

# “LAN-MATE”SERIES

## 10/100 BASE-T RJ45 1 x 1 INTEGRATED MAGNETICS CONNECTOR

### 10/100 BASE-TX MAGNETICS

- RJ-45 needs to be matched FCC standard.
- Complies with requirement of IEEE802.3u standards.
- RJ-45 connector integrated with transformer/impedance resistor/high voltage capacitor.
- Size same as RJ-45 connector to save PCB board space.
- Reduced EMI radiation to improve EMI performance.
- Design for 10/100 BASE transmission over UTP-5 cable.
- Includes integrated 2 LEDS(option).
- LED signal leads are isolated from the Ethernet signal leads to reduce EMI and cross talk.
- Compliance with ROHS requirements.
- Operating temperature range: 0 to +70 .
- Storage temperature range: -25 to +85 .



S



T

#### Electrical specifications @ 25

Part Number	Turns Ratio (±5%)		OCL (uH Min) @ 100 KHz/0.1V with 8mA DC Bias	C <sub>W/W</sub> (pF Max)	L.L (uH Max)	Insertion Loss (dB Max) 0.3-100MHz	HI-POT (Vrms)
	TX	RX					
KLU1S041-34 LF	1CT:1CT	1CT:1CT	350	28	0.4	-1.15	1500
KLU1S041A -43 LF	1CT:1CT	1CT:1CT	350	28	0.4	-1.15	1500
KLU1S041C-34 LF	1CT:1CT	1CT:1CT	350	28	0.4	-1.15	1500
KLU1S041CM-43 LF	1CT:1CT	1CT:1CT	350	28	0.4	-1.15	1500
KLU1S041CX-34 LF	1CT:1CT	1CT:1CT	350	56	0.5	-1.15	1500
KLU1S041F -43 LF	1CT:1CT	1CT:1CT	350	28	0.4	-1.15	1500
KLU1S041X-43 LF	1CT:1CT	1CT:1CT	350	56	0.5	-0.8	1500
KLU1S516-34 LF	1CT:1	1CT:1CT	350	28	0.4	-1.15	1500
KLU1T516E1-43 LF	1CT:1	1CT:1CT	350	--	--	-1.15	1500

#### Continue

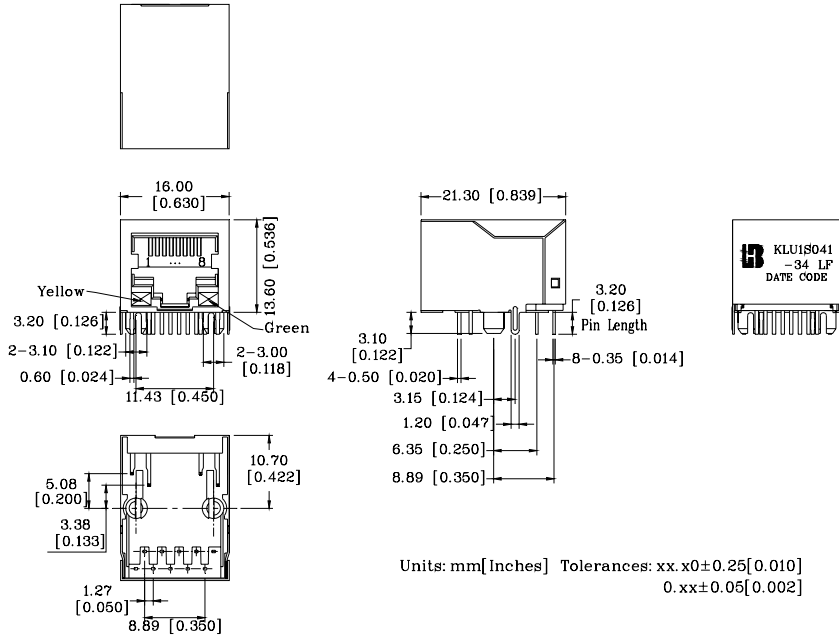
Number	Return Loss (dB Min)					Cross talk (dB Min)			CMR (dB Min)		
	30MHz	40MHz	50MHz	60MHz	80MHz	0.3-30MHz	30-60MHz	60-100MHz	1-30MHz	30-60MHz	60-125MHz
KLU1S041-34 LF	-16	-14	-13.5	-13	-10	-40	-35	-30	-30	-25	-20
KLU1S041A -43 LF	-16	-14	-13.5	-13	-10	-40	-35	-30	-30	-25	-20
KLU1S041C-34 LF	-16	-14	-13.5	-13	-10	-40	-35	-30	-30	-25	-20
KLU1S041CM-43 LF	-16	-14	-13.5	-13	-10	-40	-35	-30	-30	-25	-20
KLU1S041CX-34 LF	-16	-14	-13.5	-13	-10	-40	-35	-30	-30	-25	-20
KLU1S041F -43 LF	-16	-14	-13.5	-13	-10	-40	-35	-30	-30	-25	-20
KLU1S041X-43 LF	-16	-14	-13.5	-13	-10	-40	-35	-30	-30	-25	-20
KLU1S516-34 LF	-16	-14	-13.5	-13	-10	-40	-35	-30	-30	-25	-20
KLU1T516E1-43 LF	-16	-14	-13.5	-13	-10	-40	-35	-30	-30	-25	-20

For customized parts or more detailed information, please log on [www.bothhandusa.com](http://www.bothhandusa.com) or write to [sales@bothhandusa.com](mailto:sales@bothhandusa.com)

**“LAN-MATE” SERIES**  
**10/100 BASE-T RJ45 1 x 1 INTEGRATED MAGNETICS CONNECTOR**  
**10/100 BASE-TX MAGNETICS**

**Mechanicals**

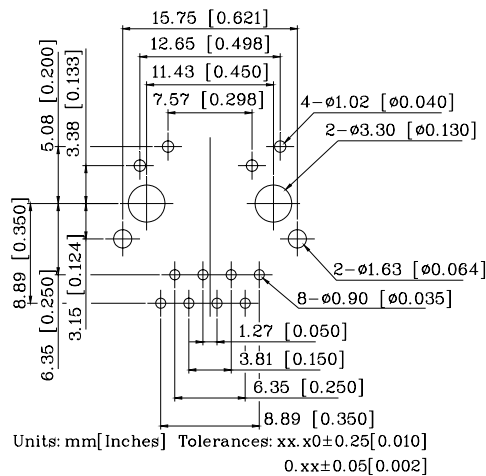
**KLU1SXXXX-XX LF**



- |                     |   |   |
|---------------------|---|---|
| 1. Plastic Material | : | Thermoplastic (UL 94V-0), Black Housing   |
| 2. Metal Shield     | : | Brass, 20u" inches thick Nickel   |
| 3. Spring Wire      | : | 0.45mm Dia. Phosphor bronze with 0.1524 *10 <sup>-6</sup> m gold plated & 1.524*10 <sup>-6</sup> m thick Nickel |
| 4. Solder Pin       | : | 0.5x0.35mm, SUS430 with solder Plated   |
| 5. Durability       | : | 750 Mating cycles Min.  |

**PCB Layout Mounting Hole (Top View)**

**KLU1SXXXX-XX LF**

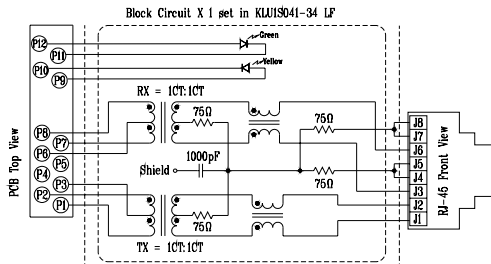


**“LAN-MATE” SERIES**  
**10/100 BASE-T RJ45 1 x 1 INTEGRATED MAGNETICS CONNECTOR**  
**10/100 BASE-TX MAGNETICS**

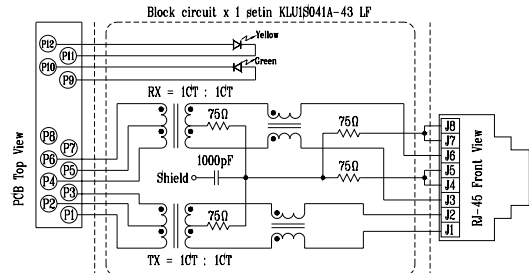
Specification	Packing Manner	Q'ty per Tube/Reel	Q'ty/ Inner box	Q'ty/ Carton
KLU1SXXX LF	TUBE	30	480	1920
KLU1TXXX LF	TUBE	26	416	1664

**Schematics**

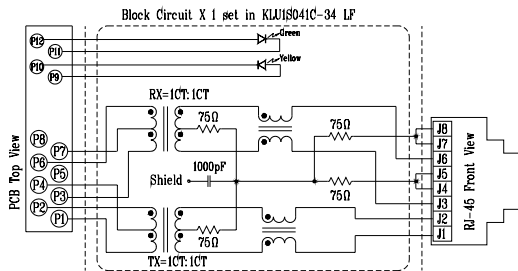
**KLU1S041-34 LF**



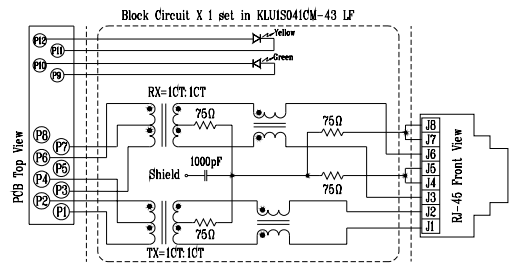
**KLU1S041A -43 LF**



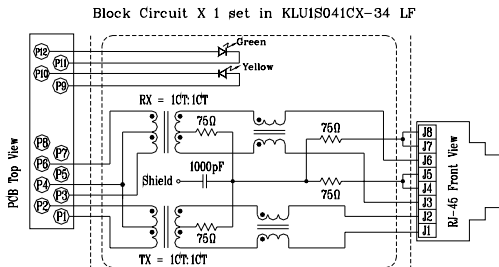
**KLU1S041C-34 LF**



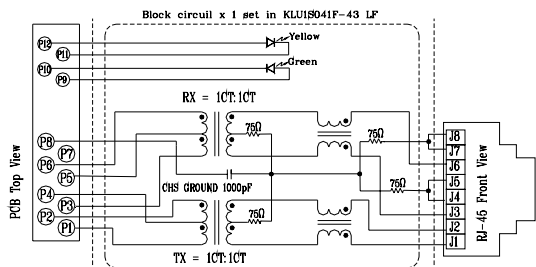
**KLU1S041CM-43 LF**



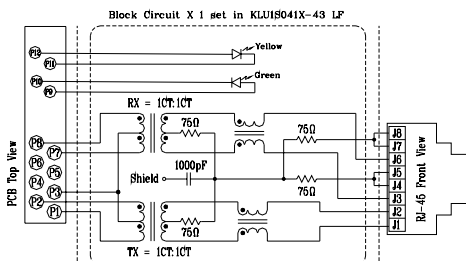
**KLU1S041CX-34 LF**



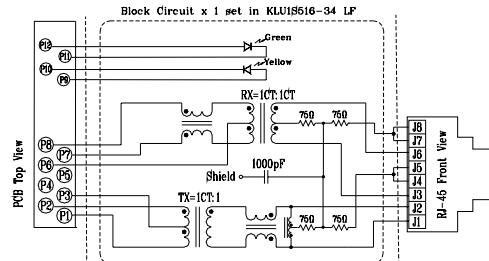
**KLU1S041F -43 LF**



**KLU1S041X-43 LF**



**KLU1S516-34 LF**

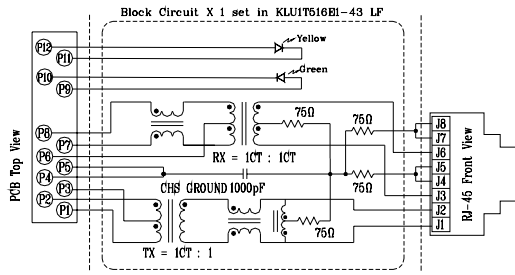


# “LAN-MATE”SERIES

## 10/100 BASE-T RJ45 1 x 1 INTEGRATED MAGNETICS CONNECTOR

### 10/100 BASE-TX MAGNETICS

#### KLU1T516E1-43 LF



## Part Numbering System

### Example BHJack Part Number:

<b>K</b>	<b>L</b>	<b>U</b>	<b>1</b>	<b>S</b>	<b>041</b>	<b>-XX</b>	<b>LF</b>
代表非 MD 機構	TAB DOWN RJ-45 JACK	100 BASE (802.3U)	Number of parts “1” : single port	Shield type S: standard shield T: with spring tab on top and side D: spring tab on side E: spring tab on top	for different circuit	Led options	RoHS