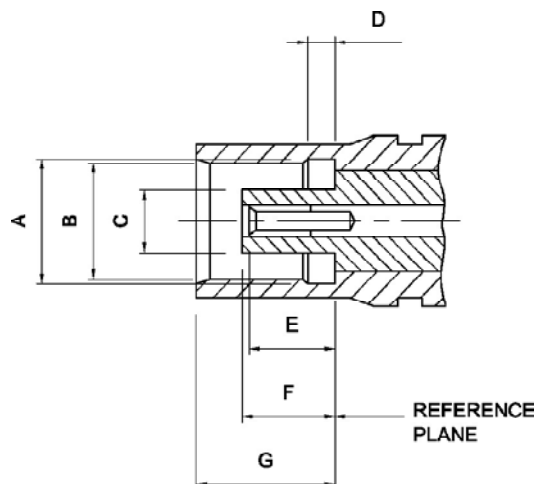
Letter	Minimum	Maximum
A	3.66	3.76
B	2.00	2.07
C	0.48	0.53
D	4.16	-
E	2.81	3.20
F	0.00	0.30
G	2.81	3.20

DIMENSIONS ARE IN MILLIMETERS

JACK

Letter	Minimum	Maximum
A	3.61	3.75
B	3.43	3.48
C	1.80	1.97
D	0.75	0.85
E	2.31	2.79
F	2.61	2.79
G	4.00	4.12

DIMENSIONS ARE IN MILLIMETERS





ELECTRICAL RATINGS

Impedance	50 ohm		
Frequency Range	DC to 6 GHz		
	<i>Cable Type</i>		
Dielectric Withstanding Voltage (at sea level, in V rms, 50 Hz)	RG-174, 188, 316; .086"	750 min	1000 min
Working Voltage (at sea level, in V rms, 50 Hz)	RG-178, 196; .047"	250 max	335 max
Insulation Resistance	10000 M Ω min		
Insertion Loss	.1 dB max @ 1.0 GHz		
Contact Resistance	<i>Center Contact</i>	<i>Outer Contact</i>	
	5 m Ω max	1 m Ω max	

MECHANICAL RATINGS

Mating	Snap-on coupling		
Durability	500 matings		
Engagement Force	5.6 lbs. max		
Disengagement Force	Between 1.8 lbs. and 4.5 lbs.		
Contact Captivation	4.5 lbs. min		
Cable Retention	RG-174, 188, 316	RG-178, 196	
	12.1 lbs. min	7.3 lbs. min	

ENVIRONMENTAL RATINGS

Temperature Range	-65°C to + 165°C
Vibration	MIL-STD-202, Method 204, Condition B
Corrosion	MIL-STD-202, Method 101, Condition B
Temperature Cycling	MIL-STD-1344, Method 1003, Condition A

MATERIALS

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

VSWR

Cable Type	Frequency Range			
	1 GHz	3 GHz	5 GHz	
RG-55, 142, 223, 400	1.12	1.25	1.35	Typical VSWR for MCX straight connectors
RG-58	1.12	1.25	1.35	
RG-174, 188, 316	1.15	1.3	1.35	
RG-178, 196	1.2	1.3	-	
Semi-rigid .086"	1.15	1.22	1.3	
RG-174, 188, 316	1.12	1.18	1.32	Typical VSWR for MCX right angle connectors
RG-178, 196	1.2	1.3	-	
Semi-rigid .086"	1.12	1.15	1.32	
Semi-rigid .141"	1.12	1.2	1.32	

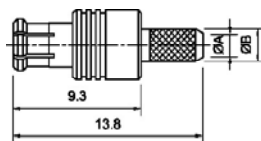


Straight Crimp Plug



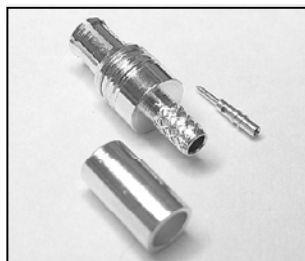
Part Number	Cable Type	Dimension	
LTI-MXSM11GT-XXX	RG-316,174,188,Q1,D316	A: 1.7	B: 2.7
LTI-MXSM11GT-XXX	RG-178,196	A: 1.0	B: 1.7
LTI-7MXSM11GT-179	RG-179 (75 ohm)	A: 1.7	B: 2.7

TO CREATE COMPLETE PART NUMBER: Fill in Cable Type where XXX is.
See Part Numbering Chart on page XX for more info.
Nickel plated parts (LTI-MXSM11NT-XXX) available. Call for min order reqs.



ASSEMBLY INST.: Page 176
Recommended Stripping DIMs:
Page 172, Line 5

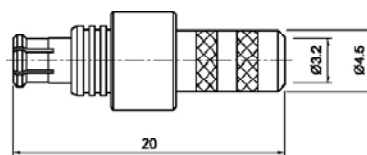
Straight Crimp Plug



Part Number	Cable Type
LTI-MXSM11GT-XXX	RG-58, 142, 55, 223, 400

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

Nickel plated parts (LTI-MXSM11NT-XXX) available. Call for min order reqs.



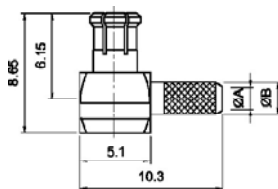
ASSEMBLY INST.: Page 176
Recommended Stripping DIMs:
Page 172, Line 5

Right Angle Crimp Plug



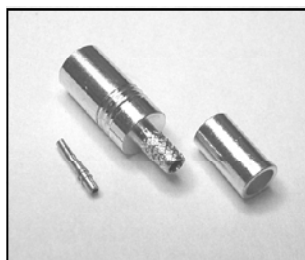
Part Number	Cable Type	Dimension	
LTI-MXLM11GT-XXX	RG-316,174,188,Q1,D316	A: 1.7	B: 2.7
LTI-MXLM11GT-XXX	RG-178,196	A: 1.0	B: 1.7
LTI-7MXLM11GT-179	RG-179 (75 ohm)	A: 1.7	B: 2.7

TO CREATE COMPLETE PART NUMBER: Fill in Cable Type where XXX is.
See Part Numbering Chart on page 3 for more info.
Nickel plated parts (LTI-MXLM11NT-XXX) available. Call for min order reqs.



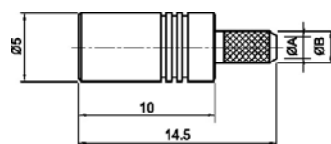
ASSEMBLY INST.: Page 177
Recommended Stripping DIMs:
Page 172, Line 5

Straight Crimp Jack



Part Number	Cable Type	Dimension	
LTI-MXSF11GT-XXX	RG-316,174,188,Q1,D316	A: 1.7	B: 2.7
LTI-MXSF11GT-XXX	RG-178,196	A: 1.0	B: 1.7
LTI-7MXSF11GT-179	RG-179 (75 ohm)	A: 1.7	B: 2.7

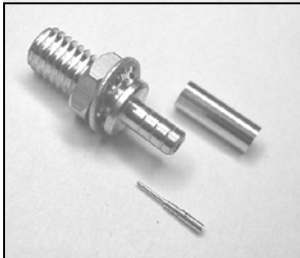
TO CREATE COMPLETE PART NUMBER: Fill in Cable Type where XXX is.
See Part Numbering Chart on page 3 for more info.
Nickel plated parts (LTI-MXSF11NT-XXX) available. Call for min order reqs.



ASSEMBLY INST.: Page 176
Recommended Stripping DIMs:
Page 172, Line 6

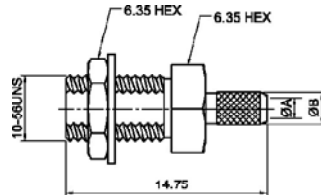


Bulkhead Crimp Jack



Part Number	Cable Type	M.H.	Dimension	
LTI-MXSF13RGT-XXX	RG-316,174,188;Q1,D316	3	A: 1.7	B: 2.7
LTI-MXSF13RGT-XXX	RG-178,196	3	A: 1.0	B: 1.7
LTI-7MXSF13RGT-179 (75ohm)	RG-179	3	A: 1.7	B: 2.7

TO CREATE COMPLETE PART NUMBER: Fill in Cable Type where XXX is. See Part Numbering Chart on page 3 for more info. Nickel plated parts (LTI-MXSF13RNT-XXX) available. Call for min order reqs.



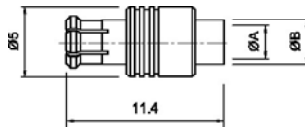
MOUNTING HOLE (M.H.): Page 174
 ASSEMBLY INST.: Page 176
 Recommended Stripping DIMS:
 Page 172, Line 40

Straight Plug for Semi-Rigid Cable



Part Number	Cable Type	Dimension	
LTI-MXSM31GT-047	Semi-Rigid .047"	A: 1.2	B: 2.2
LTI-MXSM31GT-086	Semi-Rigid .086"	A: 2.3	B: 3.2

Nickel plated parts (LTI-MXSM31NT-XXX) available. Call for min order reqs.



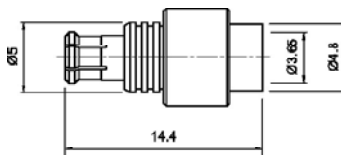
ASSEMBLY INST.: Page 180
 Recommended Stripping DIMS:
 Page 173, Line 5

Straight Plug for Semi-Rigid Cable



Part Number	Cable Type
LTI-MXSM31GT-141	Semi-Rigid .141"

Nickel plated parts (LTI-MXSM31NT-141) available. Call for min order reqs.



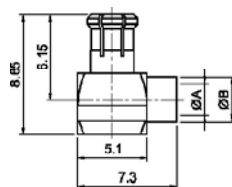
ASSEMBLY INST.: Page 180
 Recommended Stripping DIMS:
 Page 173, Line 5

Right Angle Plug for Semi-Rigid Cable



Part Number	Cable Type	Dimension	
LTI-MXLM31GT-047	Semi-Rigid .047"	A: 1.2	B: 2.2
LTI-MXLM31GT-086	Semi-Rigid .086"	A: 2.3	B: 3.2
LTI-MXLM31GT-141	Semi-Rigid .141"	A: 3.65	B: 4.8

Nickel plated parts (LTI-MXLM31NT-XXX) available. Call for min order reqs.



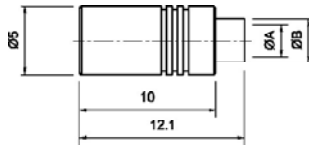
ASSEMBLY INST.: Page 181
 Recommended Stripping DIMS:
 Page 173, Line 4



Straight Jack for Semi-Rigid Cable

Part Number	Cable Type	Dimension	
LTI-MXSF31GT-047	Semi-Rigid .047"	A: 1.2	B: 2.2
LTI-MXSF31GT-086	Semi-Rigid .086"	A: 2.3	B: 3.2
LTI-MXSF31GT-141	Semi-Rigid .141"	A: 3.65	B: 4.8

Nickel plated parts (LTI-MXSF31NT-XXX) available. Call for min order reqs.

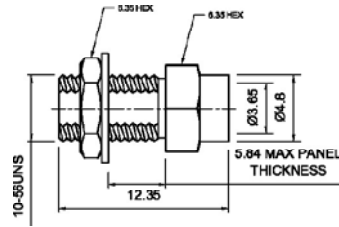


ASSEMBLY INST.: Page 180
Recommended Stripping DIMs:
Page 173, Line 3

Bulkhead Solder Jack for Semi-Rigid Cable

Part Number	M.H.	Cable Type
LTI-MXSF33RGT-086	3	Semi-Rigid .086"

Nickel plated parts (LTI-MXSF33RNT-XXX) available.
Call for min order reqs.

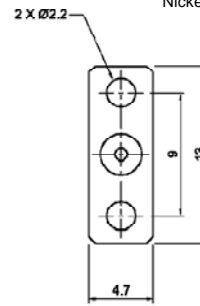
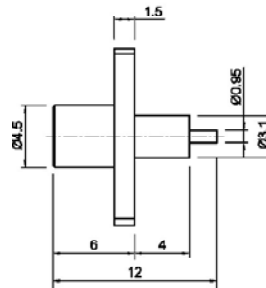


MOUNTING HOLE (M.H.): Page 174
ASSEMBLY INST.: Page 180
Recommended Stripping DIMs:
Page 173, Line 3

2-Hole Panel Mount Jack With Solder Post and Extended Dielectric

Part Number	M.H.
LTI-MXSF92DNFGT	34
LTI-7MXSF92DNFGT (75 ohm)	34

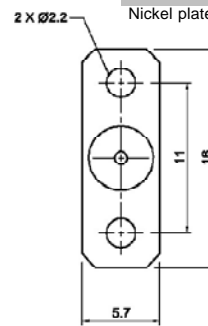
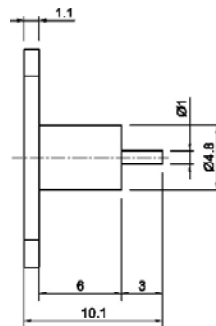
Nickel plated parts (LTI-MXSF92DNFNT) available.
Call for min order reqs.



Flush 2-Hole Panel Mount Jack With Solder Post Termination

Part Number	M.H.
LTI-MXSF92UNFGT	35
LTI-7MXSF92UNFGT (75 ohm)	35

Nickel plated parts (LTI-MXSF92UNFNT) available.
Call for min order reqs.

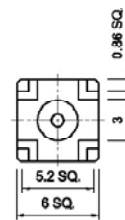
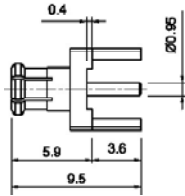
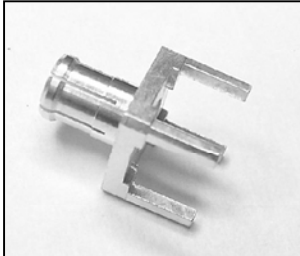




Straight PCB Mount Plug

Part Number	M.H.
LTI-MXSM54GT	22
LTI-7MXSM54GT (75 ohm)	22

Nickel plated parts (LTI-MXSM54NT) available. Call for min order reqs.

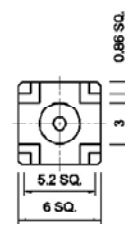
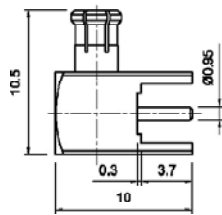


MOUNTING HOLE (M.H.): Page 174

Right Angle PCB Mount Plug

Part Number	M.H.
LTI-MXLM54GT	22
LTI-7MXLM54GT (75 ohm)	22

Nickel plated parts (LTI-MXLM54NT) available. Call for min order reqs.

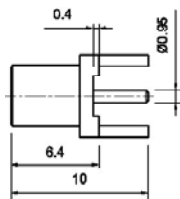
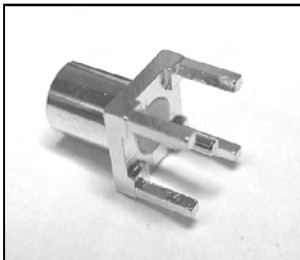


MOUNTING HOLE (M.H.): Page 174

Straight PCB Mount Jack

Part Number	M.H.
LTI-MXSF54GT	22
LTI-7MXSF54GT (75 ohm)	22

Nickel plated parts (LTI-MXSF54NT) available. Call for min order reqs.

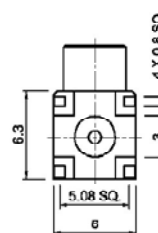
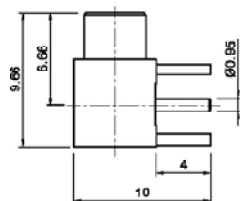
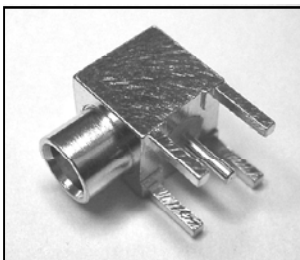


MOUNTING HOLE (M.H.): Page 174

Right Angle PCB Mount Jack

Part Number	M.H.
LTI-MXLF54GT	22
LTI-7MXLF54GT (75 ohm)	22

Nickel plated parts (LTI-MXLF54NT) available. Call for min order reqs.



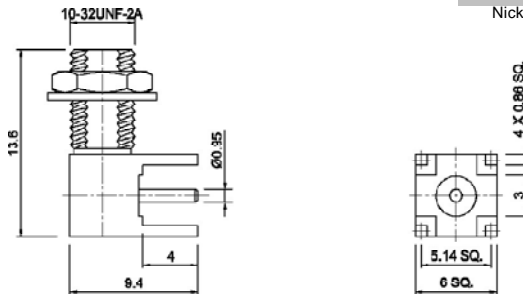
MOUNTING HOLE (M.H.): Page 174



Right Angle Bulkhead PCB Thru Hole Jack

Part Number	M.H.
LTI-MXLF543GT	26
LTI-7MXLF543GT (75 ohms)	26

Nickel plated parts (LTI-MXLF543NT) available.
Call for min order reqs.

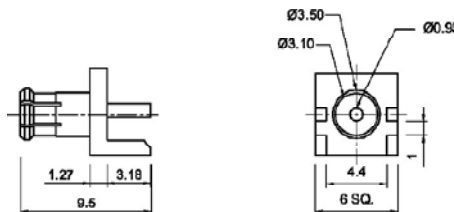


MOUNTING HOLE (M.H.): Page 174

End Launch Plug

Part Number
LTI-MXSM55GT
LTI-7MXSM55GT (75 ohm)

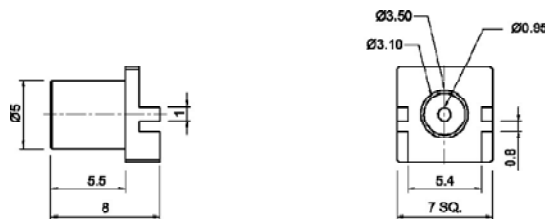
Nickel plated parts
(LTI-MXSM55NT) available.
Call for min order reqs.



End Launch Jack, Short

Part Number
LTI-MXSF55ZGT
LTI-7MXSF55ZGT (75 ohm)

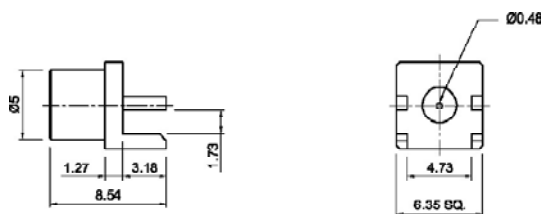
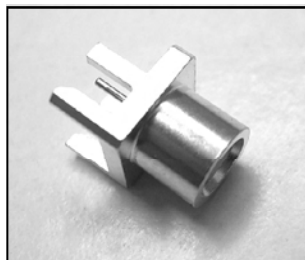
Nickel plated parts
(LTI-MXSF55ZNT) available.
Call for min order reqs.



End Launch Jack

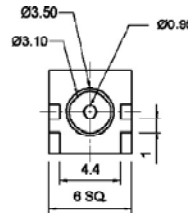
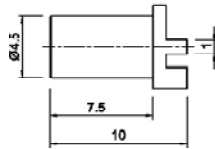
Part Number
LTI-MXSF55GT
LTI-7MXSF55GT (75 ohm)

Nickel plated parts
(LTI-MXSF55NT) available.
Call for min order reqs.



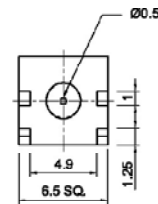
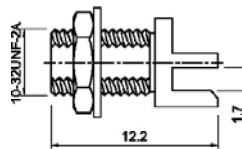


End Launch Jack, Long



Part Number
LTI-MXSF55LGT
LTI-7MXSF55LGT (75 ohm)
Nickel plated parts (LTI-MXSF55LNT) available. Call for min order reqs.

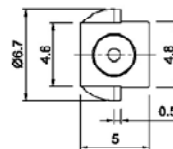
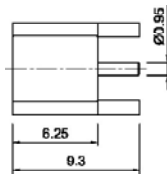
End Launch Bulkhead Jack



Part Number	M.H.
LTI-MXSF553GT	4
LTI-7MXSF553GT (75 ohm)	4
Nickel plated parts (LTI-MXSF553NT) available. Call for min order reqs.	

MOUNTING HOLE (M.H.): Page 174

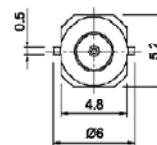
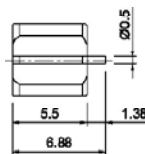
Edge Mount Jack



Part Number	M.H.
LTI-MXSF56GT	18
LTI-7MXSF56GT (75 ohm)	18
Nickel plated parts (LTI-MXSF56NT) available. Call for min order reqs.	

MOUNTING HOLE (M.H.): Page 174

Edge Card Surface Mount Jack



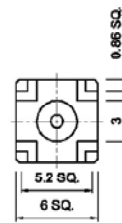
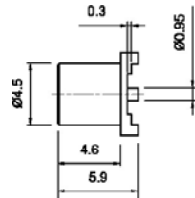
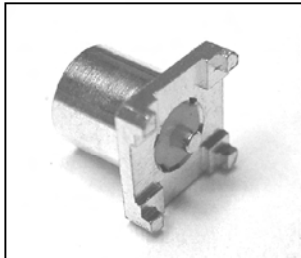
Part Number
LTI-MXSF96GT
LTI-7MXSF96GT (75 ohm)
Nickel plated parts (LTI-MXSF96NT) available. Call for min order reqs.



Vertical Surface Mount Jack

Part Number	M.H.
LTI-MXSF66GT	21
LTI-7MXSF66GT (75 ohm)	21

Nickel plated parts (LTI-MXSF66NT) available. Call for min order reqs.

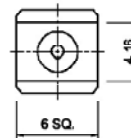
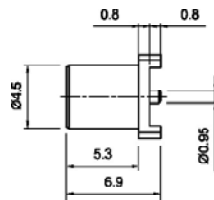
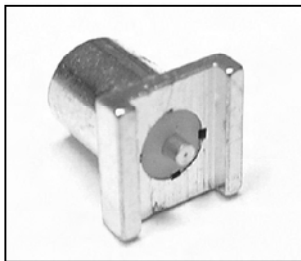


MOUNTING HOLE (M.H.): Page 174

Vertical Surface Mount Jack, Long Version

Part Number	M.H.
LTI-MXSF66LGT	48
LTI-7MXSF66LGT (75 ohm)	48

Nickel plated parts (LTI-MXSF66LNT) available. Call for min order reqs.

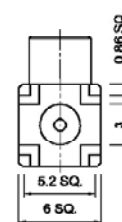
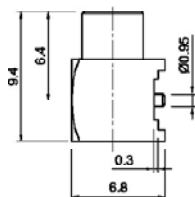
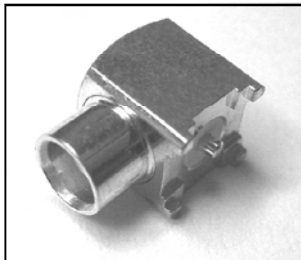


MOUNTING HOLE (M.H.): Page 175

Right Angle Surface Mount Jack

Part Number	M.H.
LTI-MXLF66GT	21
LTI-7MXLF66GT (75 ohm)	21

Nickel plated parts (LTI-MXLF66NT) available. Call for min order reqs.



MOUNTING HOLE (M.H.): Page 174