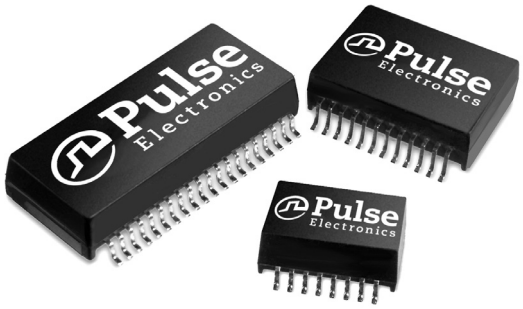
Star Magnetics™
10/100BASE-T Transformer Modules with PoE* Option and 1:1 Turns Ratios

**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[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
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

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. H0056NL**T**

6. MSL = Moisture Sensivity Level: **a**=1, **b**=2, **c**=3, **d**=4, **e**=5

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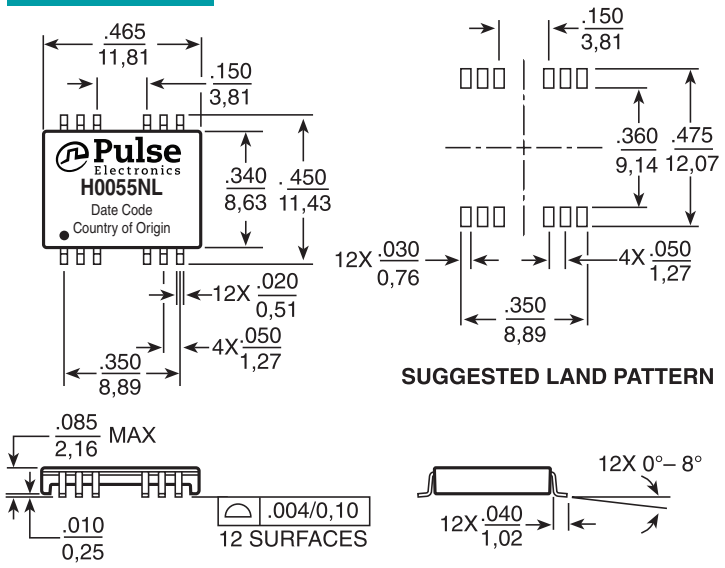
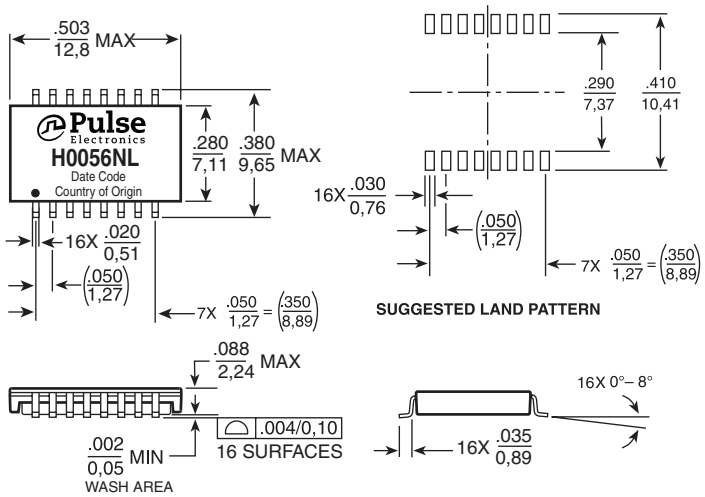
Mechanicals

H0055NL



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

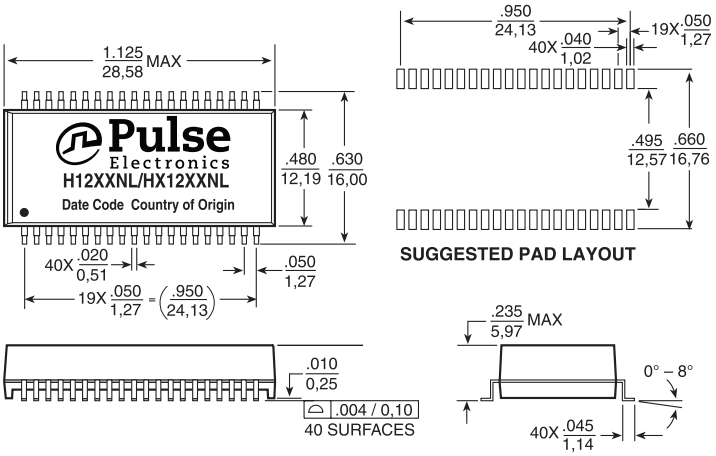
H0056NL



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

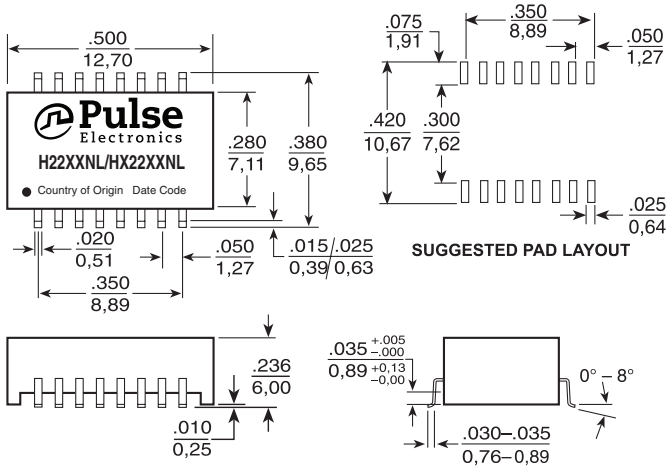
Dimensions: Inches / mm — Unless otherwise specified, all tolerances are ± .010 / 0,25

H1259NL, HX1259NL



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

H1260NL, HX1260NL, H2260NL, HX2260NL

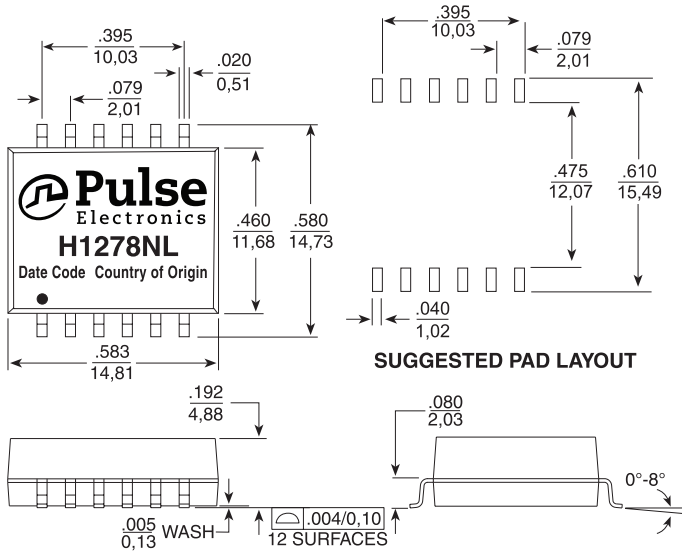


Weight .....0.9 grams
Tape & Reel 600/reel
Tube 40/tube

Dimensions: Inches / mm — Unless otherwise specified, all tolerances are ± .010 / 0,25

Mechanicals *(continued)*

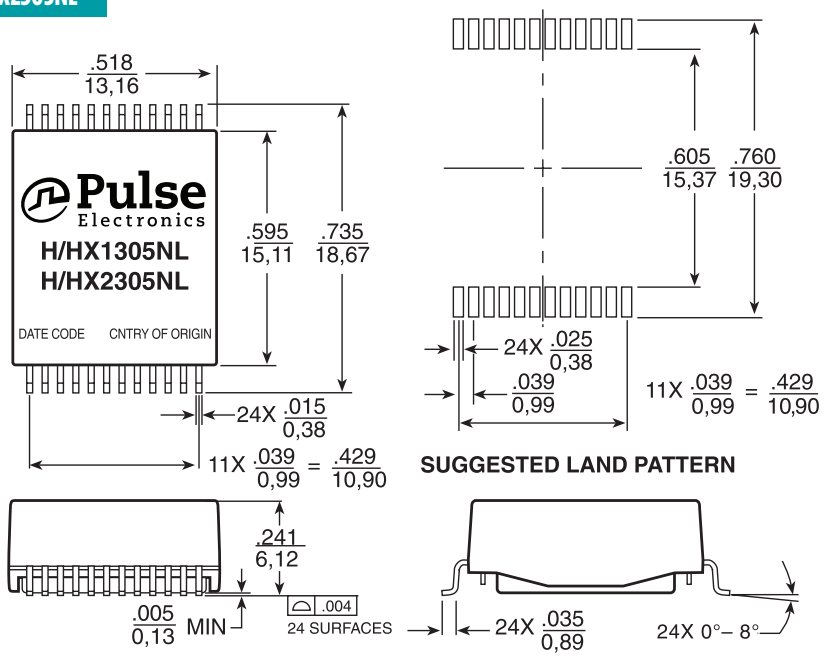
H1278NL



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

Dimensions: Inches / mm Unless otherwise specified, all tolerances are ± .010 / 0,25

H1305NL, HX1305NL, H2305NL, HX2305NL



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

Dimensions: Inches / mm Unless otherwise specified, all tolerances are ± .010 / 0,25

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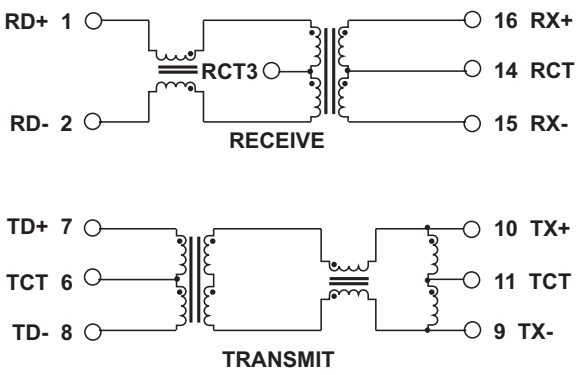
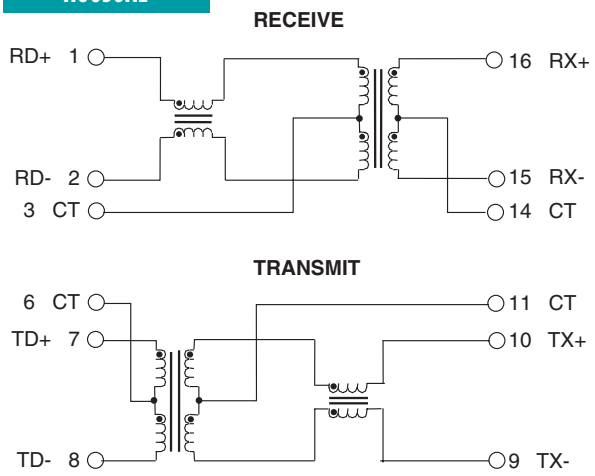
Schematics

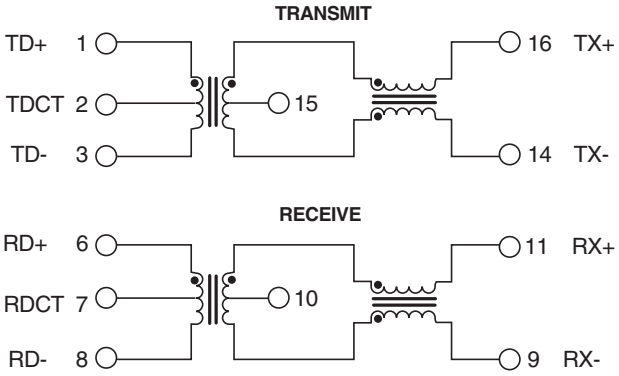
H0055NL



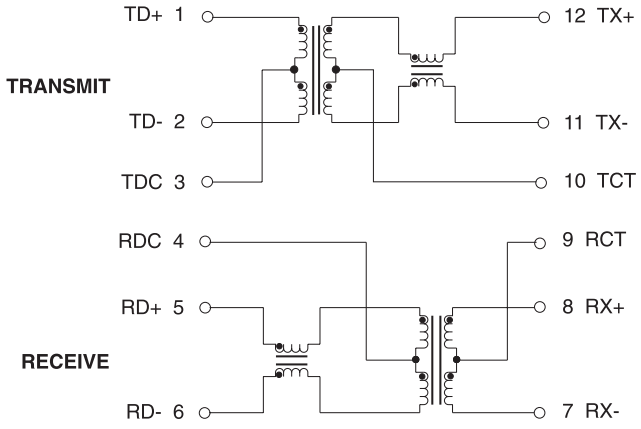
H0056NL



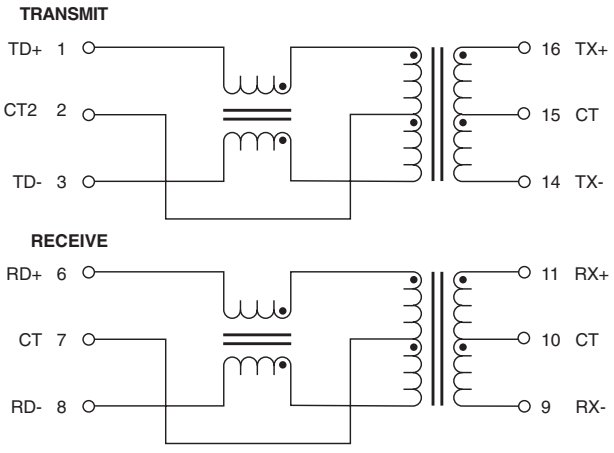
H1260NL, HX1260NL



H1278NL



H2260NL, HX2260NL



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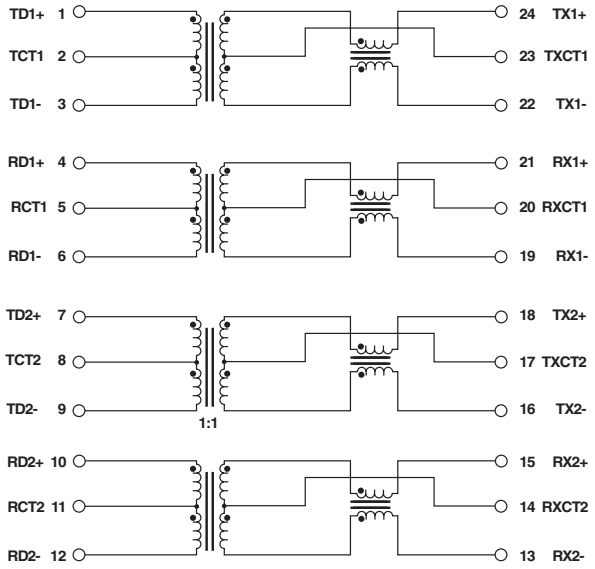
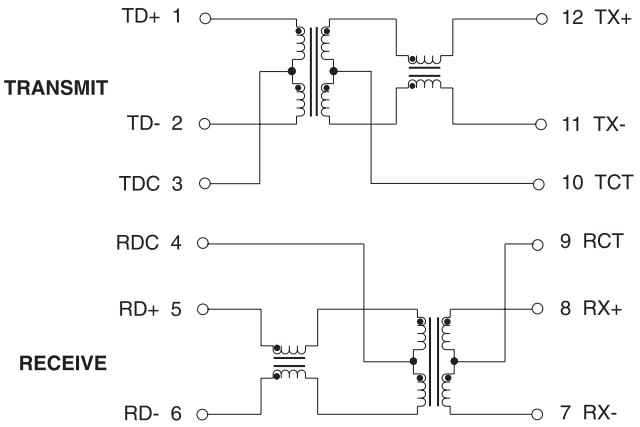
**Power over Ethernet*

Schematics *(continued)*

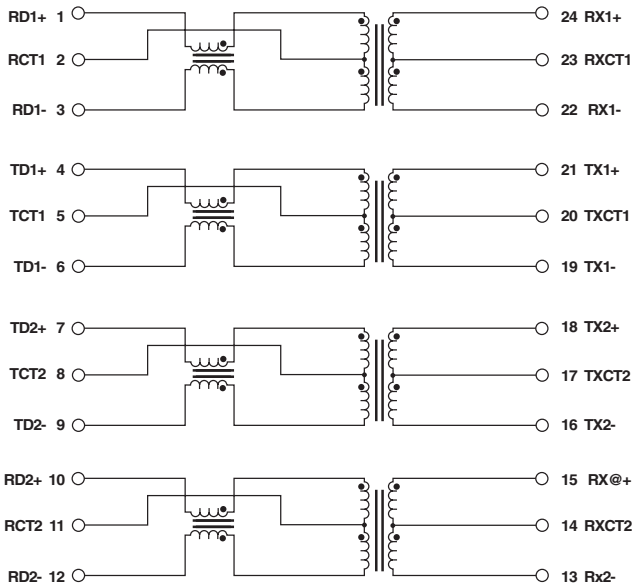
H1305NL, HX1305NL



H1278NL



H2305NL, HX2305NL



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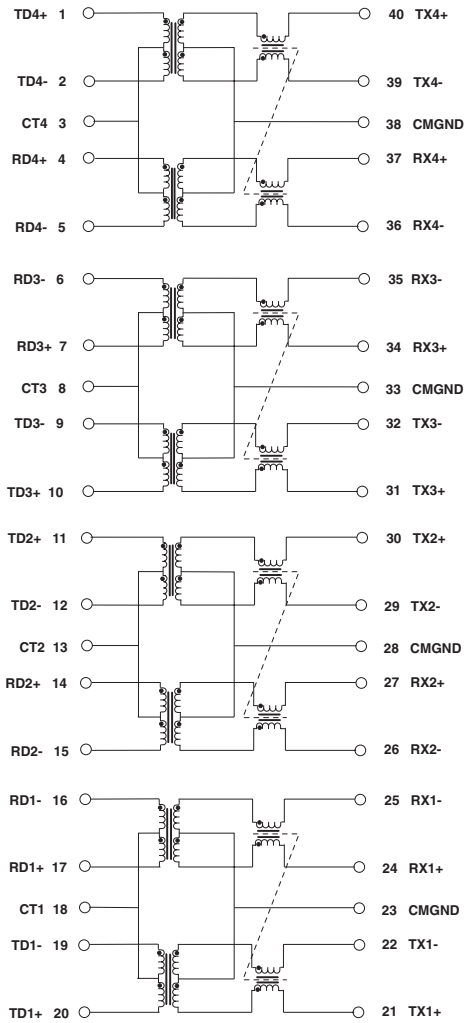
**Power over Ethernet*

Schematics *(continued)*

H1259NL, HX1259NL



For More Information

Pulse Worldwide Headquarters
12220 World Trade Drive
San Diego, CA
92128
U.S.A.

Tel: 858 674 8100

Pulse Europe
Einsteinstrasse 1
D-71083 Herrenberg
Germany

Tel: 49 7032 7806

Pulse China Headquarters
B402, Shenzhen Academy of Aerospace Technology Bldg.
10th Kejinan Road
High-Tech Zone
Nanshan District
Shenzen, PR China
518057

Pulse North China
Room 2704/2705
Super Ocean Finance Ctr.
2067 Yan An Road West
Shanghai 200336
China

Pulse South Asia
135 Joo Seng Road
#03-02
PM Industrial Bldg.
Singapore 368363

Tel: 65 6287 8998
Fax: 65 6287 8998

Pulse North Asia
3F, No. 198
Zhongyuan Road
Zhongli City
Taoyuan County 320
Taiwan R. O. C.
Tel: 886 3 4356768
Fax: 886 3 4356823
(Pulse)

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