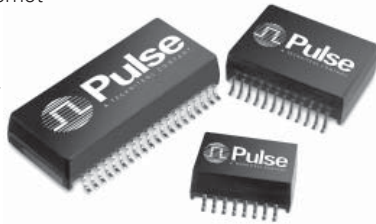





Star Magnetics™ 10/100BASE-T Transformer Modules with PoE* Option and 1:1 Turns Ratios

*Power over Ethernet



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

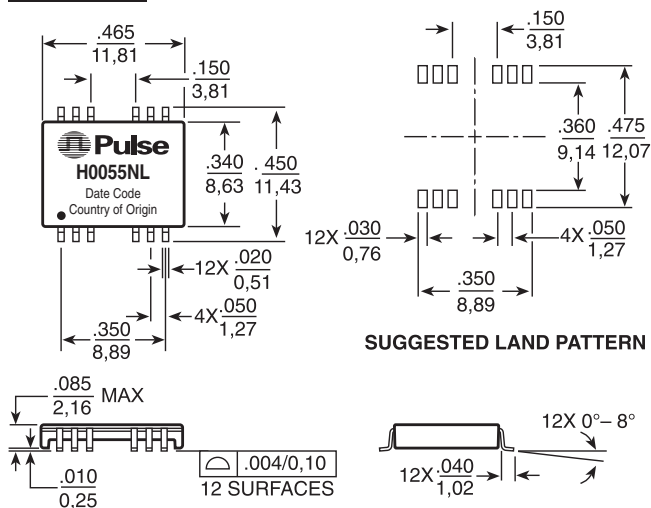
Electrical Specifications @ 25°C — Operating Temperature 0°C to 70°C

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

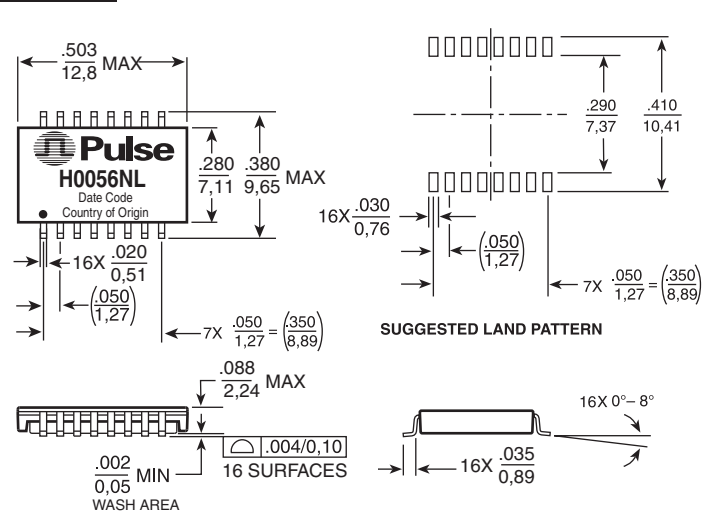
- H0055NL is designed to meet 200 μH nom.
- H0056NL is designed to meet 300 μH nom.
- Parts offer extended operating temperature of -40 to +85°C
- These parts are compliant to IEEE802.3af, Power over Ethernet (PoE) standard.
- When ordering Tape & Reel packaging, add a "T" suffix to the end of the part 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

Star Magnetics™

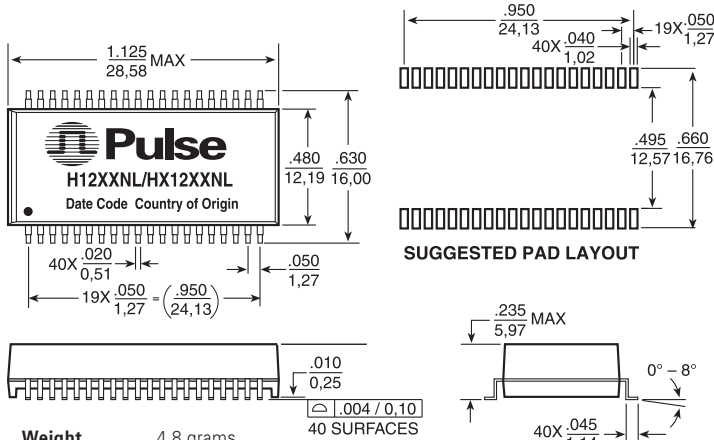
10/100BASE-T Transformer Modules

with PoE* Option and 1:1 Turns Ratios



Mechanicals (continued)

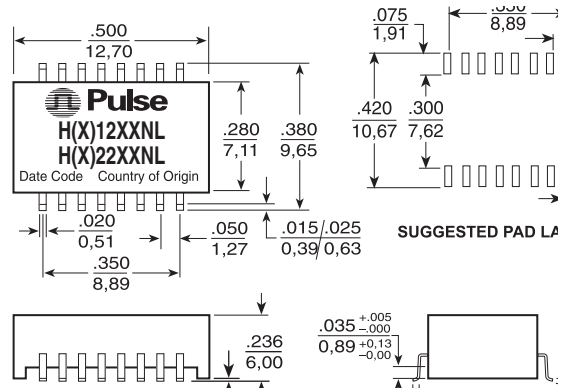
H1259NL, HX1259NL, H1266NL



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

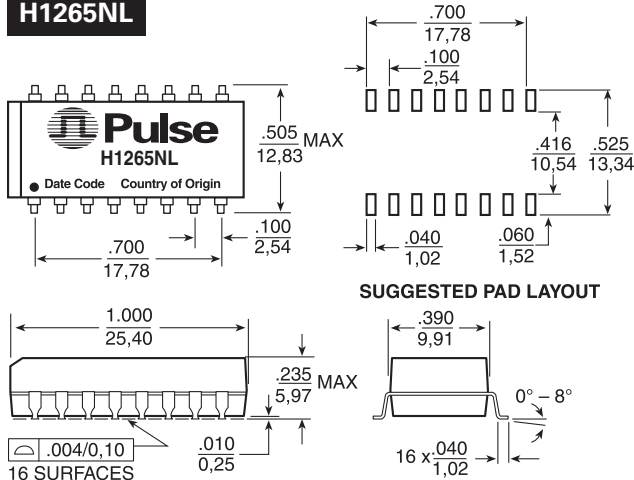
Dimensions: $\frac{\text{Inches}}{\text{mm}}$ Unless otherwise specified, all tolerances are $\pm \frac{.010}{0.25}$

H1260NL, HX1260NL, H2260NL, HX2260NL



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

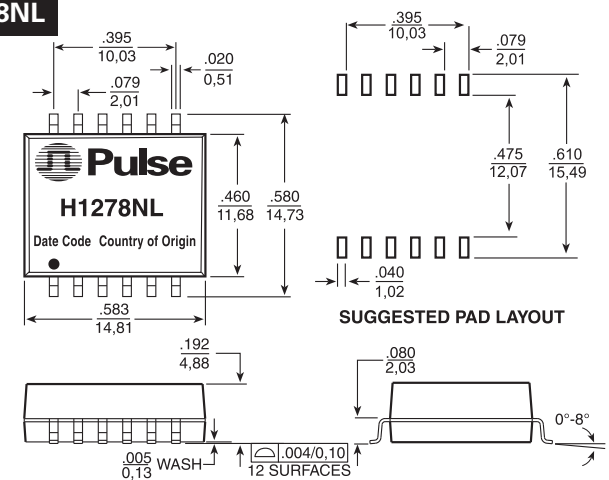
H1265NL



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

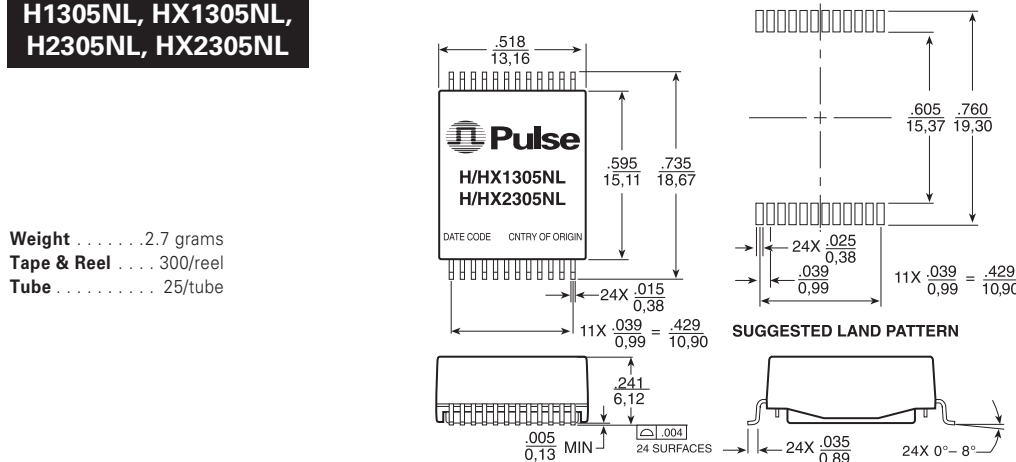
Dimensions: $\frac{\text{Inches}}{\text{mm}}$ Unless otherwise specified, all tolerances are $\pm \frac{.010}{0.25}$

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 $\pm \frac{.010}{0.25}$

Star Magnetics™

10/100BASE-T Transformer Modules

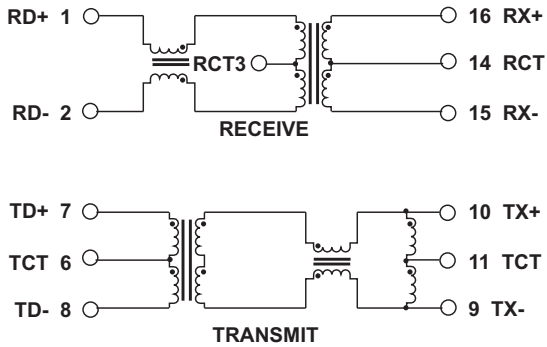
with PoE* Option and 1:1 Turns Ratios

*Power over Ethernet

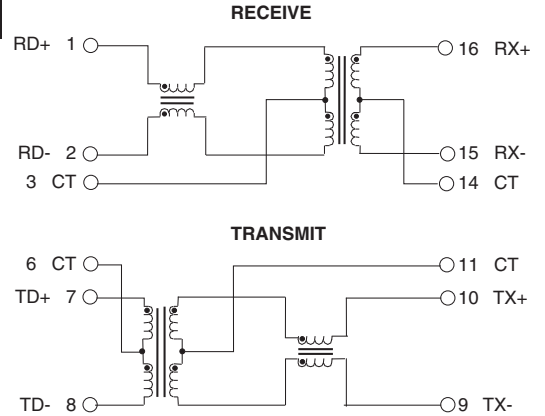


Schematics

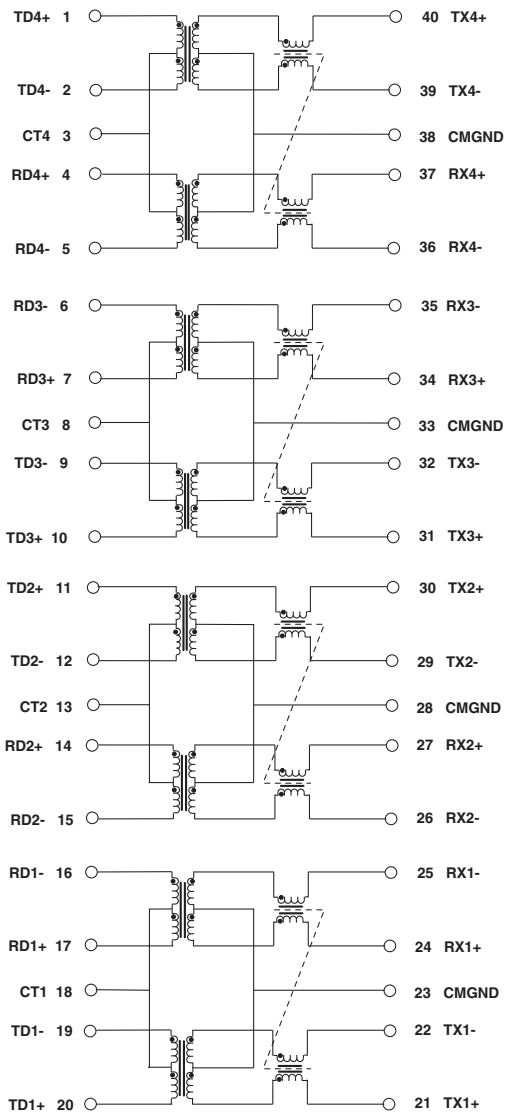
H0055NL



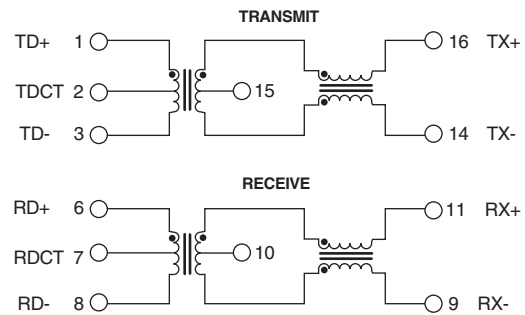
H0056NL



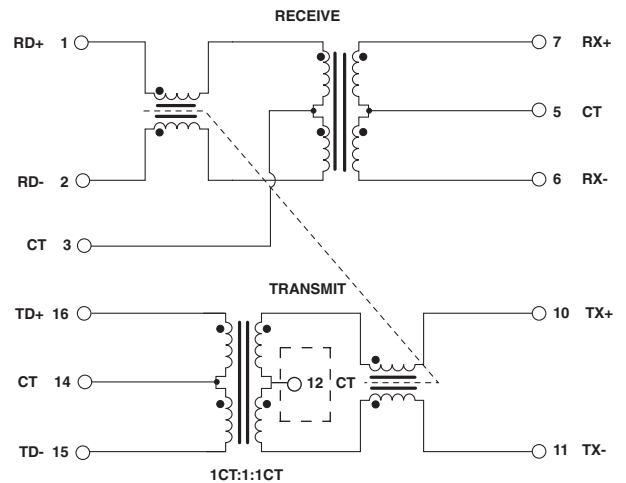
H1259NL, HX1259NL



H1260NL, HX1260NL



H1265NL



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

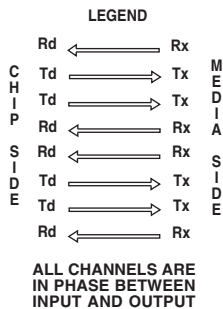
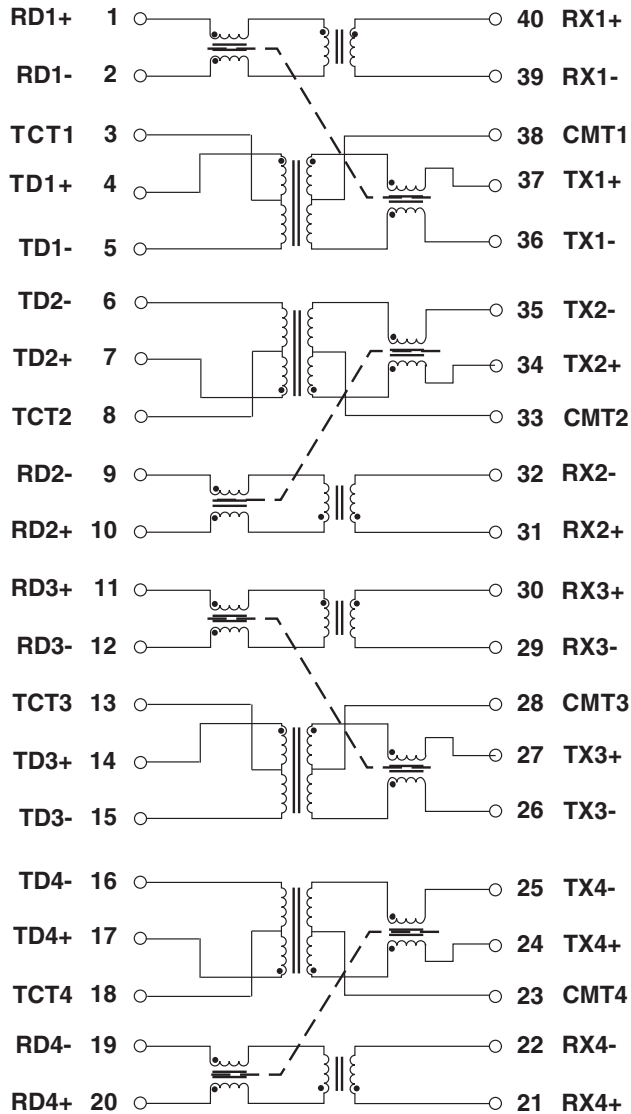
Star Magnetics™ 10/100BASE-T Transformer Modules with PoE* Option and 1:1 Turns Ratios



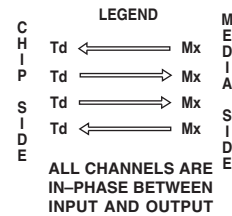
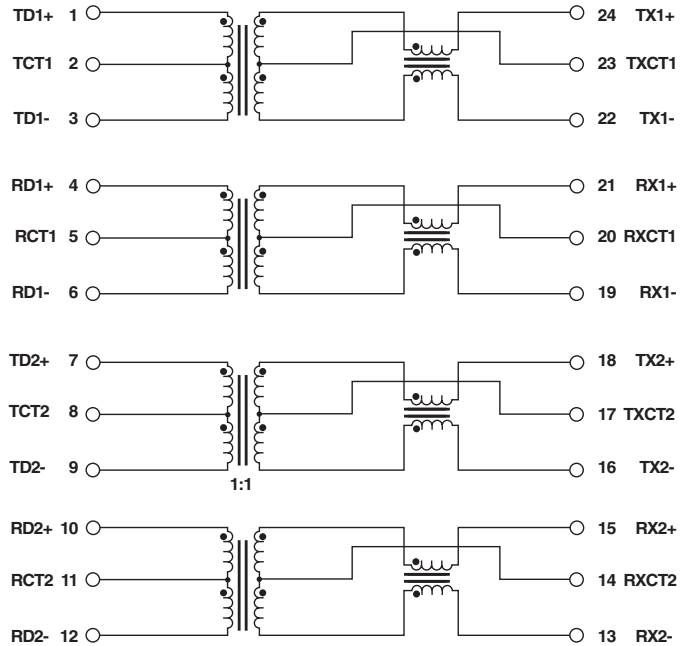
*Power over Ethernet

Schematics (continued)

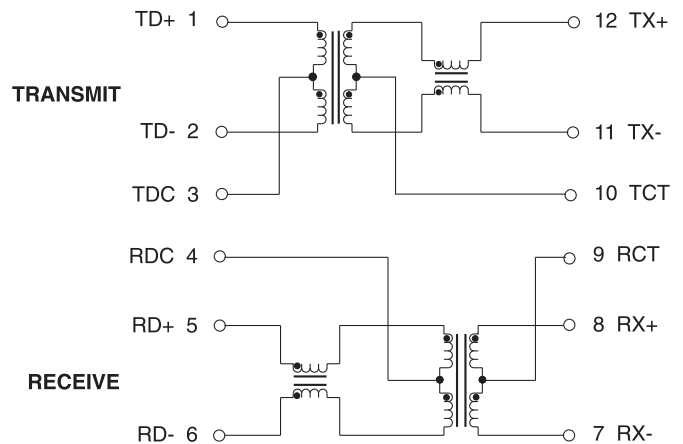
H1266NL



H1305NL, HX1305NL



H1278NL



Star Magnetics™

10/100BASE-T Transformer Modules

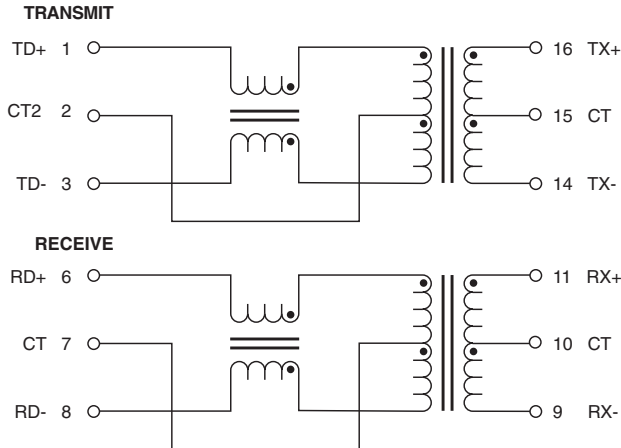
with PoE* Option and 1:1 Turns Ratios

*Power over Ethernet

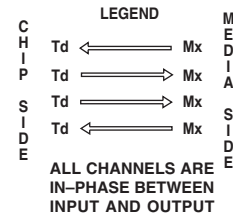
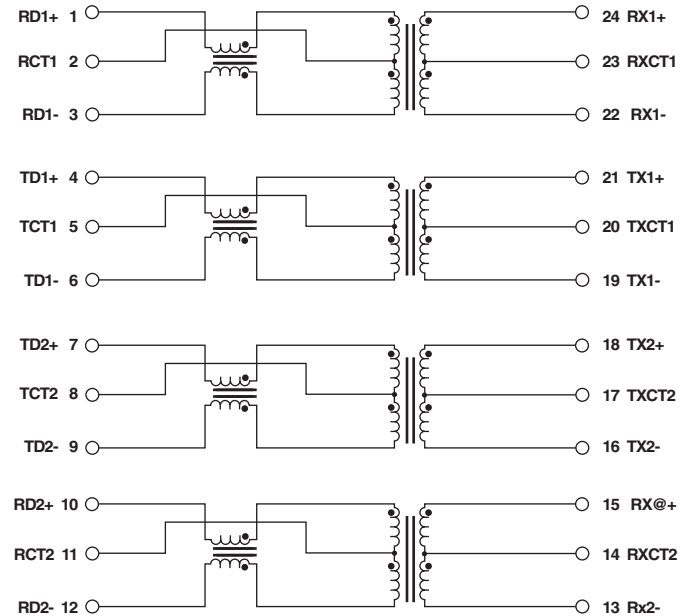


Schematics (continued)

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

Performance warranty of products offered on this data sheet is limited to the parameters specified. Data is subject to change without notice. Other brand and product names mentioned herein may be trademarks or registered trademarks of their respective owners.
© Copyright, 2009. Pulse Engineering, Inc. All rights reserved.