

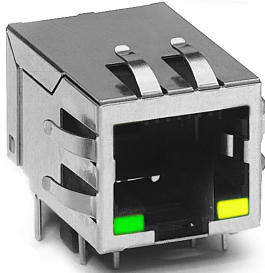


**THE DATASHEET OF  
J00-0045NL**







**Description:**

10/100 Base-TX RJ45 1x1 Tab-DOWN 8-pin Integrated Magnetics Connector, designed to support high volume cost-conscious consumer applications such as: ADSL modems, Cable modems, STB and Video on Demand.



**Features and Benefits:**

- 
RoHS peak wave solder temperature rating 260°C Suitable for CAT 5 & 6 Fast Ethernet Cable or better UTP
- 
Meets IEEE 802.3 specification
- 
350µH minimum OCL with 8mA bias current
- 
High performance for MAX EMI suppression for cost-conscious applications

10 Base-T Electrical Specifications @ 25°C - Operating Temperature 0°C to +70°C

RoHS Compliant Part Number	Data Rate	Turns Ratios		EMI Fingers	LEDs (L/R)	BST	Insertion Loss (dB MAX)	Return Loss (dB MIN) 100Ω ± 15Ω	Crosstalk (dB MIN)	Common Mode Rejection (dB MIN)	Hipot (Vrms)
		TX	RX				1-10MHz	1-10MHz	1-10MHz	5MHz	@60Hz 1 MIN
J00-0051NL	10BT	1CT:2.5	1CT:1	Yes	G/Y	No	-1	-15	-30	-25	1500
J00-0062NL	10BT	1CT:2.5	1CT:1	No	None	No	-1	-15	-30	-25	1500
J00-0063NL	10BT	1CT:2.5	1CT:1	No	G/Y	No	-1	-15	-30	-25	1500

10/100 Base-T Electrical Specifications @ 25°C - Operating Temperature 0°C to +70°C

RoHS Compliant Part Number	Data Rate	Turns Ratios		EMI Fingers	LEDs (L/R)	BST	Insertion Loss (dB MAX)		Return Loss (dB MIN) 100Ω ± 15Ω					Crosstalk (dB MIN)			Common Mode Rejection (dB MIN)		Hipot (Vrms)
		TX	RX				1-65MHz	1-10MHz	10-30MHz	30-60MHz	60-80MHz	1-30MHz	30-60MHz	60-100MHz	1-50MHz	50-150MHz	@60Hz 1 MIN		
J00-0014NL	100BT	1CT:1	1CT:1	No	None	Yes	-1	-18	-14	-12	-10	-35	-35	-30	-20	-15	1500		
J00-0042NL	100BT	1CT:1	1CT:1	No	None	No	-1	-18	-14	-12	-10	-35	-35	-30	-20	-15	1500		
J00-0045NL	100BT	1CT:1	1CT:1	No	G/Y	Yes	-1	-18	-14	-12	-10	-35	-35	-30	-20	-15	1500		
J00-0061NL	100BT	1CT:1	1CT:1	Yes	None	Yes	-1	-18	-14	-12	-10	-35	-35	-30	-20	-15	1500		
J00-0065NL	100BT	1CT:1	1CT:1	Yes	G/Y	Yes	-1	-18	-14	-12	-10	-35	-35	-30	-20	-15	1500		
J00-0066NL	100BT	1CT:1	1CT:1	Yes	G/Y	No	-1	-18	-14	-12	-10	-35	-35	-30	-20	-15	1500		

**Notes:**

1. For an explanation of EMI fingers, refer to the mechanical drawing page
2. LEDs Left/Right: **G**=green, **Y**=yellow
3. IEEE802.3i (10Base-T) standard does not require these parts to achieve 350µH minimum OCL with 8mA bias current for 10Base-T parts.



## LED Configuration

### Green / Yellow LED Specification - (LEDs without internal resistors)

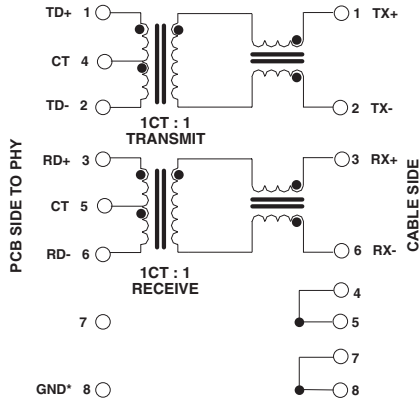


Standard LED	Wavelength	Forward* V(MAX)	(TYP)
Yellow	585 nm	2.5 V	2.1 V
Green	565 nm	2.5 V	2.2 V

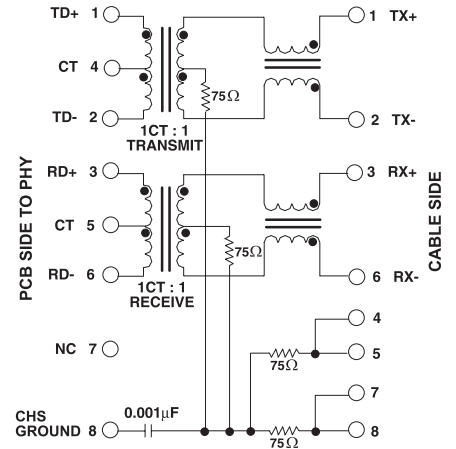
\* Assumes bias current = 20mA

## J00-00XX Series Electrical Schematics

### J00-0042NL/66NL



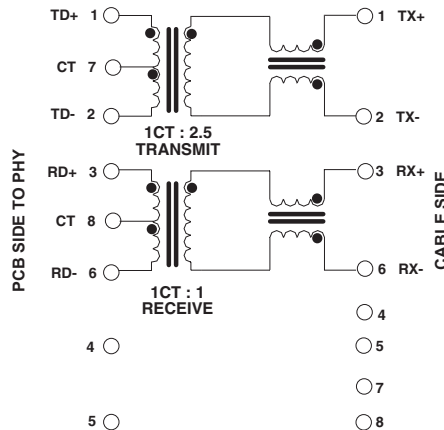
### J00-0014NL/45NL/61NL/65NL



NOTE: Connect CHS GND to PCB ground.

## J00-00XX Series Electrical Schematics

### J00-0051NL/62NL/63NL



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