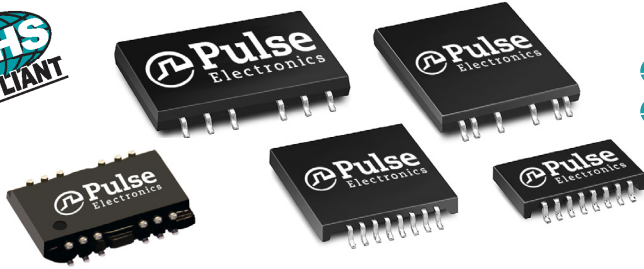


10/100 PC Card LAN Magnetic Modules



- 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

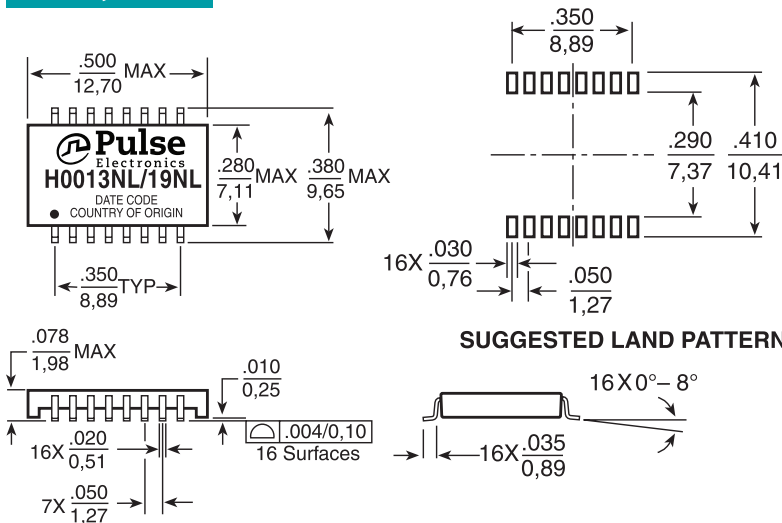
RoHS Compliant Part Number	Turns Ratio (±5%)		Insertion Loss (dB MAX) 100 kHz-100 MHz	Return Loss (dB MIN)			Differential to Common Mode Rejection (dB MIN)			Crosstalk (dB MIN)			Hipot (Vrms MIN)
	TX	wRX		30 MHz	60 MHz	80 MHz	30 MHz	50 MHz	100 MHz	30 MHz	62 MHz	100 MHz	
H0009NL ^{2a}	1:1	1:1	-0.9	-16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

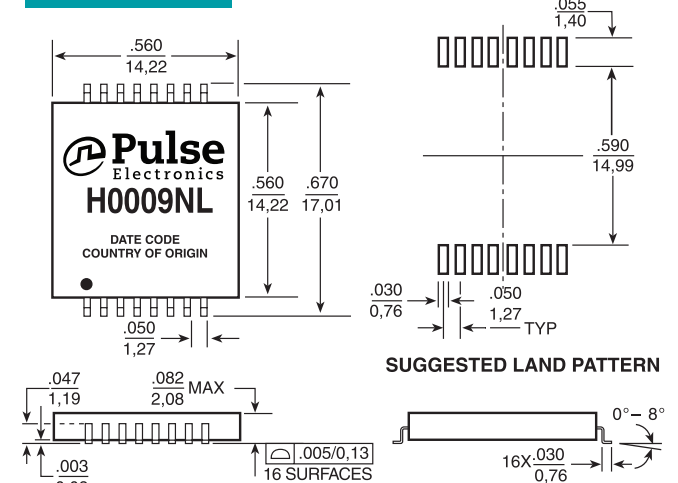
Mechanicals

H0013NL, H0019NL



Weight3 grams
Tape & Reel2000/Reel
Tube40/Tube

H0009NL



Weight1.3 grams
Tape & Reel900/Reel
Tube25/Tube

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

USA 858 674 8100

Germany 49 7032 7806 0

Singapore 65 6287 8998

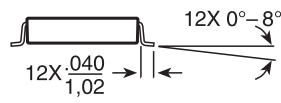
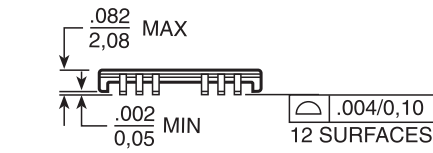
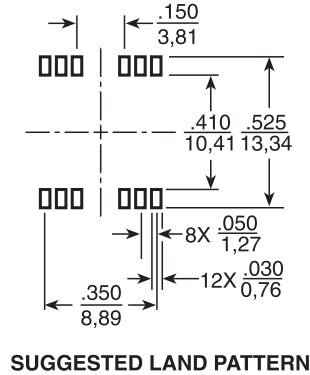
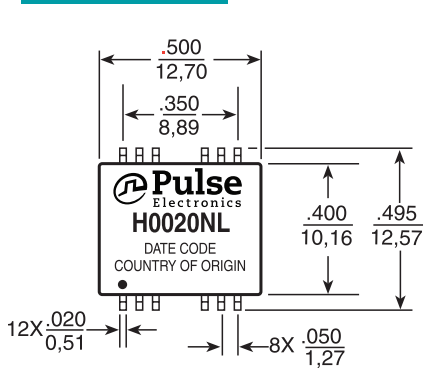
Shanghai 86 21 62787060

China 86 755 33966678

Taiwan 886 3 4356768

Mechanicals (continued)

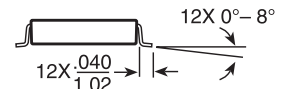
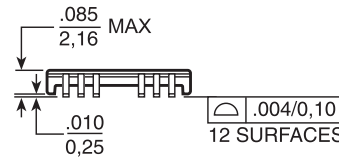
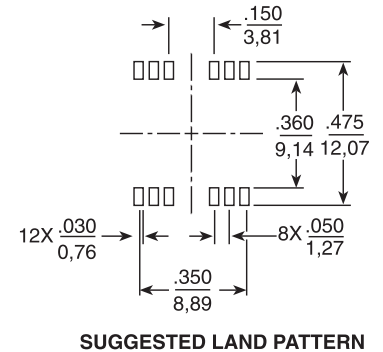
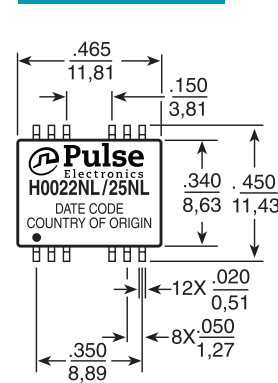
H0020NL



Weight0.3 grams
Tape & Reel500/Reel
Tube40/Tube

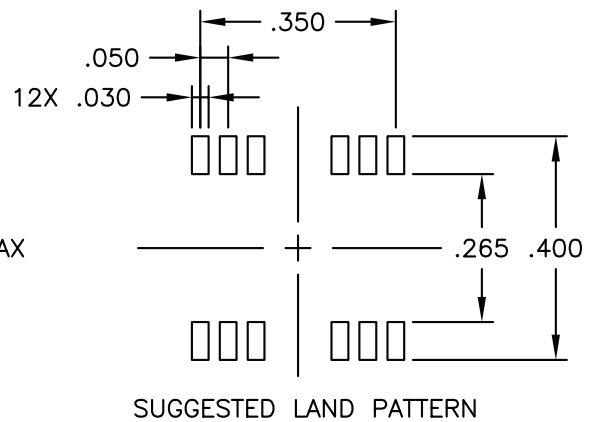
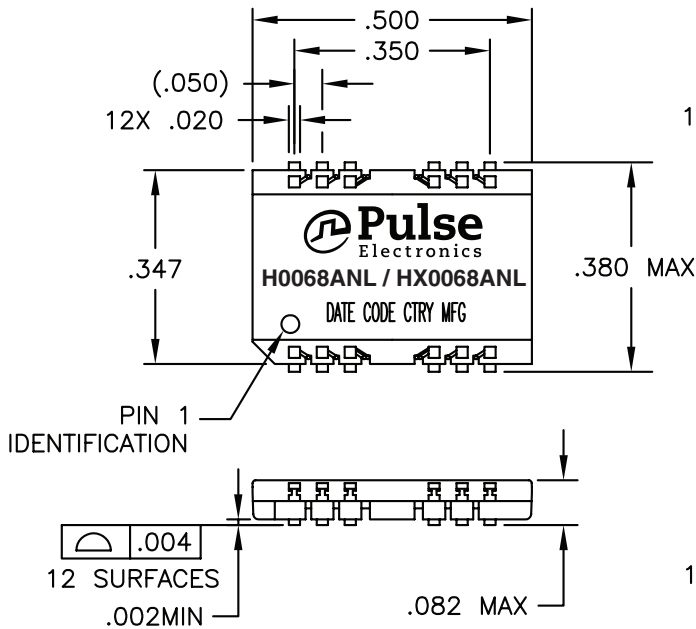
Dimensions: $\frac{\text{Inches}}{\text{mm}}$ Unless otherwise specified, all tolerances are $\pm \frac{.010}{0,25}$

H0022NL, H0025NL



Weight0.355 grams
Tape & Reel1000/Reel
Tube40/Tube

H0068ANL, HX0068ANL



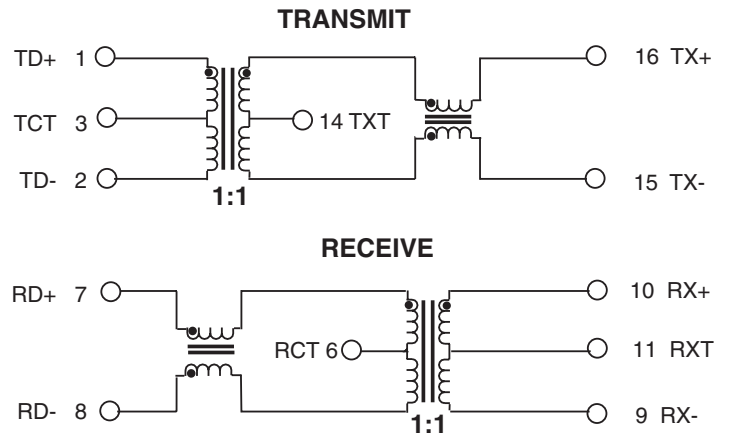
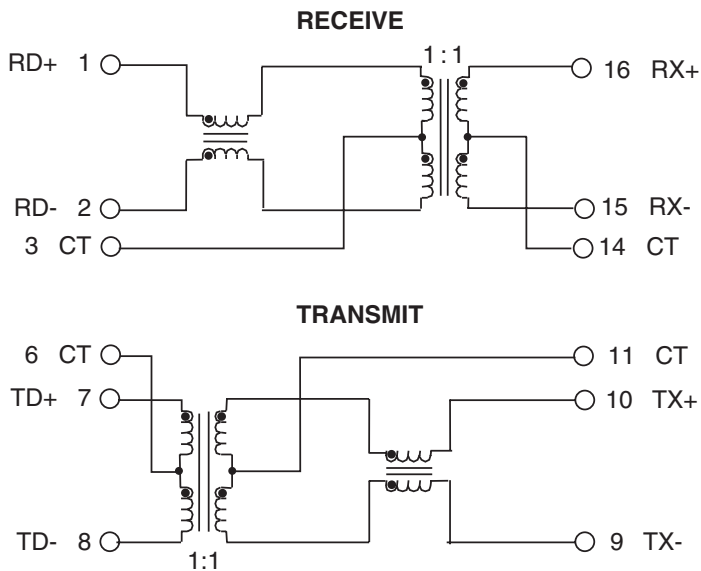
Dimensions: $\frac{\text{Inches}}{\text{mm}}$ Unless otherwise specified, all tolerances are $\pm \frac{.010}{0,25}$

Weight0.4 grams
Tape & Reel2000/Reel
Tube40/Tube

Schematics

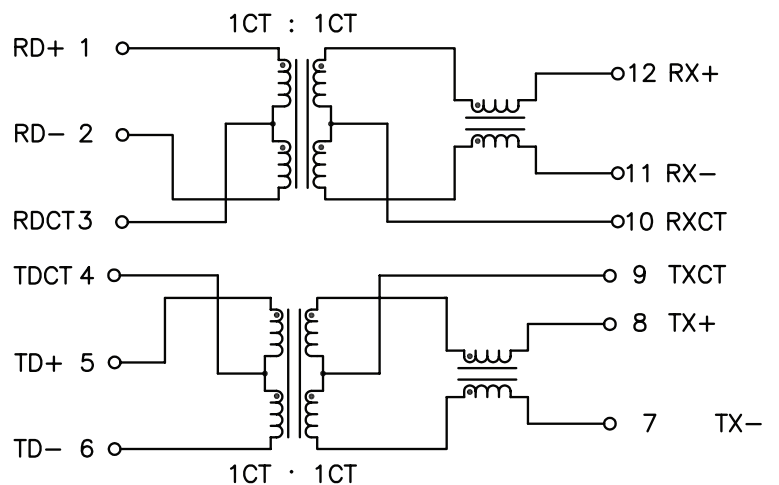
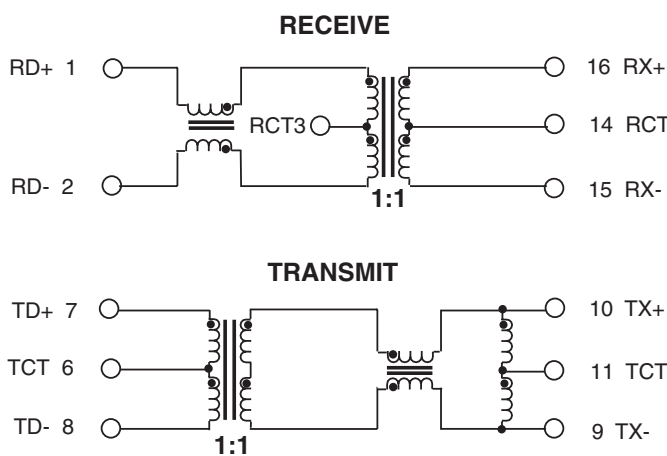
H0009NL, H0013NL, H0019NL, H0025NL

H0020NL



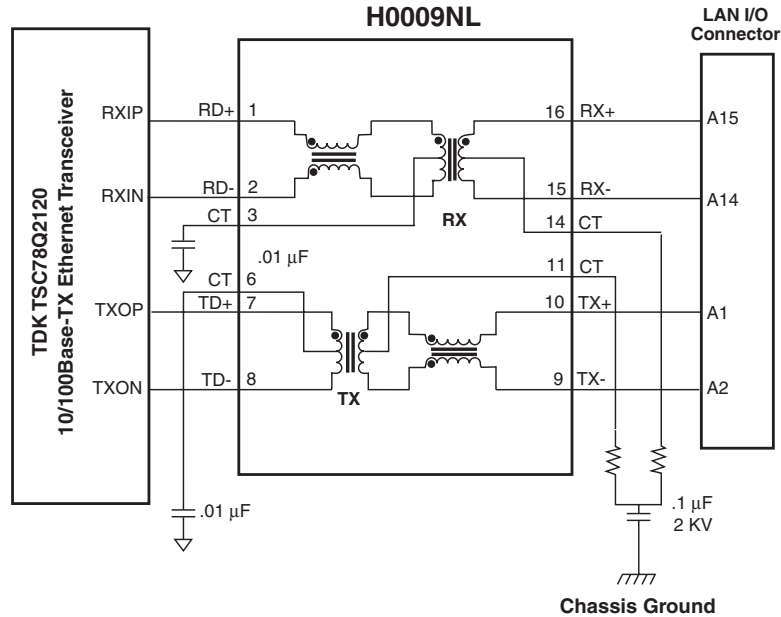
H0022NL

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 Kejian 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.