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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

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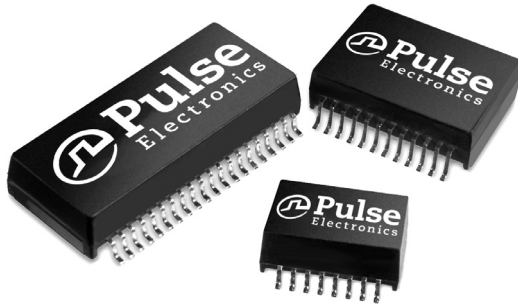
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# Star Magnetics™ 10/100BASE-T Transformer Modules with PoE\* Option and 1:1 Turns Ratios

\*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

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, 7</sup>	No	1	-2.5	—	-1.0	-16	-10	-10	-45	-40	-33	1500
H0056NL <sup>2, 6a, 7</sup>	No	1	—	-0.8	-0.9	-16	-10	-10	-45	-40	-33	1500
H1259NL <sup>6a, 7</sup>	No	4	-1.2	—	-1.4	-16	-10	-10	-45	-40	-33	1500
HX1259NL <sup>3, 6a, 7</sup>	No	4	-1.2	—	-1.4	-16	-10	-10	-45	-40	-33	1500
H1260NL <sup>6a, 7</sup>	No	1	-1.1	—	-1.1	-16	-10	-10	-35	-30	-30	1500
HX1260NL <sup>3, 6a, 7</sup>	No	1	-1.1	—	-1.1	-16	-10	-10	-35	-30	-30	1500
H1278NL <sup>6a, 7</sup>	No	1	-1.1	—	-1.0	-16	-10	-10	-45	-40	-33	1500
H1305NL <sup>6a, 7</sup>	No	2	-1.2	—	-1.4	-16	-10	-10	-45	-40	-33	1500
HX1305NL <sup>3, 6a, 7</sup>	No	2	-1.2	—	-1.4	-16	-10	-10	-45	-40	-33	1500
H2260NL <sup>6a, 7</sup>	Yes <sup>d</sup>	1	-1.1	—	-1.1	-16	-10	-10	-35	-30	-30	1500
HX2260NL <sup>3, 6a, 7</sup>	Yes <sup>d</sup>	1	-1.1	—	-1.1	-16	-10	-10	-35	-30	-30	1500
H2305NL <sup>6a, 7</sup>	Yes <sup>d</sup>	2	-1.2	—	-1.4	-16	-10	-10	-45	-40	-33	1500
HX2305NL <sup>3, 6a, 7</sup>	Yes <sup>d</sup>	2	-1.2	—	-1.4	-16	-10	-10	-45	-40	-33	1500

**Notes:**

1. H0055NL is designed to meet 200 μH nom.
2. H0056NL is designed to meet 300 μH nom.
3. Parts offer extended operating temperature of -40 to +85°C
4. These parts are compliant to IEEE802.3af, Power over Ethernet (PoE) standard.
5. When ordering Tape & Reel packaging, add a "T" suffix to the end of the part number, e.g. H0056NLT
6. MSL = Moisture Sensivity Level: a=1, b=2, c=3, d=4, e=5
7. Not for sale in U.S.

USA 858 674 8100

Germany 49 7032 7806 0

Singapore 65 6287 8998

Shanghai 86 21 62787060

China 86 755 33966678

Taiwan 886 3 4356768

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

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## Mechanicals

### H0055NL

**SUGGESTED LAND PATTERN**

**Weight** .....0.35 grams  
**Tape & Reel** .....1000/reel  
**Tube** .....40/tube

### H0056NL

**SUGGESTED LAND PATTERN**

**Weight** .....0.30 grams  
**Tape & Reel** .....2000/reel  
**Tube** .....40/tube

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

### H1259NL, HX1259NL

**SUGGESTED PAD LAYOUT**

**Weight** .....3.4 grams  
**Tape & Reel** .....250/reel  
**Tube** .....15/tube

### H1260NL, HX1260NL, H2260NL, HX2260NL

**SUGGESTED PAD LAYOUT**

**Weight** .....0.9 grams  
**Tape & Reel** .....600/reel  
**Tube** .....40/tube

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

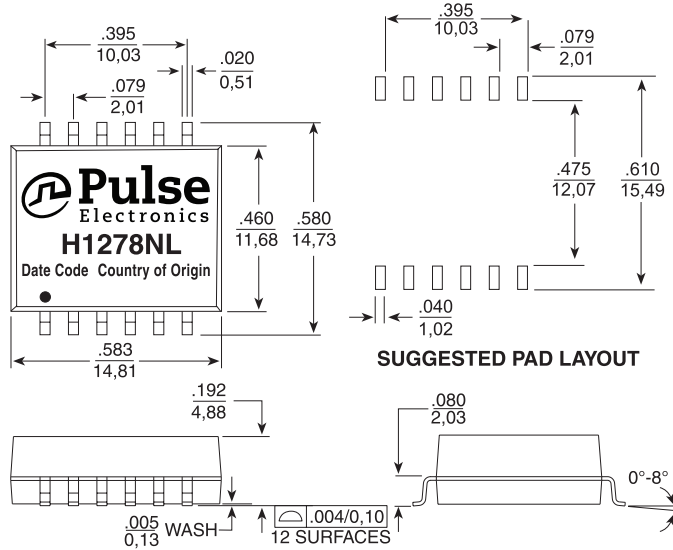
# Star Magnetics™ 10/100BASE-T Transformer Modules with PoE\* Option and 1:1 Turns Ratios

\*Power over Ethernet



## Mechanicals (continued)

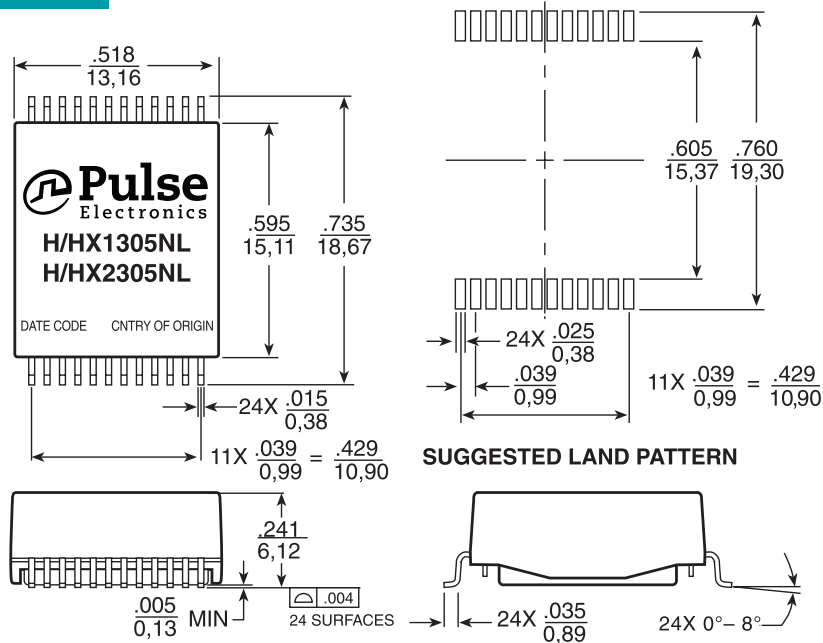
### H1278NL



Weight .....0.9 grams  
Tape & Reel .....350/reel  
Tube .....35/tube

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

### H1305NL, HX1305NL, H2305NL, HX2305NL



Weight .....2.7 grams  
Tape & Reel .....350/reel  
Tube .....35/tube

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

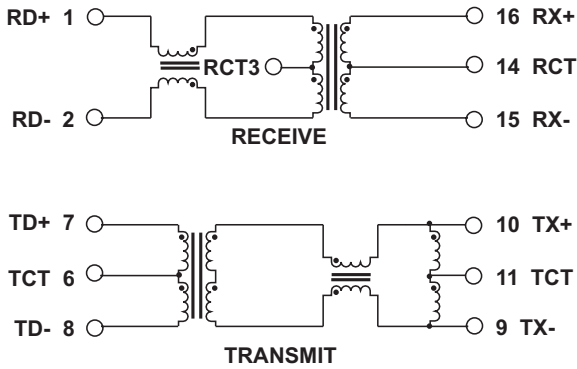
# Star Magnetics™ 10/100BASE-T Transformer Modules with PoE\* Option and 1:1 Turns Ratios

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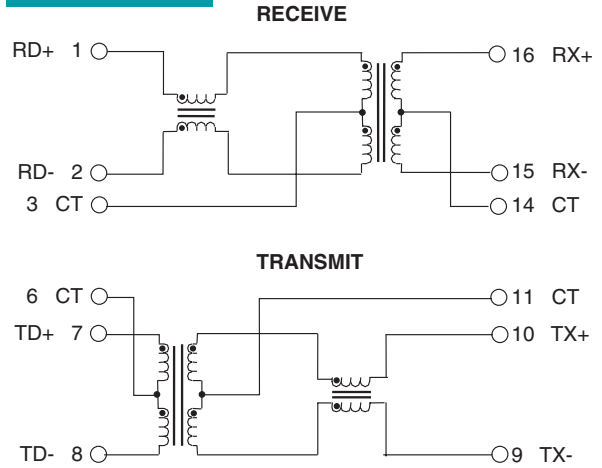


## Schematics

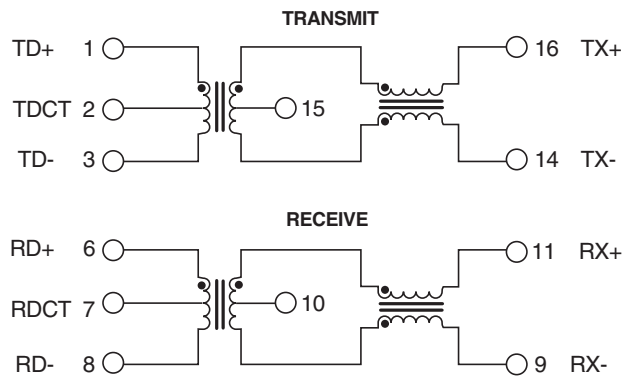
### H0055NL



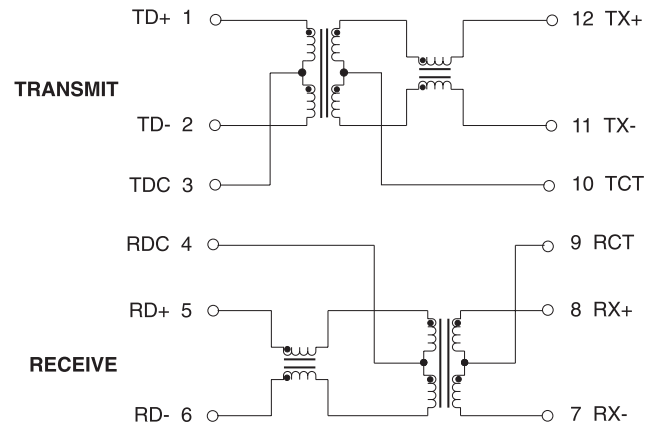
### H0056NL



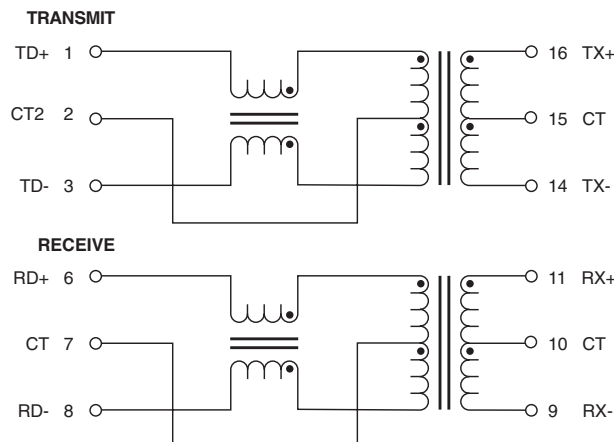
### H1260NL, HX1260NL



### H1278NL



### H2260NL, HX2260NL



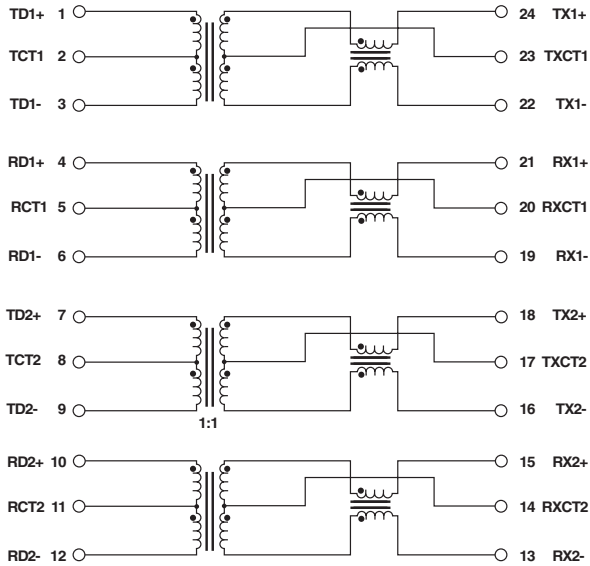
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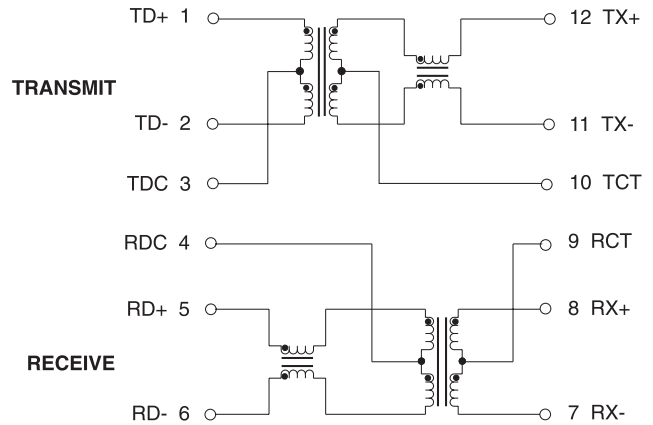


## Schematics (continued)

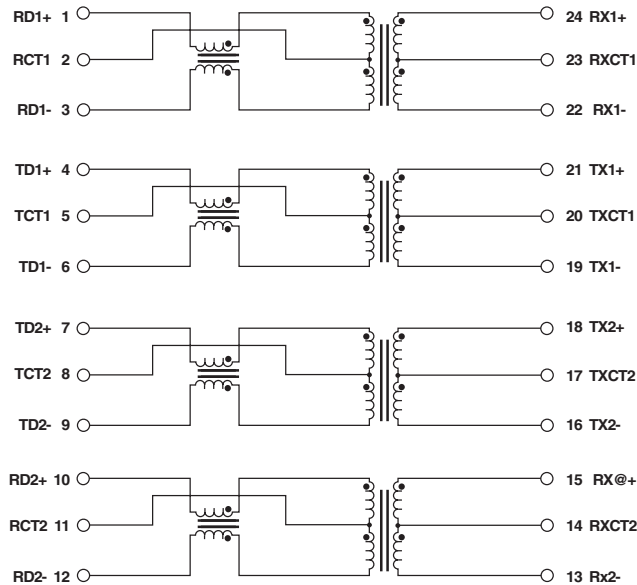
### H1305NL, HX1305NL



### H1278NL



### H2305NL, HX2305NL

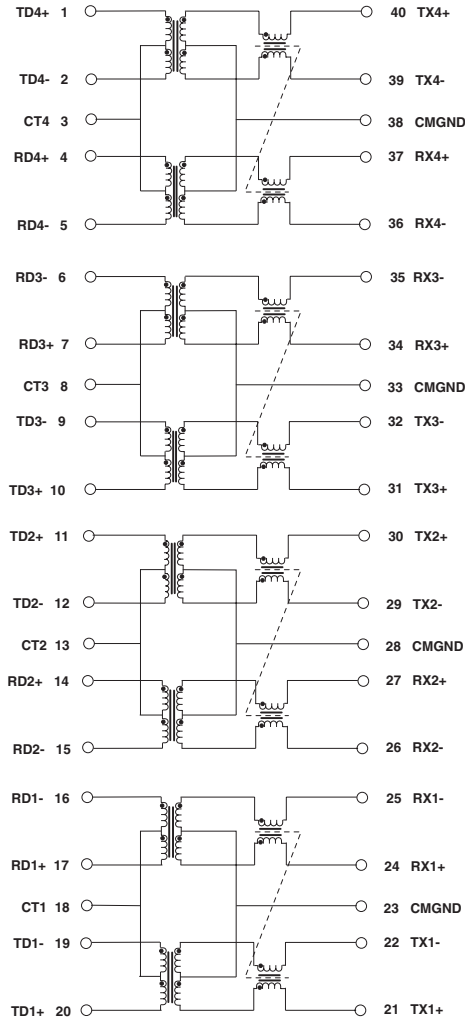


# Star Magnetics™ 10/100BASE-T Transformer Modules with PoE\* Option and 1:1 Turns Ratios

\*Power over Ethernet

## Schematics (continued)

H1259NL, HX1259NL



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