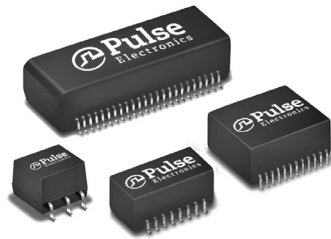


Power over Ethernet (PoE) Magnetics and (PoE+) Magnetics

100Base-TX VoIP Magnetics Modules



- RoHS peak reflow temperature rating 245C
- IEEE 802.3af/ANSI X3.263 compliant performance
- Designed for IP phone or switch applications

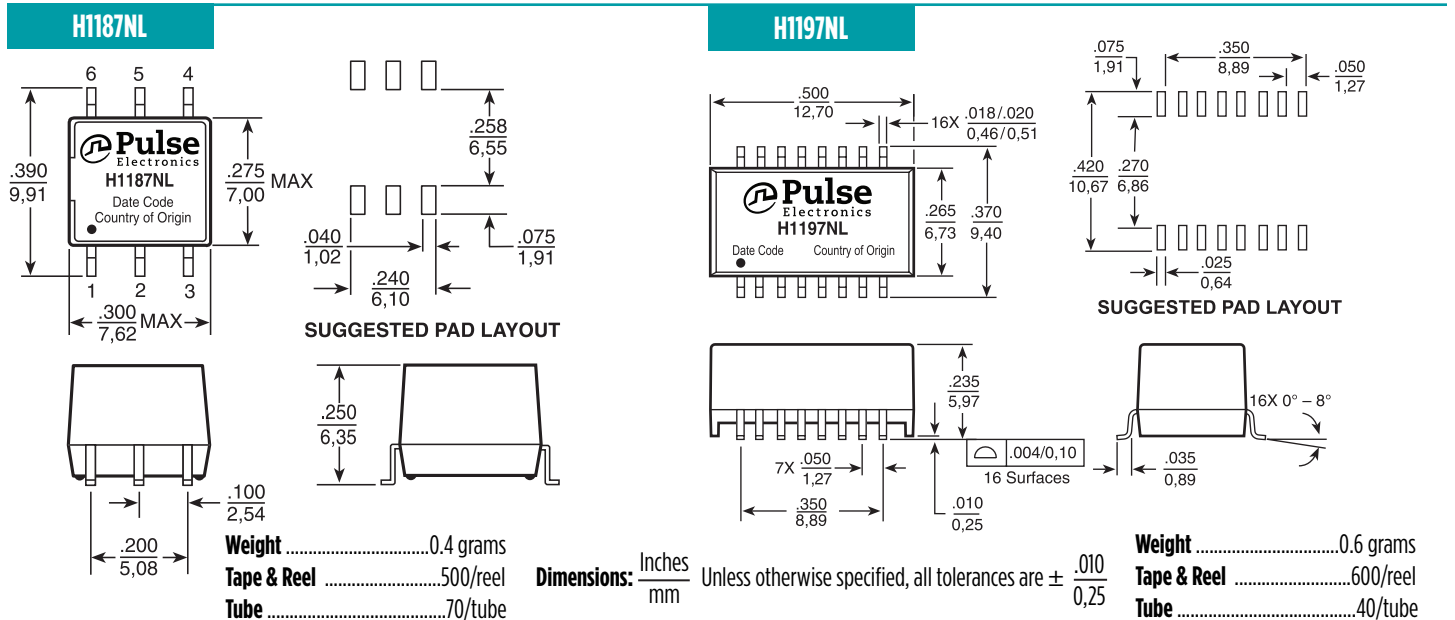
Electrical Specifications @ 25°C - Operating Temperature 0°C to 70°C

Part Number	No. of Ports	Insertion Loss (dB MAX)	Return Loss (dB MIN @ 100 Ω)					Differential to Common Mode Rejection (dB MIN @ 100 Ω)			CrossTalk (dB TYP)			Hipot (Vrms MIN)	DC Resistance Balance ≤ (%)
			1-100 MHz	1-30 MHz	40 MHz	50 MHz	60-80 MHz	30 MHz	60 MHz	100 MHz	30 MHz	60 MHz	100 MHz		
H1187NL ^{2a}	1	-1.2	-16	-14	-13	-12	-12	-43	-37	-33	-45	-40	-35	1500	—
H1197NL ^{2a, 4}	1	-1.2	-16	-14	-13	-12	-12	-43	-37	-33	-45	-40	-35	1500	—
H2019NL ^{2a, 4}	1	-1.2	-16	-14	-13	-12	-12	-43	-37	-33	-45	-40	-35	1500	3.5
H2005ANL ^{2c}	2	-1.2	-16	-14	-13	-12	-12	-50	-43	-35	-43	-37	-33	1500	3.5
H2006ANL ^{2c}	2	-1.2	-16	-14	-13	-12	-12	-43	-37	-33	-43	-37	-31	1500	3.5
H2008NL ^{2c}	2	-1.2	-16	-14	-13	-12	-12	-40	-35	-30	-43	-37	-33	1500	3.5
H2009NL ^{2a, 4}	2	-1.1	-16	-14	-13	-12	-12	-43	-37	-33	-43	-37	-33	1500	3.5
H2017NL ^{2c}	4	-1.2	-16	-14	-13	-12	-12	-43	-37	-33	-45	-40	-35	1800	3.5
HX2019NL ^{1, 2a, 4}	1	-1.4	-16	-14	-13	-12	-12	-43	-37	-33	-45	-40	-35	1500	3.5
HX2326NL ^{1, 2a, 3}	1	-1.0	-16	-14.4	-13	-12	-12	-43	-37	-33	-45	-40	-35	1500	3.5

- Extended operating temperature (-40°C to +85°C)
- MSL (Moisture Sensitivity Level): a = 1, b = 2, c = 3, d = 4, e = 5
- PoE+ (IEEE 802.3at compliant)
- Not for sale in U.S.

Notes: When ordering Tape & Reel packaging, add the suffix "T" to the end of the part number. For example: H2008NLT.

Mechanicals



USA 858 674 8100 Germany 49 7032 7806 0 Singapore 65 6287 8998 Shanghai 86 21 62787060 China 86 755 33966678 Taiwan 886 3 4356768

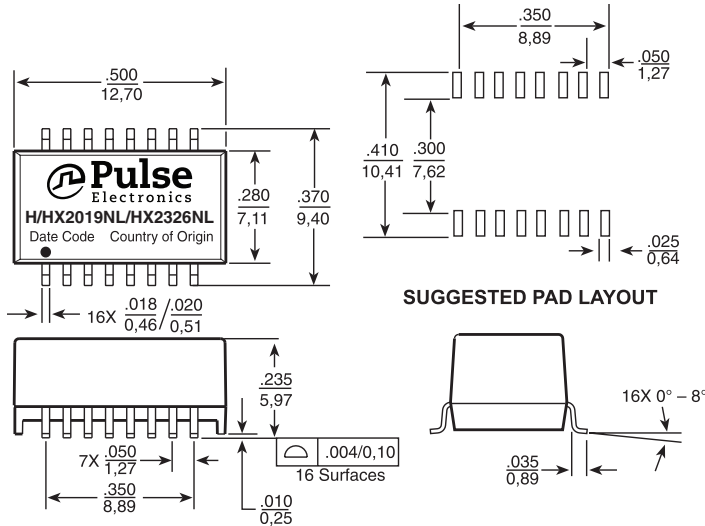
Power over Ethernet (PoE) Magnetics and (PoE+) Magnetics

100Base-TX VoIP Magnetics Modules



Mechanicals (continued)

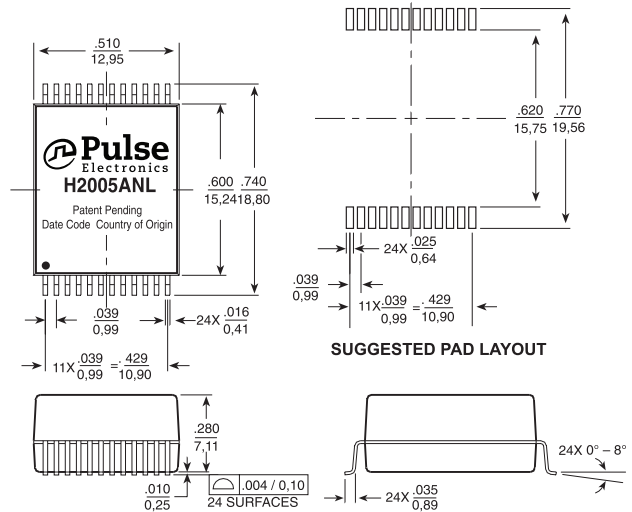
H2019NL, HX2019NL, HX2326NL



Weight1.0 grams
 Tape & Reel600/reel
 Tube40/tube

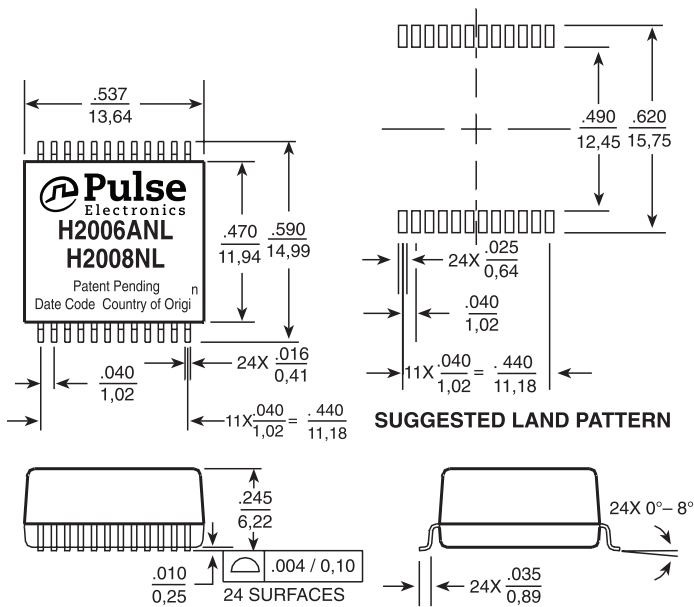
Dimensions: $\frac{\text{Inches}}{\text{mm}}$ Unless otherwise specified, all tolerances are $\pm \frac{.010}{0,25}$

H2005ANL



Weight2.7 grams
 Tape & Reel250/reel
 Tube25/tube

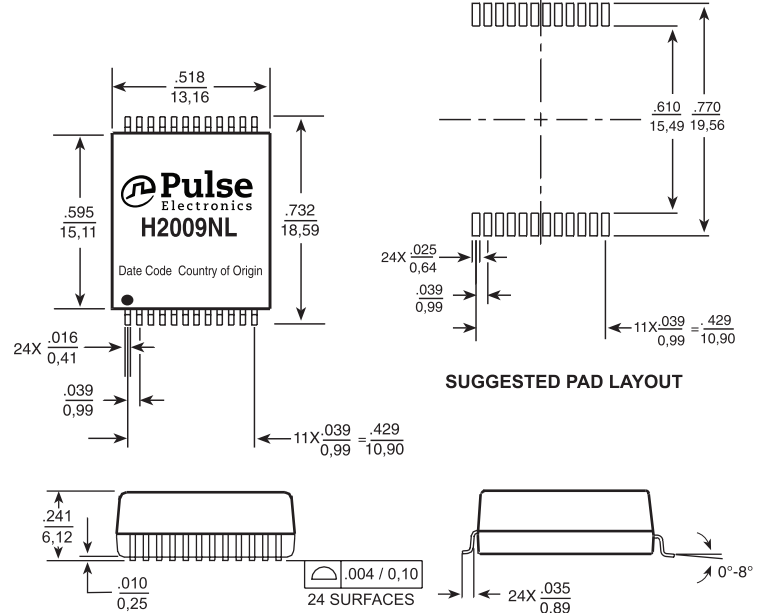
H2006ANL, H2008NL



Weight2.4 grams
 Tape & Reel350/reel
 Tube35/tube

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

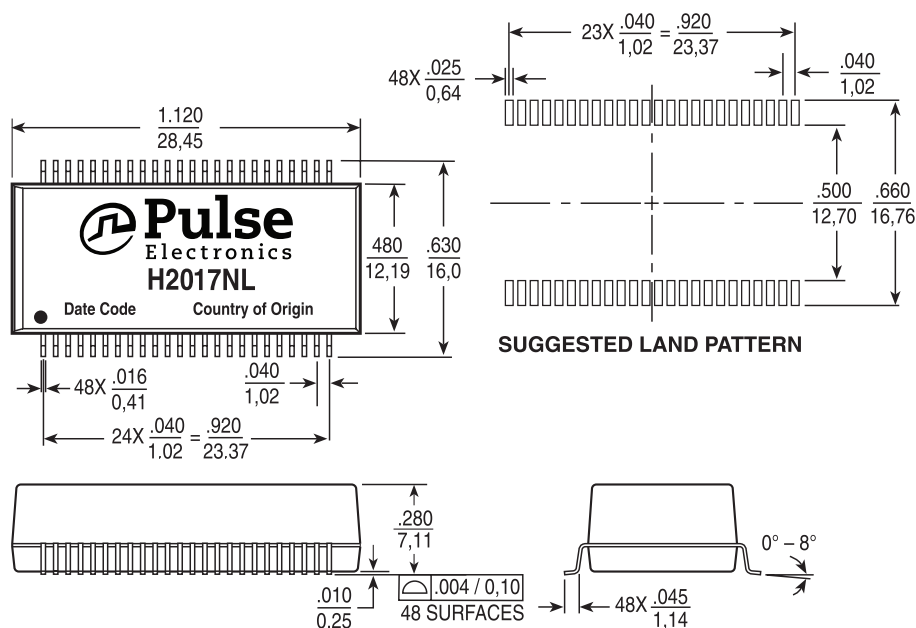
H2009NL



Weight1.6 grams
 Tape & Reel300/reel
 Tube35/tube

Mechanicals *(continued)*

H2017NL

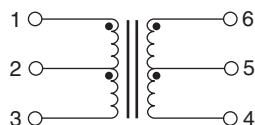


Weight5.0 grams
Tape & Reel250/reel
Tube15/tube

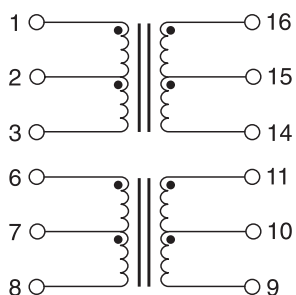
Dimensions: $\frac{\text{Inches}}{\text{mm}}$ Unless otherwise specified, all tolerances are $\pm \frac{.010}{0,25}$

Schematics

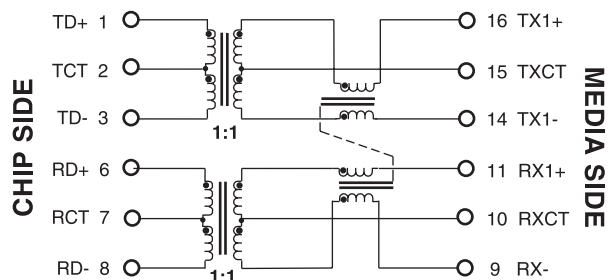
H1187NL



H1197NL

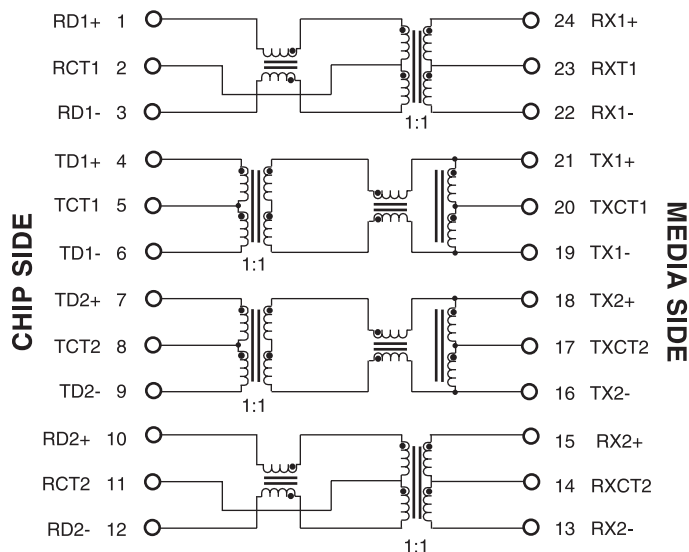


H2019NL, HX2019NL

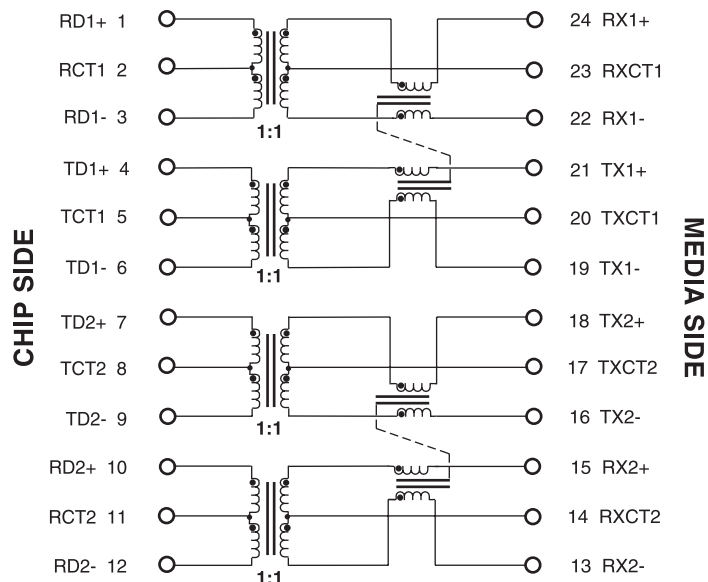


Schematics (continued)

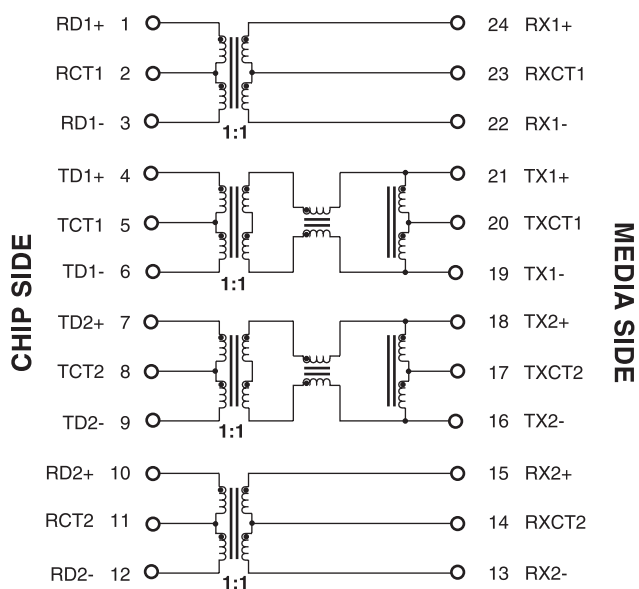
H2005ANL



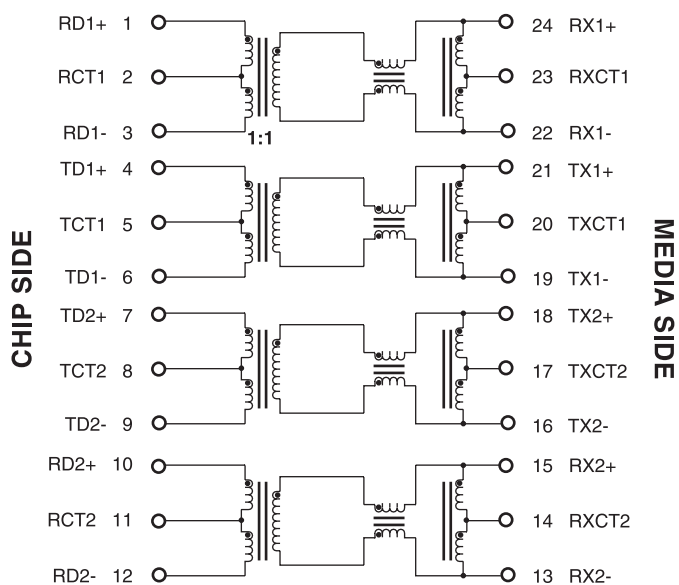
H2006ANL



H2008NL



H2009NL

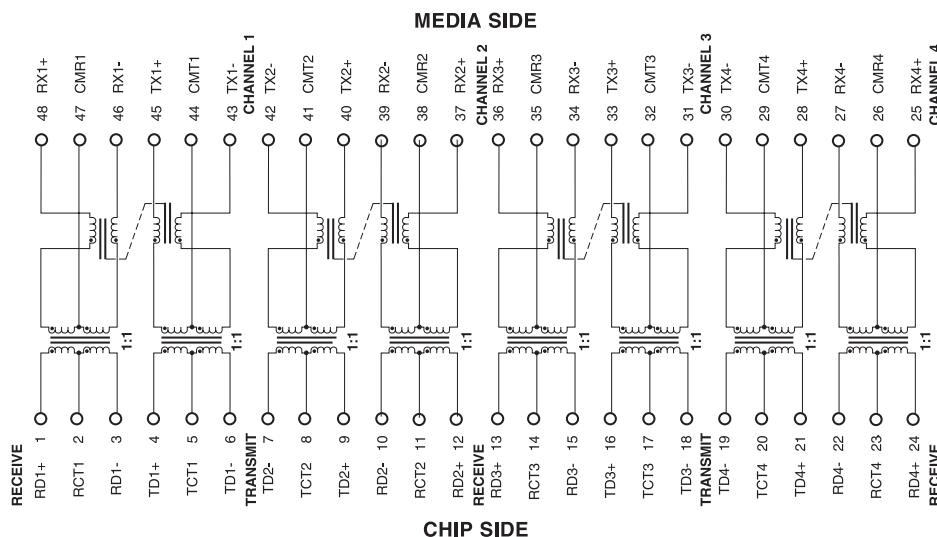


Power OVER Ethernet (PoE) Magnetics and (PoE+) Magnetics

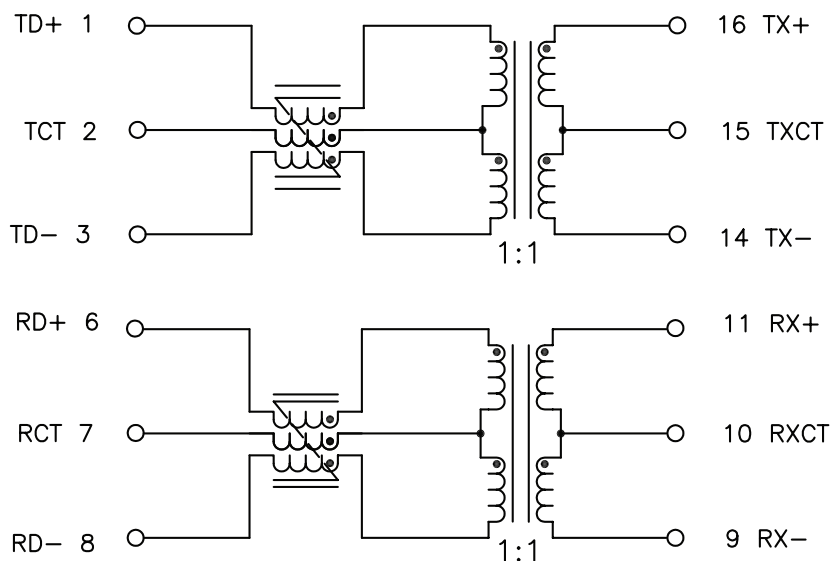
100Base-TX VoIP Magnetics Modules

Schematics (continued)

H2017NL



HX2326NL



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