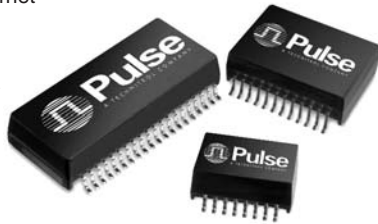


Star Magnetics™ 10/100BASE-T Transformer Modules with PoE* Option and 1:1 Turns Ratios

*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

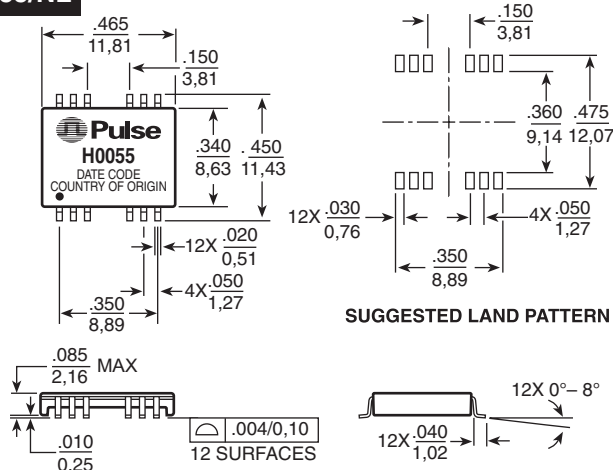
RoHS-5 ⁶ Compliant Part Number	RoHS-6 ⁷ Compliant Part Number	PoE	Number of Ports	Insertion Loss (dB MAX)			Return Loss (Z out = 100 Ω ±15%)			Crosstalk (adjacent channels, dB MIN)			Hipot (V _{RMS} MIN)
				0.1 MHz	1 MHz	100 MHz	30 MHz	60 MHz	80 MHz	30 MHz	60 MHz	100 MHz	
H0055 ¹	H0055NL ^{1,8a}	No	1	-2.5	—	-1.0	-16	-10	-10	-45	-40	-33	1500
H0056 ²	H0056NL ^{2,8a}	No	1	—	-0.8	-0.9	-16	-10	-10	-45	-40	-33	1500
H0056	H0056NL ^{8a}	No	4	-1.2	—	-1.4	-16	-10	-10	-45	-40	-33	1500
HX1259 ³	HX1259NL ^{8a}	No	4	-1.2	—	-1.4	-16	-10	-10	-45	-40	-33	1500
H1260	H1260NL ^{8a}	No	1	-1.1	—	-1.1	-16	-10	-10	-35	-30	-30	1500
HX1260 ³	HX1260NL ^{8a}	No	1	-1.1	—	-1.1	-16	-10	-10	-35	-30	-30	1500
H1265	H1265NL ^{7,8a}	No	1	-1.3	—	-1.0	-16	-10	-10	-40	-38	-33	1500
H1266	H1266NL ^{7,8a}	No	4	-1.2	—	-1.0	-16	-10	-10	-45	-40	-30	1500
H1278	H1278NL ^{7,8a}	No	1	-1.1	—	-1.0	-16	-10	-10	-45	-40	-33	1500
H1305	H1305NL ^{8a}	No	2	-1.2	—	-1.4	-16	-10	-10	-45	-40	-33	1500
HX1305 ³	HX1305NL ^{8a}	No	2	-1.2	—	-1.4	-16	-10	-10	-45	-40	-33	1500
H2260	H2260NL ^{8a}	Yes ⁴	1	-1.1	—	-1.1	-16	-10	-10	-35	-30	-30	1500
HX2260 ³	HX2260NL ^{7,8a}	Yes ⁴	1	-1.1	—	-1.1	-16	-10	-10	-35	-30	-30	1500
H2305	H2305NL ^{8a}	Yes ⁴	2	-1.2	—	-1.4	-16	-10	-10	-45	-40	-33	1500
HX2305 ³	HX2305NL ^{8a}	Yes ⁴	2	-1.2	—	-1.4	-16	-10	-10	-45	-40	-33	1500

- H0055 is designed to meet 200 μH nom.
- H0056 is designed to meet 300 μH nom.
- Parts offer extended temperature of operation -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. H0056T
- 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

NOTE: "—" = not tested at that frequency.

Mechanicals

H0055/NL

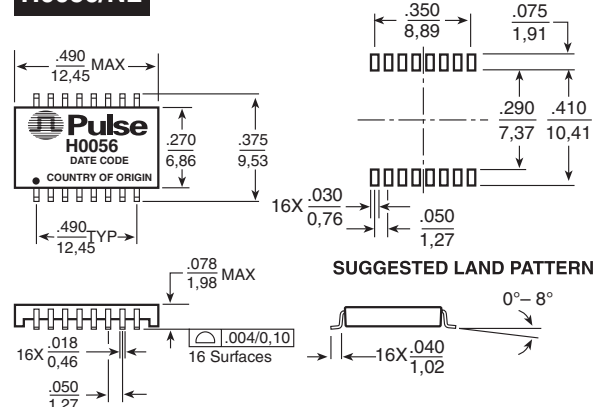


Weight355 grams
Tape & Reel . . .1000/reel
Tube40/tube

Dimensions: Inches
mm

Unless otherwise specified, all tolerances are ±.010
0,25

H0056/NL



Weight3 grams
Tape & Reel . . .2000/reel
Tube40/tube

Star Magnetics™

10/100BASE-T Transformer Modules

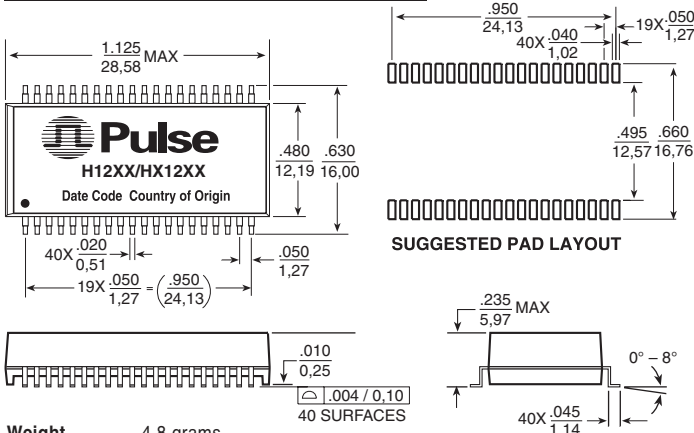
with PoE* Option and 1:1 Turns Ratios



*Power over Ethernet

Mechanicals (continued)

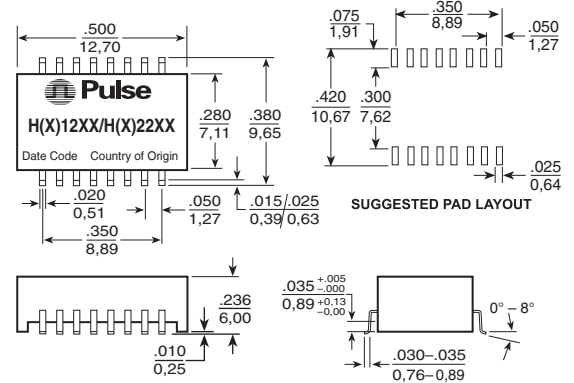
H1259/NL, HX1259/NL, H1266/NL



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

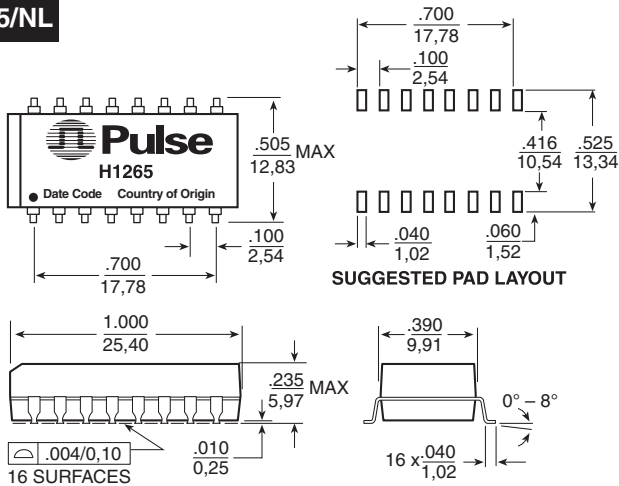
Dimensions: $\frac{\text{Inches}}{\text{mm}}$ Unless otherwise specified, all tolerances are $\pm \frac{.010}{0.25}$

H1260//NL, HX1260//NL, H2260/NL, HX2260/NL



Weight 2.8 grams
Tube45/tube
Tape & Reel 600/reel

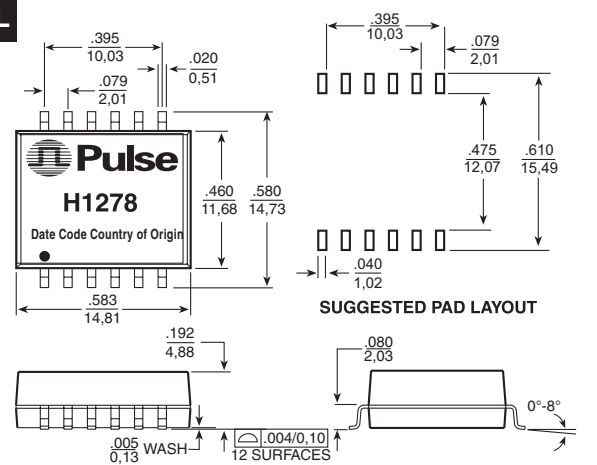
H1265/NL



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

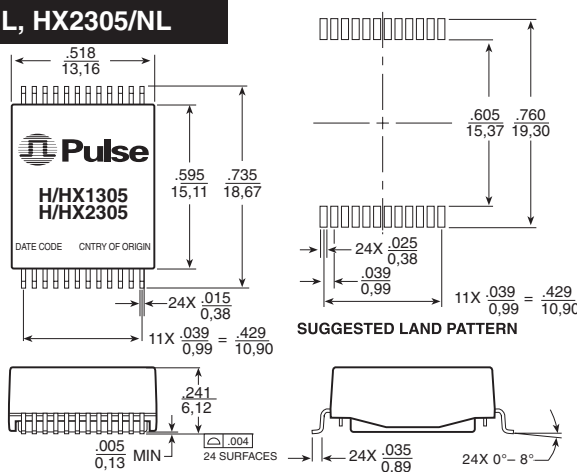
Dimensions: $\frac{\text{Inches}}{\text{mm}}$ Unless otherwise specified, all tolerances are $\pm \frac{.010}{0.25}$

H1278/NL



Weight 1.7 grams
Tape & Reel 350/reel
Tube 30/tube

H1305/NL, HX1305/NL, H2305/NL, HX2305/NL



Weight 2.7 grams
Tape & Reel 300/reel
Tube 25/tube

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

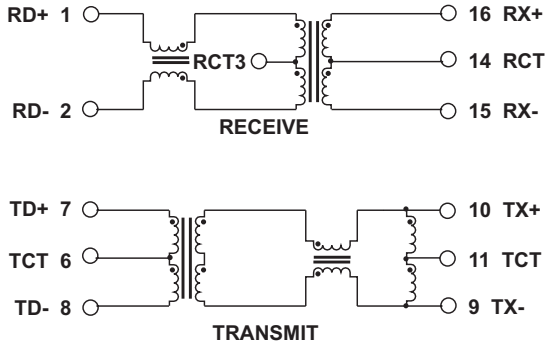
Star Magnetics™ 10/100BASE-T Transformer Modules with PoE* Option and 1:1 Turns Ratios

*Power over Ethernet

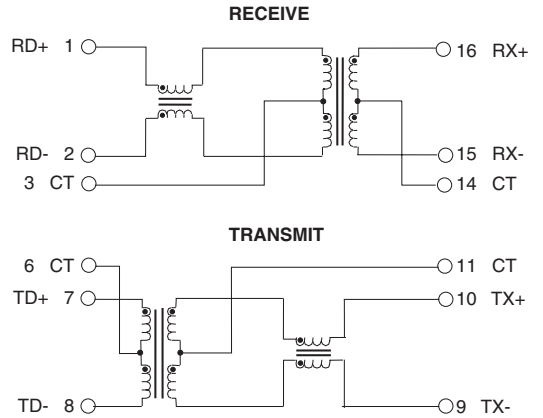


Schematics

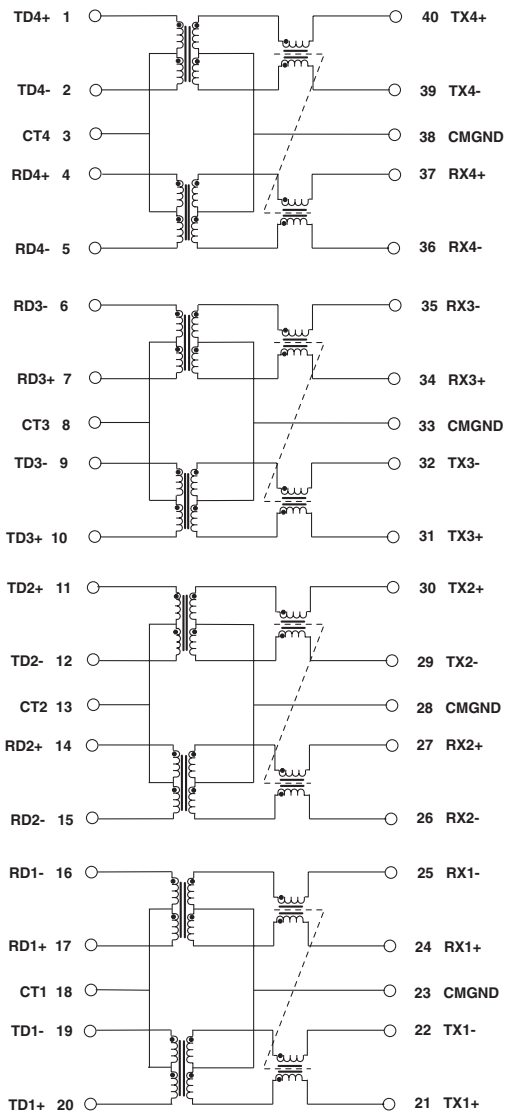
H0055/NL



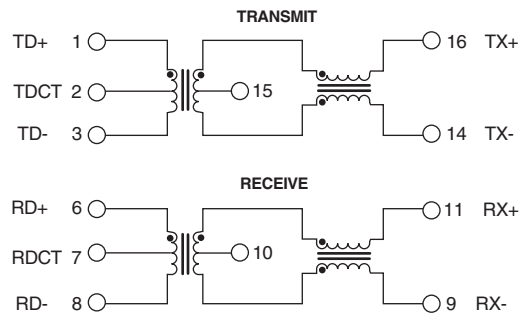
H0056/NL



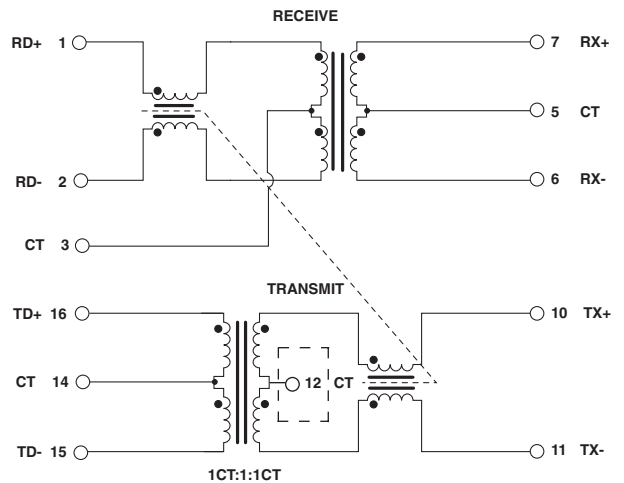
H1259/NL, HX1259/NL



H1260/NL, HX1260/NL



H1265/NL



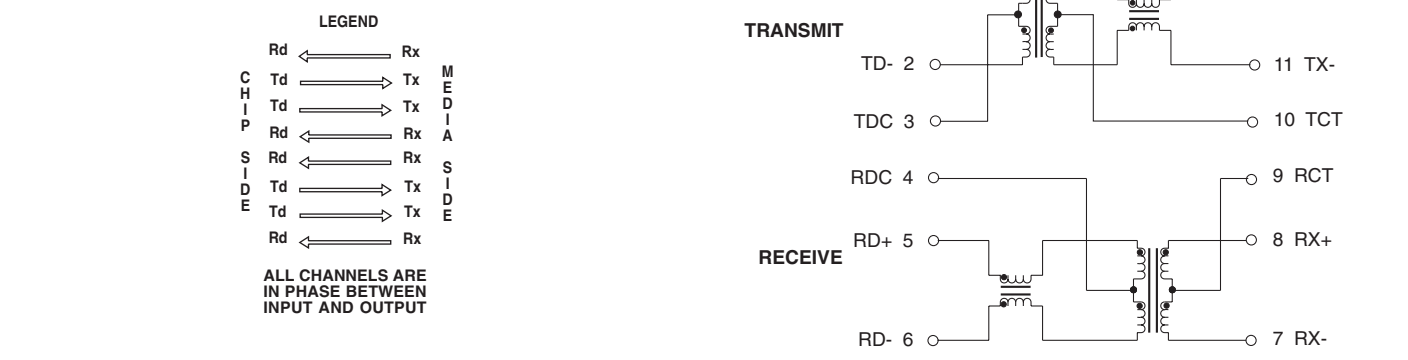
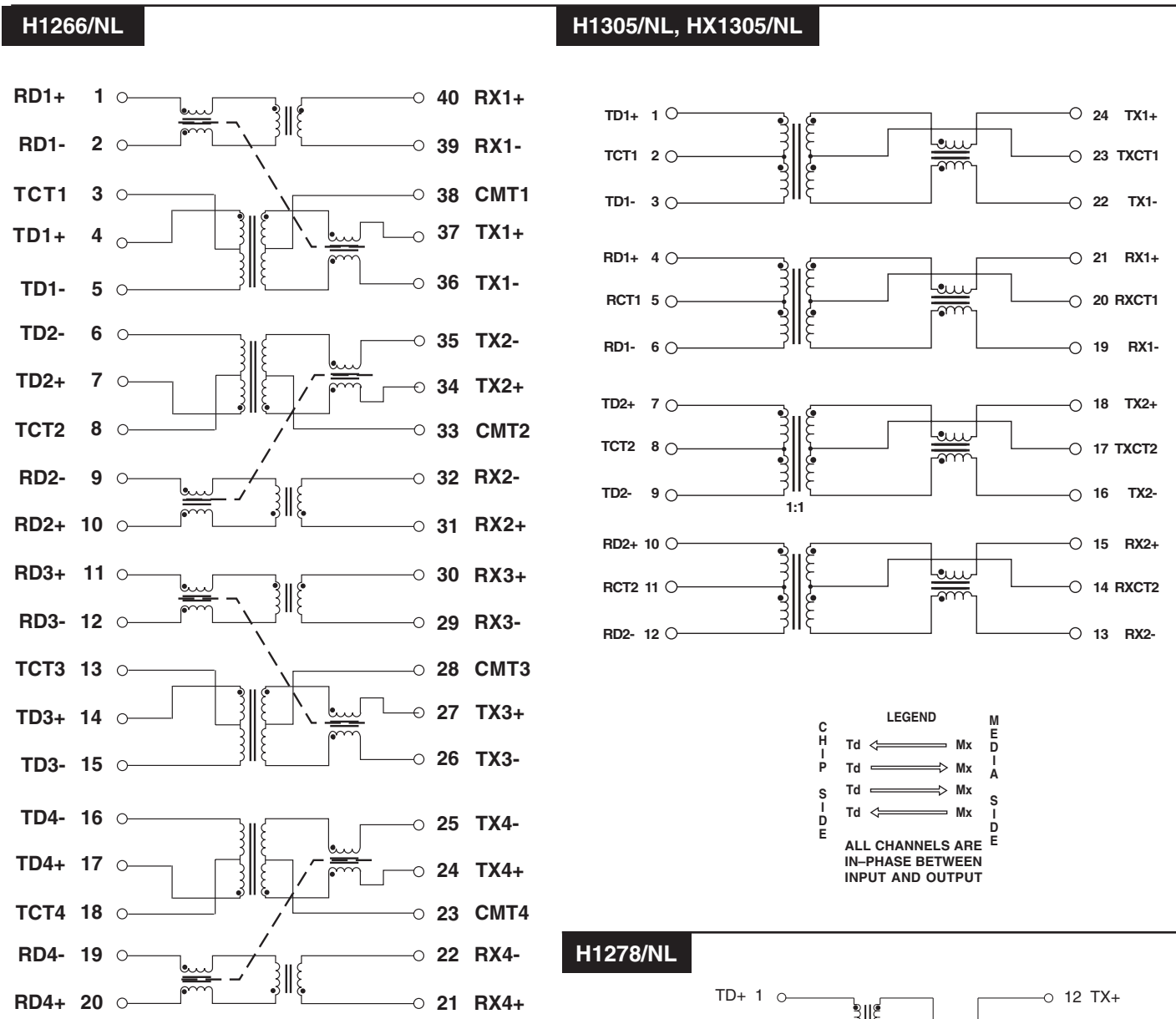
H1265: 3-core design (T3 same toroid core)

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

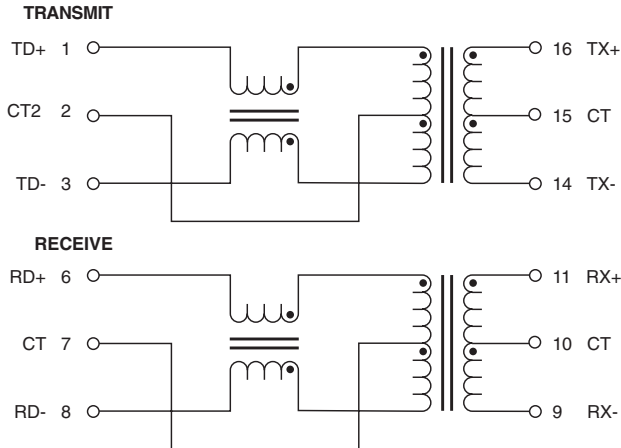
with PoE* Option and 1:1 Turns Ratios

*Power over Ethernet

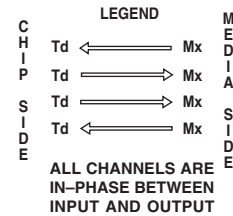
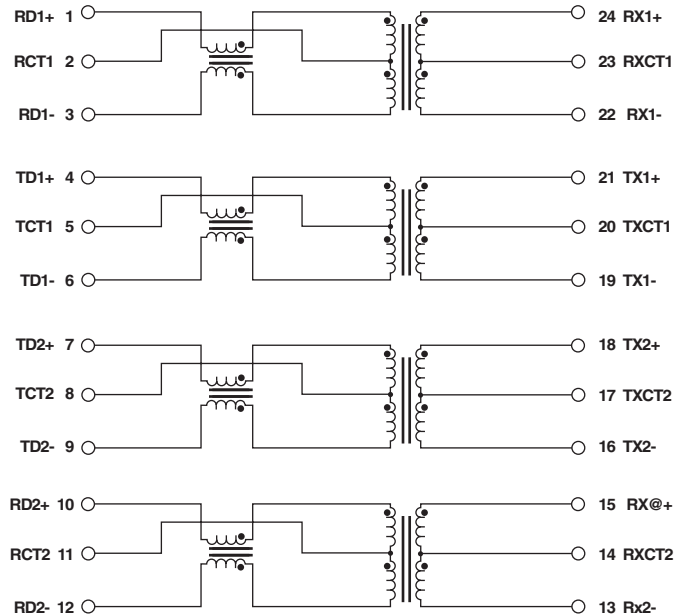


Schematics (continued)

H2260/NL, HX2260/NL



H2305/NL, HX2305/NL



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