

## “LAN-MATE” SERIES

### SINGLE RJ45 CONNECTOR MODULE WITH INTEGRATED 10 BASE T MAGNETICS & FILTERS

- RJ-45 connector integrated with Filter
- Size same as RJ-45 connector to save PCB board space
- Reduce EMI radiation, Improve EMI performance
- Operating temperature range: 0°C to +70°C
- Storage temperature range: -40°C to +125°C



#### Electrical Specifications @ 25°C

Type : 7 POLE (TX) & 5 POLE (RX)

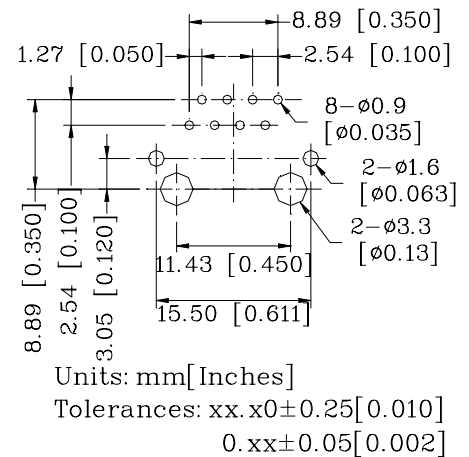
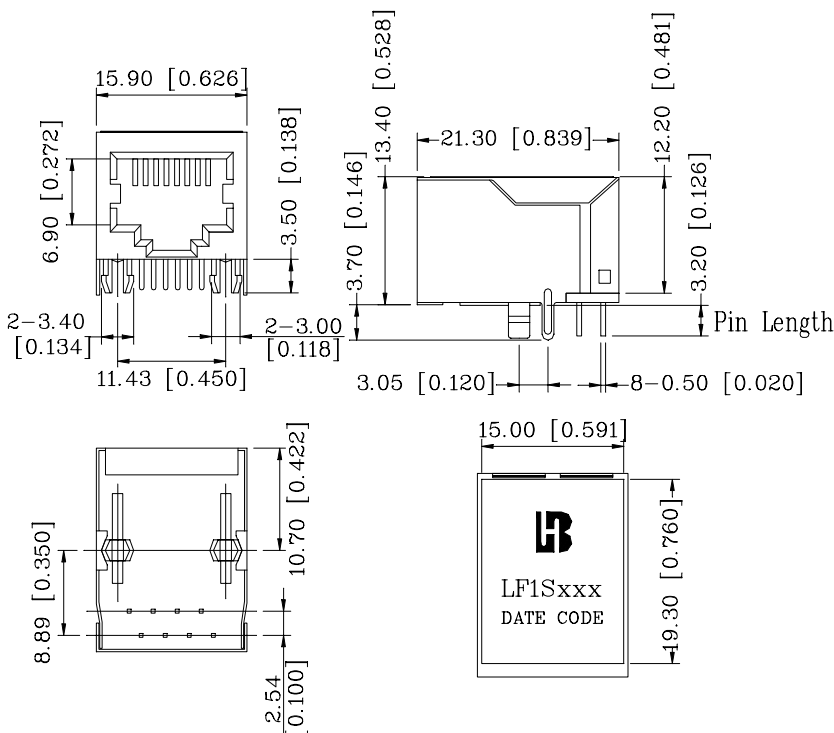
CUT OFF Frequency : 17 MHz±1 MHz (TX & RX) Isolation Voltage : 1200Vrms

Part Number	Insertion Loss (dB Max)	Attenuation TX/RX (dB Min)				Return Loss TX & RX (dB Min)		Cross talk (dB Min)	Common Mode Rejection (dB Min)	Turn Ratio TX/RX (±5%)
		1-10MHz	20MHz	25MHz	30MHz	40MHz	1-10MHz			
LF1S009	-1.0	-7/-5	-18/-11	-28/-16	-33/-26	-	-13.5	-30	-30	1CT:1.41/1CT:1
LF1S021	-1.0	-5/-4.2	-18/-11	-28/-16	-33/-26	-	-17 Typ	-30	-30	1CT:1CT/1CT:1CT
LF1S022	-1.0	-5/-4.2	-18/-11	-28/-16	-33/-26	-	-13.5	-30	-30	1CT:1CT/1CT:1CT
LF1S022A	-1.0	-5/-4.2	-18/-11	-28/-16	-33/-26	-	-15	-30	-30	1CT:1CT/1CT:1CT
LF1S023B	-1.15	-5/-4.2	-18/-11	-28/-16	-33/-26	-13.5	-	-30	-30	1:2CT/1CT:1CT
LF1S026B	-1.15	-5/-4.2	-18/-11	-28/-16	-33/-26	-13.5	-	-30	-30	1:1.414CT/1CT:1CT
LF1S028	-1.15	-5/-4.2	-18/-11	-28/-16	-33/-26	-	-17 Typ	-30	-30	1.414:1CT/1CT:1CT

#### Mechanicals

LF1SXXX

PCB Layout Mounting Hole (Top View)



Units: mm [Inches] Tolerances: xx.x0±0.25 [0.010]  
0.xx±0.05 [0.002]

Physical char : 1. Plastic Material : PBT 15% Glass Filled( UL 94V-0 ), Black Housing

2. Metal Shield : Brass C2680-H, 20u Nickel Plated, t=0.25mm

Bothhand USA. e-mail: [sales@bothhandusa.com](mailto:sales@bothhandusa.com) <http://www.bothhandusa.com>

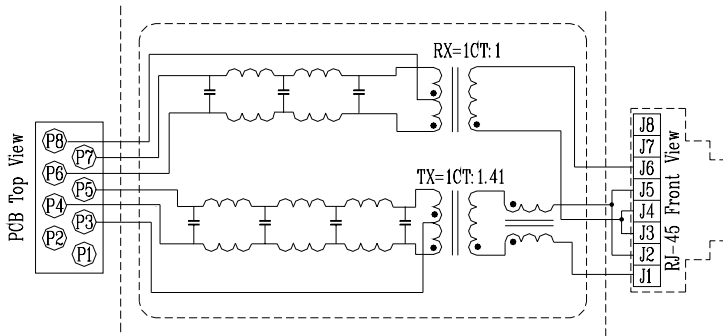
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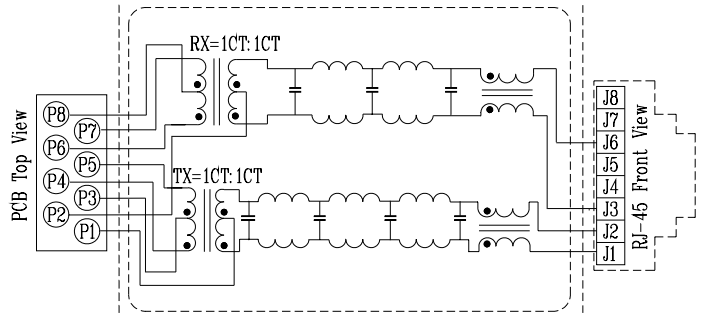
3. Spring Wire : 0.45mm Dia. Phosphor bronze over with 6u gold plated
4. Solder Pin : 0.4x0.4mm, Phosphor bronze with solder Solder plated
5. Durability : 300 Mating cycles Min.

**Schematics**

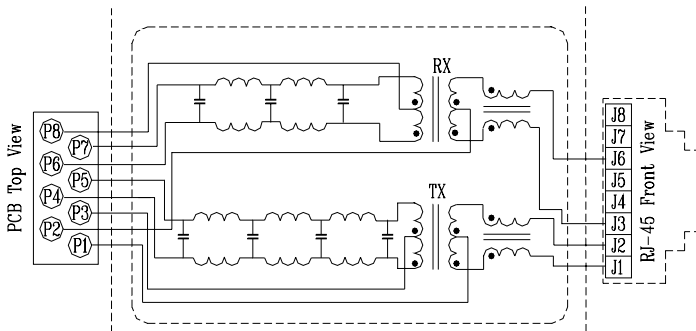
**LF1S009**



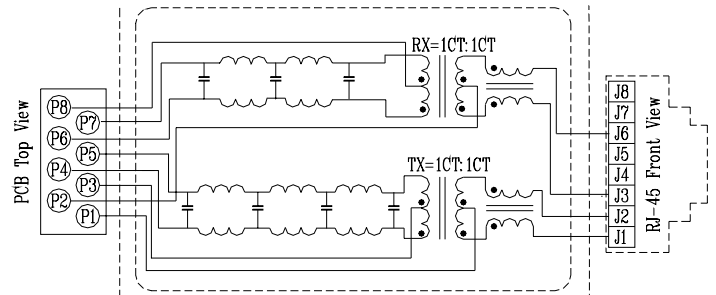
**LF1S021**



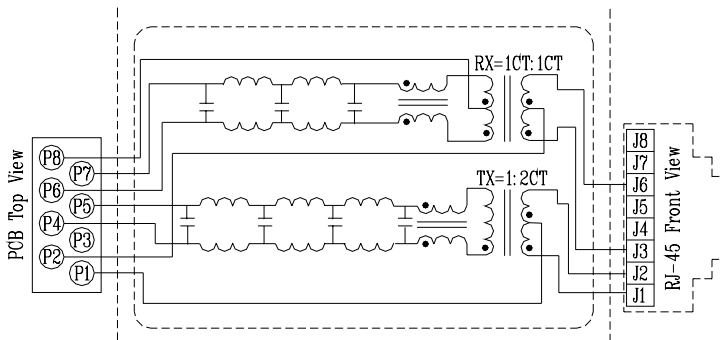
**LF1S022**



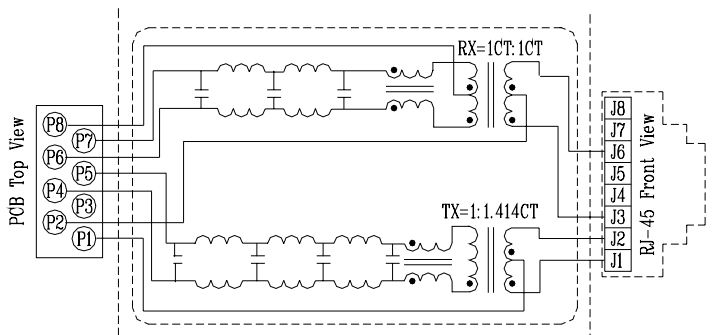
**LF1S022A**



**LF1S023B**



**LF1S026B**



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