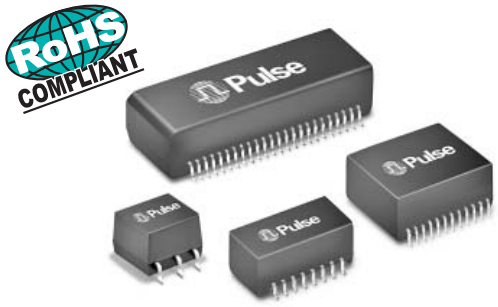
POWER OVER ETHERNET (PoE) MAGNETICS

10/100BASE-TX VoIP Magnetics Modules

Pulse
A TECHNITROL COMPANY



- RoHS peak reflow temperature rating 245°C
- 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

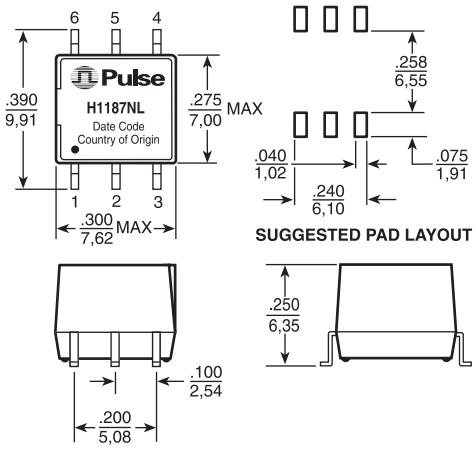
Part Number	Ports	Insertion Loss (dB MAX)	Return Loss (dB MIN @ 100 Ω)				Differential to Common Mode Rejection (dB MIN)			Cross Talk (dB MIN)			Hipot (Vrms MIN))	DC Resistance Balance ≤ (%)
		1-100 MHz	1-30 MHz	40 MHz	50 MHz	60-80 MHz	30 MHz	60 MHz	100 MHz	30 MHz	60 MHz	100 MHz		
H1187NL[2a]	1	-1.2	-16	-14	-13	-12	-43	-37	-33	-45	-40	-35	1500	—
H1197NL [2a]	1	-1.2	-16	-14	-13	-12	-43	-37	-33	-45	-40	-35	1500	—
H2019NL[2a]	1	-1.2	-16	-14	-13	-12	-43	-37	-33	-45	-40	-35	1500	3.5
H2005ANL[2c]	2	-1.2	-16	-14	-13	-12	-50	-43	-35	-43	-37	-33	1500	3.5
H2006ANL[2c]	2	-1.2	-16	-14	-13	-12	-43	-37	-33	-43	-37	-31	1500	3.5
H2008NL[2c]	2	-1.2	-16	-14	-13	-12	-40	-35	-30	-43	-37	-33	1500	3.5
H2009NL[2a]	2	-1.1	-16	-14	-13	-12	-43	-37	-33	-43	-37	-33	1500	3.5
H2014NL[2d]	4	-1.2	-16	-14	-13	-12	-43	-37	-33	-45	-40	-35	1500	3.5
H2017NL[2c]	4	-1.2	-16	-14	-13	-12	-43	-37	-33	-45	-40	-35	1800	3.5
HX2019NL[1, 2a]	1	-1.4	-16	-14	-13	-12	-43	-37	-33	-45	-40	-35	1500	3.5

1. **Extended** operating temperature (-40°C to +85°C)
2. **MSL** (Moisture Sensitivity Level): a = 1, b = 2, c = 3, d = 4, e = 5

NOTE: When ordering Tape & Reel packaging, add the suffix "**T**" to the end of the part number. For example: H2008NL**T**.

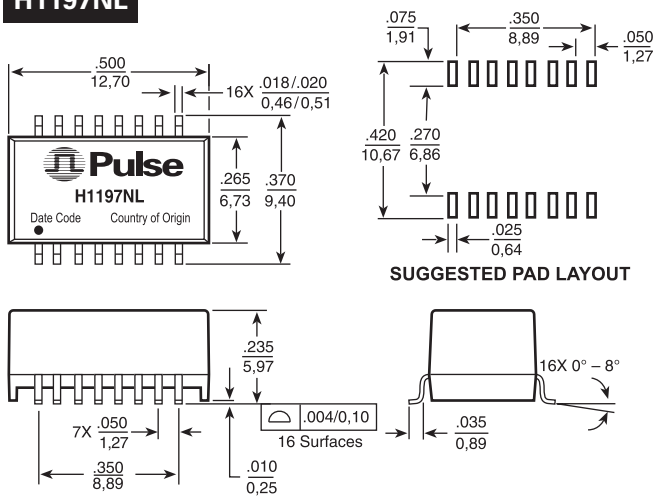
Mechanicals

H1187NL



Weight . . . . . 0.6 grams
Tape & Reel 500/reel
Tube 70/tube

H1197NL



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

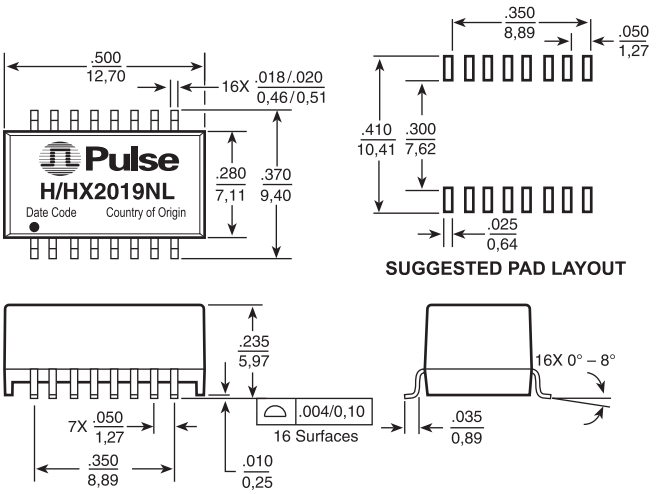
Dimensions: Inches / mm Unless otherwise specified, all tolerances are ± .010 / 0,25

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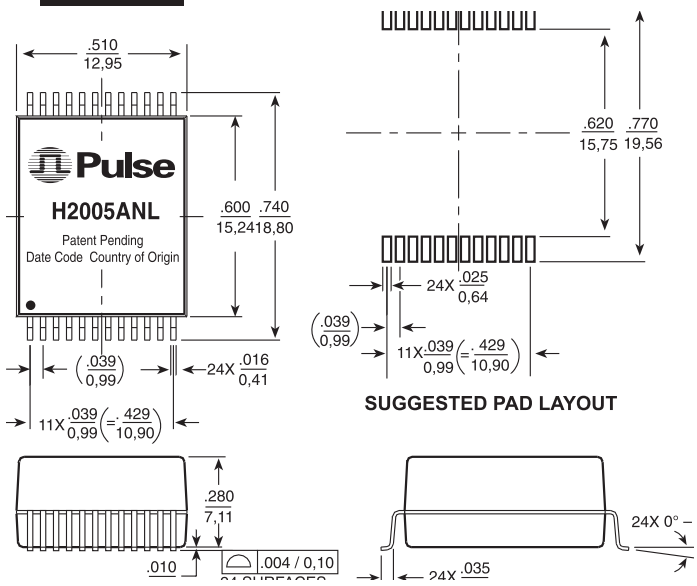
Mechanicals

H2019NL, HX2019NL



Weight . . . . . 1.0 grams
Tape & Reel 600/reel
Tube 45/tube

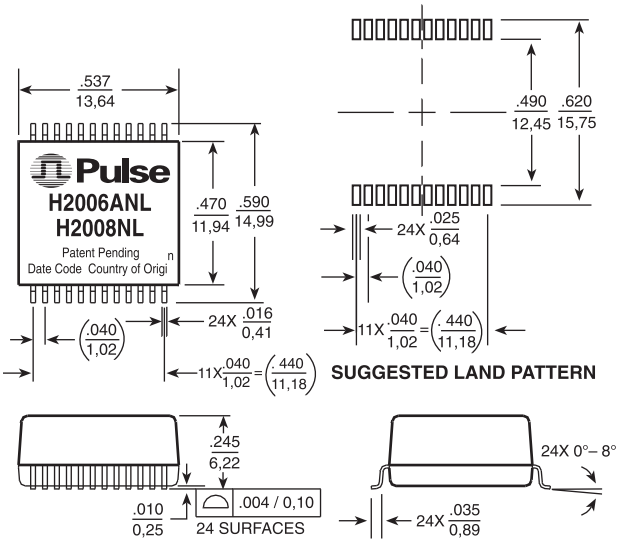
H2005ANL



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

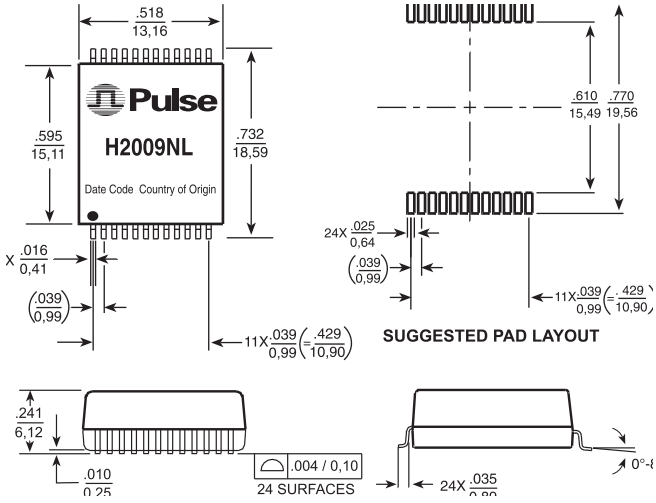
Dimensions: Inches / mm Unless otherwise specified, all tolerances are ± .010 / 0,25

H2006ANL, H2008NL



Weight . . . . . 2.4 grams
Tape & Reel 350/reel
Tube 35/tube

H2009NL



Weight . . . . . 1.6 grams
Tape & Reel 300/reel
Tube 35/tube

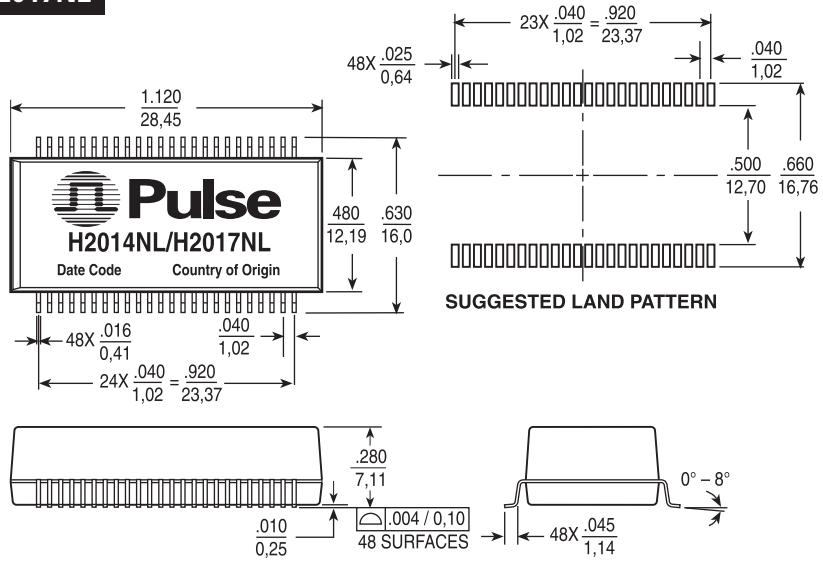
Dimensions: Inches / mm Unless otherwise specified, all tolerances are ± .010 / 0,25

POWER OVER ETHERNET (PoE) MAGNETICS

10/100BASE-TX VoIP Magnetics Modules

Mechanicals (continued)

H2014NL, H2017NL

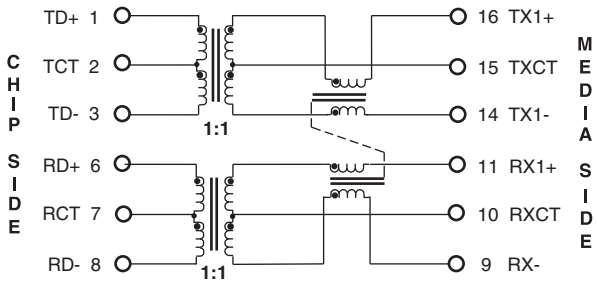


Dimensions: Inches / mm Unless otherwise specified, all tolerances are ± .010/0,25

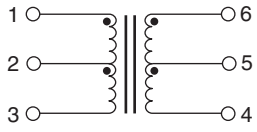
Weight . . . . . 5.0 grams
Tape & Reel . . . . . 250 /reel
Tube 15/tube

Schematics

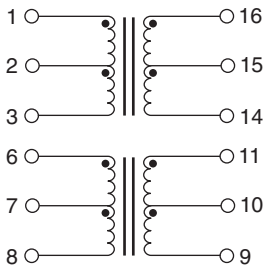
H2019NL, HX2019NL



H1187NL

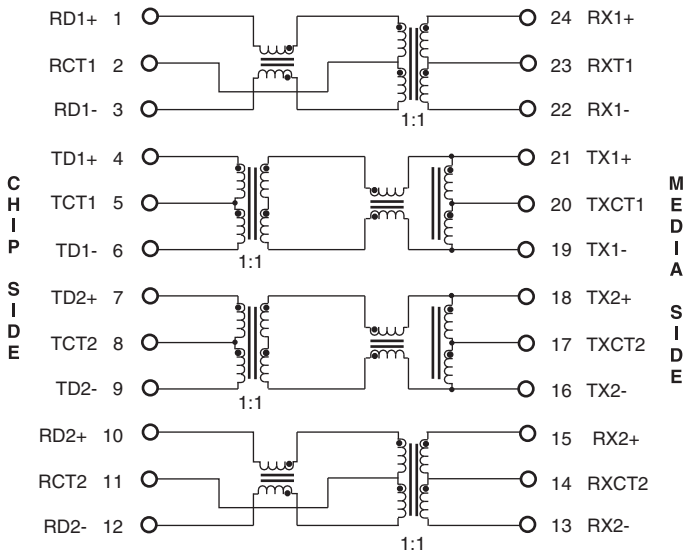


H1197NL

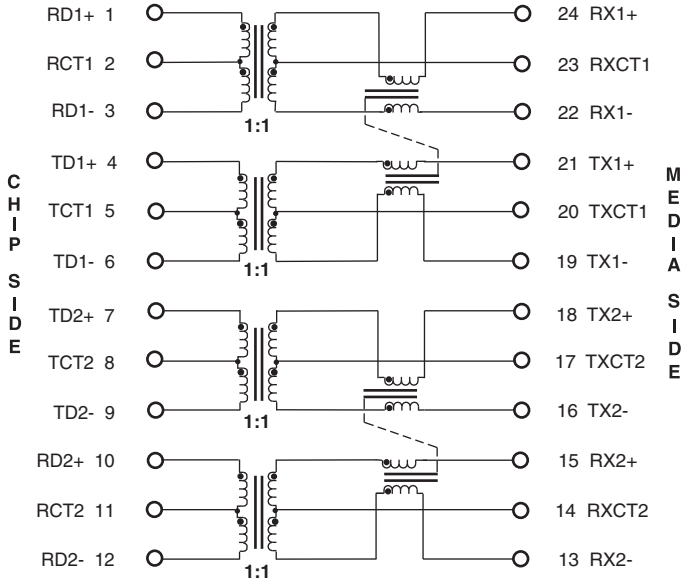


Schematics *(continued)*

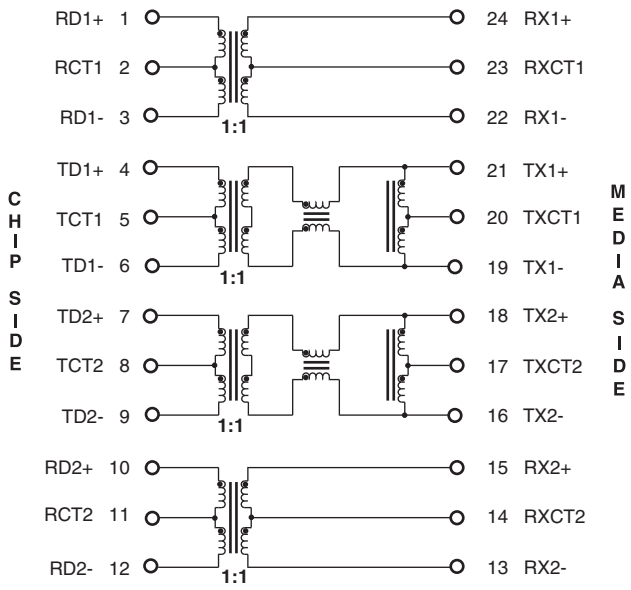
H2005ANL



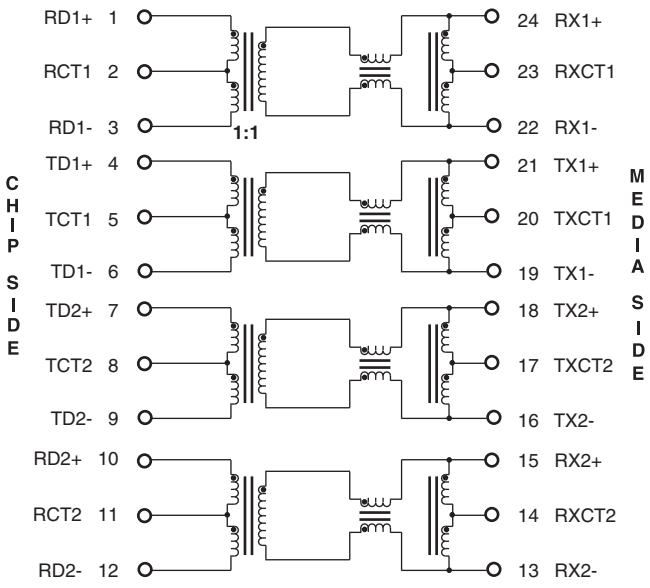
H2006ANL



H2008NL



H2009NL

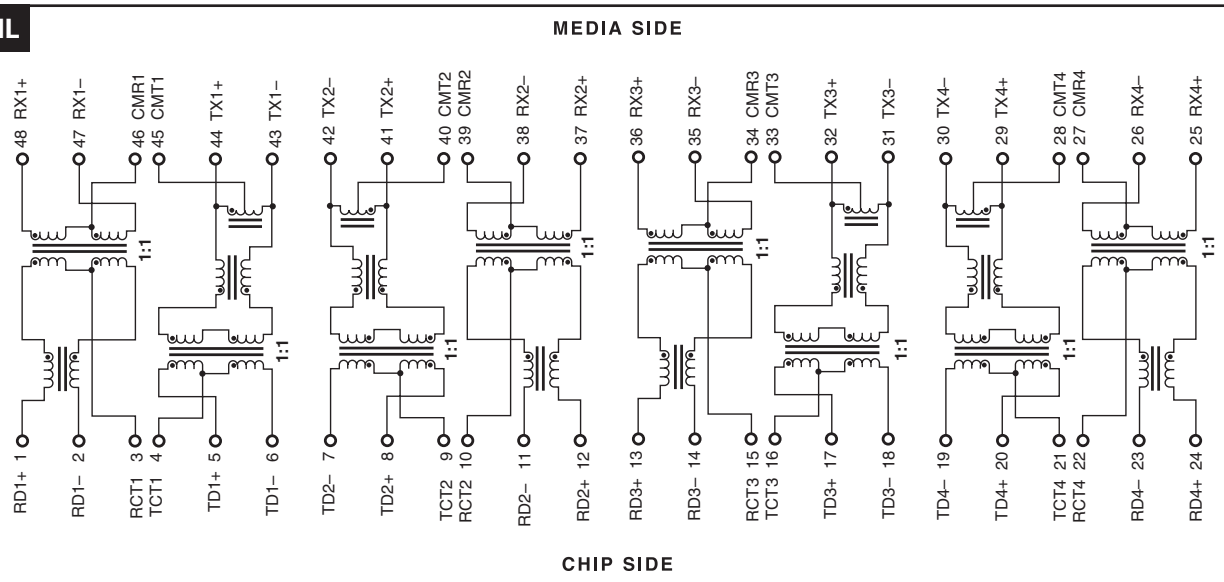


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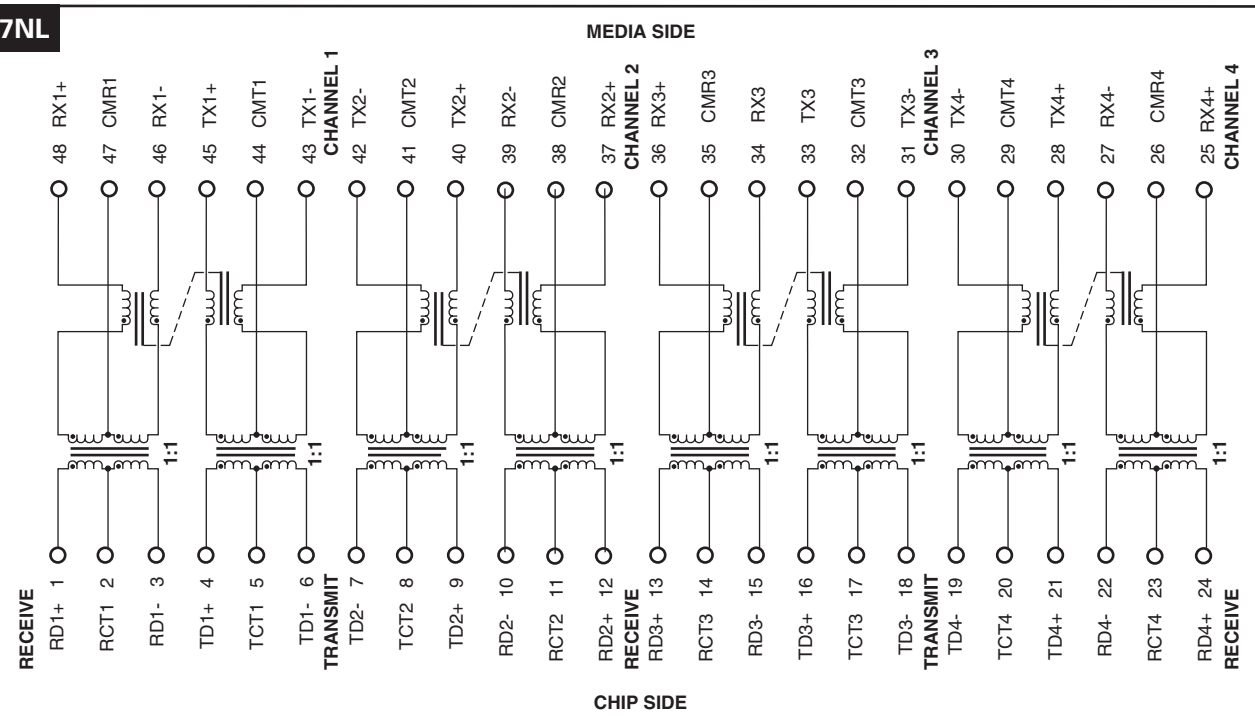
10/100BASE-TX VoIP Magnetics Modules

Schematics *(continued)*

H2014NL



H2017NL



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