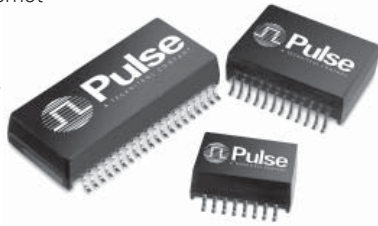





# Star Magnetics™ 10/100BASE-T Transformer Modules with PoE\* Option and 1:1 Turns Ratios

\*Power over Ethernet



-  RoHS peak reflow temperature rating 245°C
-  Meets IEEE 802.3 specification
-  Compact footprint

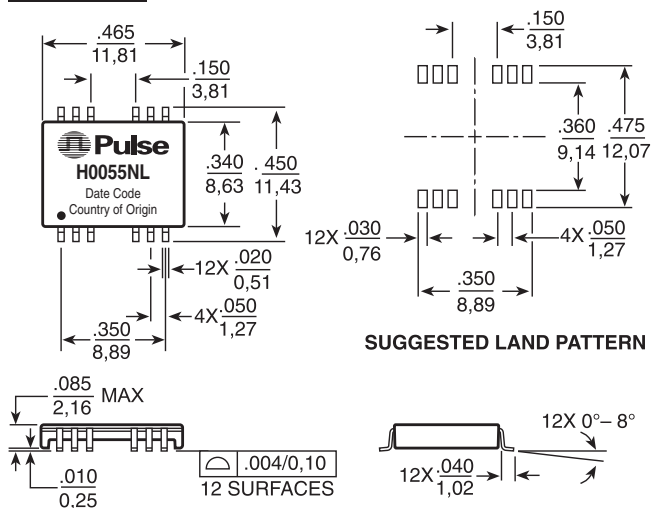
## Electrical Specifications @ 25°C — Operating Temperature 0°C to 70°C

RoHS Compliant Part Number	PoE	Number of Ports	Insertion Loss (dB MAX)			Return Loss (Z out = 100 Ω ±15%)			Crosstalk (adjacent channels dB MIN)			Hipot (Vrms MIN)
			0.1 MHz	1 MHz	100 MHz	30 MHz	60 MHz	80 MHz	30 MHz	60 MHz	100 MHz	
H0055NL <sup>1, 6a</sup>	No	1	-2.5	—	-1.0	-16	-10	-10	-45	-40	-33	1500
H0056NL <sup>2, 6a</sup>	No	1	—	-0.8	-0.9	-16	-10	-10	-45	-40	-33	1500
H1259NL <sup>6a</sup>	No	4	-1.2	—	-1.4	-16	-10	-10	-45	-40	-33	1500
HX1259NL <sup>3, 6a</sup>	No	4	-1.2	—	-1.4	-16	-10	-10	-45	-40	-33	1500
H1260NL <sup>6a</sup>	No	1	-1.1	—	-1.1	-16	-10	-10	-35	-30	-30	1500
HX1260NL <sup>3, 6a</sup>	No	1	-1.1	—	-1.1	-16	-10	-10	-35	-30	-30	1500
H1265NL <sup>6a</sup>	No	1	-1.3	—	-1.0	-16	-10	-10	-40	-38	-33	1500
H1266NL <sup>6a</sup>	No	4	-1.2	—	-1.0	-16	-10	-10	-45	-40	-30	1500
H1278NL <sup>6a</sup>	No	1	-1.1	—	-1.0	-16	-10	-10	-45	-40	-33	1500
H1305NL <sup>6a</sup>	No	2	-1.2	—	-1.4	-16	-10	-10	-45	-40	-33	1500
HX1305NL <sup>3, 6a</sup>	No	2	-1.2	—	-1.4	-16	-10	-10	-45	-40	-33	1500
H2260NL <sup>6a</sup>	Yes <sup>4</sup>	1	-1.1	—	-1.1	-16	-10	-10	-35	-30	-30	1500
HX2260NL <sup>3, 6a</sup>	Yes <sup>4</sup>	1	-1.1	—	-1.1	-16	-10	-10	-35	-30	-30	1500
H2305NL <sup>6a</sup>	Yes <sup>4</sup>	2	-1.2	—	-1.4	-16	-10	-10	-45	-40	-33	1500
HX2305NL <sup>3, 6a</sup>	Yes <sup>4</sup>	2	-1.2	—	-1.4	-16	-10	-10	-45	-40	-33	1500

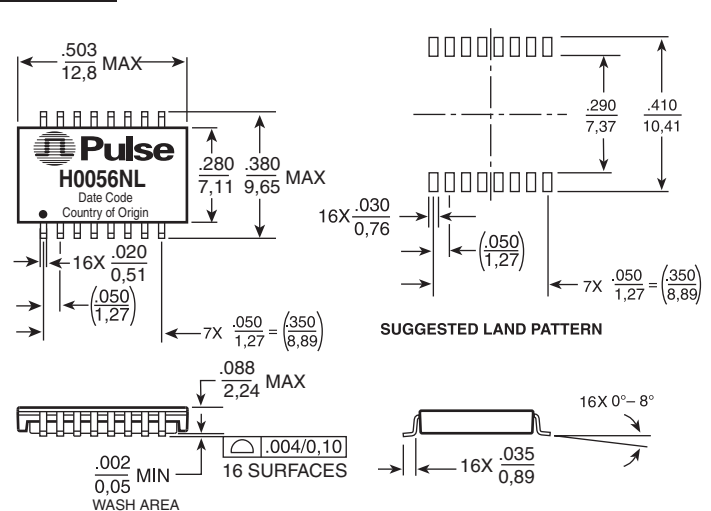
- H0055NL is designed to meet 200 μH nom.
- H0056NL is designed to meet 300 μH nom.
- Parts offer extended operating temperature of -40 to +85°C
- These parts are compliant to IEEE802.3af, Power over Ethernet (PoE) standard.
- When ordering Tape & Reel packaging, add a "T" suffix to the end of the part number, e.g. H0056NLT
- MSL = Moisture Sensitivity Level: a=1, b=2, c=3, d=4, e=5

## Mechanicals

### H0055NL



### H0056NL



Weight . . . . .355 grams  
Tape & Reel . . . 1000/reel  
Tube . . . . . 40/tube

Dimensions:  $\frac{\text{Inches}}{\text{mm}}$  Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0,25}$

Weight . . . . .3 grams  
Tape & Reel . . . 2000/reel  
Tube . . . . . 40/tube

USA 858 674 8100 • Germany 49 7032 7806 0 • Singapore 65 6287 8998 • Shanghai 86 21 32181071 • China 86 755 33966678 • Taiwan 886 3 4643715

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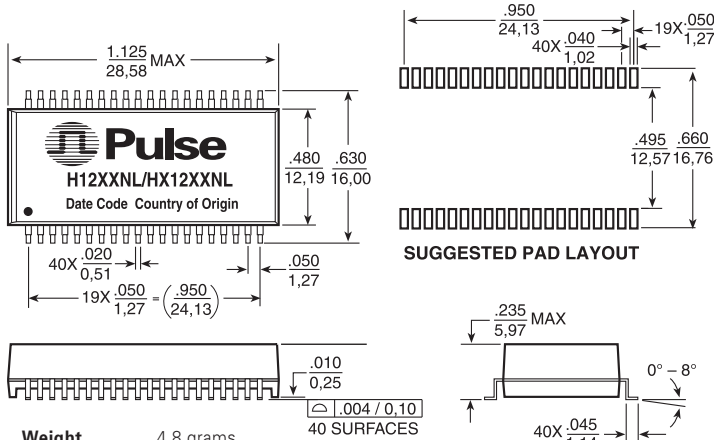
## 10/100BASE-T Transformer Modules

### with PoE\* Option and 1:1 Turns Ratios



### Mechanicals (continued)

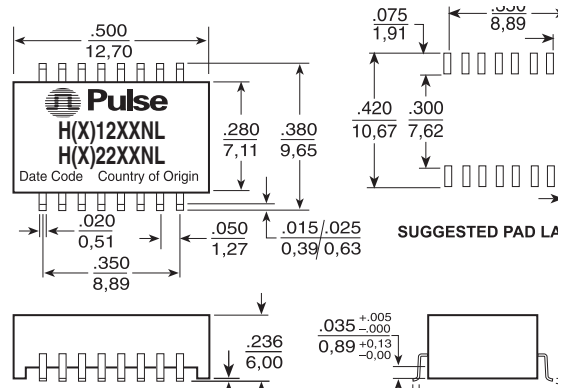
#### H1259NL, HX1259NL, H1266NL



Weight . . . . . 4.8 grams  
Tape & Reel . . . . . 250/reel  
Tube . . . . . 15/tube

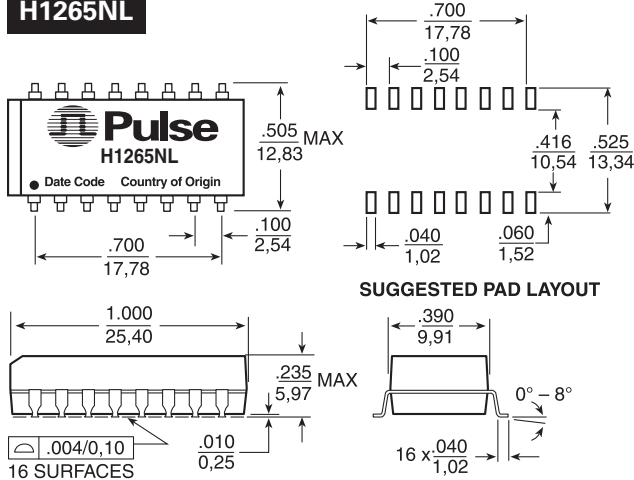
Dimensions:  $\frac{\text{Inches}}{\text{mm}}$  Unless otherwise specified, all tolerances are  $\pm \frac{.010}{.25}$

#### H1260NL, HX1260NL, H2260NL, HX2260NL



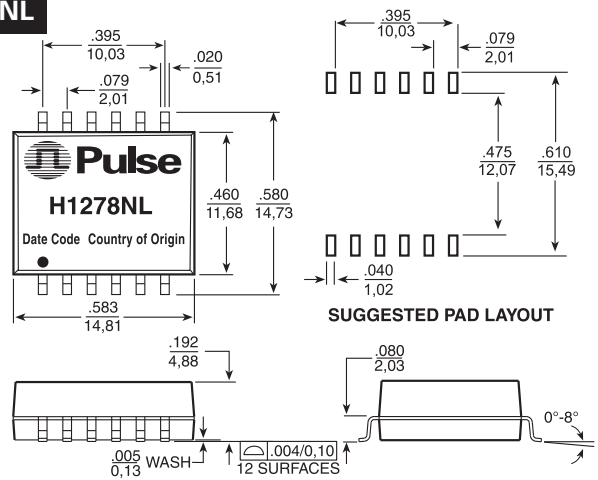
Weight . . . . . 2.8 grams  
Tube . . . . . 45/tube  
Tape & Reel . . . . . 600/reel

#### H1265NL



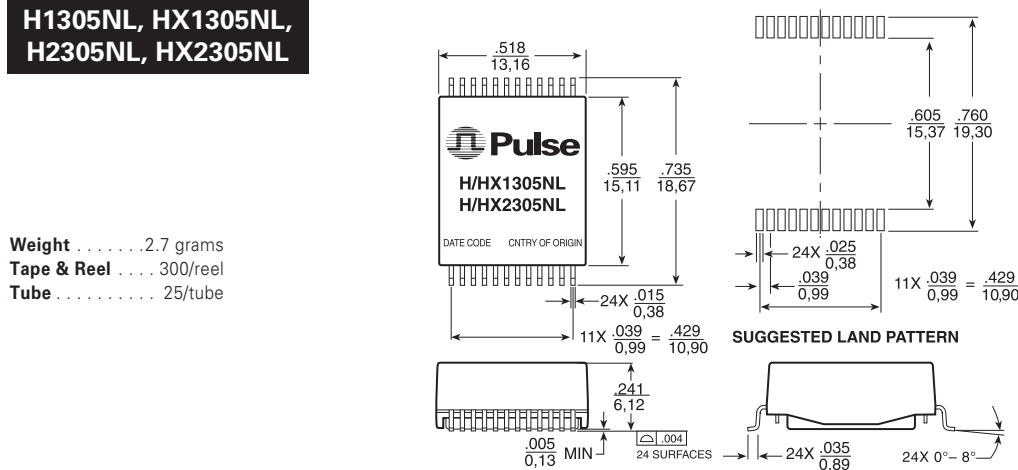
Weight . . . . . 3.0 grams  
Tube . . . . . 20/tube  
Tape & Reel . . . . . 300/reel

#### H1278NL



Weight . . . . . 1.7 grams  
Tape & Reel . . . . . 350/reel  
Tube . . . . . 30/tube

#### H1305NL, HX1305NL, H2305NL, HX2305NL



Weight . . . . . 2.7 grams  
Tape & Reel . . . . . 300/reel  
Tube . . . . . 25/tube

Dimensions:  $\frac{\text{Inches}}{\text{mm}}$  Unless otherwise specified, all tolerances are  $\pm \frac{.010}{.25}$

# Star Magnetics™

## 10/100BASE-T Transformer Modules

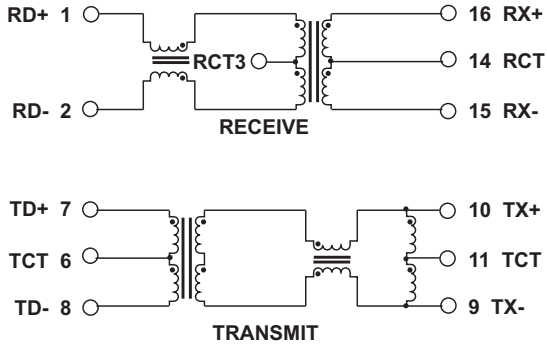
### with PoE\* Option and 1:1 Turns Ratios

\*Power over Ethernet

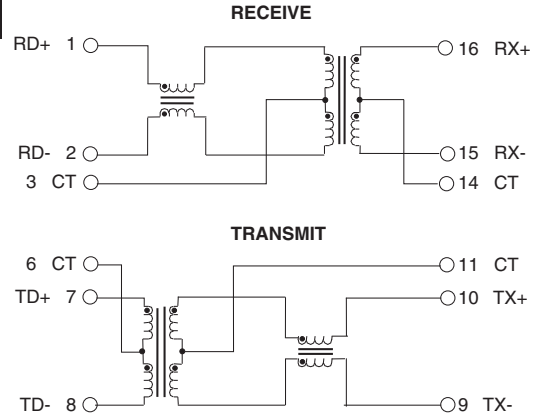


### Schematics

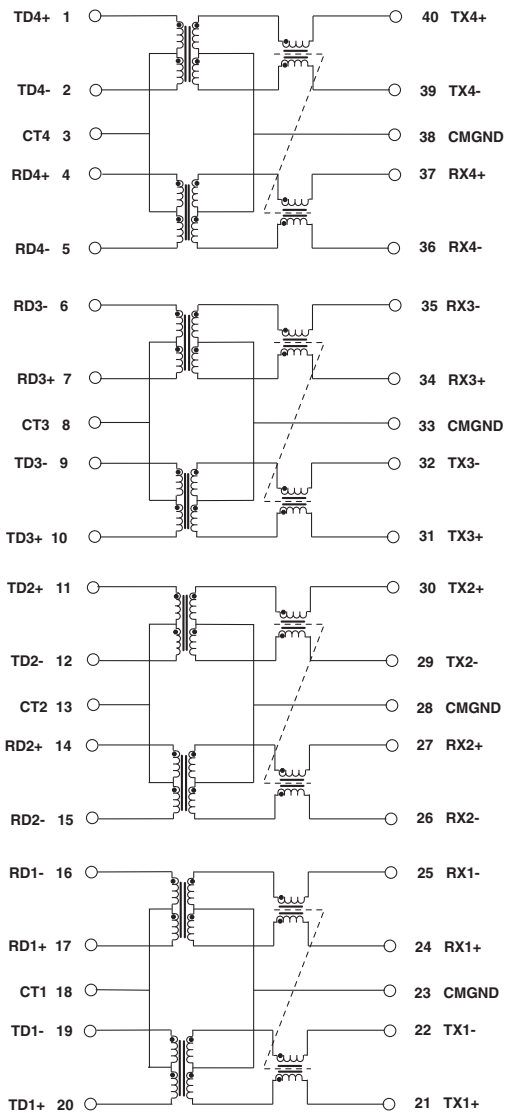
#### H0055NL



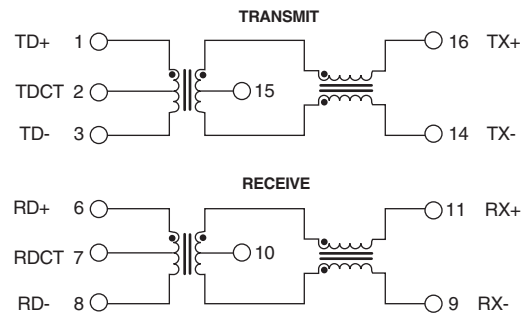
#### H0056NL



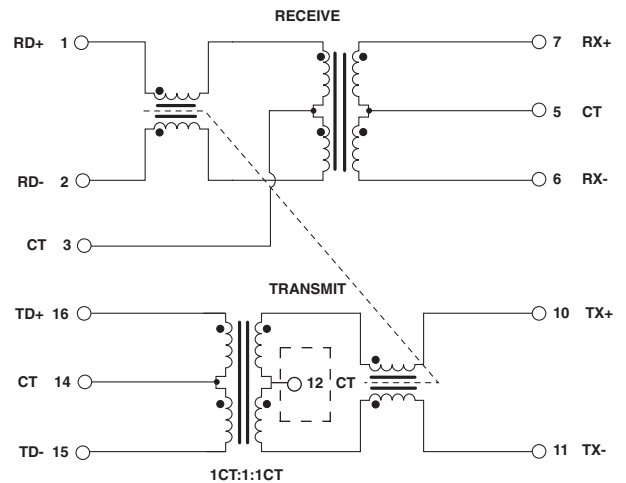
#### H1259NL, HX1259NL



#### H1260NL, HX1260NL



#### H1265NL



H1265: 3-core design (T3 same toroid core)

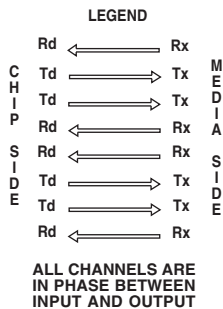
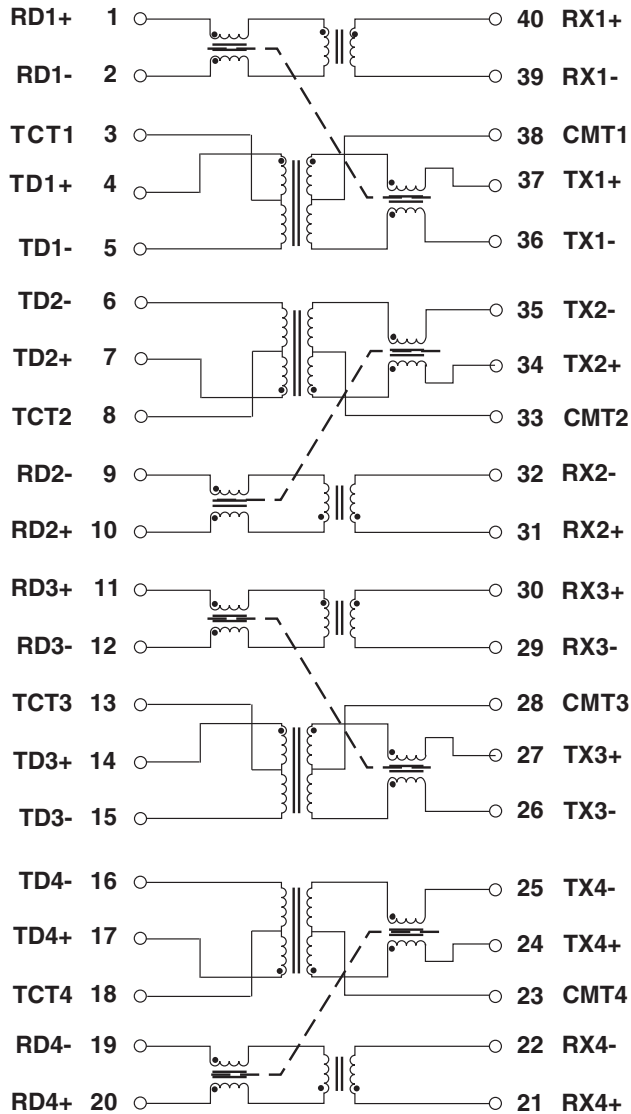
# Star Magnetics™ 10/100BASE-T Transformer Modules with PoE\* Option and 1:1 Turns Ratios



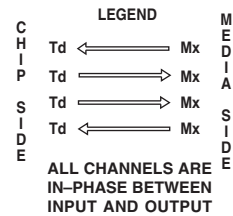
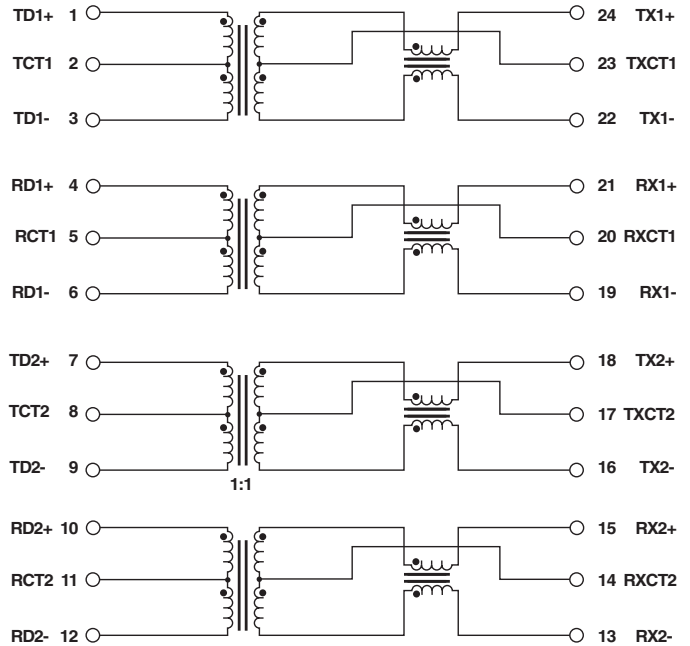
\*Power over Ethernet

## Schematics (continued)

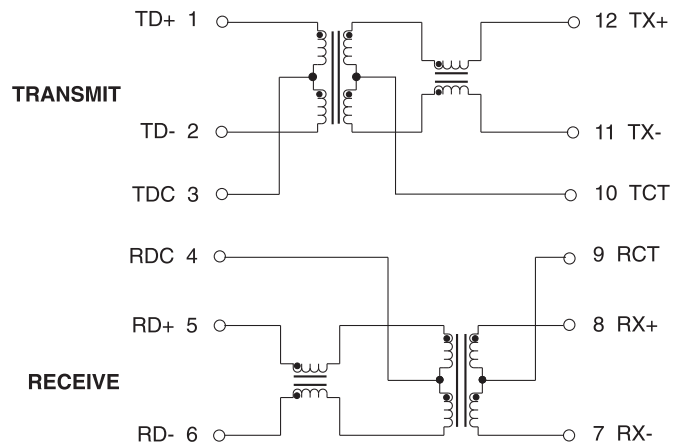
### H1266NL



### H1305NL, HX1305NL



### H1278NL



# Star Magnetics™

## 10/100BASE-T Transformer Modules

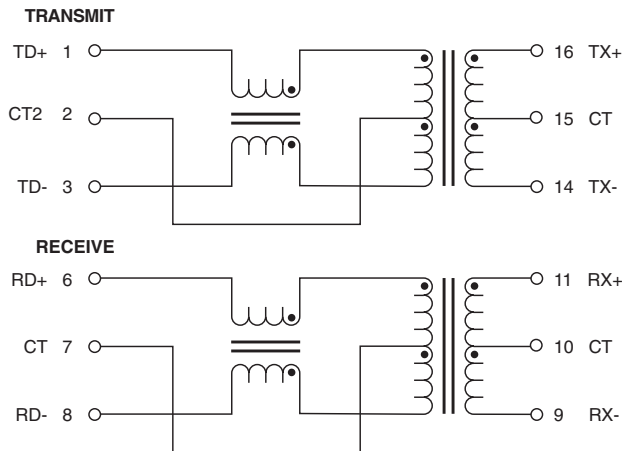
### with PoE\* Option and 1:1 Turns Ratios

\*Power over Ethernet

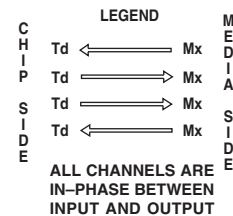
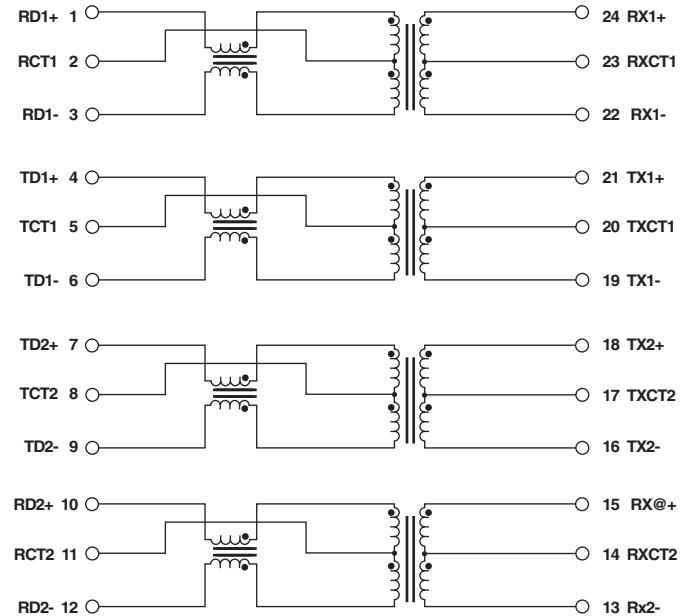


### Schematics (continued)

#### H2260NL, HX2260NL



#### H2305NL, HX2305NL



### For More Information:

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