ELFA

PRODUKTINFORMATION

Vi reserverar oss mot fel samt förbehåller oss rätten till ändringar utan föregående meddelande

ELFA artikelnr

42-480-01	Modularjack 8/8	FRJA-408
42-480-19	Modularjack 8/8 2-pol	FRJA-408-02
42-480-50	Modularjack 8/8 m.filter	FRJA-418
42-480-68	Modularjack 8/8 filter 2-p	FRJA-418-02
42-482-09	Modularjack med LED	RJHS-5081
42-482-17	Modularjack med LED 2-p	RJHS-5081-02
42-482-66	Modularjack med LED	RJHS-5085
42-482-74	Modularjack med LED 2-p	RJHS-5085-02
42-483-32	Modularjack skärm m. LED	RJHS-5381
42-483-40	Modularjack skärm m.LED 2p	RJHS-5381-02
42-484-07	Modularjack skärm m.LED	RJHS-5385
42-484-15	Modularjack skärm m.LED 2p	RJHS-5385-02
42-484-64	Modularjack skärm m.LED 2p	RJSA-5381-02
42-484-72	Modularjack skärm m.LED 8p	RJSA-5381-08
42-485-06	Modularjack skärm m.LED 2p	RJSA-5385-02
42-485-14	Modularjack skärm m.LED 8p	RJSA-5385-08
42-486-05	Modularjack 6/6	RJ01-660-01
42-486-13	Modularjack 6/6, 2-pol	RJ01-660-02
42-486-21	Modularjack 6/6 skärmat	RJ01-662-01
42-486-39	Modularjack 6/6 skärmat 2p	RJ01-662-02

MODULAR
JACKS

Amphenol®

www.rjvista.com

Contents

Amphenol Data/Telecom Products Group of Amphenol Canada Corp., a subsidiary of Amphenol Corporation, is an ISO 9001 certified facility located in Toronto, Canada. Our activities are dedicated to the design, development and manufacture of interconnect products intended for use in the data communications and telecommunications markets. Our expertise in understanding and supporting our customers' interconnect needs has earned Amphenol Canada a reputation of quality and excellence among the world's leading users of electronic components.

This Modular Jack catalog represents some of our more popular products within this product category. Other product categories include, but are not limited to: D-Sub, Micro-Ribbon, USB, RF, Fiber-Optic, DIN 41612, mini-DIN, Headers and Sockets, Firewire, SCSI, VHDCI and Filtered Connector products.

EMI Quiet Modular Jacks with LED's

RJ *vista*™ is a family of EMI Quiet Modular Jack Connectors with built-in LEDs, meets Ethernet CAT 5 performance. This product is ideal for LAN applications such as adapter cards and routers. Shielded and non-shielded versions are available, with a variety of LED colors, and ports.
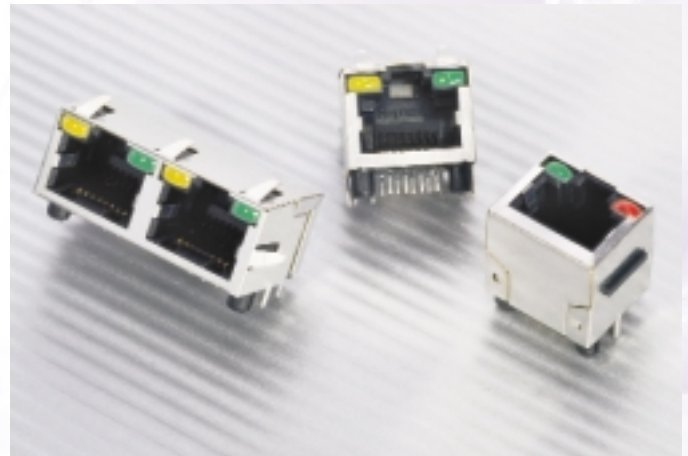
Specifications

MATERIAL

Shield:	Copper Alloy; Tin/Lead Plated
Contacts:	Phosphor Bronze; Gold over Nickel
Insert:	Solder reflow process compatible (Complies with UL 94V-0)

ELECTRICAL

Contact Resistance:	20 milliohms maximum
Insulation Resistance:	500 megohms minimum
Current Rating:	1.5 Amps
Voltage Rating:	125 Volts AC
Dielectric Withstanding Voltage:	1000 VAC, RMS. 60 Hz. 1 min.

Standard LEDs: For 5.0 V Systems

Forward Voltage:	2.1 Volts Typical
Reverse Voltage:	6.0 Volts minimum
Luminous Intensity:	0.5 mCd minimum (at If=2mA)

Low Current LEDs: For 3.3 V Systems

Forward Voltage:	2.0 Volts Typical
Reverse Voltage:	6.0 Volts minimum
Luminous Intensity:	1.0 mCd minimum (at If=2mA)

Other Parameters:

Storage Temperature:	-20° C to 85° C
Lead Soldering Temperature:	260° C (5 sec)
Plating on Tails:	Tin-Lead (90-10) alloy
UL File # :	E135615
CSA File # :	LR68598

Ordering Information

RJHS – X X X X – XX

X — VERSION
- 3 - vertical mount, RJ45, 8 contacts
- 5 - 8 position, RJ45, flat contact 50 micro inch gold
- 6 - 6 position, RJ11, round contact 30 micro inch gold
- 7 - 6 position, RJ11, flat contact 50 micro inch gold
- 8 - 8 position, RJ45, PCMCIA, flanged, round contact 30 micro inch gold
- L - low profile, 8 position

X — SHIELDING OPTION
- 0 - no shield
- 3 - shielded
- 4 - one port shield similar to code 3 but with side ground tabs
- 7 - shield with ground lug (single port)

X — NUMBER OF CONTACTS
- 4 - 4 contacts (6 position)
- 6 - 6 contacts (6 position)
- 8 - 8 contacts (8 position)
- A - 10 contacts (10 position)

Note: PCMCIA version is only available in single port

Options for style, shield & contacts available. Contact Amphenol Canada for more information

XX — NUMBER OF PORTS
- Blank - Single port
- 02 - 2 ports
- 03 - 3 ports
- 04 - 4 ports
- 05 - 5 ports
- 06 - 6 ports
- 07 - 7 ports
- 08 - 8 ports

X — LED DESIGNATION
- 0 - blocked
- 1 - led 1 green, led 2 yellow
- 2 - led 1 green
- 3 - led 2 yellow
- 4 - led 1 yellow, led 2 green
- 5 - led 1 green, led 2 green
- 6 - led 1 yellow, led 2 yellow
- A - led 1+ 2 - bi-colour yellow/green
- B - led 1 + 2 - bi-colour red/green

For additional colour combinations refer to Chart RJHS Page 2

Amphenol® Canada Corp. Telephone: (416) 754-5656 Fax: (416) 754-8668 E-mail: sales@amphenolcanada.com

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RJHS Series

LED Designation

R J H S - 5 3 8 **1** * - 0 8

* LED DESIGNATION CODE

LED CODE	LED 2 Left	LED 1 Right
0	Blocked	Blocked
1	Yellow	Green
2	Blocked	Green
3	Yellow	Blocked
4	Green	Yellow
5	Green	Green
6	Yellow	Yellow
7	Red	Green
8	Green	Red
9	Green	Blocked
A	BiC Gr/Yl	BiC Gr/Yl
B	BiC Rd/Gr	BiC Rd/Gr
C	BiC Rd/Gr	BiC Gr/Yl
D	Green	BiC Gr/Yl
E	Yellow	BiC Gr/Yl
F	BiC Gr/Yl	Yellow
G	BiC Gr/Or	BiC Gr/Or
H	BiC Gr/Yl	Green
J	BiC Rd/Gr	Yellow
K	Yellow	BiC Gr/Or
L	BiC Rd/Gr	Red
M	Red	Yellow
N	BiC Gr/Rd	BiC Gr/Yl
P	Green	BiC Rd/Gr
R	BiC Gr/Or	Green
T	Red	Red
V	BiC Rd/Gr	Green
W	Special Designation (add digit to part number)	
Z		

* Contact Amphenol Canada for more information

R J H S - 5 3 8 W - 0 8 **2** *

* SPECIAL LED DESIGNATION

SPECIAL DESIGNATION	LED 2 Left	LED 1 Right
0	See standard Design	
1	Red	Blocked
2	BiC Gr/Yl	Yellow
3	Yellow	Red
4	Blocked	Red
5	Blocked	Yellow
6	Red	BiC Gr/Yl
7		
8		
9		

LOW CURRENT LED OPTIONS

	LED 2 Left	LED 1 Right
A	Yellow	Yellow
B	Yellow	Green
C	Green	Yellow
D	Green	Green

LED 2 — LED 1

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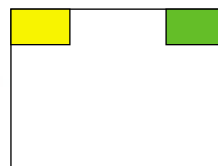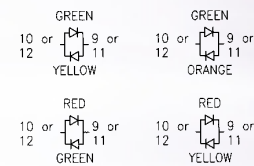
Single Port
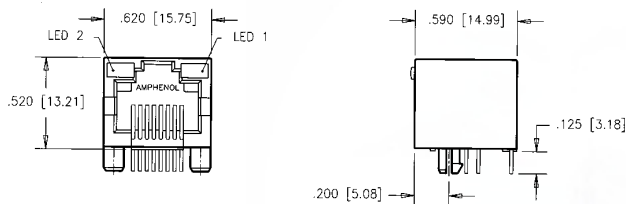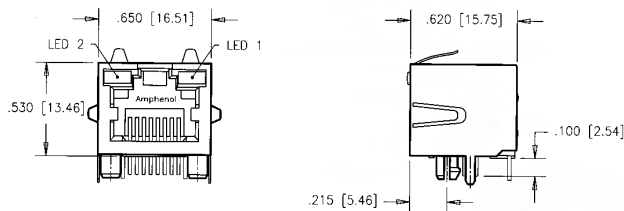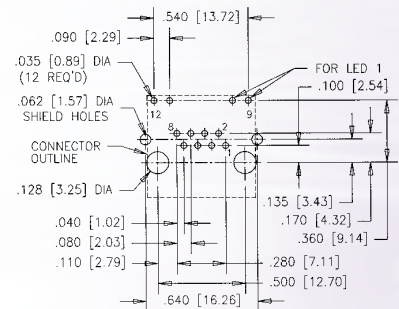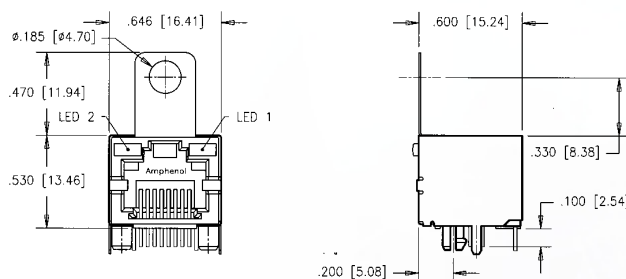
NON-SHIELDED

PCB LAYOUT
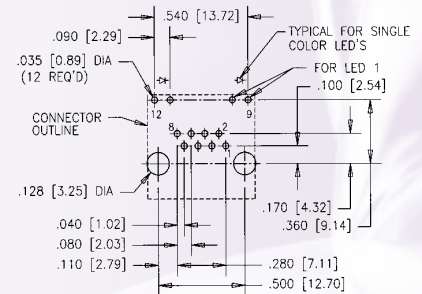
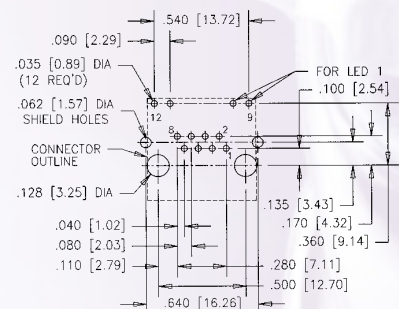### BI-COLOUR LEDS

SHIELDED WITH TOP & SIDE GROUND TABS

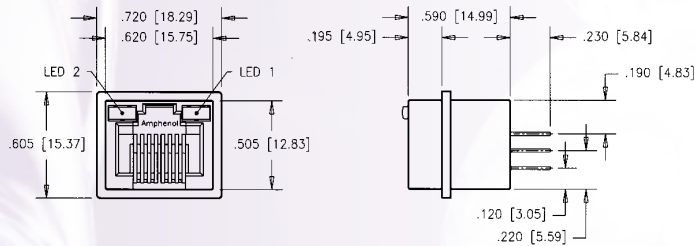### PCB LAYOUT

SHIELDED WITH GROUND LUG

PCB LAYOUT

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RJHS Series

PCMCIA (CABLE ASSEMBLY) SINGLE PORT

BACK VIEW

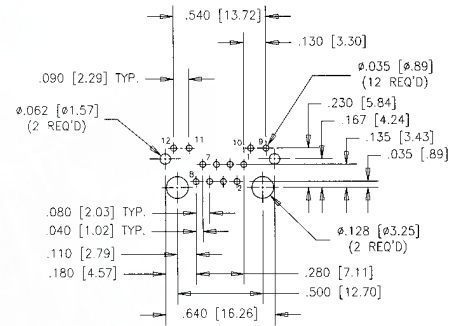TYPICAL FOR SINGLE COLOR LED'S
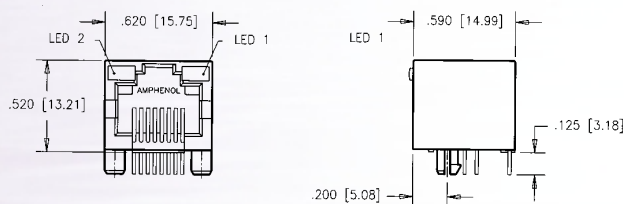
CENTRAL 4 OR 6, OR ALL 8 CONTACTS

LED TERMINATION
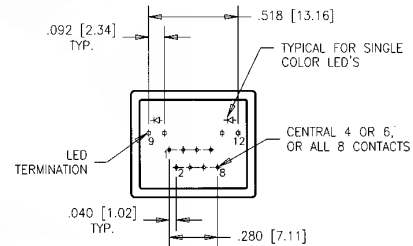
VERTICAL MOUNT SINGLE PORT ONLY
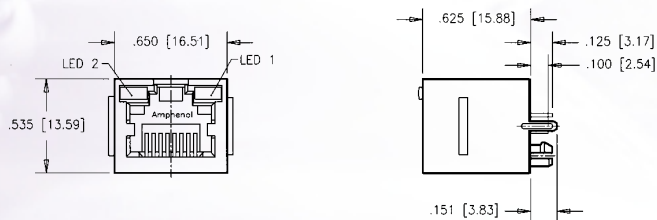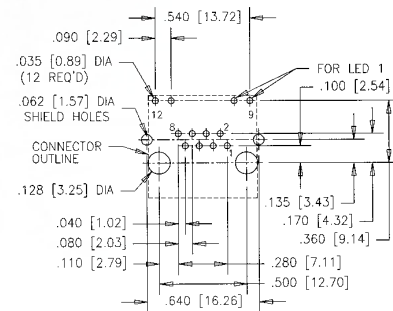

PCB LAYOUT

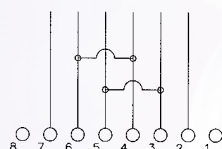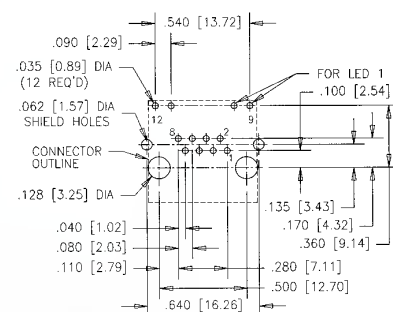## LOW PROFILE SINGLE & 2 PORT

PCB LAYOUT

FOR LED 1

CONNECTOR OUTLINE

SHORTING BARS SINGLE & 2 PORT

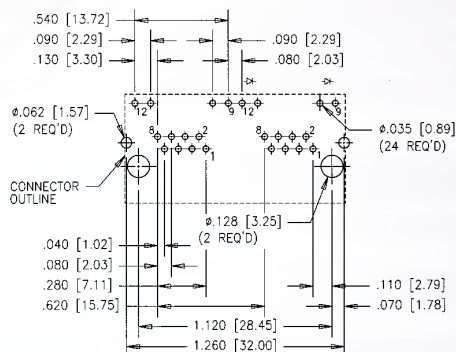## PCB LAYOUT

FOR LED 1

CONNECTOR OUTLINE
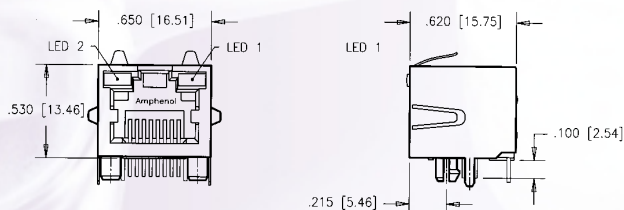
SHORTING BARS (CIRCUIT)

EMI Quiet Modular Jacks with LED's Multiport

RJ *vista*™ is a family of EMI Quiet Modular Jack Connectors with built-in LEDs, designed for Category 5 ethernet performance. This product is ideal for LAN applications such as adapter cards and routers. Shielded and non-shielded versions are available, with a variety of LED colors, and ports.

SHIELDED 2 PORT

SHIELDED 3 PORT

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5
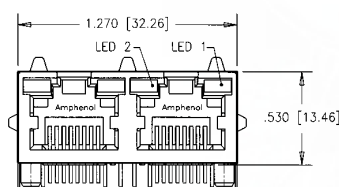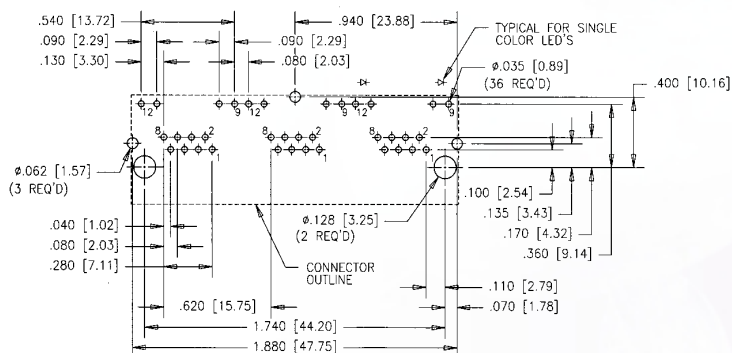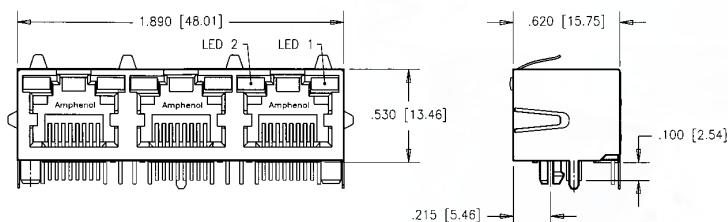
SHIELDED WITH TOP AND SIDE GROUND TABS (AVAILABLE IN MULTI-PORT)
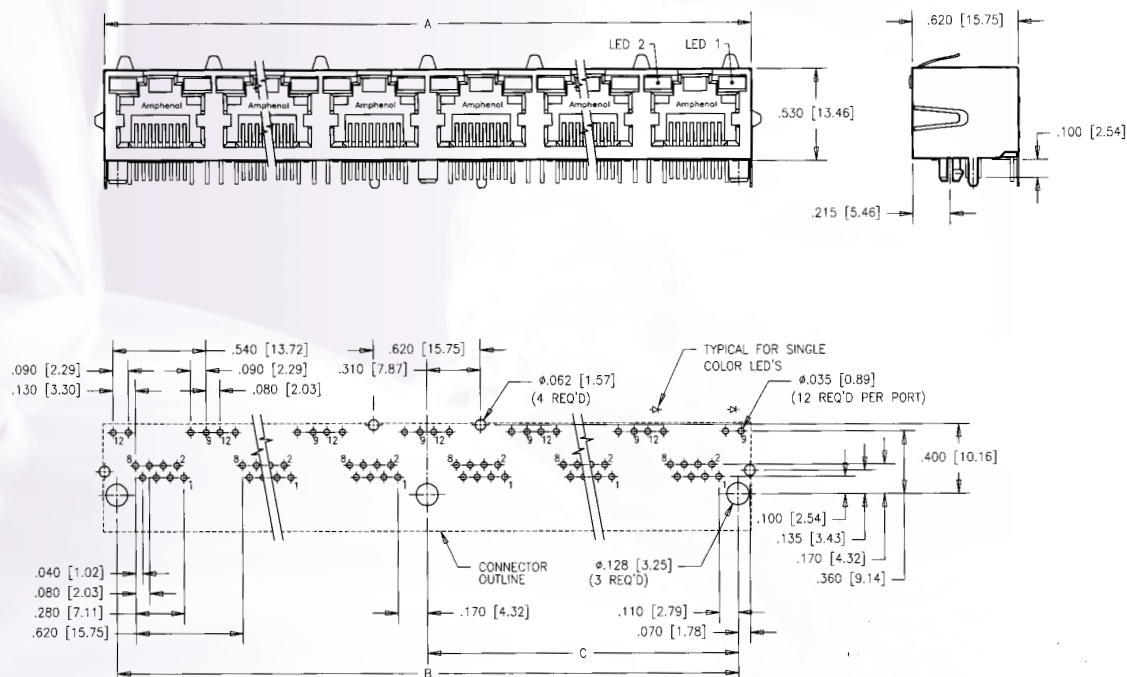
Number of ports	A	B	C
2	see page 5	see page 5	see page 5
3	see page 5	see page 5	see page 5
4	2.510[63.75]	2.360[59.94]	1.180[29.97]
6	3.750[95.25]	3.600[91.44]	1.800[45.72]
8	4.990[126.75]	4.840[122.94]	2.420[61.47]

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Amphenol RJ45 Stackable

Reduces component and labour costs by incorporating LED's into the connector.

Meets Ethernet CAT 5 Performance

Stackable feature enables more ports with same board space.

For superior EMI performance, the option of configuring your connector with a ferrite filter is available.
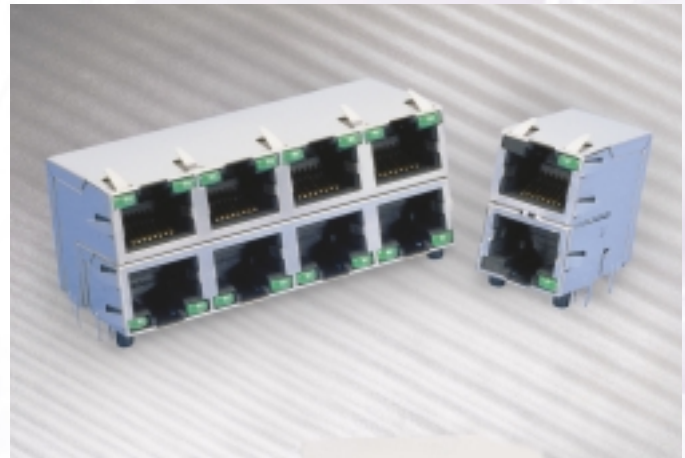
Amphenol offers a wide variety of options:

- Ferrite filter
- Shielded & unshielded versions
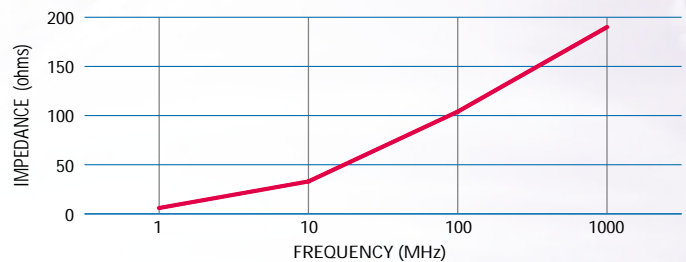- Variety of LED combinations
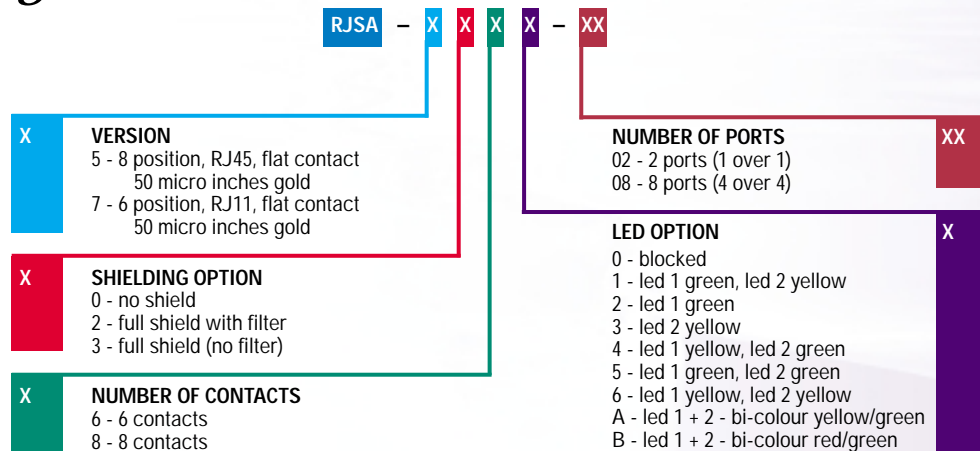- Variety of ports

Specifications

MATERIAL

Please refer to RJHS specifications on page 1.

Impedance Characteristics

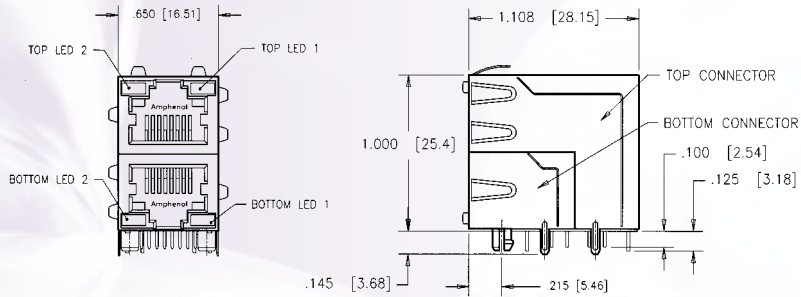Graph: IMPEDANCE (ohms) vs FREQUENCY (MHz)

Ordering Information

RJSA – X X X X – XX

X — VERSION
5 - 8 position, RJ45, flat contact
    50 micro inches gold
7 - 6 position, RJ11, flat contact
    50 micro inches gold

X — SHIELDING OPTION
0 - no shield
2 - full shield with filter
3 - full shield (no filter)

X — NUMBER OF CONTACTS
6 - 6 contacts
8 - 8 contacts

XX — NUMBER OF PORTS
02 - 2 ports (1 over 1)
08 - 8 ports (4 over 4)

X — LED OPTION
0 - blocked
1 - led 1 green, led 2 yellow
2 - led 1 green
3 - led 2 yellow
4 - led 1 yellow, led 2 green
5 - led 1 green, led 2 green
6 - led 1 yellow, led 2 yellow
A - led 1 + 2 - bi-colour yellow/green
B - led 1 + 2 - bi-colour red/green

*   Filtering available - Please contact Amphenol for more information
** additional LED codes available - see page 2

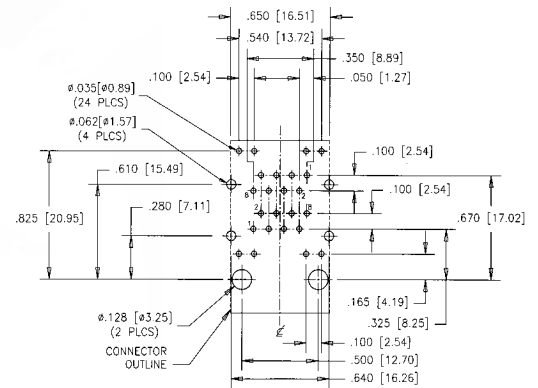**Amphenol® Canada Corp. Telephone: (416) 754-5656 Fax: (416) 754-8668 E-mail: sales@amphenolcanada.com**
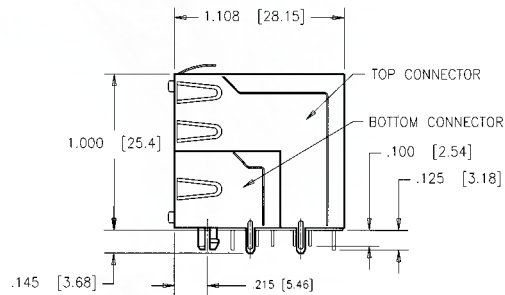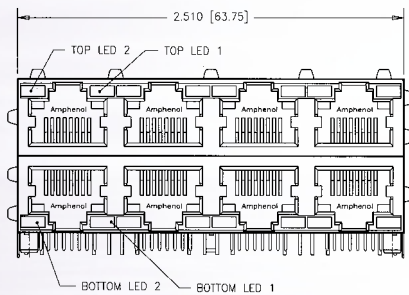
7

RJSA Series

2x1 RJ45/RJ11

PCB LAYOUT


2X4 RJ45/RJ11

PCB LAYOUT
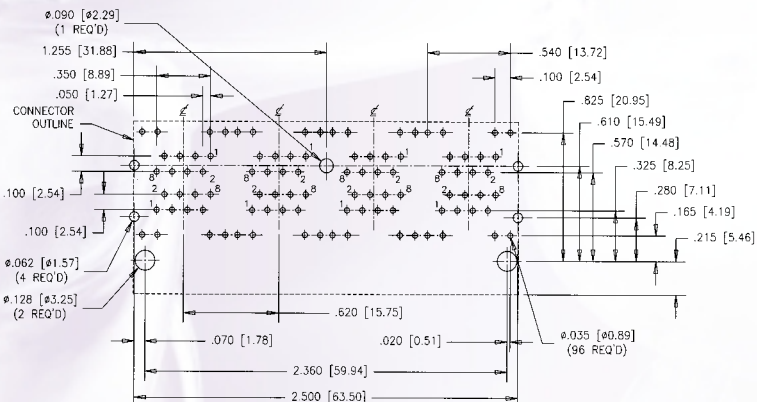
ASSEMBLY
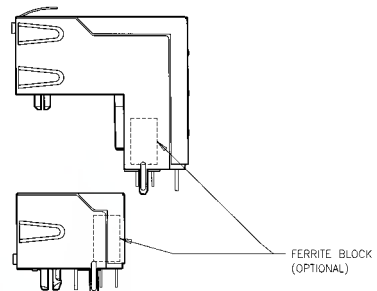
STACKABLE MODULAR
JACK ASSEMBLY

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FRJ/FRJA Series

Modular Jack with Superior EMI Performance

The FRJ and FRJA series of shielded and filtered modular jacks offer low cost and effective EMC control within standard RJ-11 and RJ-45 connector footprints. EMC control is offered by a completely shielded connector and/or with the use of a high resistivity, high impedance ferrite block. No board layout changes are required for its use. Simply replace the standard non-filtered connector for superior EMC performance.
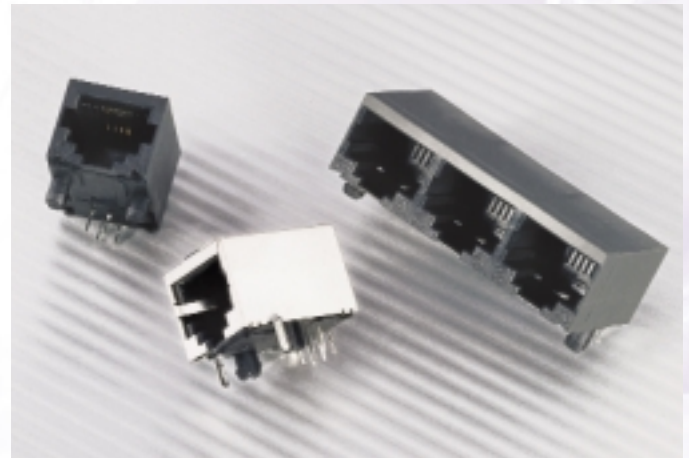
Specifications

MATERIAL

|	
Shield:	Copper Alloy; Tin/Lead Plated
Contacts:	Phosphor Bronze; Gold over 30µ inches (0.76 microns) over Ni
Insert:	For FRJ, High Temperature Resistant Nylon. For FRJA, Thermoplastic Polyester (Complies with UL 94V-0)
Filter:	High Impedance, High Resistivity, Ferrite Block

ELECTRICAL

Contact Resistance:	20 Milliohms maximum
Insulation Resistance:	500 Megaohms minimum
Current Rating:	1.5 Amps
Voltage Rating:	125 Volts AC
UL File # :	E135615
CSA File #:	LR68598

Impedance Characteristics
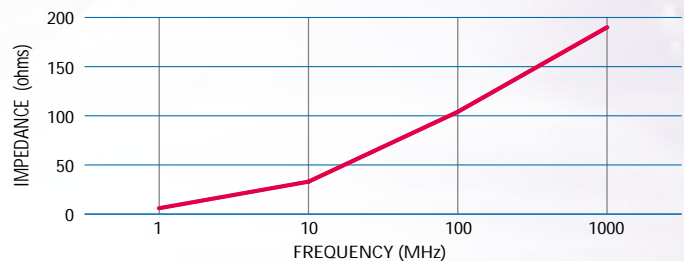
6 Position Filtered - High Profile
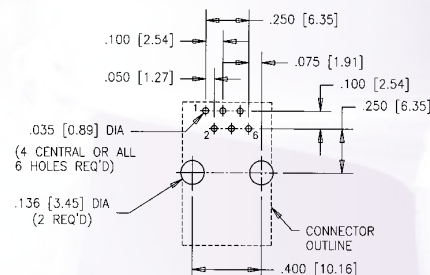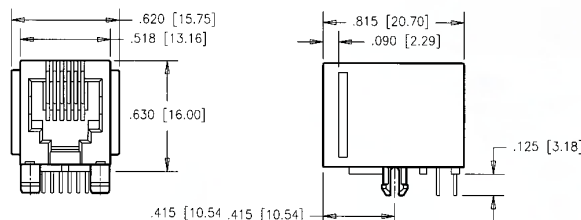
4 Contacts:

Standard Jack:	FRJ-104
Filtered:	FRJ-144

6 Contacts:

Standard Jack:	FRJ-106
Filtered:	FRJ-146

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FRJA Series

Ordering Information

FRJA – X X X – XX

X **NUMBER OF POSITIONS**
4 - 8 position
6 - 6 position

X **OPTIONS**
0 - non filtered, non shielded
1 - filtered with front tab shield
3 - shield (front tab)
4 - filtered
6 - filtered with rear tab shield
8 - shielded (rear tab)

XX **NUMBER OF PORTS**
Blank - 1 port
02 - 2 ports
03 - 3 ports
04 - 4 ports
06 - 6 ports
08 - 8 ports

X **NUMBER OF CONTACTS**
8 - 8 contacts (8 position)
6 - 6 contacts (6 position)
4 - 4 contacts (6 position)

PCB LAYOUT

.620 [15.75]
.350 [8.89]
.100 [2.54]
.050 [1.27]
.050 [1.27]
.085 [2.16]
ø.035 [ø.89]
(CENTRAL 4 OR 6
OR ALL 8 REQ'D)
CONNECTOR OUTLINE
.100 [2.54]
.250 [6.35]
.120 [3.05]
.120 [3.05]
ø.064 [ø1.62] HOLES FOR SHIELD REAR TABS
ø.136 [ø3.46] (2 REQ'D)
ø.062 [ø1.57] HOLES FOR SHIELD FRONT TABS
.070 [1.78]
.450 [11.43]
.590 [14.99]

Single Port (8 & 6 position)

NON-SHIELDED

.550 [13.97]
.500 [12.70]
.710 [18.03]
.125 [3.18]
.310 [7.87]

SHIELDED

.575 [14.61]
.510 [12.95]
.735 [18.67]
.125 [3.18]
.320 [8.13]
.320 [8.13]
.320 [8.13]

FRONT TAB   REAR TAB   NO TAB

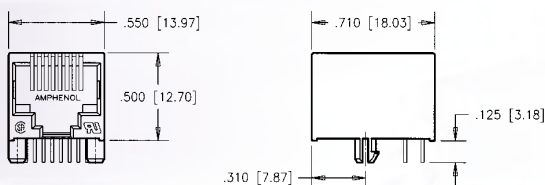Amphenol® Canada Corp. Telephone: (416) 754-5656 Fax: (416) 754-8668 E-mail: sales@amphenolcanada.com

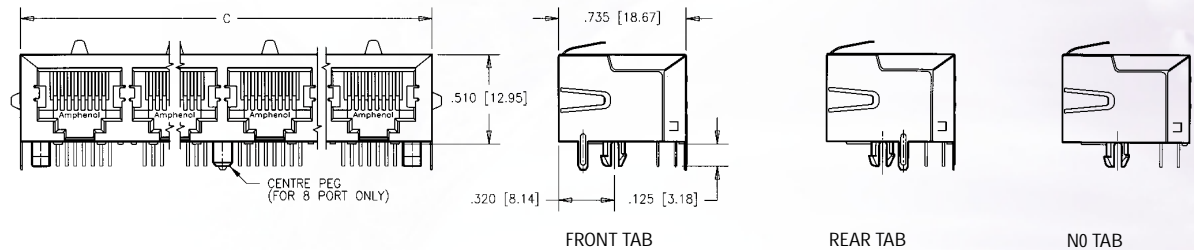## Multi Port (8 & 6 position)

NON-SHIELDED

SHIELDED

FRONT TAB

REAR TAB

N0 TAB
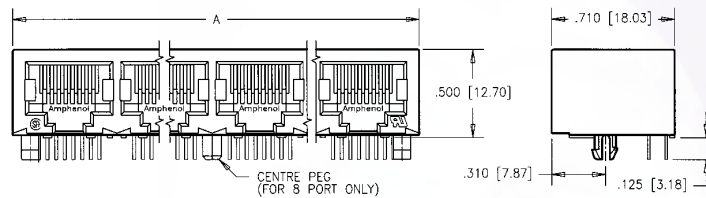
PCB LAYOUT
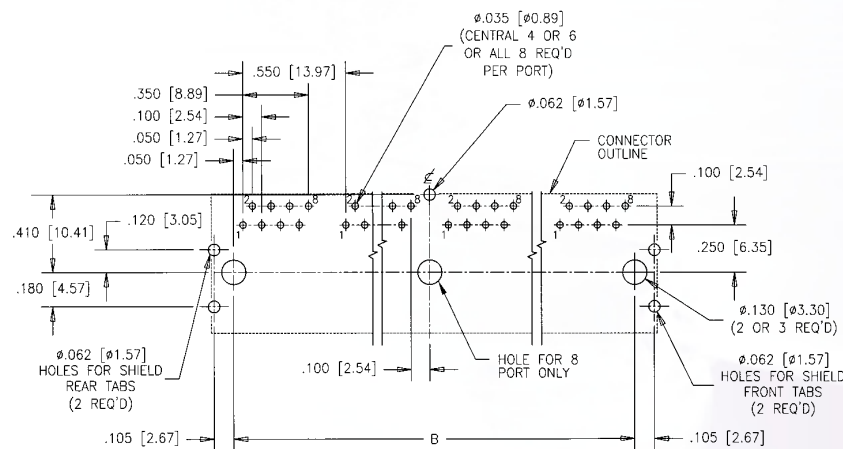
Number of ports	A	B	C
2	1.200[30.48]	1.000[25.40]	1.230[31.24]
4	2.300[58.42]	2.100[53.34]	2.330[59.18]
6	3.400[86.36]	3.200[81.28]	3.430[87.12]
8	4.500[114.30]	4.300[109.22]	4.530[115.06]

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13
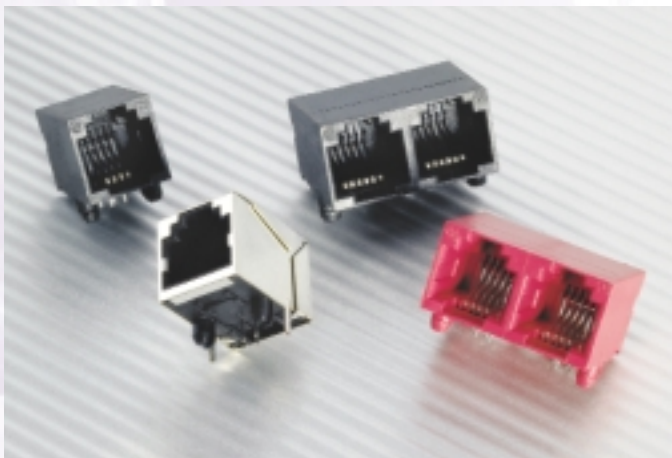
RJ01 Series

Modular Jack with Superior EMI Performance

The RJ01 series of 6-position jacks are designed for superior EMI performance. The inverted connector provides shorter leads, eliminating the EMI antenna effect of the standard connector footprint. Typical performance improvement over their standard connector counterparts is 5-10 dB over the frequency range.
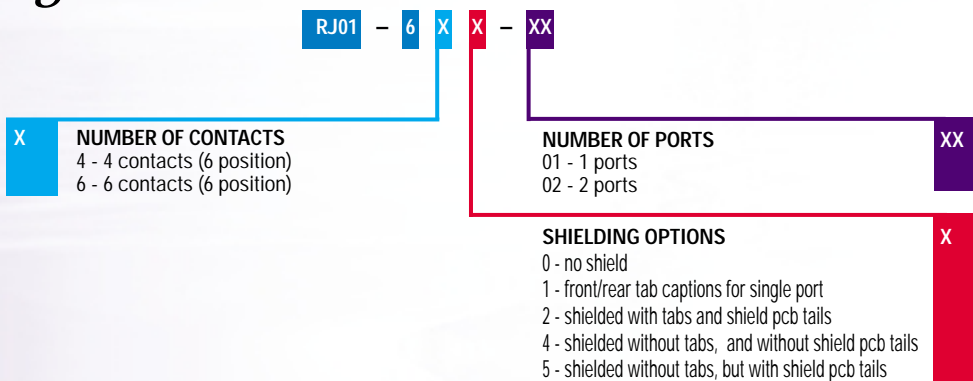
Specifications

MATERIAL

Housing: High Temperature Resistant Nylon Flammability rating UL94V-0

Contacts: Phosphor Bronze

Contact Plating: 50 µ inches (1.27 microns) Gold Over Nickel On Mating Area, Tin-Lead Alloy On Tails
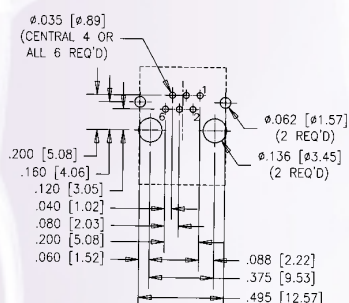
Shield: Copper Alloy, Tin-Lead Alloy Plated

ELECTRICAL

UL#   EI35615
CSA#   LR68598
EN#   60950

Ordering Information

RJ01 – 6 X X – XX

X   **NUMBER OF CONTACTS**
4 - 4 contacts (6 position)
6 - 6 contacts (6 position)

XX   **NUMBER OF PORTS**
01 - 1 ports
02 - 2 ports

X   **SHIELDING OPTIONS**
0 - no shield
1 - front/rear tab captions for single port
2 - shielded with tabs and shield pcb tails
4 - shielded without tabs, and without shield pcb tails
5 - shielded without tabs, but with shield pcb tails

PCB LAYOUT SINGLE PORT

PCB LAYOUT 2 PORT

Amphenol® Canada Corp. Telephone: (416) 754-5656 Fax: (416) 754-8668 E-mail: sales@amphenolcanada.com

Single Port

NON-SHIELDED

.475 [12.07]
.502 [12.75]
.650 [16.51]
.300 [7.62]
.110 [2.79]

2 Port

NON-SHIELDED

.950 [24.13]
.502 [12.75]
.650 [16.51]
.300 [7.62]
.110 [2.79]

Single Port

SHIELDED

.501 [12.73]
AT FRONT
.510 [12.95]
.676 [17.18]
.313 [7.95]
.110 [2.80]

2 Port

SHIELDED

.976 [24.79]
AT FRONT
.510 [12.95]
.676 [17.18]
.313 [7.95]
.110 [2.80]

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