

INELCO[®]
THE DISTINCTION

intrajack[®]

INtegrated TRAnsformer JACKs





intrajack® Product-Line Questionnaire

Name E-Mail

Company Telephone

Address

City ZIP Code

Country

What is your final product/ application?

What transceiver chip are you using ?
Manufacturer and chip number

Are you using a Jack with integrated magnetics already? Manufacturer Type (p/n)

What type of filtering is desired? common-mode-choke
 magnetic package (without isolation capacitor)
 full magnetic package (with isolation capacitor)

Network? 10/100 Base-T
 1000 Base-T
 10 Giga Base-T
 PoE
 PoE+
 T1/E1

Connector type? single port top entry
 single port side entry tab down
 single port side entry tab up
 combination RJ45 with USB
 multi port side entry tab up
 multi port side entry tab down
 multi port 2 level
multi port configuration?

Do you need LEDs? No Yes
L1 LED Color
L2 LED Color

Shield type? no shield
 standard shield
 enhanced shield
 other shield

Solder type? THR
 SMT
 PIP

Comment?

What is the annual estimated usage and over how many years?



INELCO the home of unparalleled quality and service in Interconnection and Electronic Components is a European driven company, manufacturing European ideas, solutions and quality in Asia. INELCO's mission is to fulfill the requirements of their partners and customers and remains the best choice for cost-effective solutions. INELCO is the supplier of interconnection and electronic components and systems for networking, telecommunications and industrial applications. INELCO's product range includes modular (Western) plugs and jacks (modcon®), with and without integrated transformers (intrajack®), shielded and unshielded as well as terminals (voice services®), SFPs (compu-shield®), M12 (circon®), discrete components (discom® transformers, coils and inductors), USBs and other additional products and services.



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intrajack® - transformer jacks

Specification

Characteristics Description

- RJ45 10/ 100/ 1000 Base-Tx Transformer Jack with Transformer Impedance Resistor/ High Voltage Capacitor
- Size same as RJ45 Modular Jack to save PCB Space
- Reduce EMI Radiation, improve EMI Performance
- Designed for Network Interface Card Application
- 10/ 100 Base-Tx Designed to meet IEEE 802.3u Requirement
- 1000 Base-Tx Designed to meet IEEE 802.3ab Requirement
- Designed for Transmission over UTP-5 Cable

Electrical

- Current Rating 8 mA DC
- Voltage Rating 30 V DC
- Isolation Voltage 1,500 V RMS (Input to Output) 60 s @ 60 Hz
- Inductance 350 µH min. @ 100 kHz, 100 mV, 8 mA DC Bias
- Leakage Inductance 0.3 µH max. @ 100 kHz, 100 mV
- Insertion Loss 1.1 dB max. @ (1 - 100) MHz
- Return Loss 18 dB min. @ (1 - 30) MHz
16 dB min. @ (30 - 60) MHz
12 dB min. @ (60 - 80) MHz
- Cross Talk 30 dB min. @ (1 - 100) MHz
- Common Mode Rejection 30 dB min. @ (1 - 100) MHz

Mechanical

- Operating Life 750 Cycles min.
- PCB Retention Pre-Solder 1 Lb min.
- PCB Retention Post-Solder 10 Lbs min.
- Housing Material High Temperature Polycarbonate UL94V-0
- Insert Material High Temperature Polycarbonate UL94V-0
- Contact Material Phosphor Bronze, QSn 6.5 - 0.1 T = 0.35 mm
- Contact Plating Selective Gold Plating over Nickel T = 0.20 mm
- Shield Material Brass C2680 T = 0.20 mm
- Shield Plating Nickel 30µ"-80µ"

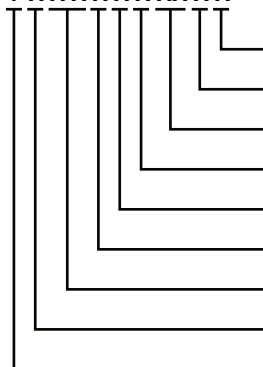
Environmental

- Operation Temperature -40 °C to +85 °C
- Storage Temperature -40 °C to +85 °C
- Wave Soldering 255 °C to 265 °C for 5 to 10 Seconds

Mates with Modular Plug Conforming to ANSI/ TIA-1096-A

Part Numbers

I X X X X X X X X X



- For Specials only: e.g. Packaging, Print D/C
- LED Configuration: 0 - 9, A - Z
- Circuit Type: 01 - 99
- Shielding Type: W = With EMI Tabs, N = W/O EMI Tabs
- Housing Material: F = Hightemp, G =S-Hightemp
- Gold Plating: 1 = 3 µ", 2 = 6 µ", 3 = 15 µ", 4 = 30 µ", 5 = 50 µ"
- Serial Number: 00 - 99, Doublestacks: First Cipher = Number of Jacks in Row
- Shielding: U: Unshielded, S: Shielded
- Jack Type: I: Intrajack

intrajack[®] - transformer jacks

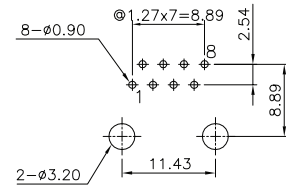
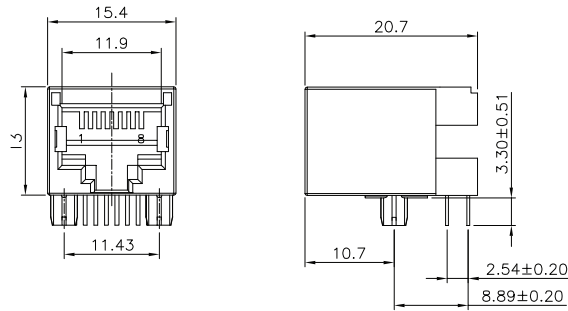
LED Configurations

	LED1	LED2		LED1	LED2
0			G		
1			H		
2			I		
3			J		
4			K		
5			L		
6			M		
7			N		
8			O		
9			P		
A			Q		
B			R		
C			S		
D					
E					

intrajack® - transformer jacks

1*1 Unshielded Jacks

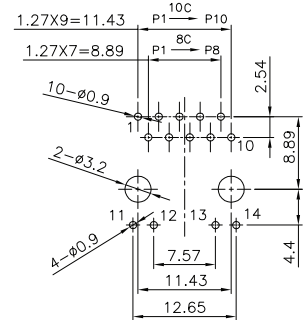
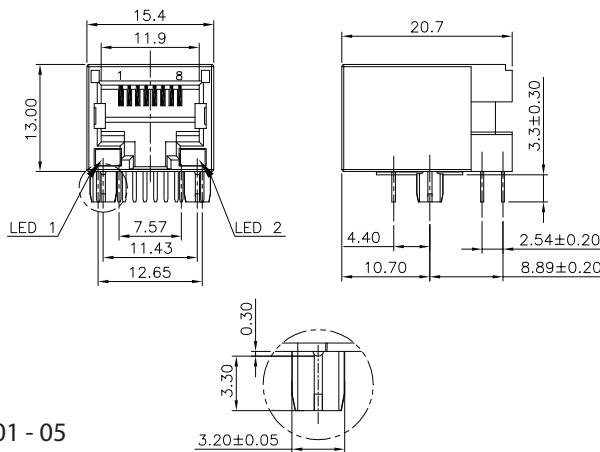
IU13XXXXXX



PC Board Layout
Component Side Shown

Circuit Type: 01 - 04
LED Configuration: 0

IU24XXXXXX

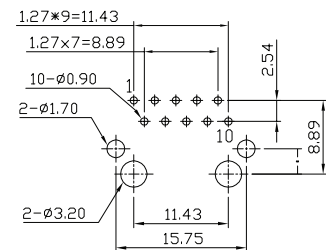
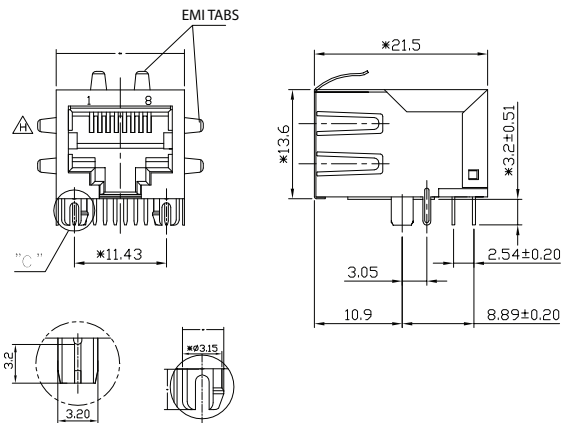


PC Board Layout
Component Side Shown

Circuit Type: 01 - 05
LED Configuration: 3, 4, 8, 0

1*1 Shielded Jacks

IS11XXXXXX



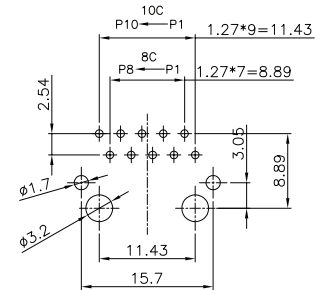
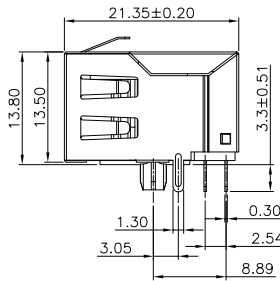
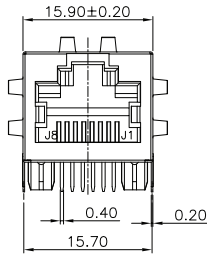
PC Board Layout
Component Side Shown

Circuit Type: 01 - 20
LED Configuration: 0

intrajack[®] - transformer jacks

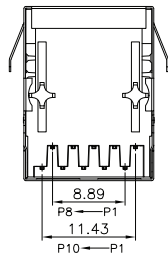
1*1 Shielded Jacks

IS23XXXXXX

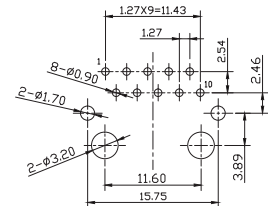
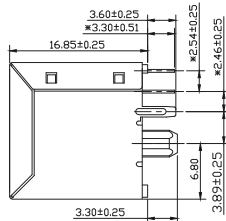
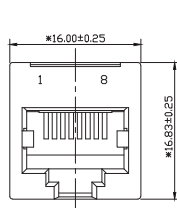


PC Board Layout
Component Side Shown

Circuit Type: 01 - 13
LED Configuration: 0

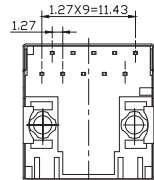


IS31XXXXXX

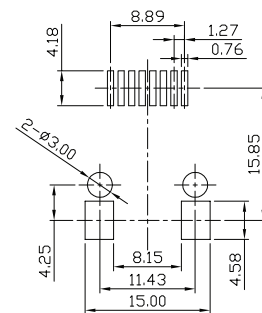
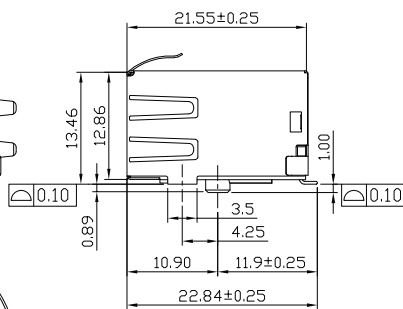
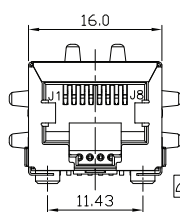


PC Board Layout
Component Side Shown

Circuit Type: 05
LED Configuration: 0

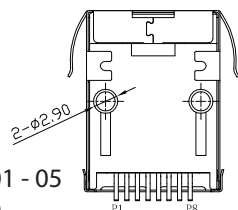


IS34XXXXXX



PC Board Layout
Component Side Shown

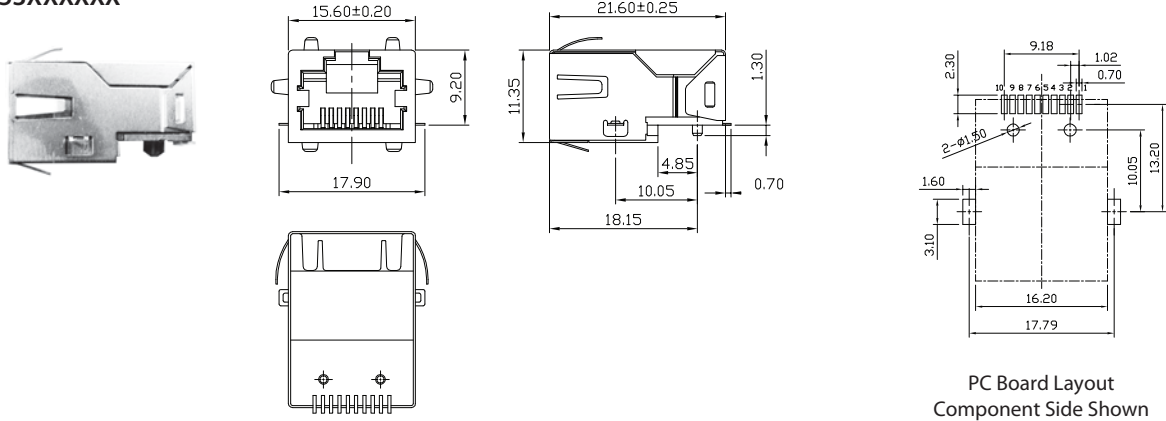
Circuit Type: 01 - 05
LED Configuration: 0



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1*1 Shielded Jacks

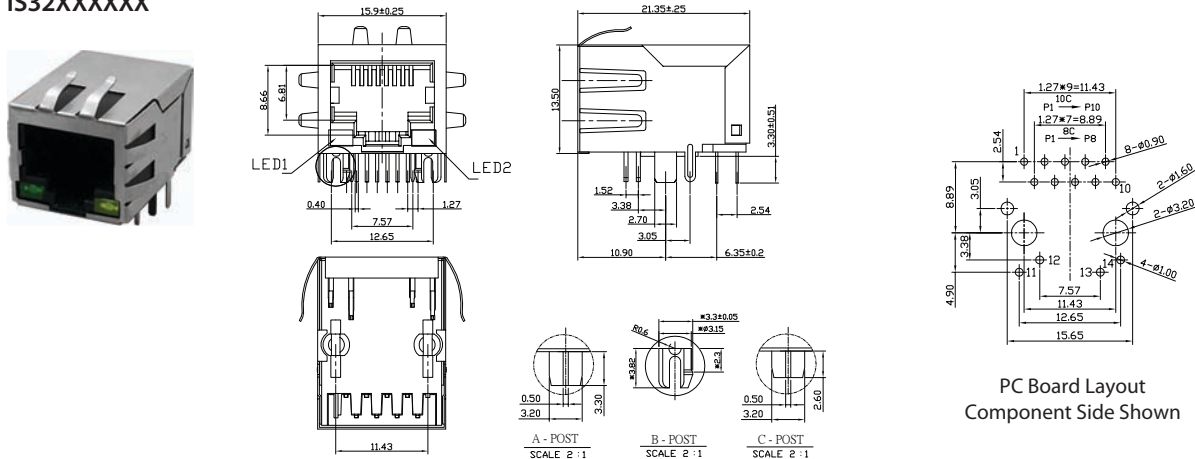
IS53XXXXXX



Circuit Type: 01 - 05
LED Configuration: 0

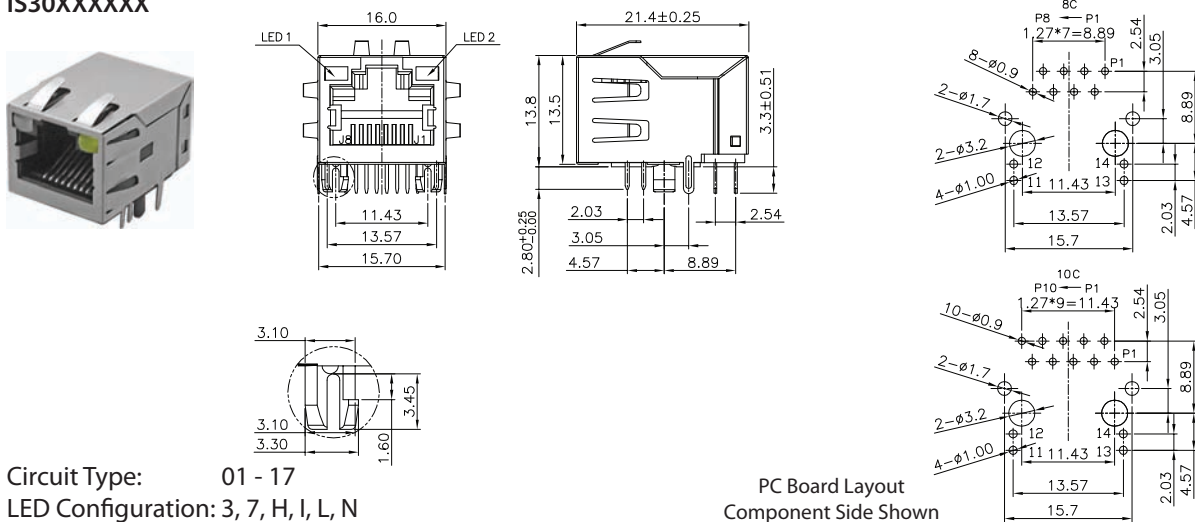
1*1 Shielded Jacks with LEDs

IS32XXXXXX



Circuit Type: 01 - 05, 07, 08
LED Configuration: 3, 4, 5, 8, D, I, K

IS30XXXXXX

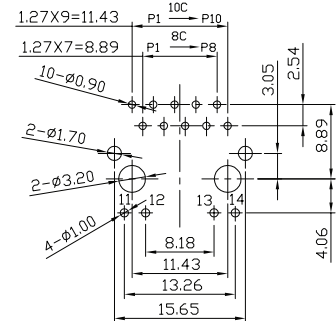
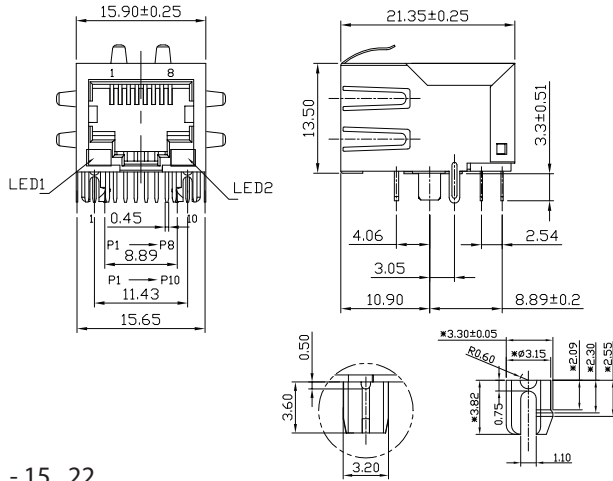


Circuit Type: 01 - 17
LED Configuration: 3, 7, H, I, L, N

intrajack[®] - transformer jacks

1*1 Shielded Jacks with LEDs

IS33XXXXXX

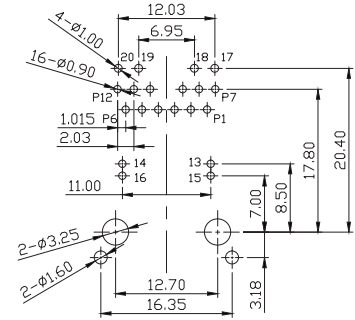
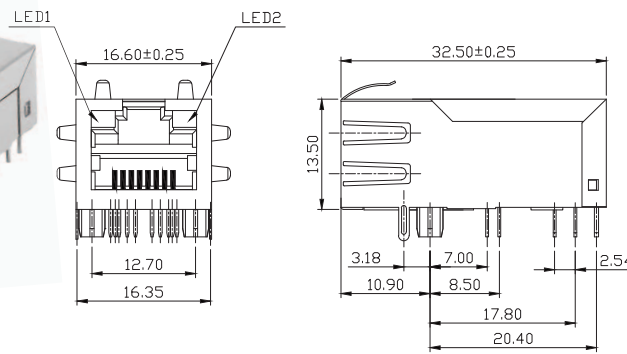


PC Board Layout
Component Side Shown

Circuit Type: 01 - 15, 22
LED Configuration: 2, 3, 4, 5, 8, B, C, J, M

DETAIL "C"
SCALE 2:1

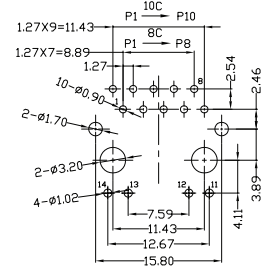
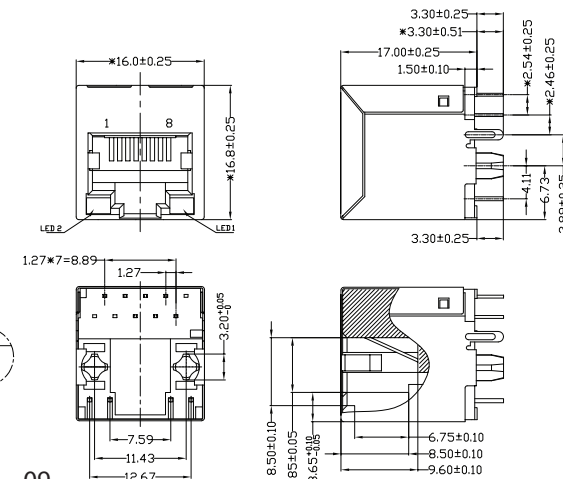
IS51XXXXXX



PC Board Layout
Component Side Shown

Circuit Type: 01 - 04, 07
LED Configuration: 3, 8, G, H

IS36XXXXXX



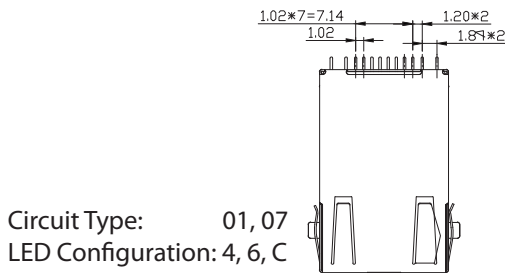
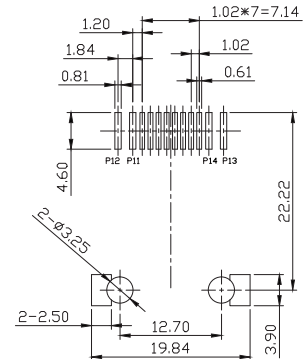
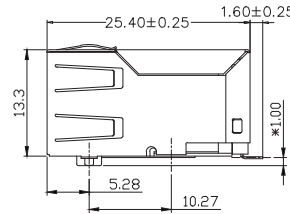
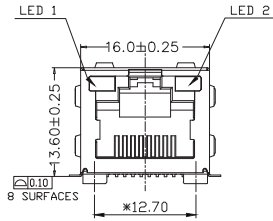
PC Board Layout
Component Side Shown

Circuit Type: 01 - 09
LED Configuration: 1, 3, 4, 7, 8, 9, B, E, I, J

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1*1 Shielded Jack with LEDs

IS43XXXXXX

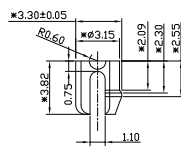
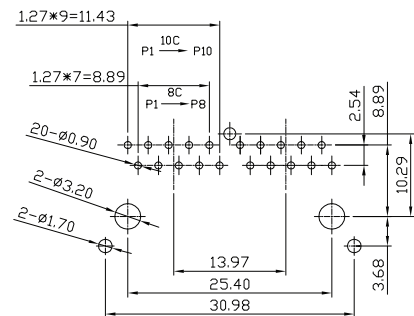
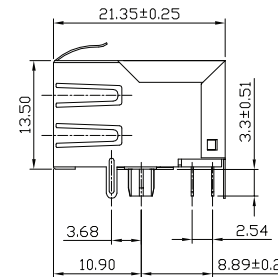
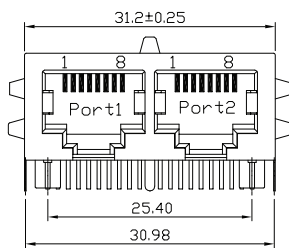
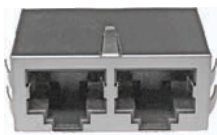


PC Board Layout
Component Side Shown

Circuit Type: 01, 07
LED Configuration: 4, 6, C

1*2 Shielded Jack

IS44XXXXXX



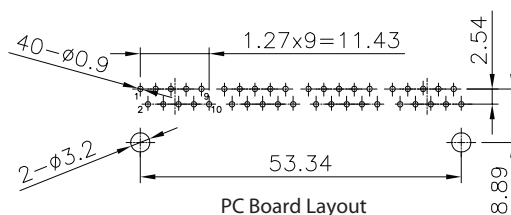
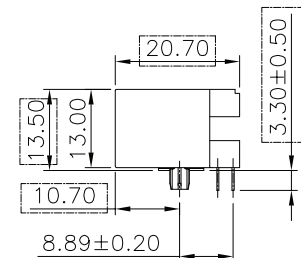
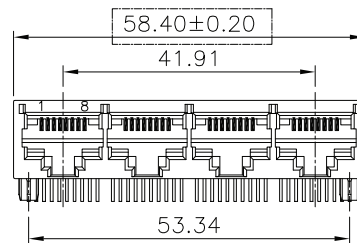
DETAIL "C"
SCALE: 2:1

PC Board Layout
Component Side Shown

Circuit Type: 01 - 05
LED Configuration: 0

1*4 Shielded Jacks

IS20XXXXXX



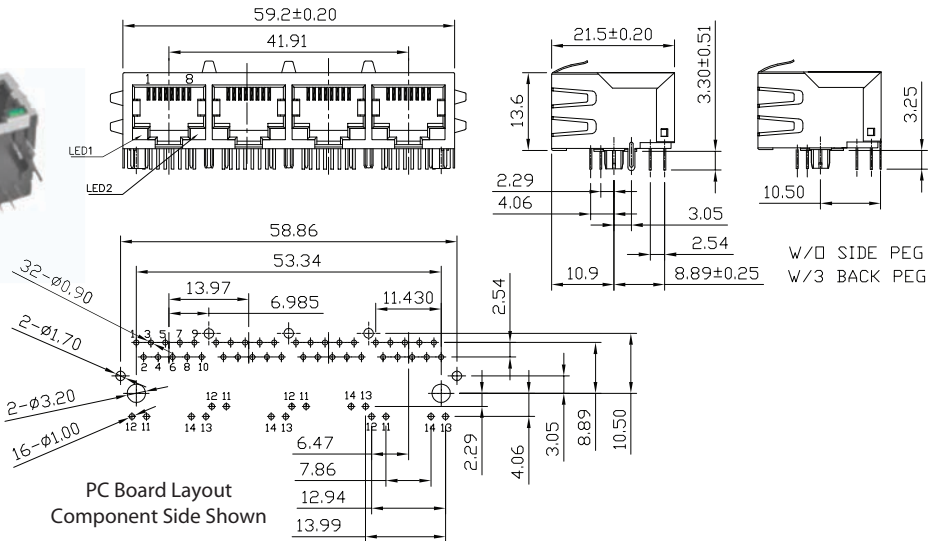
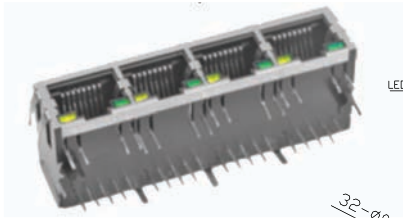
PC Board Layout
Component Side Shown

Circuit Type: 02
LED Configuration: 0

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1*4 Shielded Jack with LEDs

IS42XXXXXX

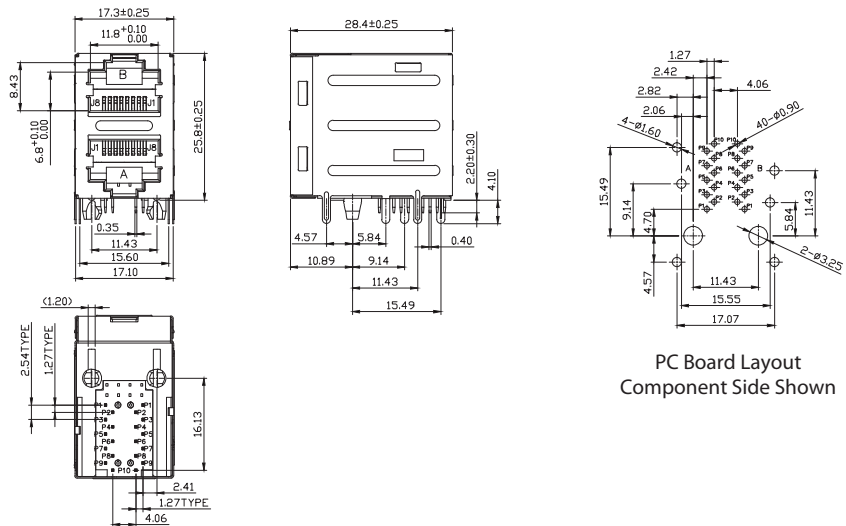


Circuit Type: 01 - 05
LED Configuration: 1, 3, A, J

PC Board Layout
Component Side Shown

2*1 Shielded Doublestack

IS1BXXXXXX

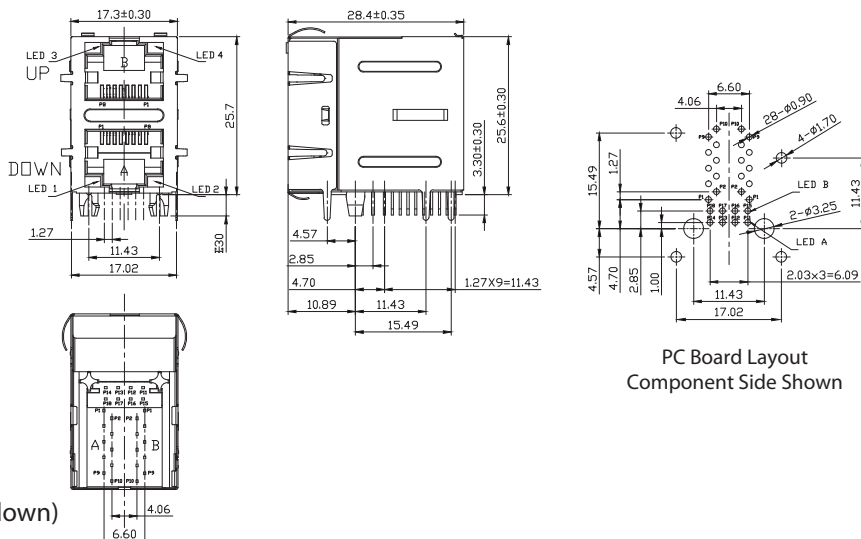


Circuit Type: 01
LED Configuration: 0

PC Board Layout
Component Side Shown

2*1 Shielded Doublestack with LEDs

IS1AXXXXXX



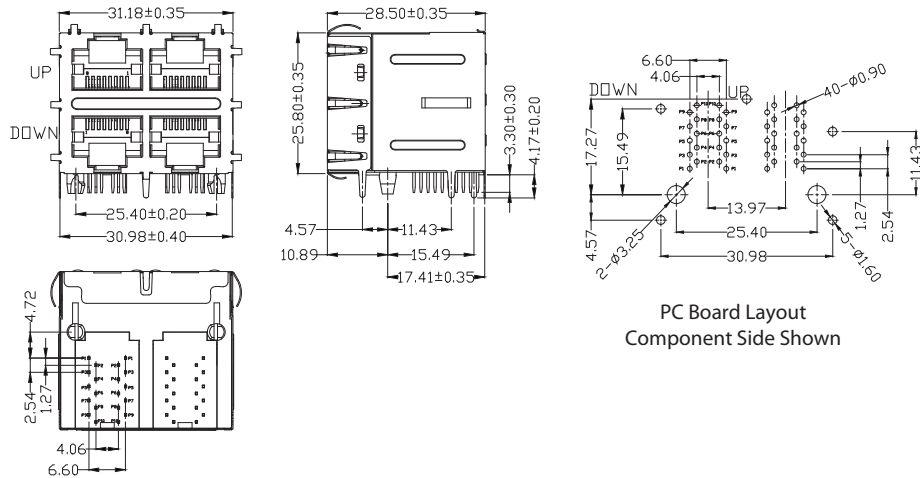
Circuit Type: 02 - 04
LED Configuration: 7, I, Q (up = down)

PC Board Layout
Component Side Shown

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2*2 Shielded Doublestack with LEDs

IS2AXXXXXX

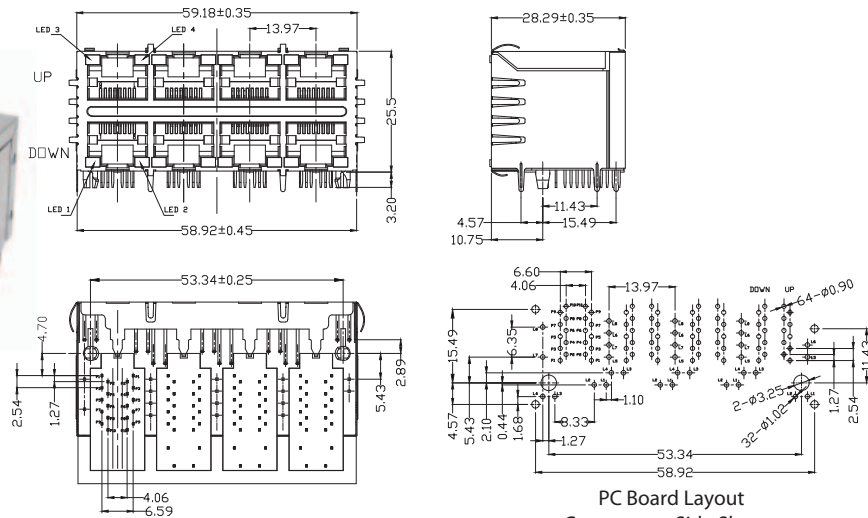


PC Board Layout
Component Side Shown

Circuit Type: 01
LED Configuration: I (up = down)

2*4 Shielded Doublestacks with LEDs

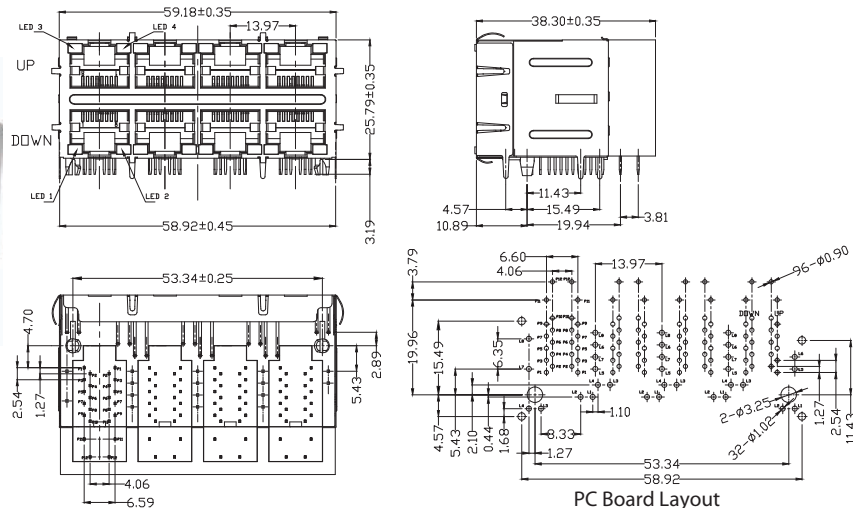
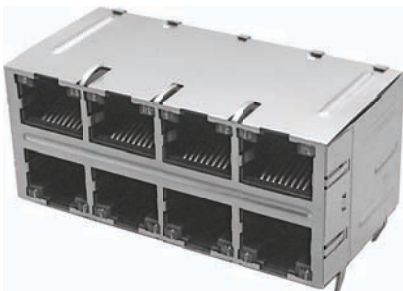
IS4AXXXXXX



PC Board Layout
Component Side Shown

Circuit Type: 01
LED Configuration: 7 (up = down)

IS4BXXXXXX



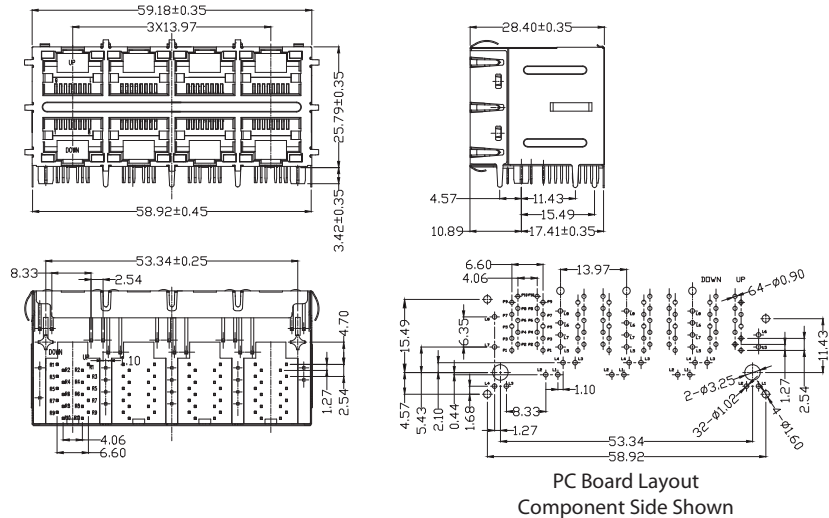
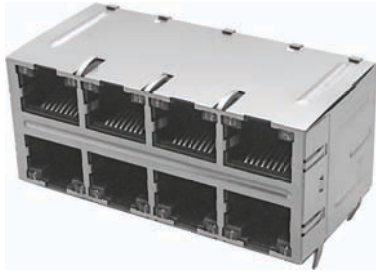
PC Board Layout
Component Side Shown

Circuit Type: 01
LED Configuration: P (up = down)

intrajack[®] - transformer jacks

2*4 Shielded Doublestack with LEDs

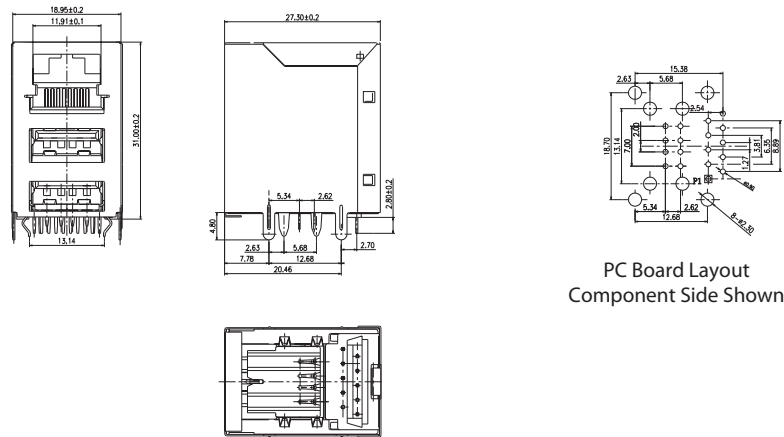
IS4CXXXXXX



Circuit Type: 01
LED Configuration: 3 (up = down)

3*1 Shielded Combo USB (available: USB 2.0 or 3.0)

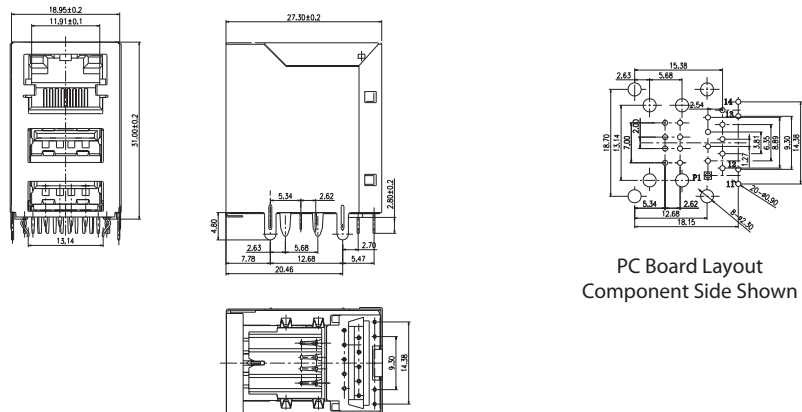
IS1CXXXXXX



Circuit Type: 02
LED Configuration: 0

3*1 Shielded Combo USB with LEDs (available: USB 2.0 or 3.0)

IS1DXXXXXX



Circuit Type: 02
LED Configuration: S