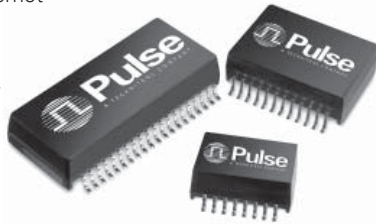


Star Magnetics™

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

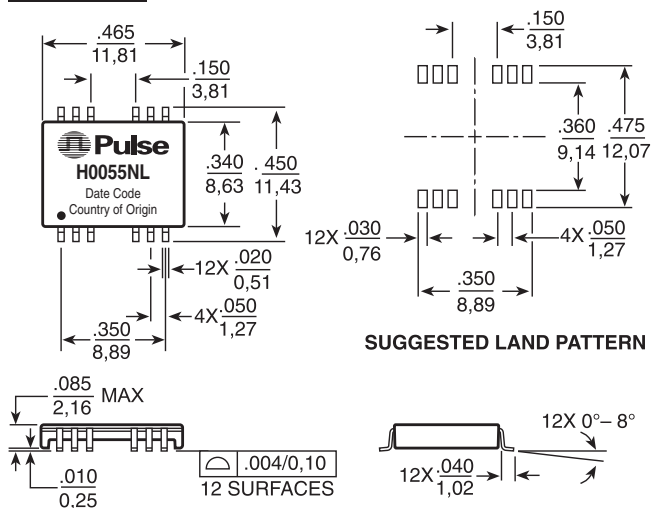
Electrical Specifications @ 25°C — Operating Temperature 0°C to 70°C

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 ^{1, 6a}	No	1	-2.5	—	-1.0	-16	-10	-10	-45	-40	-33	1500
H0056NL ^{2, 6a}	No	1	—	-0.8	-0.9	-16	-10	-10	-45	-40	-33	1500
H1259NL ^{6a}	No	4	-1.2	—	-1.4	-16	-10	-10	-45	-40	-33	1500
HX1259NL ^{3, 6a}	No	4	-1.2	—	-1.4	-16	-10	-10	-45	-40	-33	1500
H1260NL ^{6a}	No	1	-1.1	—	-1.1	-16	-10	-10	-35	-30	-30	1500
HX1260NL ^{3, 6a}	No	1	-1.1	—	-1.1	-16	-10	-10	-35	-30	-30	1500
H1265NL ^{6a}	No	1	-1.3	—	-1.0	-16	-10	-10	-40	-38	-33	1500
H1266NL ^{6a}	No	4	-1.2	—	-1.0	-16	-10	-10	-45	-40	-30	1500
H1278NL ^{6a}	No	1	-1.1	—	-1.0	-16	-10	-10	-45	-40	-33	1500
H1305NL ^{6a}	No	2	-1.2	—	-1.4	-16	-10	-10	-45	-40	-33	1500
HX1305NL ^{3, 6a}	No	2	-1.2	—	-1.4	-16	-10	-10	-45	-40	-33	1500
H2260NL ^{6a}	Yes ⁴	1	-1.1	—	-1.1	-16	-10	-10	-35	-30	-30	1500
HX2260NL ^{3, 6a}	Yes ⁴	1	-1.1	—	-1.1	-16	-10	-10	-35	-30	-30	1500
H2305NL ^{6a}	Yes ⁴	2	-1.2	—	-1.4	-16	-10	-10	-45	-40	-33	1500
HX2305NL ^{3, 6a}	Yes ⁴	2	-1.2	—	-1.4	-16	-10	-10	-45	-40	-33	1500

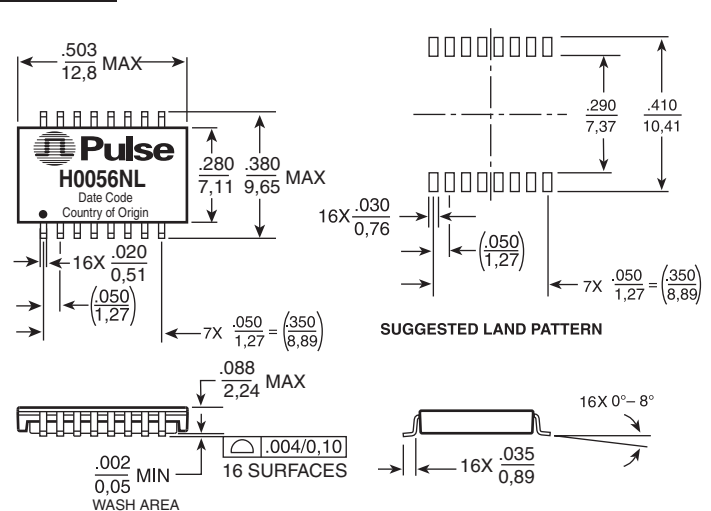
- H0055NL is designed to meet 200 μH nom.
- H0056NL is designed to meet 300 μH nom.
- Parts offer extended operating temperature of -40 to +85°C
- These parts are compliant to IEEE802.3af, Power over Ethernet (PoE) standard.
- When ordering Tape & Reel packaging, add a "T" suffix to the end of the part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

Mechanicals

H0055NL



H0056NL



Weight355 grams
Tape & Reel . . . 1000/reel
Tube 40/tube

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

Weight3 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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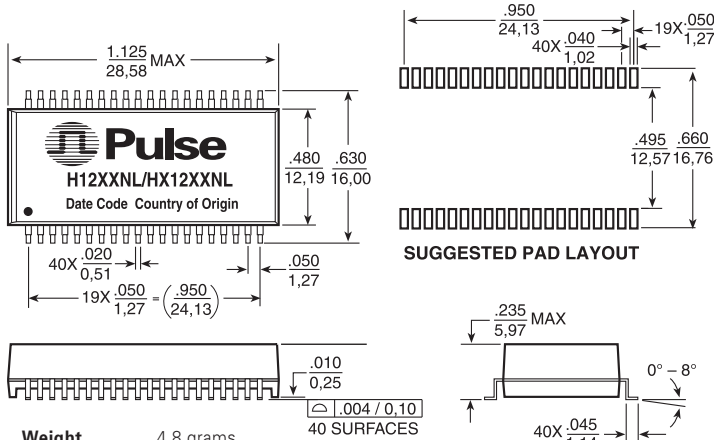
10/100BASE-T Transformer Modules

with PoE* Option and 1:1 Turns Ratios



Mechanicals (continued)

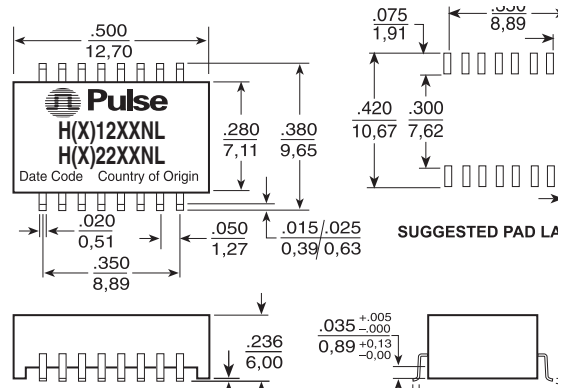
H1259NL, HX1259NL, H1266NL



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

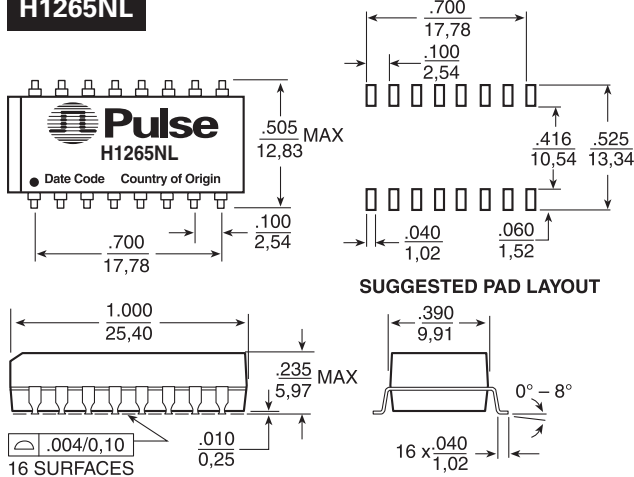
Dimensions: $\frac{\text{Inches}}{\text{mm}}$ Unless otherwise specified, all tolerances are $\pm \frac{.010}{.25}$

H1260NL, HX1260NL, H2260NL, HX2260NL



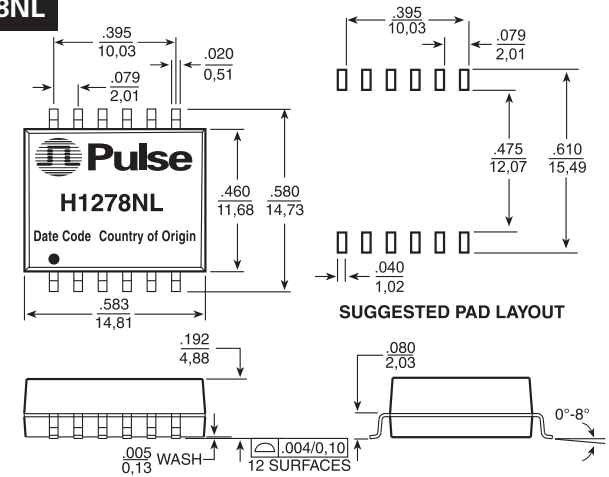
Weight 2.8 grams
Tube 45/tube
Tape & Reel 600/reel

H1265NL



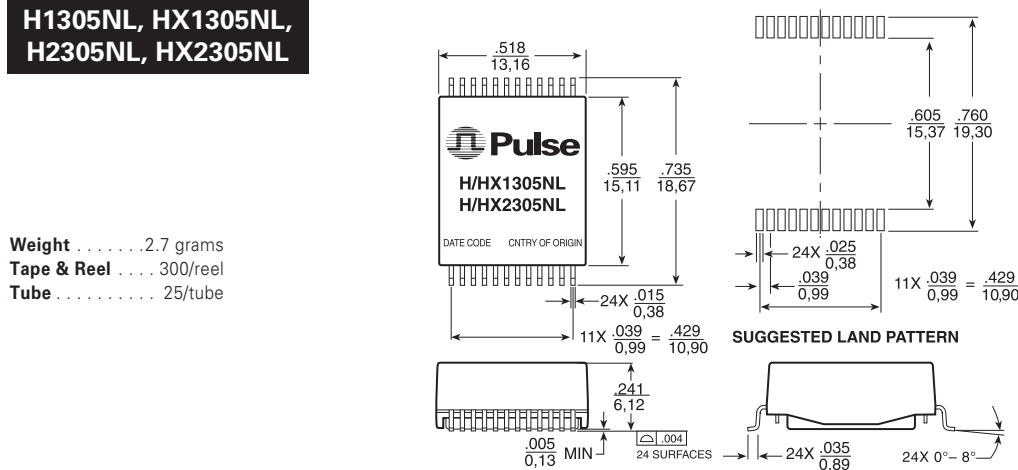
Weight 3.0 grams
Tube 20/tube
Tape & Reel 300/reel

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 $\pm \frac{.010}{.25}$

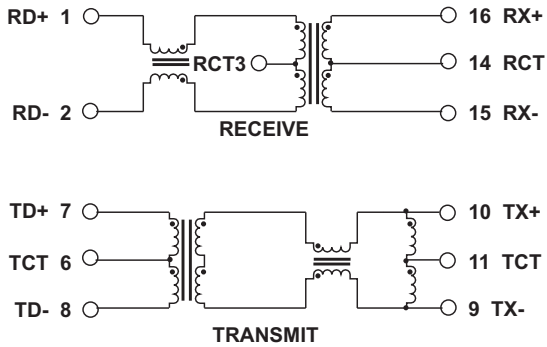
Star Magnetics™ 10/100BASE-T Transformer Modules with PoE* Option and 1:1 Turns Ratios

*Power over Ethernet

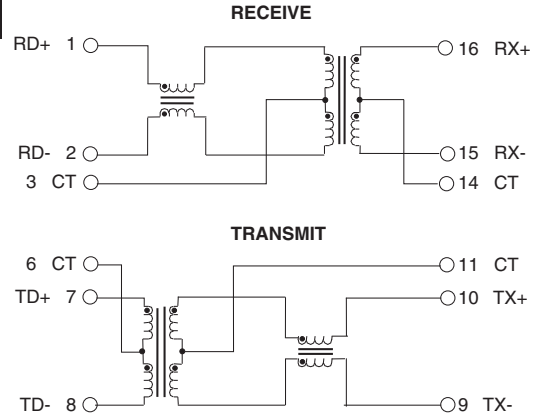


Schematics

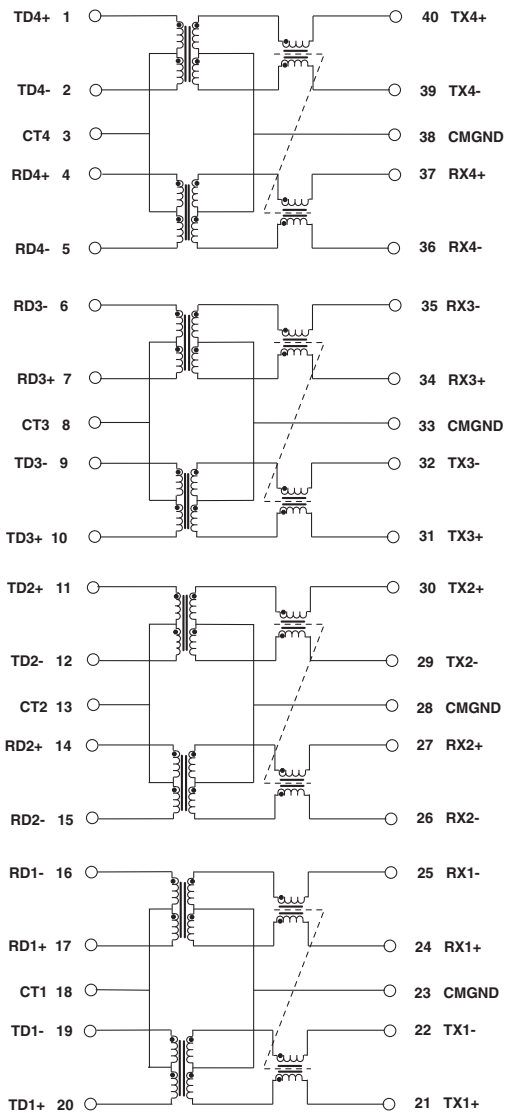
H0055NL



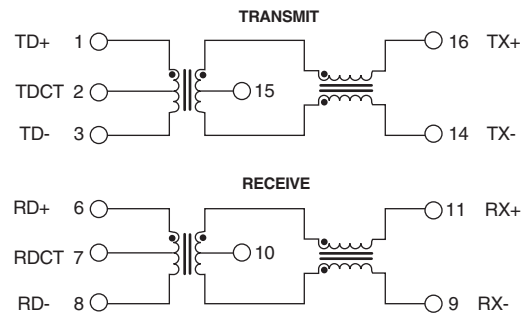
H0056NL



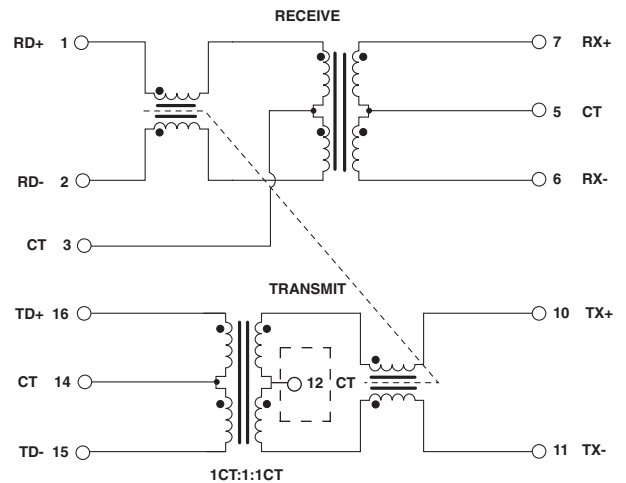
H1259NL, HX1259NL



H1260NL, HX1260NL



H1265NL



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

Star Magnetics™

10/100BASE-T Transformer Modules

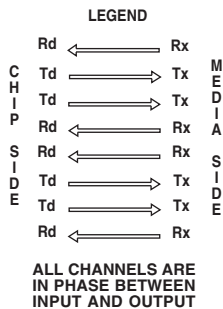
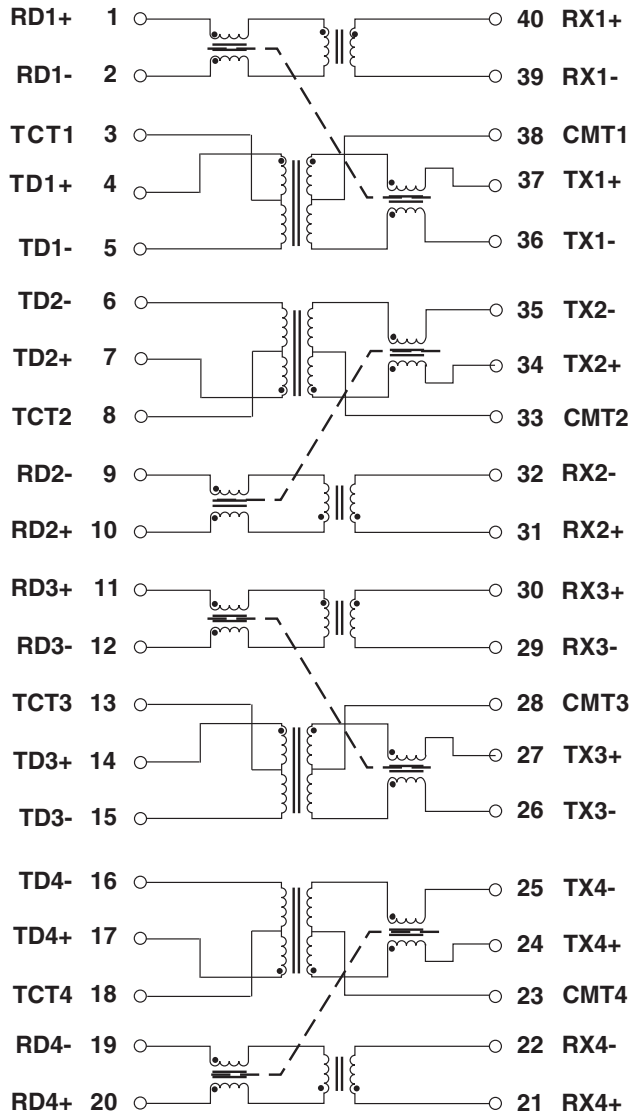
with PoE* Option and 1:1 Turns Ratios



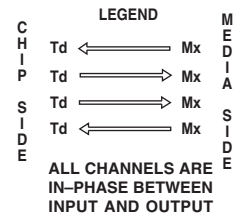
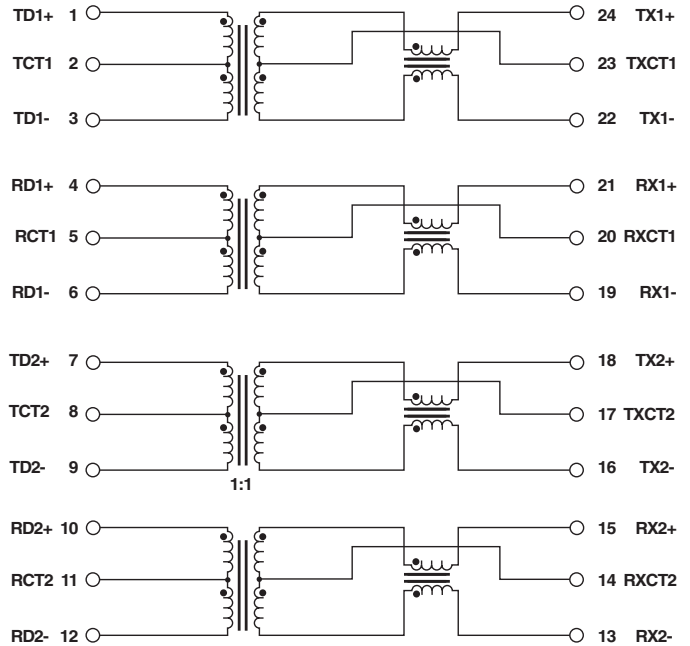
*Power over Ethernet

Schematics (continued)

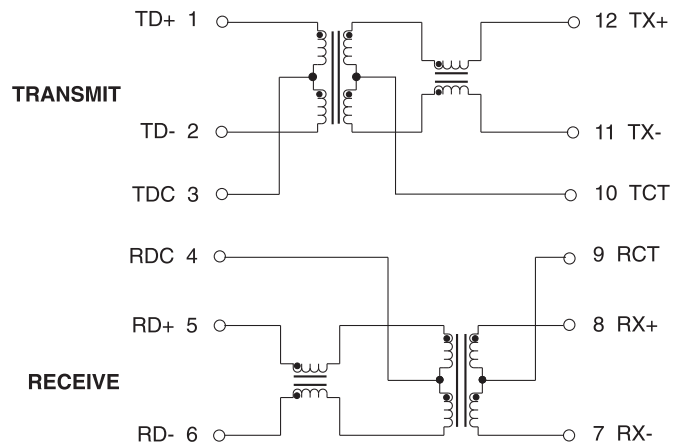
H1266NL



H1305NL, HX1305NL



H1278NL



Star Magnetics™

10/100BASE-T Transformer Modules

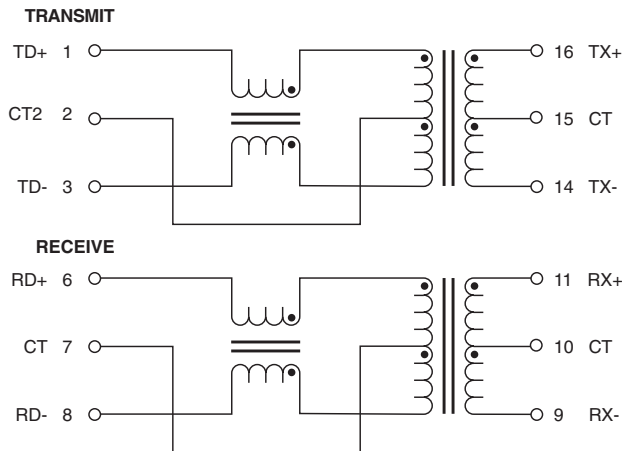
with PoE* Option and 1:1 Turns Ratios

*Power over Ethernet

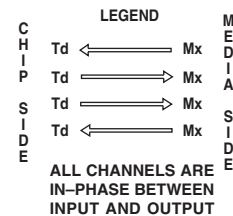
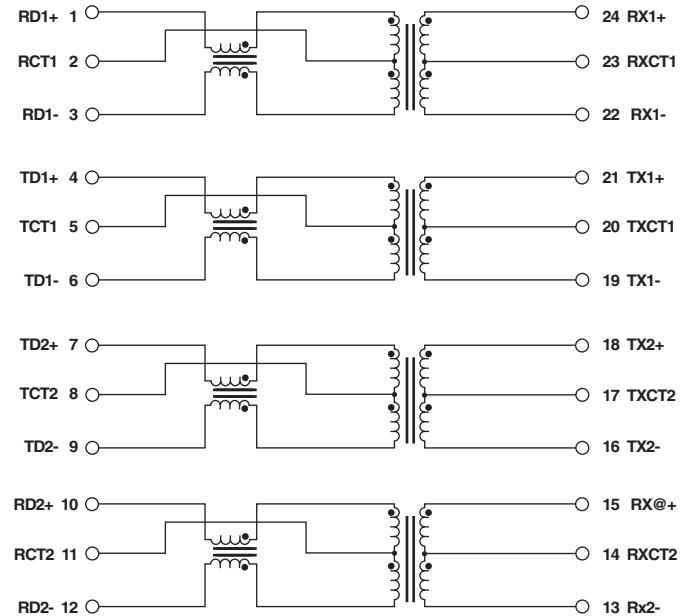


Schematics (continued)

H2260NL, HX2260NL



H2305NL, HX2305NL



For More Information:

Pulse Worldwide Headquarters	Pulse Europe	Pulse China Headquarters	Pulse North China	Pulse South Asia	Pulse North Asia
12220 World Trade Dr. San Diego, CA 92128 U.S.A.	Einsteinstrasse 1 D-71083 Herrenberg Germany	B402, Shenzhen Academy of Aerospace Technology Bldg. 10th Kejinan Rd. High-Tech Zone Nanshan District Shenzhen, PR China 518057	Room 1503 XinYin Building No. 888 YiShan Rd. Shanghai 200233 China	135 Joo Seng Rd. #03-02 PM Industrial Bldg. Singapore 368363	No. 26, Kao Ching Rd. Yang Mei Chen Taoyuan Hsien Taiwan R. O. C.
www.pulseeng.com Tel: 858 674 8100 Fax: 858 674 8262	Tel: 49 7032 7806 0 Fax: 49 7032 7806 135	TEL: 86 755 33966678 FAX: 86 755 33966700	Tel: 86 21 54643211/2 Fax: 86 21 54643210	TEL: 65 6287 8998 FAX: 65 6280 0080	Tel: 886 3 4643715 Fax: 886 3 4641911

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