



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!



## Contact us

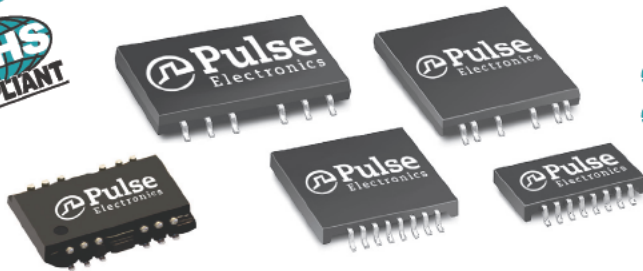
Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

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

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



# 10/100 PC Card LAN Magnetic Modules



- RoHS peak reflow temperature rating 260°C
- Low profile packages from .094" (2,39mm) to .078" (1,98mm) for PC card and cardbus applications

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

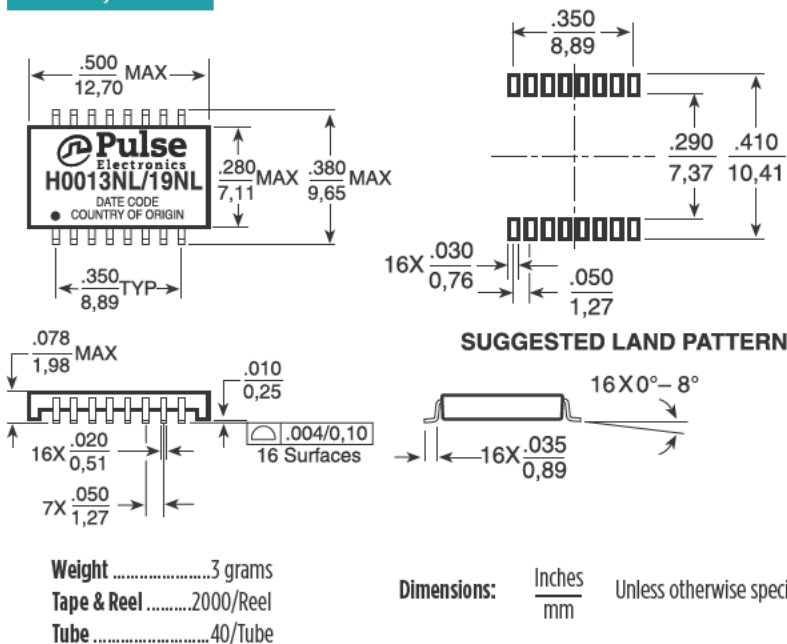
RoHS Compliant Part Number	Turns Ratio (±5%)		Insertion Loss (dB MAX) 100 kHz-100 MHz	Return Loss (dB MIN)			Differential to Common Mode Rejection (dB MIN)			Crosstalk (dB MIN)			Hipot (Vrms MIN)
	TX	wRX		30 MHz	60 MHz	80 MHz	30 MHz	50 MHz	100 MHz	30 MHz	62 MHz	100 MHz	
H0009NL <sup>2a</sup>	1:1	1:1	-0.9	-16	-12	-11	-35	-33	-20	-50	-45	-40	1500
H0013NL <sup>2a</sup>	1:1	1:1	-0.9	-16	-12	-11	-35	-33	-20	-50	-45	-40	1500
H0019NL <sup>2a</sup>	1:1	1:1	-0.9	-18	-12	-11	-40	—	-30	-45	-45	-37	1500
H0020NL <sup>2a</sup>	1:1	1:1	-1.0	-16	-12	-12	-42	—	-33	-45	-40	-35	1500
H0022NL <sup>2a</sup>	1:1	1:1	-2.0	-18	-14	-12	-40	-35	-30	-50	-45	-40	1500
H0025NL <sup>2a</sup>	1:1	1:1	-2.0	-18	-12	-12	-40	-35	-30	-45	-45	-37	1500
H0068ANL <sup>2a</sup>	1:1	1:1	-1.0	-16	-14	-12	-40	-35	-30	-45	-40	-37	1500
HX0068ANL <sup>1,2a</sup>	1:1	1:1	-1.0	-16	-14	-12	-40	-35	-30	-45	-40	-35	1500

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

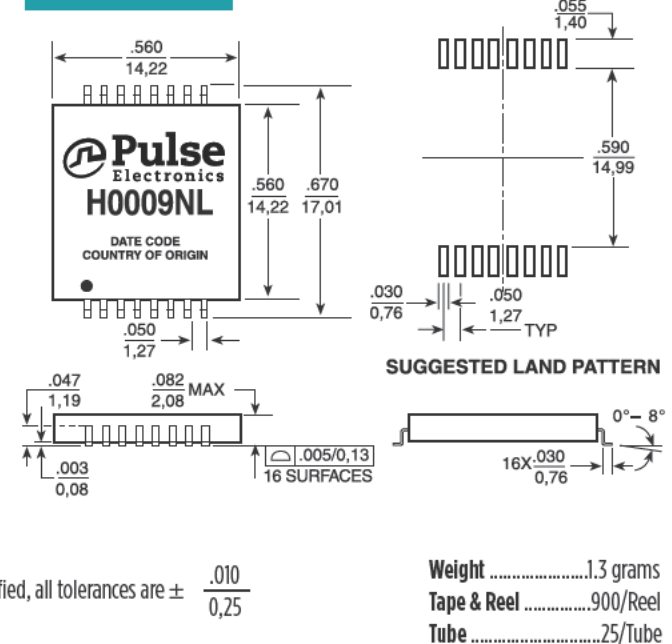
Notes: When ordering Tape & Reel packaging, add the suffix "T" to the end of the part number. For example: HX0068ANLT.

## Mechanicals

### H0013NL, H0019NL



### H0009NL



USA 858 674 8100

Germany 49 7032 7806 0

Singapore 65 6287 8998

Shanghai 86 21 62787060

China 86 755 33966678

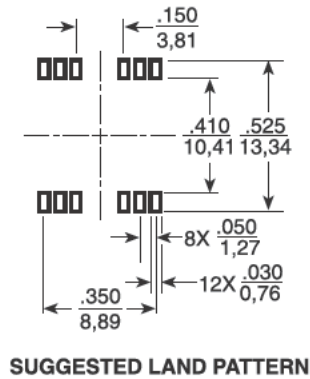
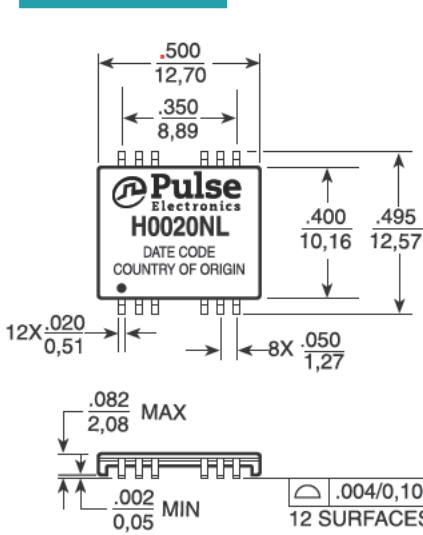
Taiwan 886 3 4356768

# 10/100 PC Card LAN Magnetic Modules

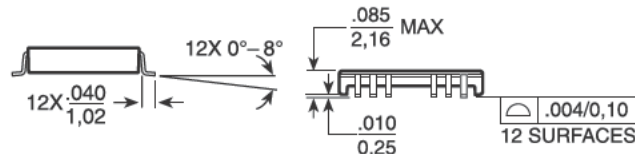
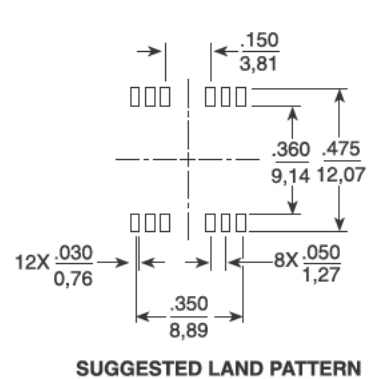
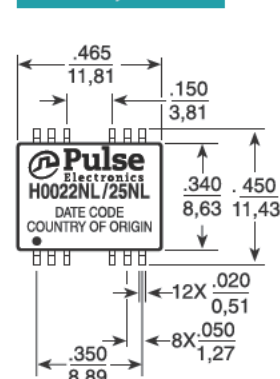


## Mechanicals (continued)

### H0020NL



### H0022NL, H0025NL

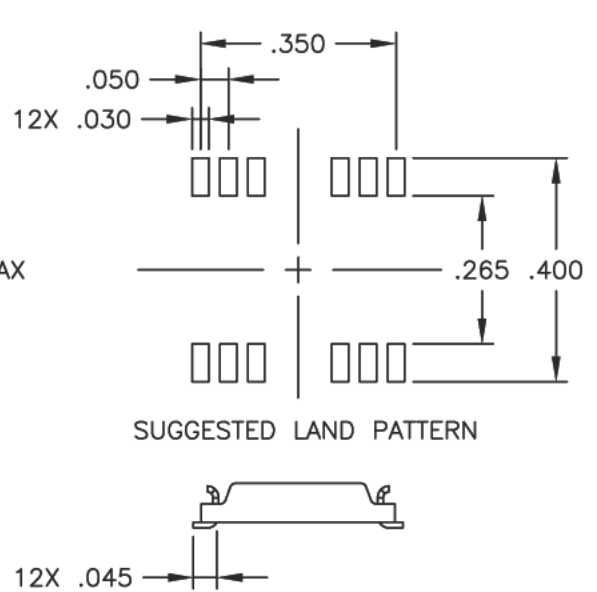
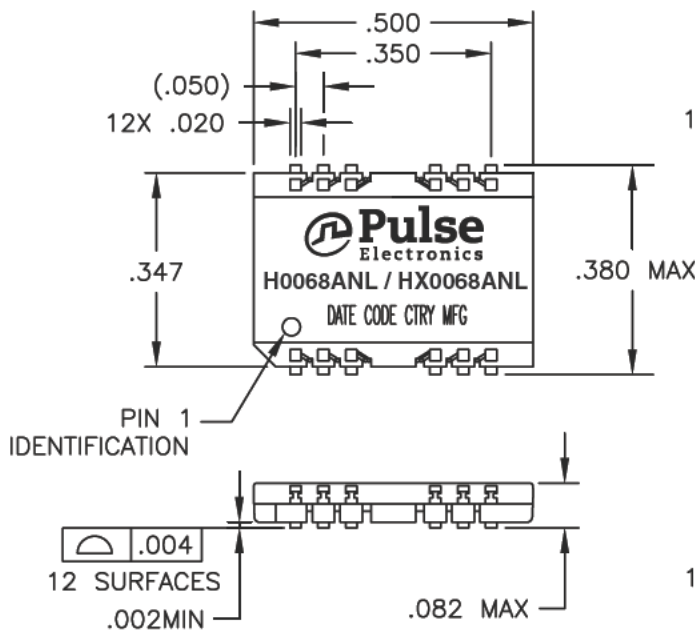


Weight .....0.3 grams  
Tape & Reel .....500/Reel  
Tube ..... 40/Tube

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

Weight .....0.355 grams  
Tape & Reel .....1000/Reel  
Tube .....40/Tube

### H0068ANL, HX0068ANL



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

Weight .....0.4 grams  
Tape & Reel .....2000/Reel  
Tube .....40/Tube

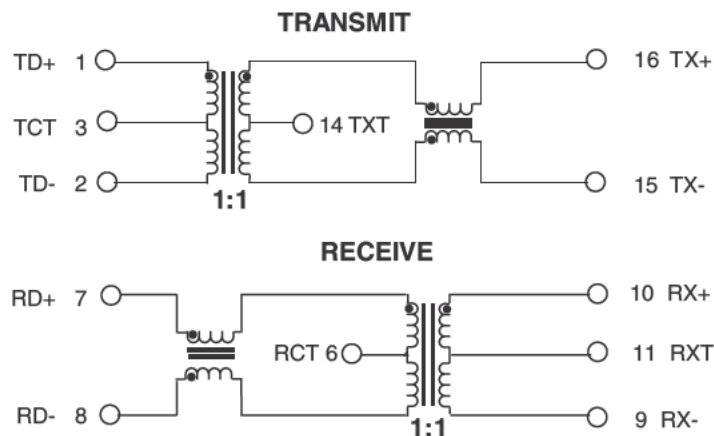
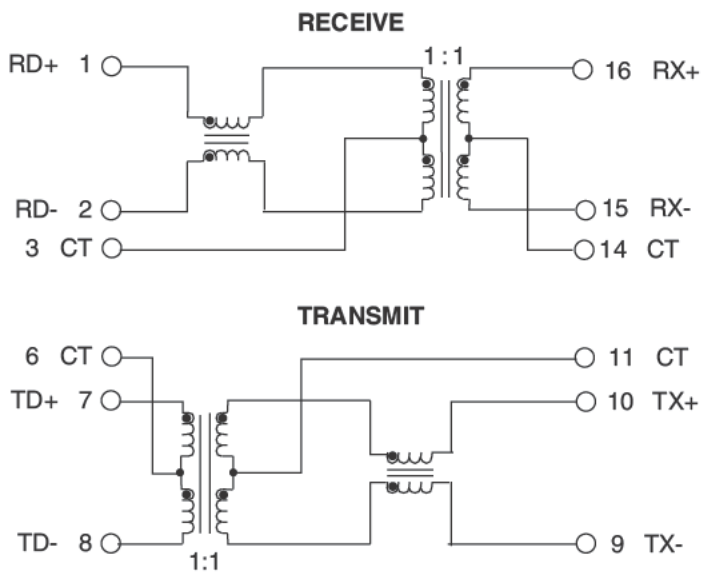
# 10/100 PC Card LAN Magnetic Modules



## Schematics

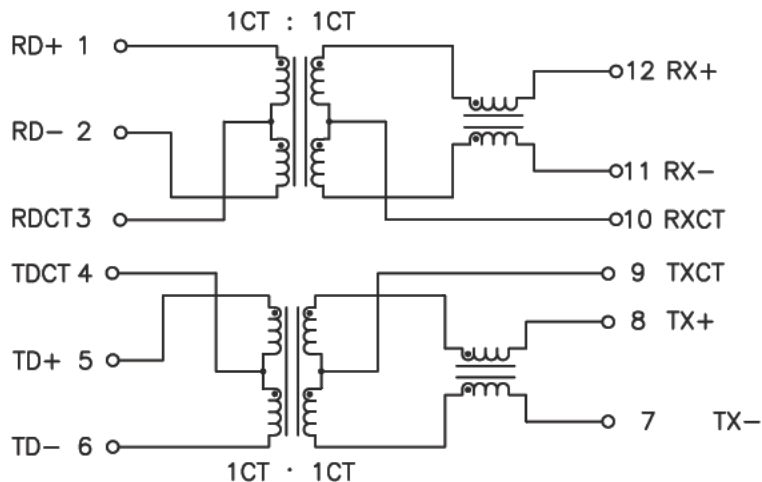
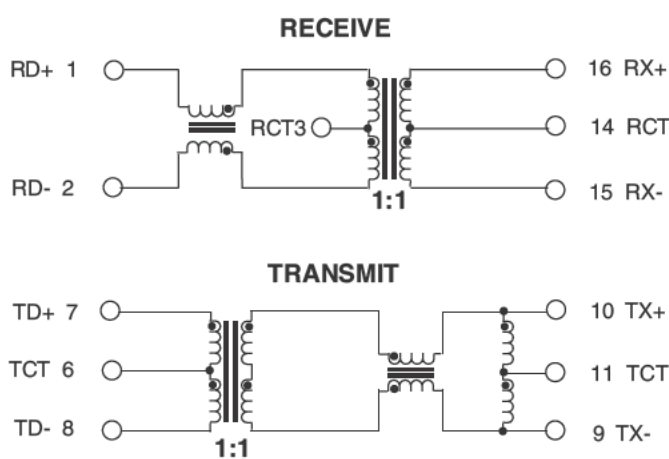
H0009NL, H0013NL, H0019NL, H0025NL

H0020NL



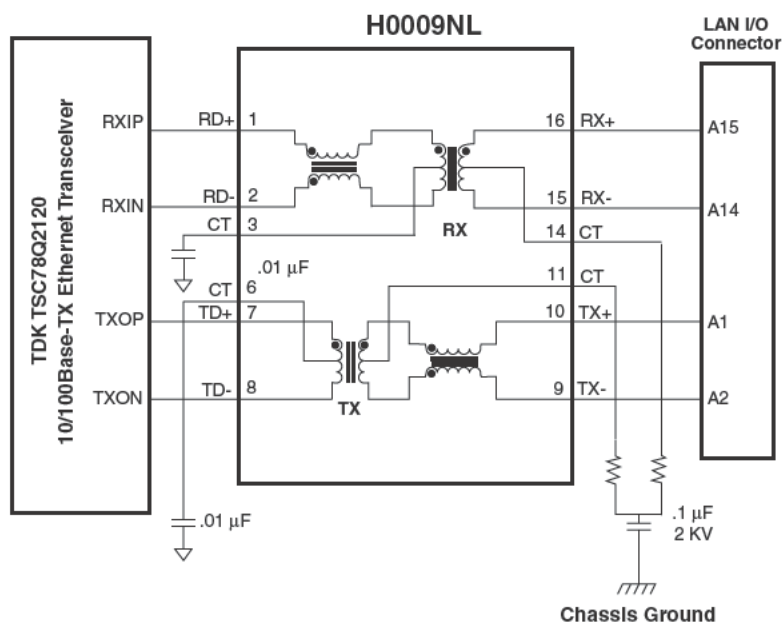
H0022NL

H0068ANL, HX0068ANL



# 10/100 PC Card LAN Magnetics Modules

## Typical Application Layout



## 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  
Shenzhen, 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)

Performance warranty of products offered on this data sheet is limited to the parameters specified. Data is subject to change without notice. Other brand and product names mentioned herein may be trademarks or registered trademarks of their respective owners. © Copyright, 2012. Pulse Electronics, Inc. All rights reserved.