

**Low Capacitance Modular RJ Jacks**

# LCT Series



**UL Recognized  
CSA Certified**



## LCT Series

Capacitance components enhance the filtering performance but may alter the signal as it passes through the RJ Jack. A low capacitance model allows additional filter performance without significant effect on the signal itself. The new LCT models provide improved performance over L models without impact on the signal. These parts are particularly suited for ethernet applications.

These models are available in shielded models only, with either panel or board ground.

**Typical insertion loss in dB:**

Line-to-ground (stop band) in a 50 ohm circuit

	Frequency-MHz						
	40	100	200	250	300	500	1000
Ferrite Sleeves	8	12	27	50	38	25	20
Ferrite Blocks	10	18	22	55	40	28	24

**Typical insertion loss in dB:**

Line-to-line (pass band) in a 50 ohm circuit

	Frequency-MHz						
	2	5	10	30	50	70	100
Ferrite Sleeves		1.2	1.9	4	5	7	10
Ferrite Blocks	1	2	3	5	8	10	13

## Specifications

**Contacts:**

Material:	Phosphor Bronze
Plating:	50 microinches gold
Barrier underplating:	100 microinches nickel
Resistance:	
Initial:	20 milliohms max.
After durability testing: (500 mating cycles)	30 milliohms max.

**Capacitors:**

Type:	Monolithic ceramic chip
Standard value:	82 pF
Standard tolerance:	±20%

**Ferrites:**

Type:	High resistivity, nickel zinc ceramic
Sleeves:	Single-aperture cylinders
Block:	Multi-aperture rectangular prism

**Shield Material:**

Tin-plated copper alloy

**Housing Material:**

Glass-filled polyester (UL94V-0)

**Dielectric Withstanding Voltage:**

Line-to-line and line-to-ground	1000 VAC for 60 seconds
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**Printed Circuit Board Retention:**

Before soldering:	1 lb. minimum
After soldering:	20 lb. minimum

Model dimensions and PC board layout on pages 170 to 174.

## Part Numbers

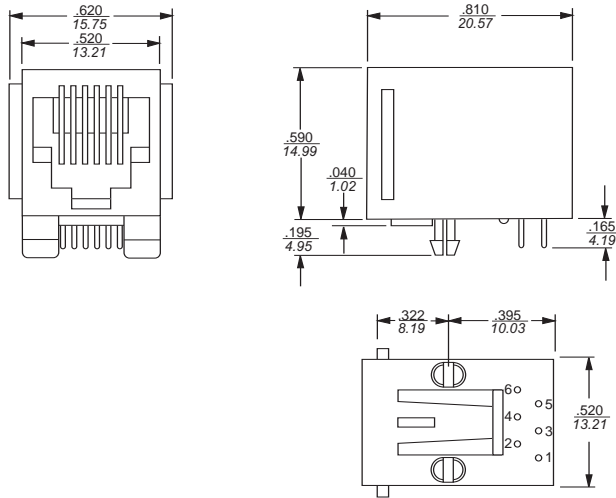
RJ11-6LCT1-S	RJ45-8LCT1-S
RJ11-6LCT1-B	RJ45-8LCT1-B
RJ11-6LCT2-S	RJ45-8LCT2-S
RJ11-6LCT2-B	RJ45-8LCT2-B

**Model Dimensions**

**Standard Profile RJ Jack Dimensions**

For the L, LC, LCT and X Series of RJ Jack Filters

**RJ11 (No Shield)**

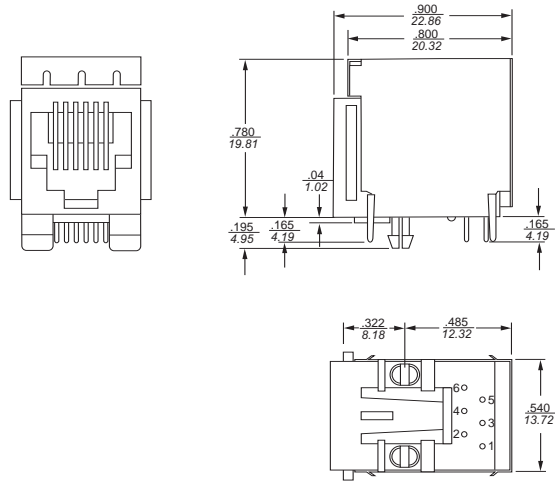


**Part Numbers**

RJ11-2L-S      RJ11-2L-B  
 RJ11-4L-S      RJ11-4L-B  
 RJ11-6L-S      RJ11-6L-B

RJ11-2X  
 RJ11-4X  
 RJ11-6X

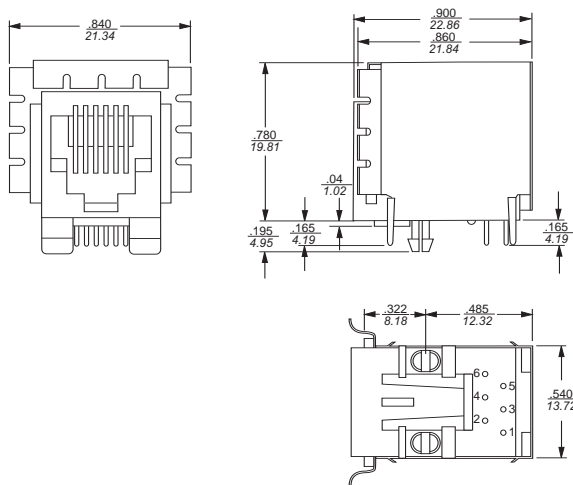
**RJ11 (Style 2 Shield)**



**Part Numbers**

RJ11-2LC2-S      RJ11-2LC2-B      RJ11-4L2-S      RJ11-6L2-B  
 RJ11-4LC2-S      RJ11-4LC2-B      RJ11-6L2-S      RJ11-6LCT2-S  
 RJ11-6LC2-S      RJ11-6LC2-B      RJ11-4L2-B      RJ11-6LCT2-B

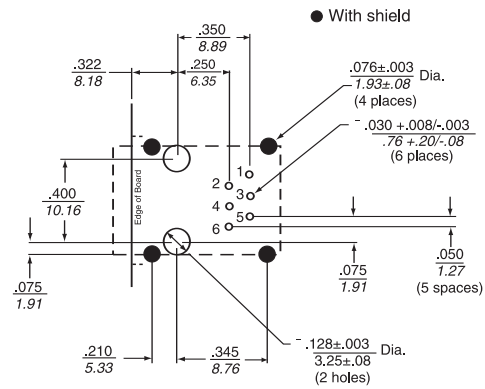
**RJ11 (Style 1 Shield)**



**Part Numbers**

RJ11-2LC1-S      RJ11-2LC1-B      RJ11-4L1-S      RJ11-6L1-B  
 RJ11-4LC1-S      RJ11-4LC1-B      RJ11-6L1-S      RJ11-6LCT1-S  
 RJ11-6LC1-S      RJ11-6LC1-B      RJ11-4L1-B      RJ11-6LCT1-B

**RJ11 (PC Board Layout)**



Shown from Component Side

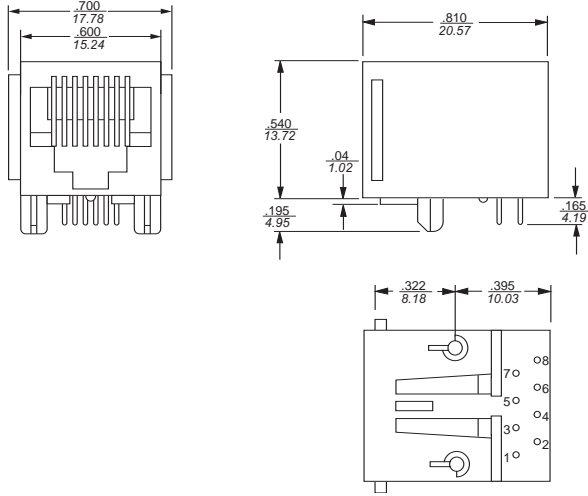
For all RJ11 L, LC, LCT and X Series Models

**Model Dimensions (Continued)**

**Standard Profile RJ Jack Dimensions (cont'd)**

For the L, LC, LCT and X Series of RJ Jack Filters

**RJ45 (No Shield)**

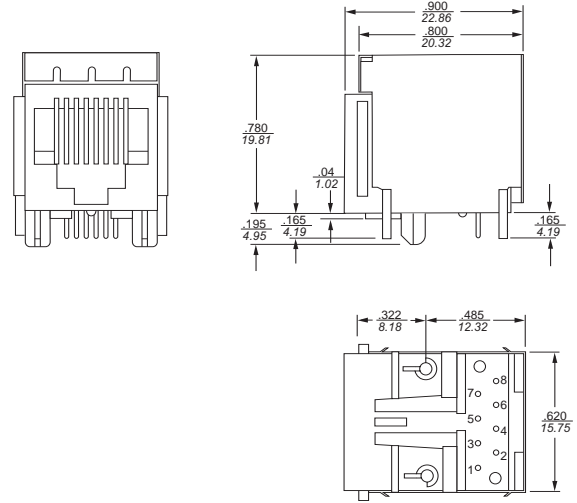


**Part Numbers**

RJ45-6L-S  
RJ45-8L-S  
RJ45-6L-B

RJ45-8L-B  
RJ45-6X  
RJ45-8X

**RJ45 (Style 2 Shield)**



**Part Numbers**

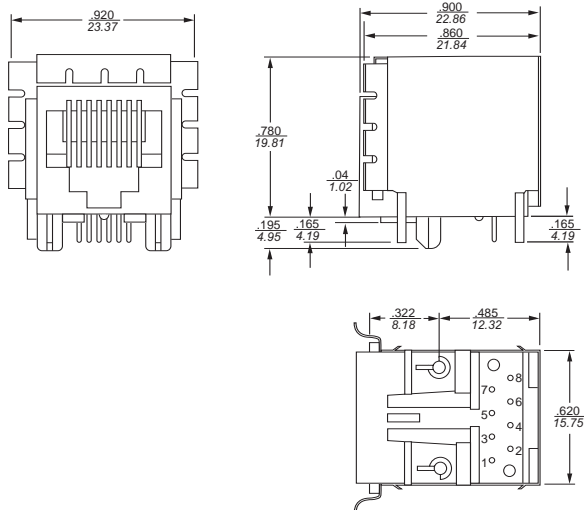
RJ45-6LC2-S  
RJ45-6L2-S  
RJ45-8LCT2-S

RJ45-8LC2-S  
RJ45-8L2-S  
RJ45-8LCT2-B

RJ45-6LC2-B  
RJ45-6L2-B

RJ45-8LC2-B  
RJ45-8L2-B

**RJ45 (Style 1 Shield)**



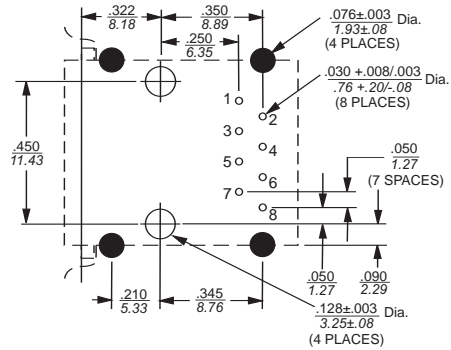
**Part Numbers**

RJ45-6LC1-S  
RJ45-6L1-S  
RJ45-8LCT1-S

RJ45-8LC1-S  
RJ45-8L1-S  
RJ45-8LCT1-B

RJ45-6LC1-B  
RJ45-6L1-B  
RJ45-8LC1-B  
RJ45-8L1-B

**RJ45 (PC Board Layout)**



Shown from Component Side

For all RJ45 L, LC, LCT and X Series Models.

**Part Numbers**

RJ45-6LC2-S  
RJ45-6L2-S  
RJ45-8LCT2-B

RJ45-8LC2-S  
RJ45-8L2-S  
RJ45-8LCT2-S

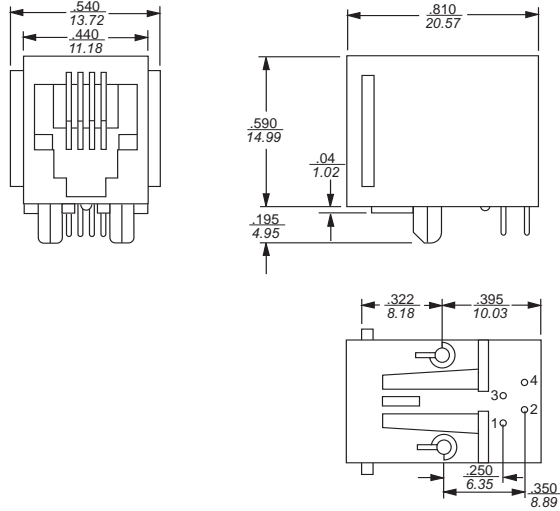
RJ45-6LC2-B  
RJ45-6L2-B

RJ45-8LC2-B  
RJ45-8L2-B

**Model Dimensions (Continued)**

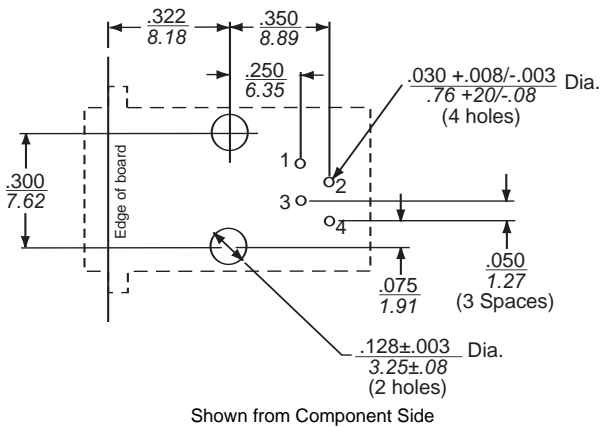
**Standard Profile RJ Jack Dimensions (cont'd)**  
For the L, LC, LCT and X Series of RJ Jack Filters

**RJH (No Shield)**



**Part Numbers**  
RJH-4-L-B

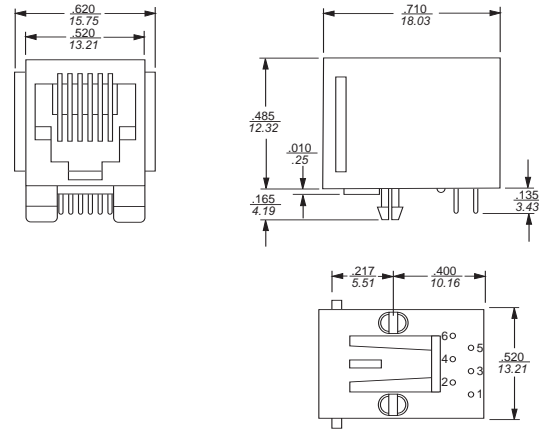
**RJH (No Shield - PC Board Layout)**



All tolerances  $\pm 0.010$  [0.25] unless otherwise noted.

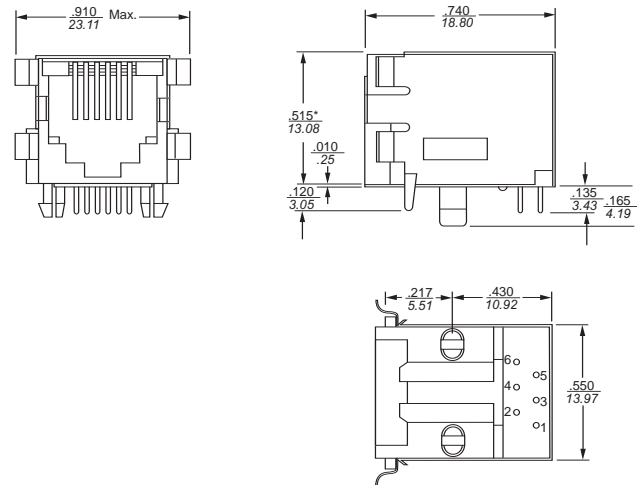
**Low Profile RJ Jack Dimensions**  
For the N and Z Series of RJ Jack Filters

**RJ11 (Low Profile - No Shield)**



**Part Numbers**  
RJ11-6N-B      RJ11-6N-S      RJ11-6Z

**RJ11 Low Profile (Style 3 Shield)**



**Part Numbers**  
RJ11-6N3-B      RJ11-6N3-S      RJ11-6Z3

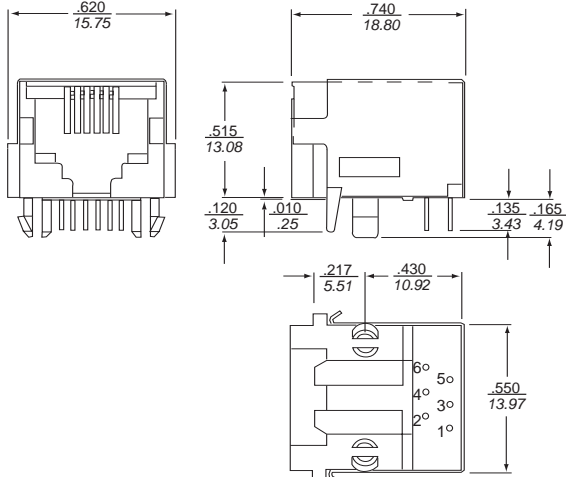
\*To top of shield

**Model Dimensions (Continued)**

**Low Profile RJ Jack Dimensions (cont'd)**

For the N and Z Series of RJ Jack Filters

**RJ11 Low Profile (Style 4 Shield)**

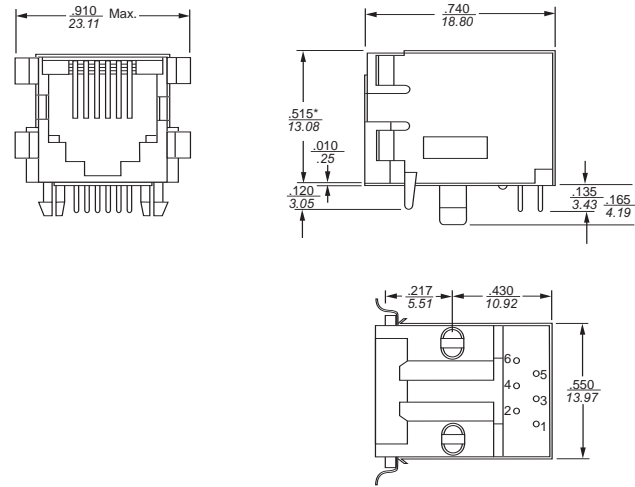


**Part Numbers**

RJ11-6N4-B RJ11-6N4-S

RJ11-6Z4

**RJ45 Low Profile (No Shield)**

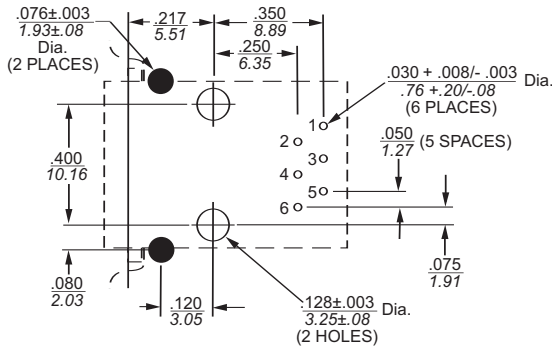


**Part Numbers**

RJ11-6N3-B RJ11-6N3-S

RJ11-6Z3

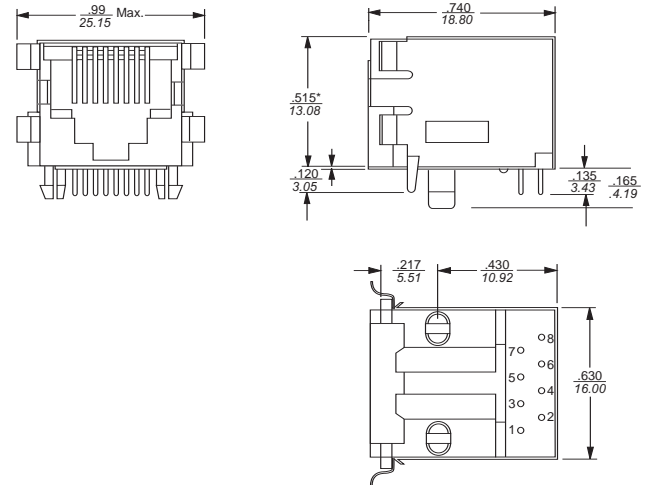
**RJ11 Low Profile (PC Board Layout)**



Shown from Component Side

For all RJ11 N and Z Series Models

**RJ45 Low Profile (Style 3 Shield)**



**Part Numbers**

RJ45-8N3-B RJ45-8N3-S

RJ45-8Z3

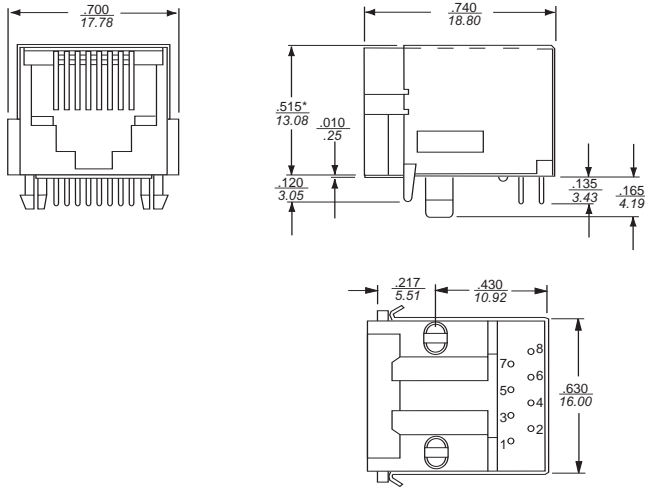
\*To top of shield

**Model Dimensions (Continued)**

**Low Profile RJ Jack Dimensions (cont'd)**

For the N and Z Series of RJ Jack Filters

**RJ45 Low Profile (Style 4 Shield)**



**Part Numbers**

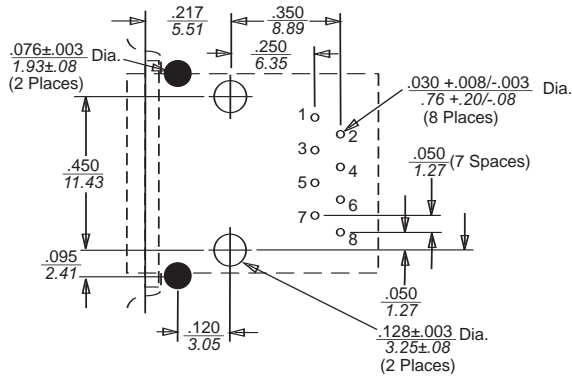
RJ45-8N4-B

RJ45-8N4-S

RJ45-8Z4

\*To top of shield

**RJ45 Low Profile (PC Board Layout)**



Shown from Component Side

For all RJ45 N and Z Series Models

All tolerances  $\pm 0.010$  [0.25] unless otherwise noted.