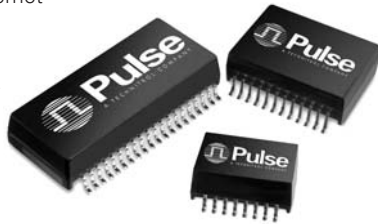






# Star Magnetics™ 10/100BASE-T Transformer Modules with PoE\* Option and 1:1 Turns Ratios

\*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

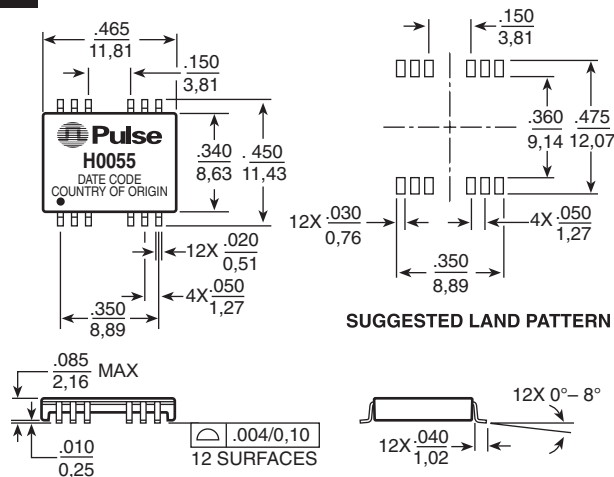
## Electrical Specifications @ 25°C — Operating Temperature 0°C to 70°C

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

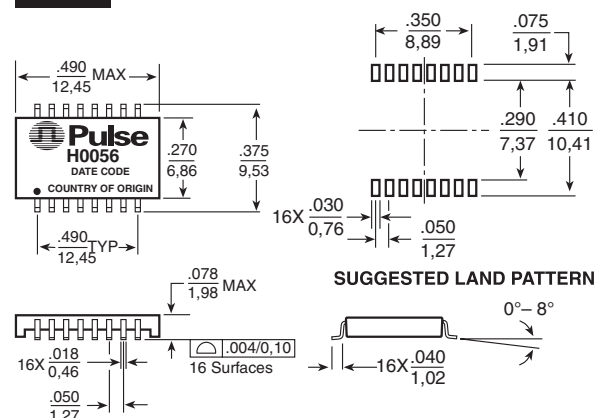
- H0055 is designed to meet 200 μH nom.
- H0056NL is designed to meet 300 μH nom.
- Parts offer extended operating temperature of -40 to +85°C
- These parts are compliant to IEEE802.3af Power over Ethernet (PoE) standard.
- For Tape & Reel packaging, add a "T" suffix to the end of the part number when 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

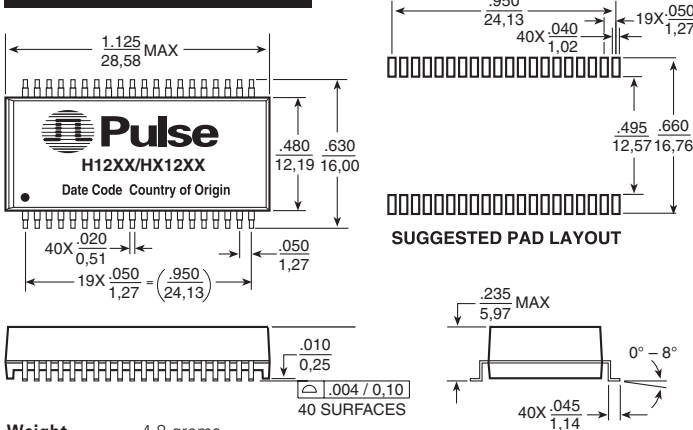
# Star Magnetics™ 10/100BASE-T Transformer Modules with PoE\* Option and 1:1 Turns Ratios



\*Power over Ethernet

## Mechanicals (continued)

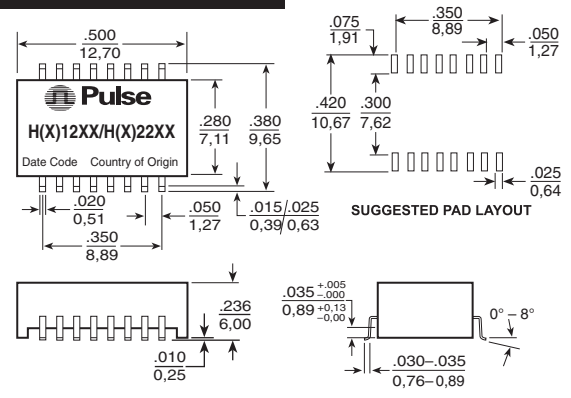
### H1259, HX1259, H1266



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

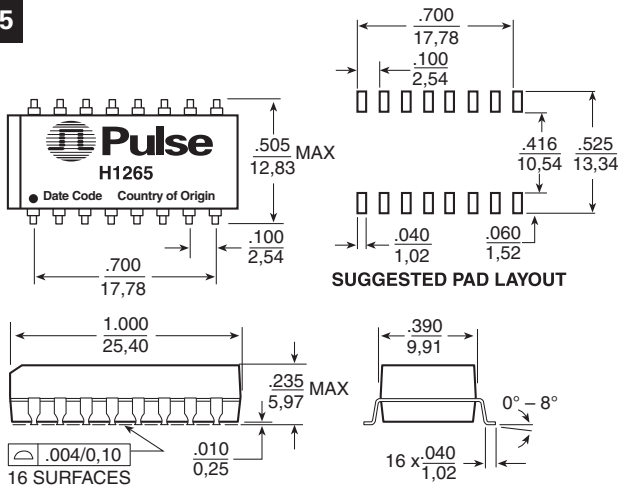
Dimensions:  $\frac{\text{Inches}}{\text{mm}}$  Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0,25}$

### H1260, HX1260, H2260, HX2260



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

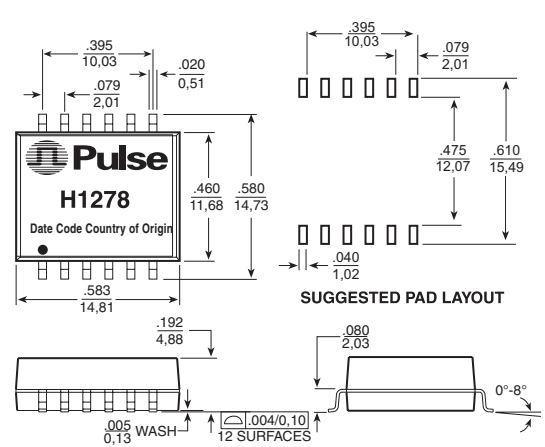
### H1265



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

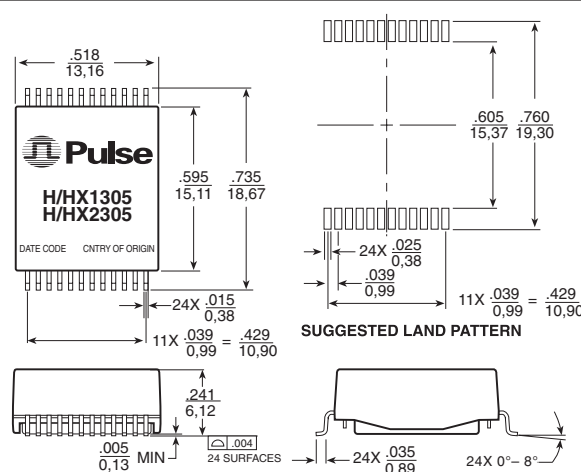
Dimensions:  $\frac{\text{Inches}}{\text{mm}}$  Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0,25}$

### 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  $\pm \frac{.010}{0,25}$

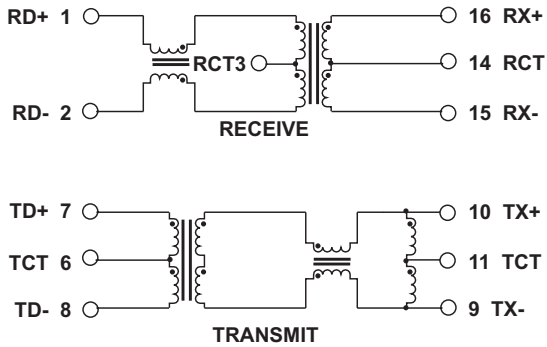
# Star Magnetics™ 10/100BASE-T Transformer Modules with PoE\* Option and 1:1 Turns Ratios

\*Power over Ethernet

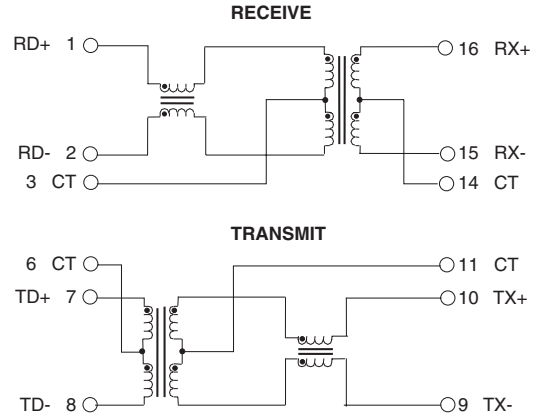


## Schematics

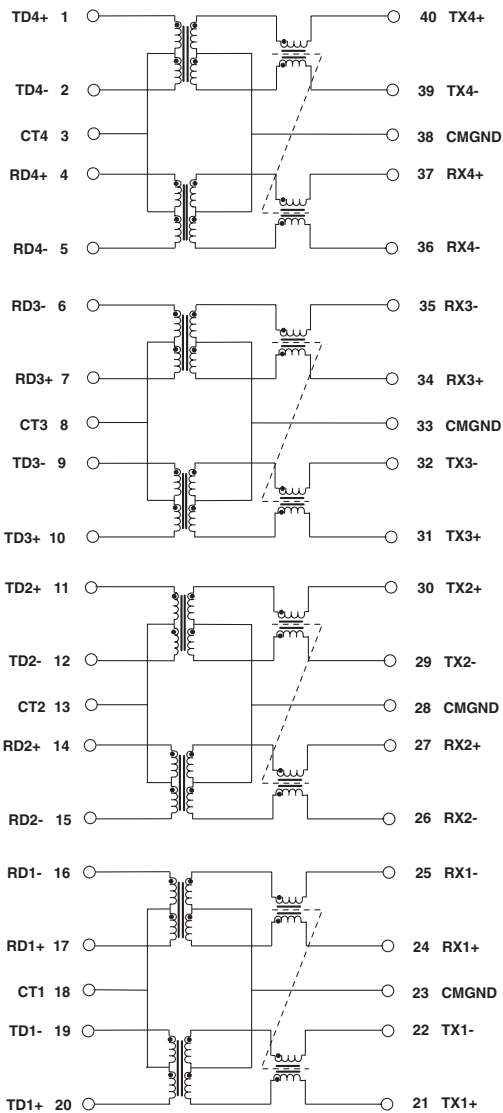
**H0055**



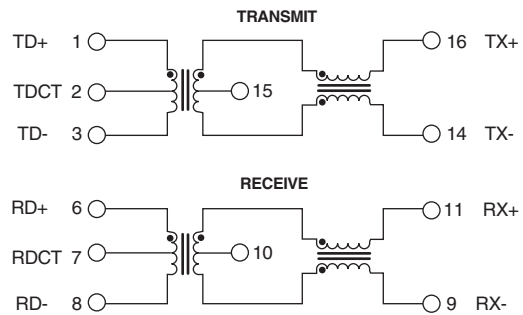
**H0056**



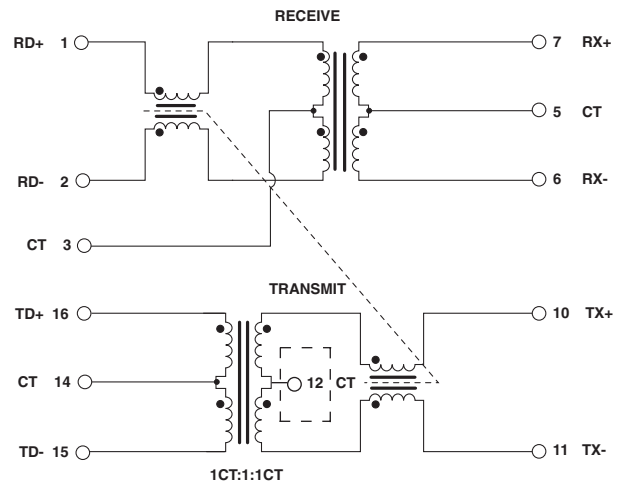
**H1259, HX1259**



**H1260, HX1260**



**H1265**



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

# Star Magnetics™

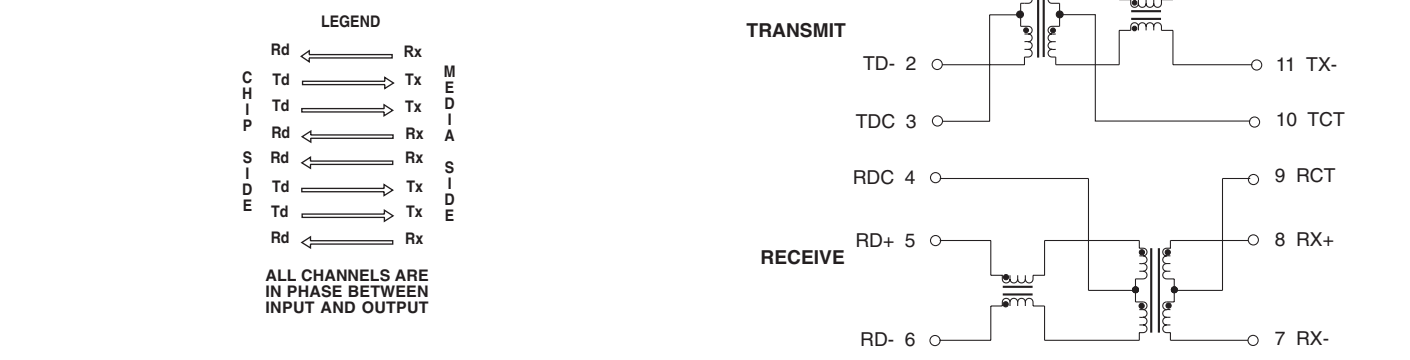
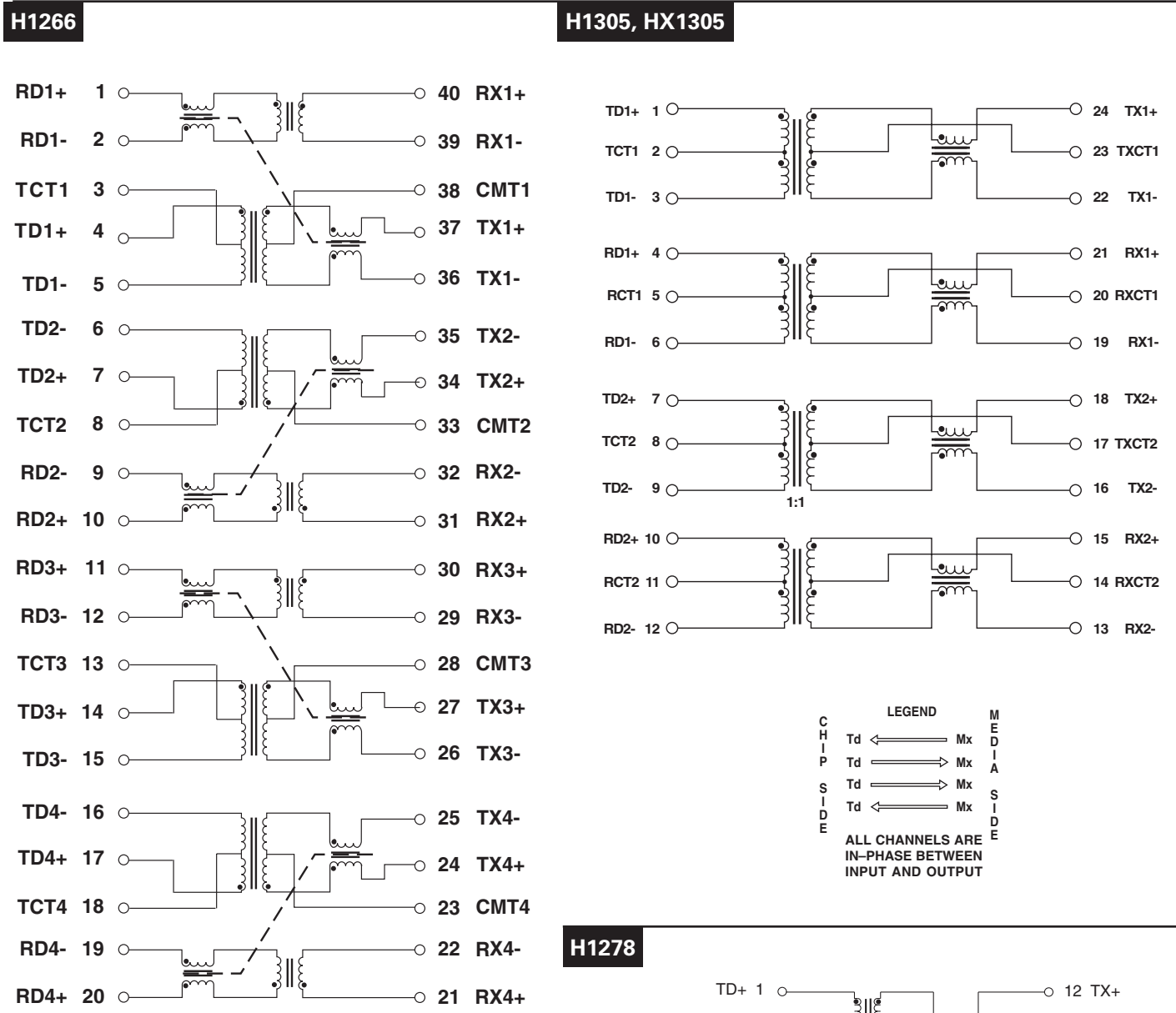
## 10/100BASE-T Transformer Modules

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



\*Power over Ethernet

### Schematics (continued)



# Star Magnetics™

## 10/100BASE-T Transformer Modules

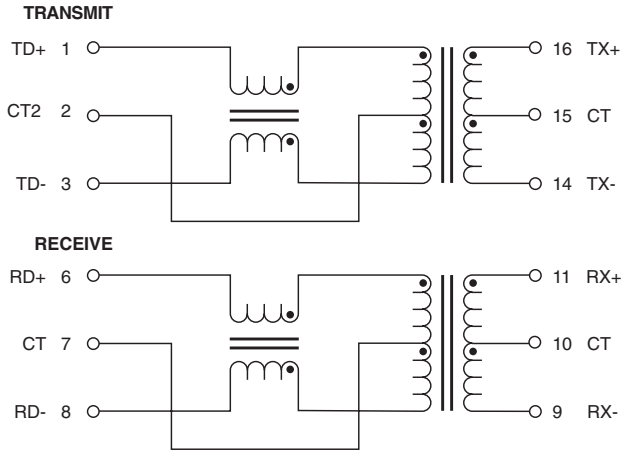
### with PoE\* Option and 1:1 Turns Ratios

\*Power over Ethernet

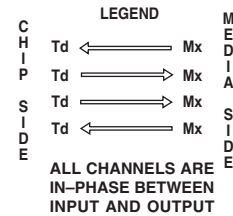
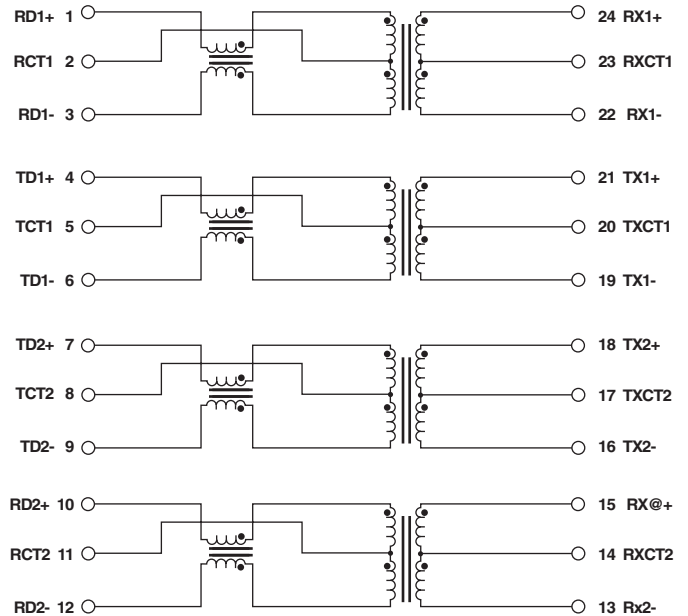


### Schematics (continued)

#### H2260, HX2260



#### H2305, HX2305



### For More Information:

<b>Pulse Worldwide Headquarters</b> 12220 World Trade Dr. San Diego, CA 92128 U.S.A.  <b>www.pulseeng.com</b> Tel: 858 674 8100 Fax: 858 674 8262	<b>Pulse Europe</b> Einsteinstrasse 1 D-71083 Herrenberg Germany  Tel: 49 7032 7806 0 Fax: 49 7032 7806 135	<b>Pulse China Headquarters</b> B402, Shenzhen Academy of Aerospace Technology Bldg. 10th Kejinan Rd. High-Tech Zone Nanshan District Shenzhen, PR China 518057  TEL: 86 755 33966678 FAX: 86 755 33966700	<b>Pulse North China</b> Room 1503 XinYin Building No. 888 YiShan Rd. Shanghai 200233 China  Tel: 86 21 54643211/2 Fax: 86 21 54643210	<b>Pulse South Asia</b> 150 Kampong Ampat #07-01/02 KA Centre Singapore 368324  Tel: 65 6287 8998 Fax: 65 6280 0080	<b>Pulse North Asia</b> No. 26, Kao Ching Rd. Yang Mei Chen Taoyuan Hsien Taiwan R. O. C.  Tel: 886 3 4643715 Fax: 886 3 4641911
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