

“LAN-MATE” SERIES
1000 BASE-T RJ45 1 x 1 INTEGRATED MAGNETICS CONNECTOR
1000 BASE-T MAGNETICS

- RJ-45 needs to be matched FCC standard.
- Complies with requirement of IEEE 802.3ab 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 1000 BASE transmission over UTP-5 cable.
- Isolation @ 60Hz: Input to output: 1500Vrms.
- 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) @ 100KHz/0.1V with 8mA DC Bias	Cross talk (dB Min)			HI-POT (Vrms)
	TX	RX		0.3-30MHz	30-60MHz	60-100MHz	
KLA1S109-34 LF	1CT: 1CT	1CT: 1CT	350	-40	-35	-30	1500
KLA1S109F-1-43 LF	1CT: 1CT	1CT: 1CT	350	-40	-35	-30	1500
KLA1S109M-43 LF	1CT: 1CT	1CT: 1CT	350	-40	-35	-30	1500

Continue

Part Number	Insertion Loss (dB Max)	Return Loss (dB Min) @ Load 100					CMR (dB Min)		
		1-100MHz	1-30MHz	30-40MHz	40-50MHz	50-80MHz	100MHz	1-30MHz	30-60MHz
KLA1S109-34 LF	-1.0	-16	-13.5	-11.5	-10	--	-30	-25	-20
KLA1S109F-1-43 LF	-1.0	-16	-13.5	-11.5	-10	--	-30	-25	-20
KLA1S109M-43 LF	-1.0	-16	-13.5	-11.5	-10	--	-30	-25	-20

For customized parts or more detailed information, please log on www.bothhandusa.com or write to sales@bothhandusa.com

NOTE: 1. Differential to Common Mode Rejection (dB Min)

1-30MHz	30-60MHz	60-100MHz
-43	-37	-33

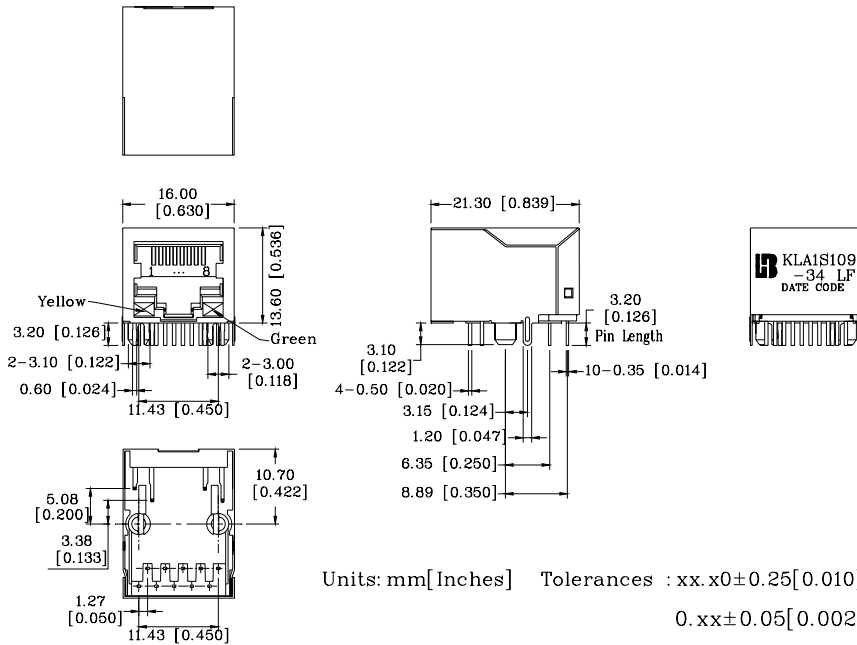
“LAN-MATE” SERIES

1000 BASE-T RJ45 1 x 1 INTEGRATED MAGNETICS CONNECTOR

1000 BASE-T MAGNETICS

Mechanicals

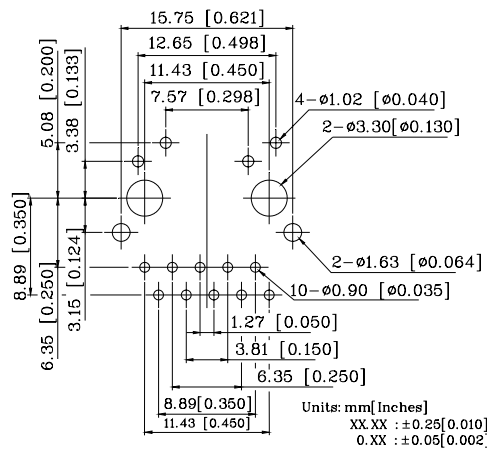
KLA1SXXX-XX LF



- 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^{-6} m gold plated & 1.524×10^{-6} 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)

KLA1SXXX-XX LF



“LAN-MATE” SERIES

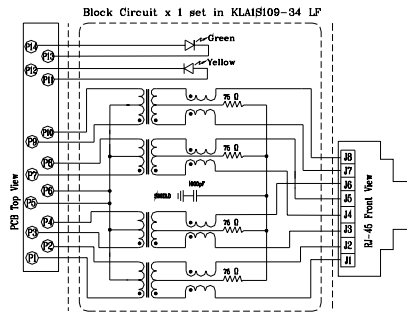
1000 BASE-T RJ45 1 x 1 INTEGRATED MAGNETICS CONNECTOR

1000 BASE-T MAGNETICS

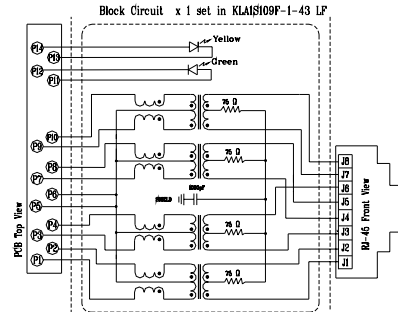
Specification	Packing Manner	Q'ty per Tubel	Q'ty/ Inner box	Q'ty/ Carton
KLA1SXXX LF	TUBE	30	480	1920
KLA1TXXX LF	TUBE	27	432	1728

Schematics

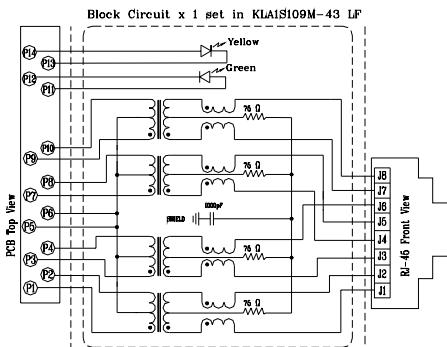
KLA1S109-34 LF



KLA1S109F-1-43 LF



KLA1S109M-43 LF



“LAN-MATE” SERIES**1000 BASE-T RJ45 1 x 1 INTEGRATED MAGNETICS CONNECTOR****1000 BASE-T MAGNETICS****Part Numbering System****Example BHJack Part Number:**

K	L	A	1	S	109	-XX	LF	
代表非 MD	TAB	DOWN	1000 BASE (802.3U)	Number of parts	Shield type	for	Led options	RoHS
機構	RJ-45 JACK		“1” : single port	S: standard shield	different circuit			
				T: with spring tab on top and side				
				D: spring tab on side				
				E: spring tab on top				