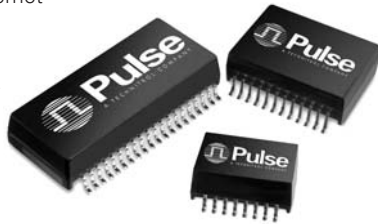


# Star Magnetics™ 10/100BASE-T Transformer Modules with PoE\* Option and 1:1 Turns Ratios

\*Power over Ethernet



- ⊕ RoHS-5 peak reflow temperature rating 235°C
- ⊕ RoHS-6 peak reflow temperature rating 245°C
- ⊕ Meets IEEE 802.3 specification
- ⊕ Compact footprint

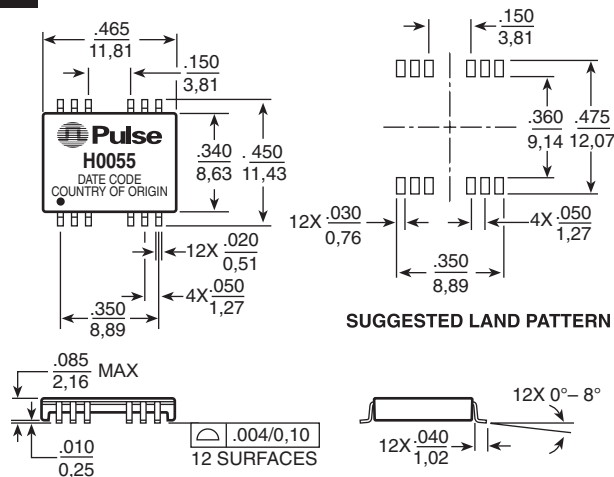
## Electrical Specifications @ 25°C — Operating Temperature 0°C to 70°C

RoHS-6 <sup>7</sup> Compliant Part Number	RoHS-5 <sup>6</sup> Compliant Part Number	PoE	Number of Ports	Insertion Loss (dB MAX)			Return Loss (Z out = 100 Ω ±15%)			Crosstalk (adjacent channels, dB MIN)			Hipot (VRMSMIN)
				0.1 MHz	1 MHz	100 MHz	30 MHz	60 MHz	80 MHz	30 MHz	60 MHz	100 MHz	
H0055NL <sup>1, 8a</sup>	H0055 <sup>1</sup>	No	1	-2.5	—	-1.0	-16	-10	-10	-45	-40	-33	1500
H0056NL <sup>2, 8a</sup>	—	No	1	—	-0.8	-0.9	-16	-10	-10	-45	-40	-33	1500
H1259NL <sup>8a</sup>	—	No	4	-1.2	—	-1.4	-16	-10	-10	-45	-40	-33	1500
HX1259NL <sup>3, 8a</sup>	HX1259 <sup>3</sup>	No	4	-1.2	—	-1.4	-16	-10	-10	-45	-40	-33	1500
H1260NL <sup>8a</sup>	H1260	No	1	-1.1	—	-1.1	-16	-10	-10	-35	-30	-30	1500
HX1260NL <sup>3, 8a</sup>	—	No	1	-1.1	—	-1.1	-16	-10	-10	-35	-30	-30	1500
H1265NL <sup>7, 8a</sup>	—	No	1	-1.3	—	-1.0	-16	-10	-10	-40	-38	-33	1500
H1266NL <sup>7, 8a</sup>	H1266	No	4	-1.2	—	-1.0	-16	-10	-10	-45	-40	-30	1500
H1278NL <sup>7, 8a</sup>	H1278	No	1	-1.1	—	-1.0	-16	-10	-10	-45	-40	-33	1500
H1305NL <sup>8a</sup>	—	No	2	-1.2	—	-1.4	-16	-10	-10	-45	-40	-33	1500
HX1305NL <sup>3, 8a</sup>	—	No	2	-1.2	—	-1.4	-16	-10	-10	-45	-40	-33	1500
H2260NL <sup>8a</sup>	H2260	Yes <sup>4</sup>	1	-1.1	—	-1.1	-16	-10	-10	-35	-30	-30	1500
HX2260NL <sup>3, 7, 8a</sup>	—	Yes <sup>4</sup>	1	-1.1	—	-1.1	-16	-10	-10	-35	-30	-30	1500
H2305NL <sup>8a</sup>	—	Yes <sup>4</sup>	2	-1.2	—	-1.4	-16	-10	-10	-45	-40	-33	1500
HX2305NL <sup>3, 8a</sup>	HX2305 <sup>3</sup>	Yes <sup>4</sup>	2	-1.2	—	-1.4	-16	-10	-10	-45	-40	-33	1500

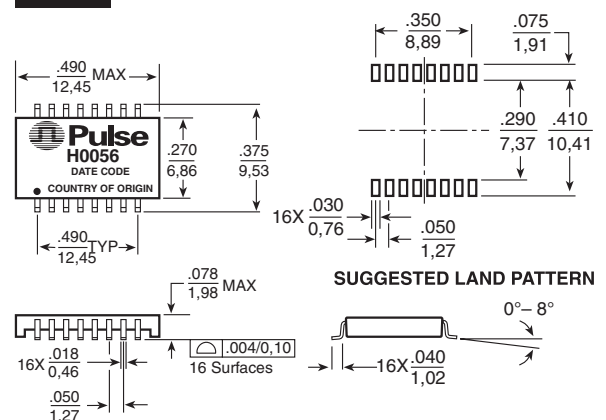
- H0055 is designed to meet 200 μH nom.
- H0056NL is designed to meet 300 μH nom.
- Parts offer extended operating temperature of -40 to +85°C
- These parts are compliant to IEEE802.3af Power over Ethernet (PoE) standard.
- For Tape & Reel packaging, add a "T" suffix to the end of the part number when ordering, e.g. H0056NLT
- RoHS-5: Product does not contain 5 out of the 6 banned substances specified in the RoHS directive (product contains lead in applications considered solder).
- RoHS-6: Product does not contain 5 out of the 6 banned substances specified in the RoHS directive. Some internal connections may contain lead in high-temperature solder (solder alloys containing more than 85% lead).
- MSL = Moisture Sensitivity Level: a=1, b=2, c=3, d=4, e=5

## Mechanicals

### H0055



### H0056



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

# Star Magnetics™

## 10/100BASE-T Transformer Modules

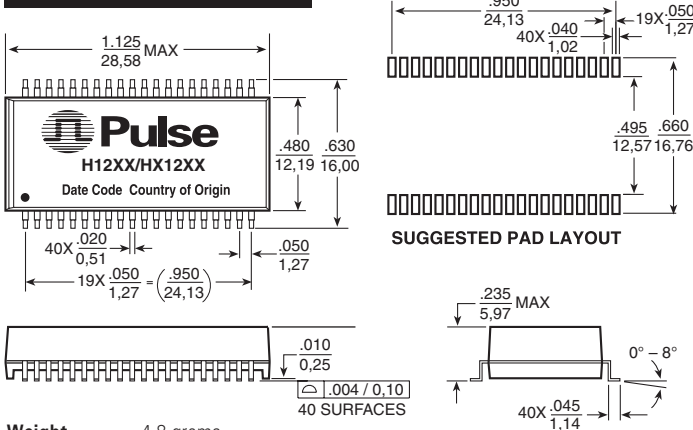
### with PoE\* Option and 1:1 Turns Ratios



\*Power over Ethernet

### Mechanicals (continued)

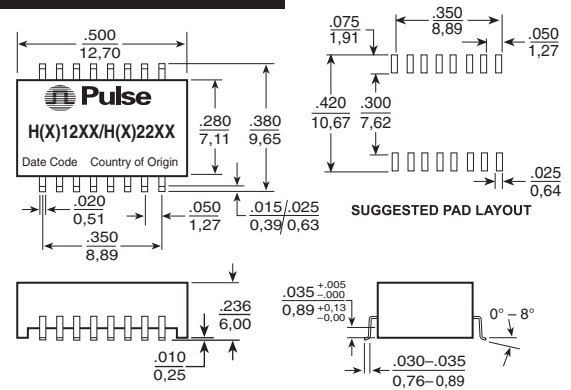
#### H1259, HX1259, H1266



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

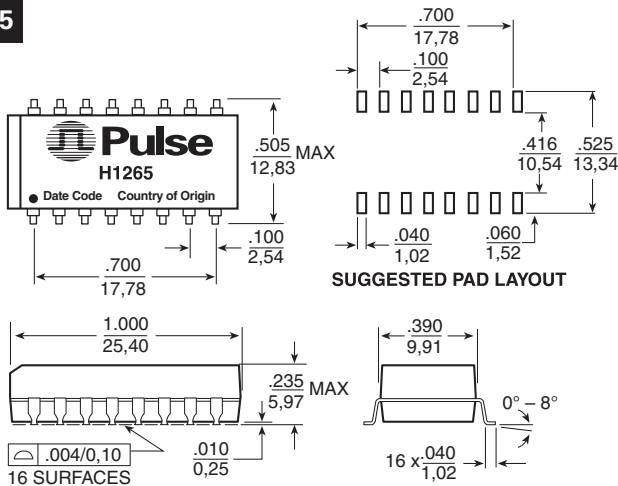
Dimensions:  $\frac{\text{Inches}}{\text{mm}}$  Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0,25}$

#### H1260, HX1260, H2260, HX2260



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

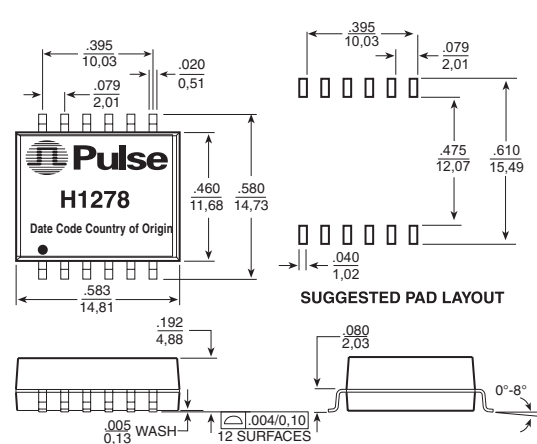
#### H1265



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

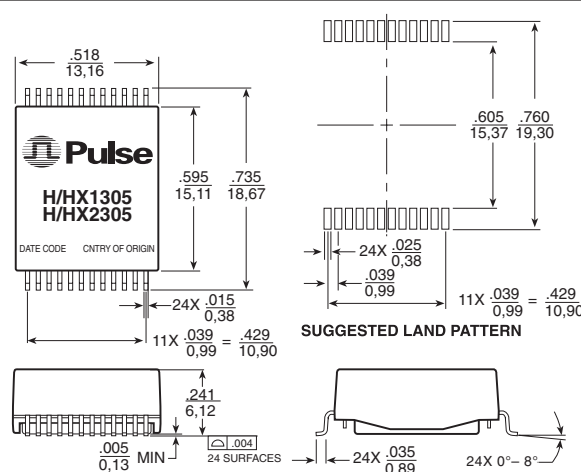
Dimensions:  $\frac{\text{Inches}}{\text{mm}}$  Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0,25}$

#### H1278



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

#### H1305, HX1305, H2305, HX2305



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

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

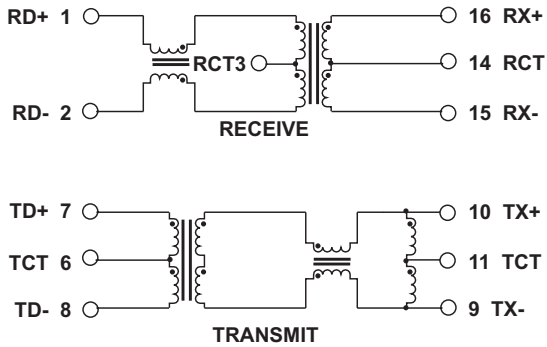
# Star Magnetics™ 10/100BASE-T Transformer Modules with PoE\* Option and 1:1 Turns Ratios

\*Power over Ethernet

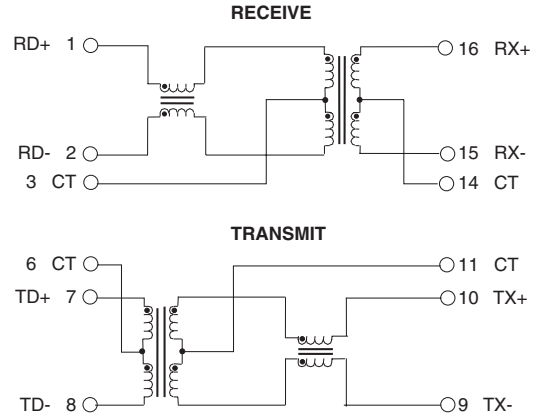


## Schematics

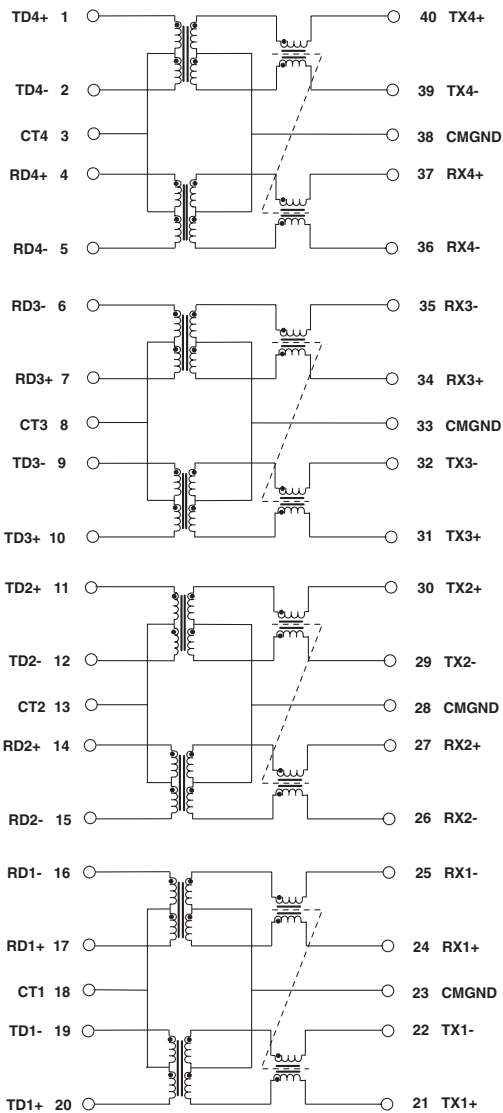
**H0055**



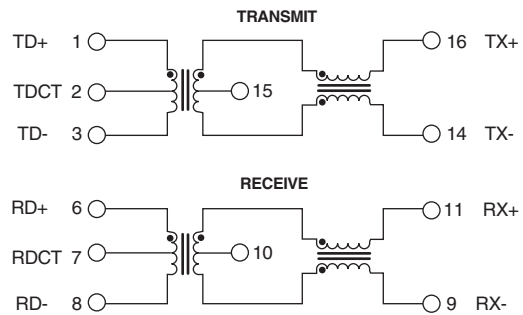
**H0056**



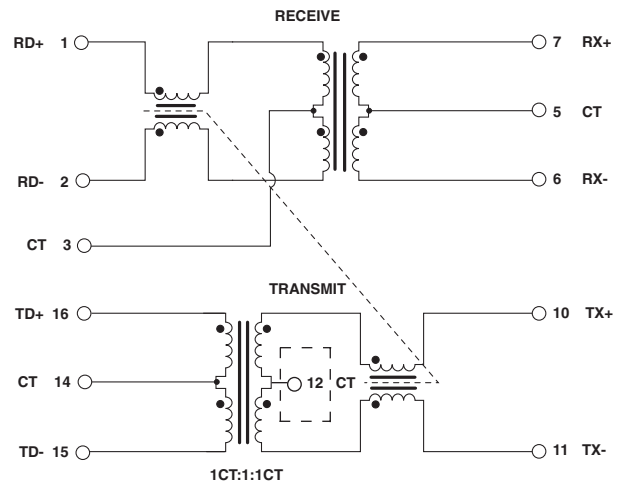
**H1259, HX1259**



**H1260, HX1260**



**H1265**



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

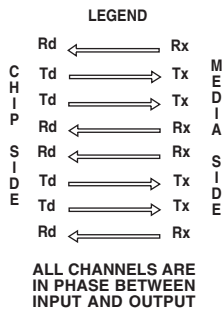
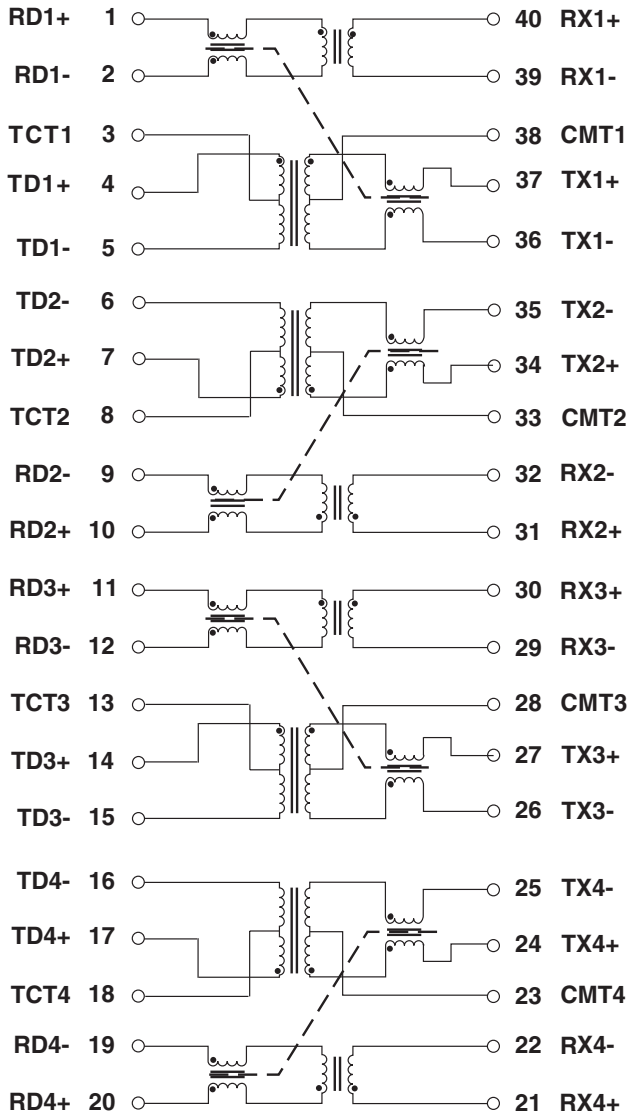
# Star Magnetics™ 10/100BASE-T Transformer Modules with PoE\* Option and 1:1 Turns Ratios



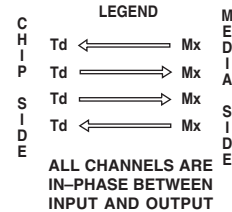
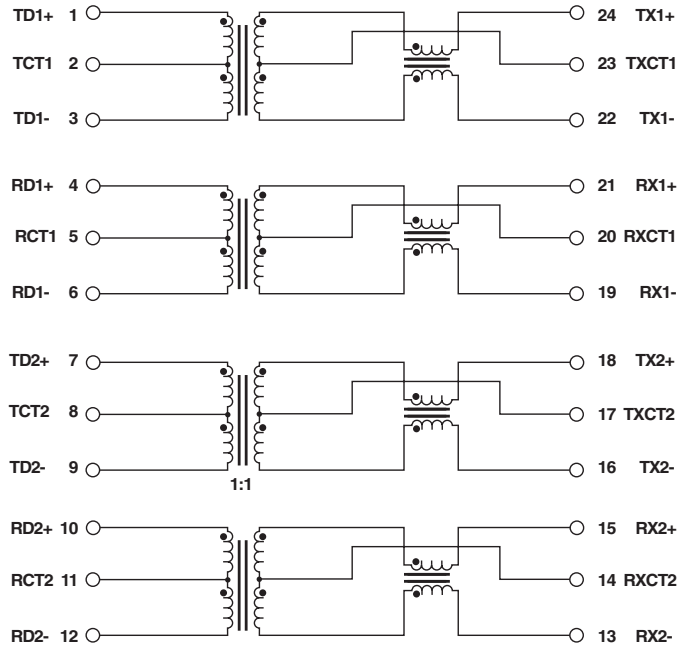
\*Power over Ethernet

## Schematics (continued)

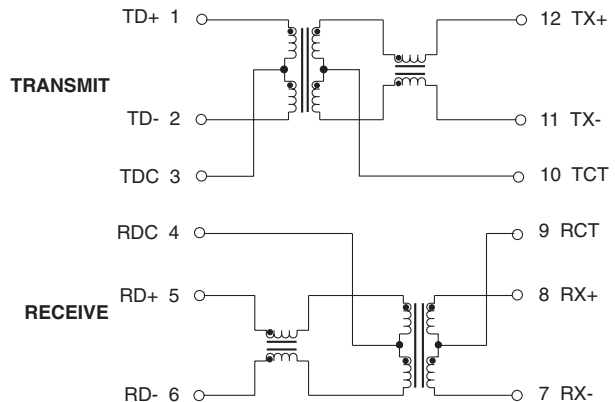
### H1266



### H1305, HX1305



### H1278



# Star Magnetics™

## 10/100BASE-T Transformer Modules

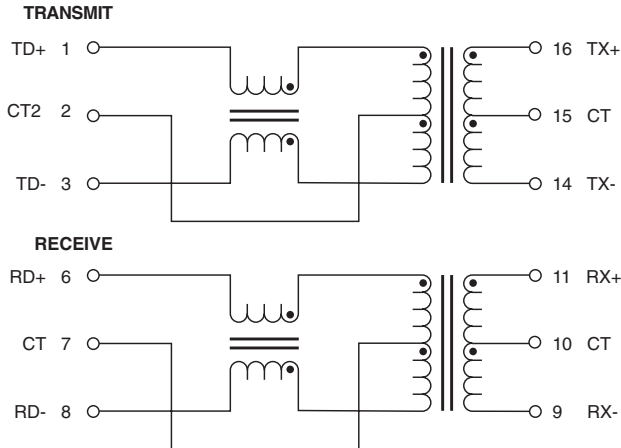
### with PoE\* Option and 1:1 Turns Ratios

\*Power over Ethernet

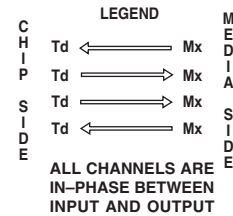
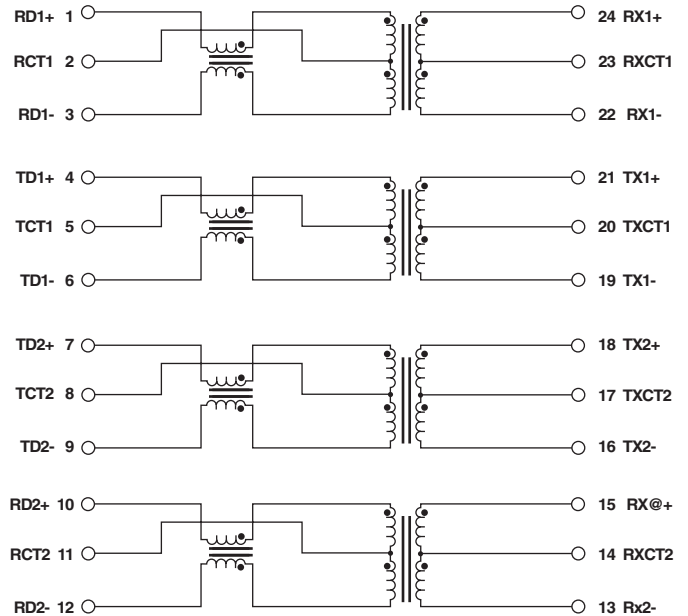


### Schematics (continued)

#### H2260, HX2260



#### H2305, HX2305



### For More Information:

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