



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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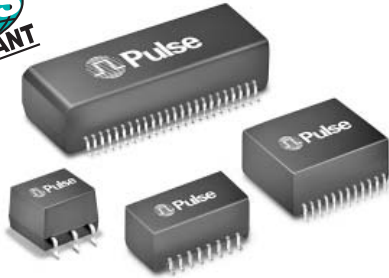
Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



POWER OVER ETHERNET (PoE) MAGNETICS

10/100BASE-TX VoIP Magnetics Modules



- 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

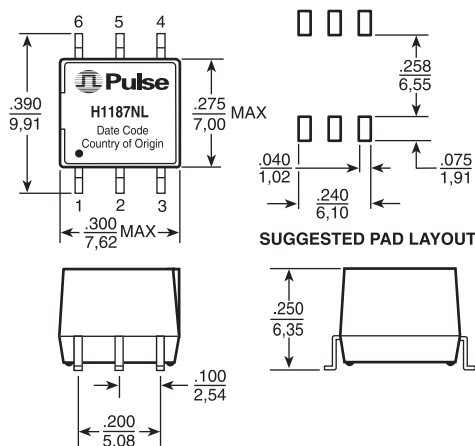
Part Number	Ports	Insertion Loss (dB MAX)	Return Loss (dB MIN @ 100 Ω)					Differential to Common Mode Rejection (dB MIN)			Cross Talk (dB MIN)			Hipot (Vrms MIN))	DC Resistance Balance ≤ (%)
			1-100 MHz	1-30 MHz	40 MHz	50 MHz	60-80 MHz	30 MHz	60 MHz	100 MHz	30 MHz	60 MHz	100 MHz		
H1187NL ^{2a}	1	-1.2	-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: H2008NLT.

Mechanics

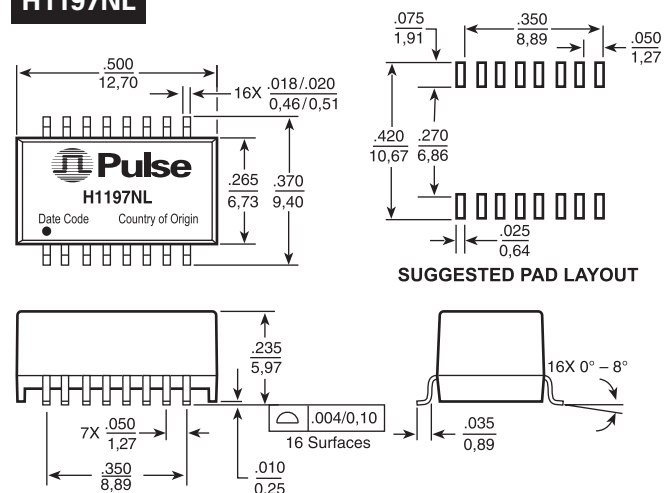
H1187NL



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

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

H1197NL



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

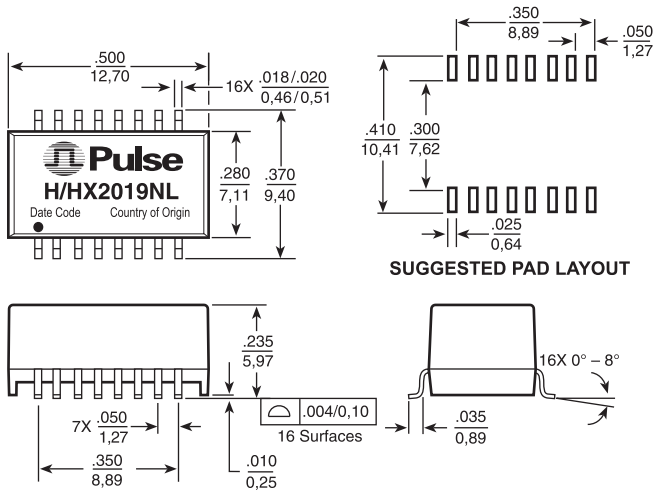
POWER OVER ETHERNET (PoE) MAGNETICS

10/100BASE-TX VoIP Magnetics Modules

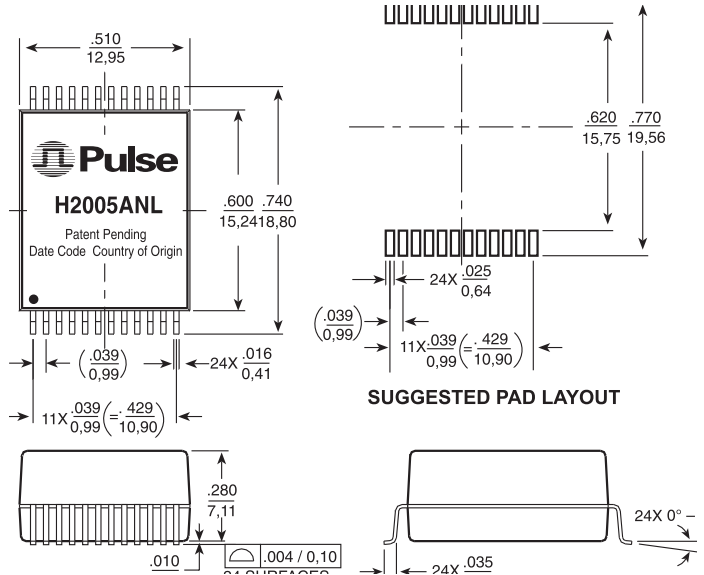


Mechanicals

H2019NL, HX2019NL



H2005ANL

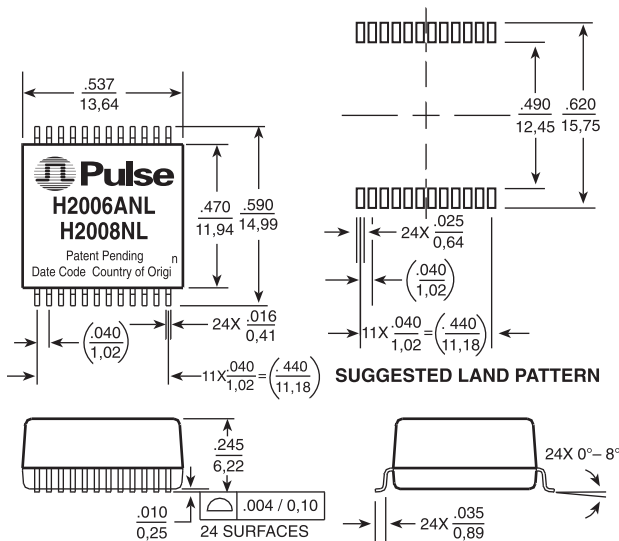


Weight 1.0 grams
Tape & Reel 600/reel
Tube 45/tube

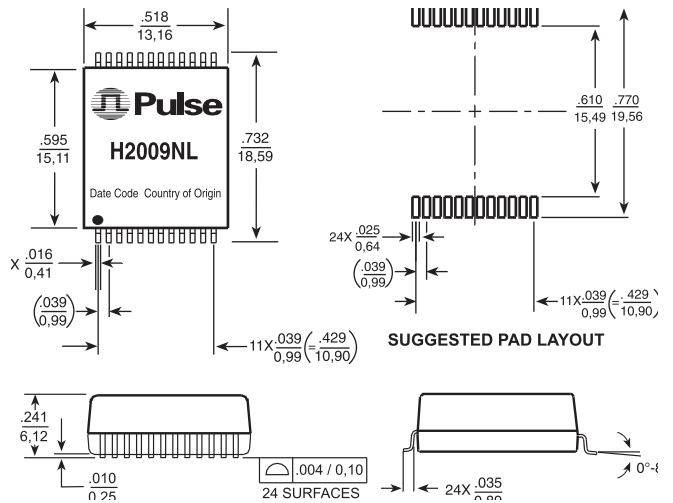
Dimensions: $\frac{\text{Inches}}{\text{mm}}$ Unless otherwise specified, all tolerances are $\pm \frac{.010}{0,25}$

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

H2006ANL, H2008NL



H2009NL



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

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

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

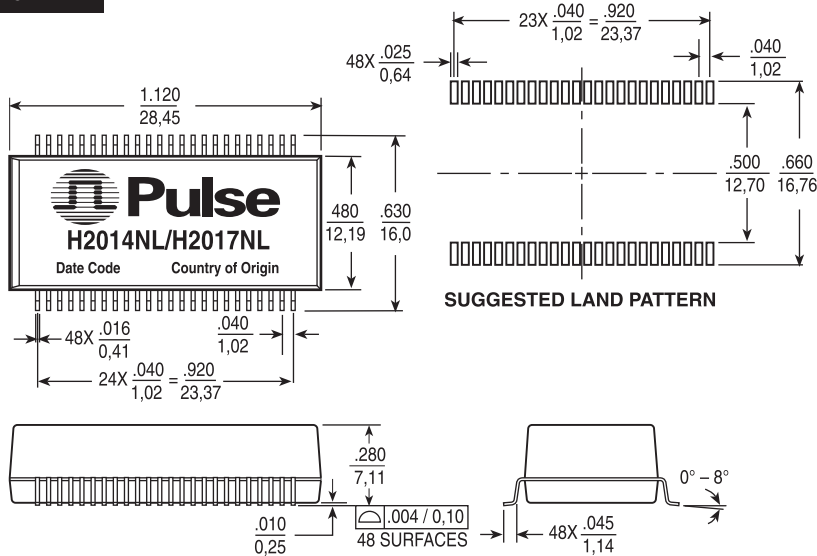
POWER OVER ETHERNET (PoE) MAGNETICS

10/100BASE-TX VoIP Magnetics Modules



Mechanicals (continued)

H2014NL, H2017NL

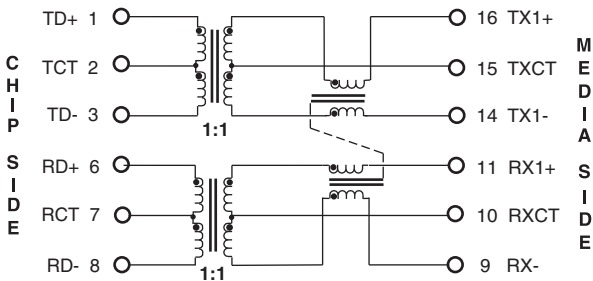


Dimensions: $\frac{\text{Inches}}{\text{mm}}$ Unless otherwise specified, all tolerances are $\pm \frac{.010}{0,25}$

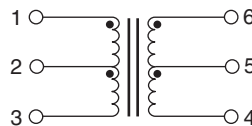
Weight 5.0 grams
Tape & Reel 250 /reel
Tube 15/tube

Schematics

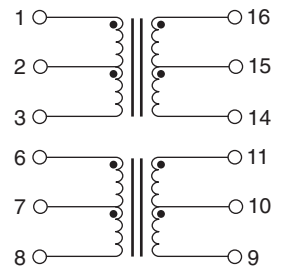
H2019NL, HX2019NL



H1187NL



H1197NL



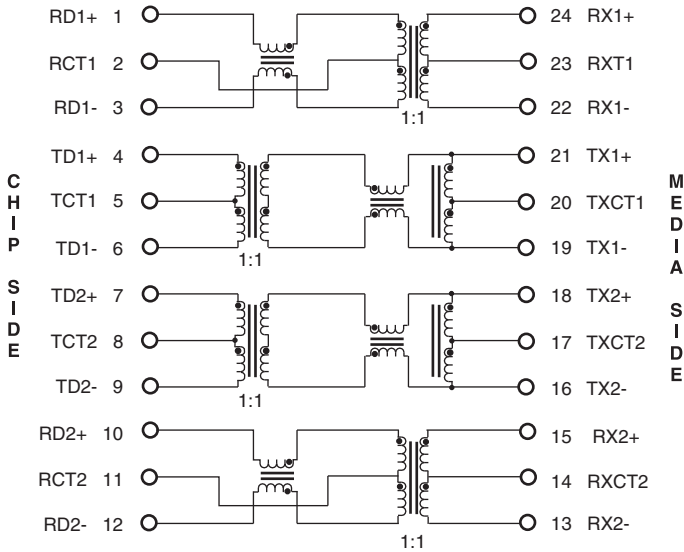
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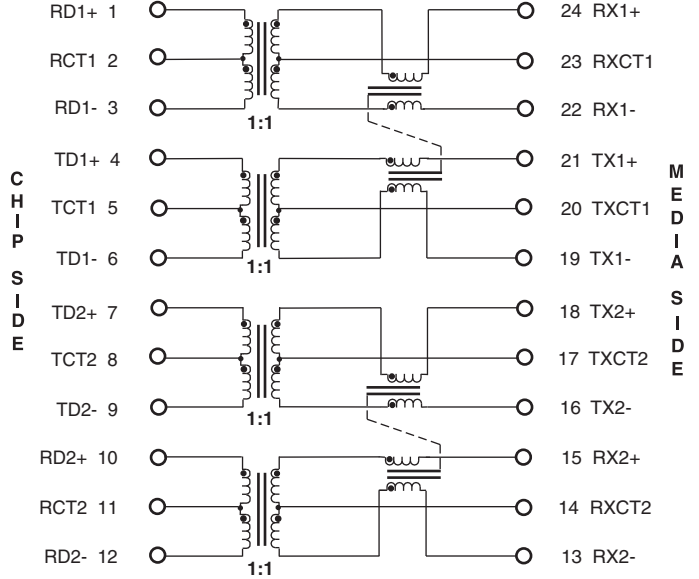


Schematics (continued)

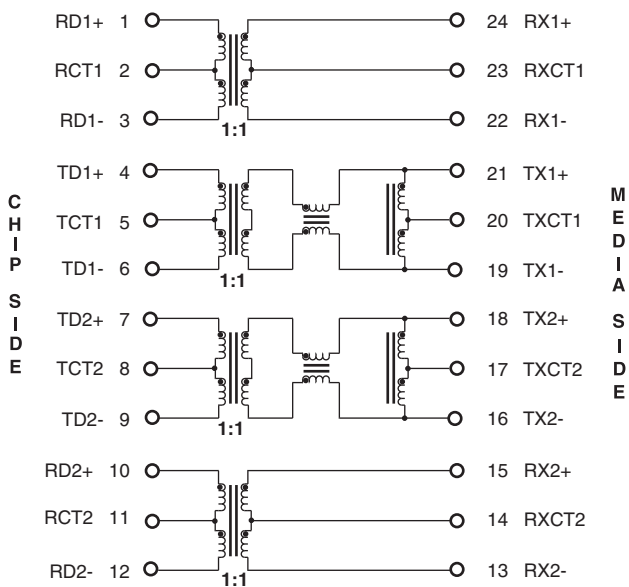
H2005ANL



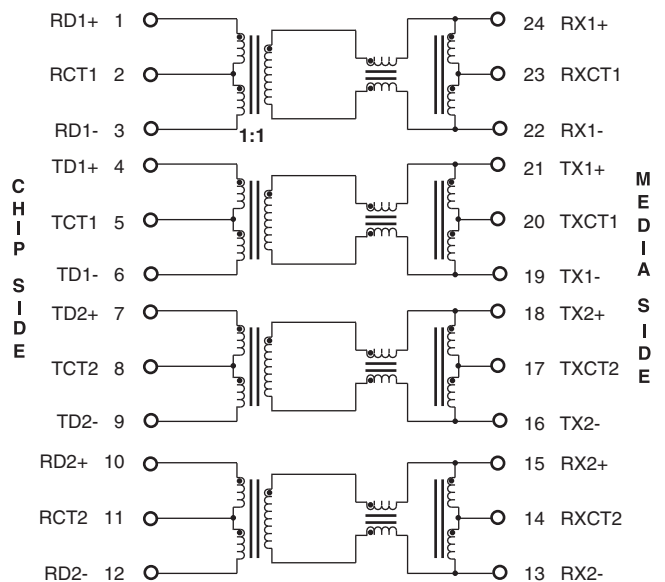
H2006ANL



H2008NL



H2009NL



POWER OVER ETHERNET (PoE) MAGNETICS

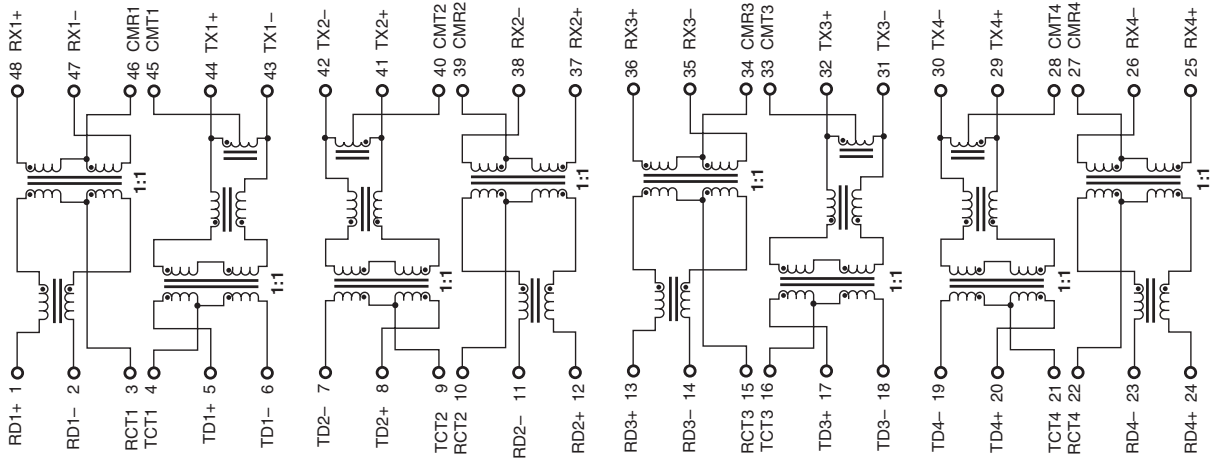
10/100BASE-TX VoIP Magnetics Modules



Schematics (continued)

H2014NL

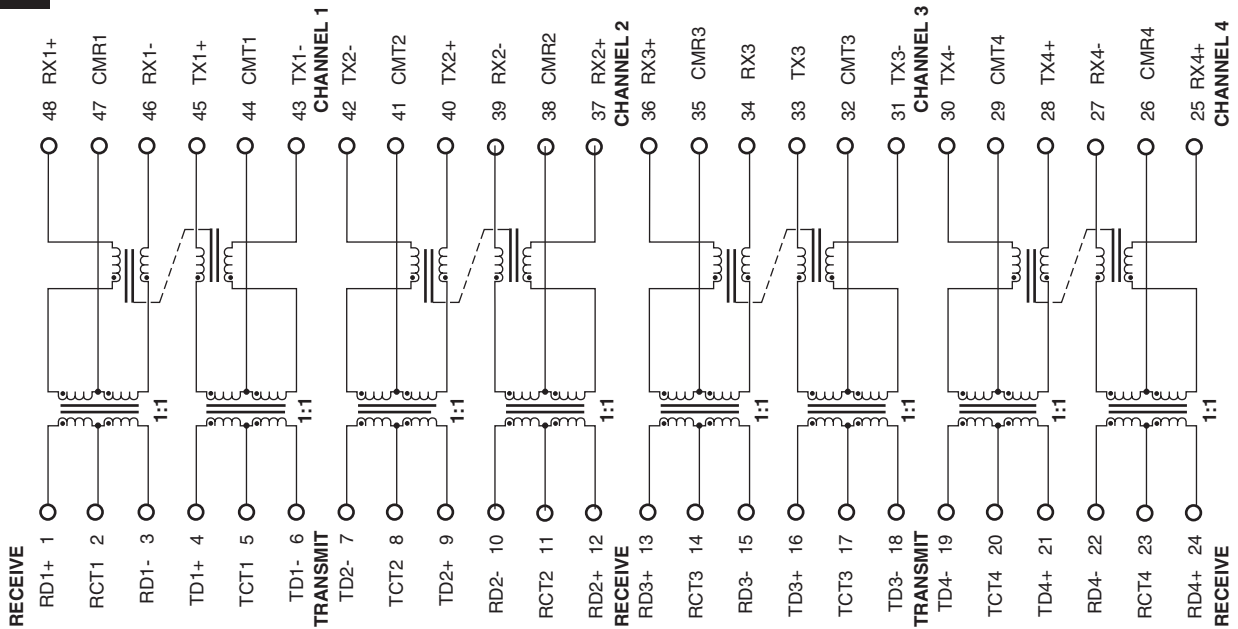
MEDIA SIDE



CHIP SIDE

H2017NL

MEDIA SIDE



CHIP SIDE

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