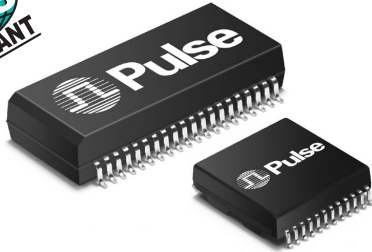


10/100BASE-TX DUAL PORT TRANSFORMER MODULES

For Use with Transceivers Requiring 1:1 Transmit and Receive Turns Ratios



- RoHS reflow temperature rating 245°C
- Meets IEEE 802.3 specification
- Some models offer AutoMDIX capability

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

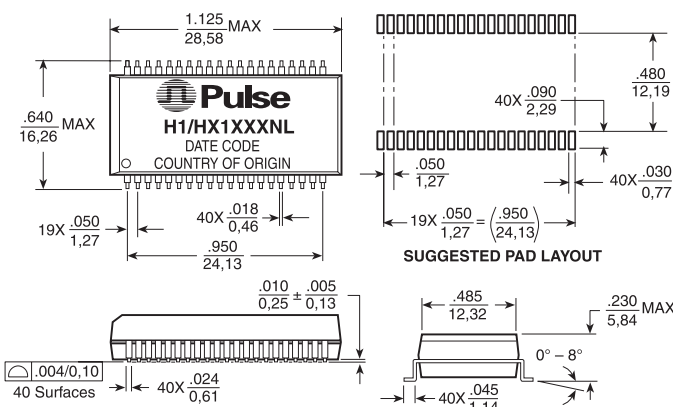
Part Number ¹	Insertion Loss (dB TYP)	Return Loss (dB TYP)					Crosstalk (dB TYP)				Differential to Common Mode Rejection (dB MIN)	
		0.1-100 MHz	2-30 MHz	40 MHz	50 MHz	60-80 MHz	1 MHz	30 MHz	60 MHz	100 MHz	1-60 MHz	60-200 MHz
H1028NL ^{2d}	-0.5	-21	-17	-14.5	-12	-65	-55	-45	-35	-45	-35	
H1049NL ^{2d}	-0.5	-21	-17	-14.5	-12	-65	-55	-45	-35	-45	-35	
H1200NL ^{2d}	-1.0	-16	-14.4	-13	-12	-50	-45	-40	-35	-37	-33	
H1174NL ^{2a}	-1.2	-18	-16	-14	-12	-60	-45	-40	-35	-45	-35	
H1244NL ^{2a, 4}	-1.2	-18	-16	-14	-12	-60	-45	-40	-35	-45	-35	
H1270NL ^{2a, 4}	-1.2	-18	-16	-14	-12	-60	-45	-40	-35	-45	-35	
HX1294NL ^{2a, 3, 4}	-1.2	-16	-14	-13.5	-10	-55	-45	-40	-35	-30	-20	

- All products meet input/output breakdown (HiPot) of 1500 Vrms.
- MSL = Moisture Sensitivity Level a=1, b=2, c=3, d=4

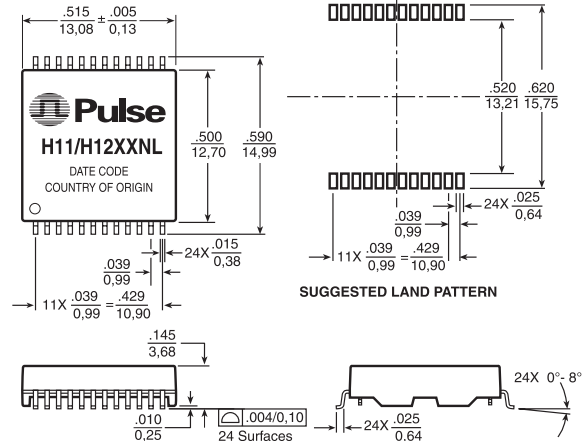
- Operating Temperature -40°C to +85°C
- Suitable for AutoMDIX applications

Mechanicals

H1XXXNL



H1174NL, H1244NL, H1270NL



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

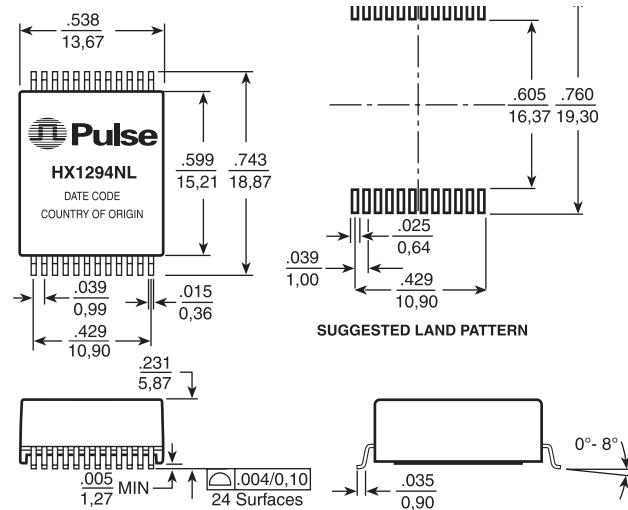
10/100BASE-TX DUAL PORT TRANSFORMER MODULES



For Use with Transceivers Requiring
1:1 Transmit and Receive Turns Ratios

Mechanicals (continued)

HX1294NL



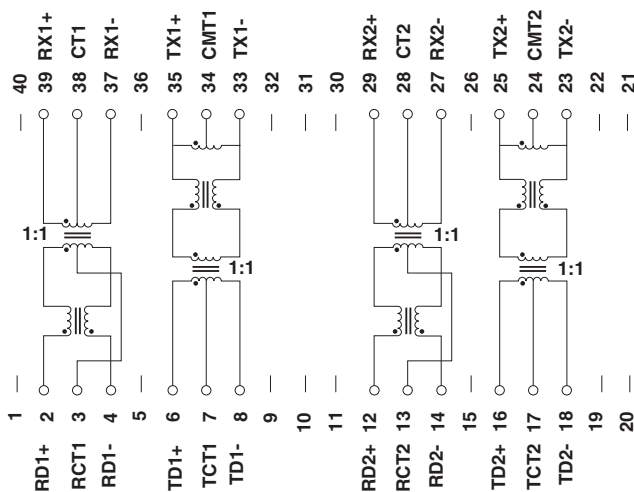
Dimensions: $\frac{\text{Inches}}{\text{mm}}$

Unless otherwise specified,
all tolerances are $\pm \frac{.010}{0.25}$

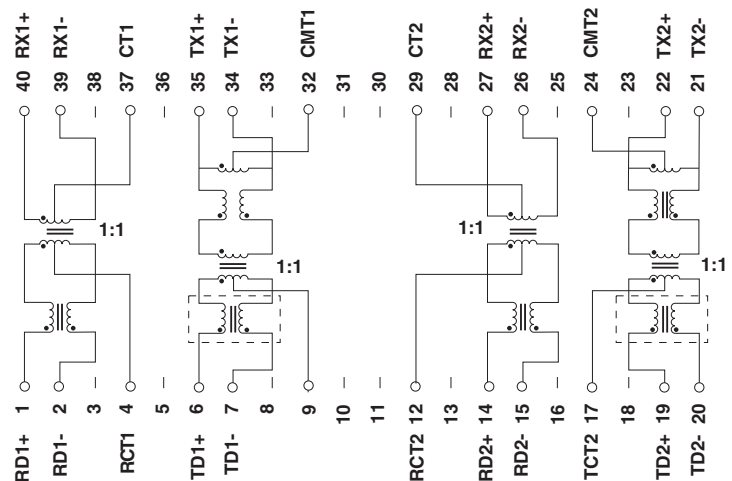
Weight 1.6 grams
Tape & Reel 300/reel
Tube 35/tube

Schematics

H1049NL



H1028NL



NOTE: H1027 has input common mode choke on pins 6-7 and pins 19-20.
H1028 does not have the additional choke.

Dual Port Solutions: The H1027NL, H1028NL, and H1049NL, are designed to support two RJ-45 connectors. The H1027NL and the H1028NL have the same pinout. The H1027NL has an additional common mode choke on both transmit channels. The H1049NL offers a different pinout for design flexibility.

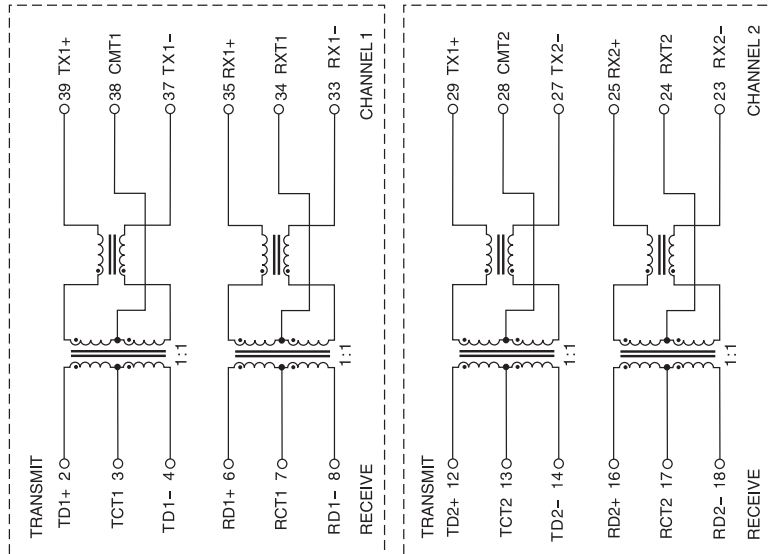
10/100BASE-TX DUAL PORT TRANSFORMER MODULES

For Use with Transceivers Requiring
1:1 Transmit and Receive Turns Ratios

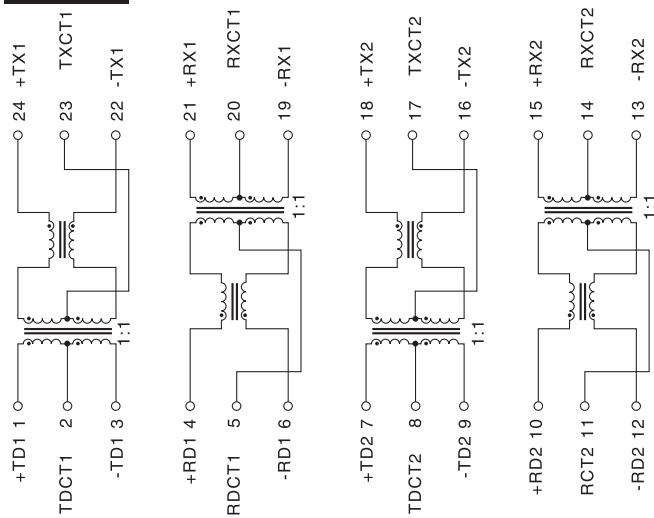


Schematics (continued)

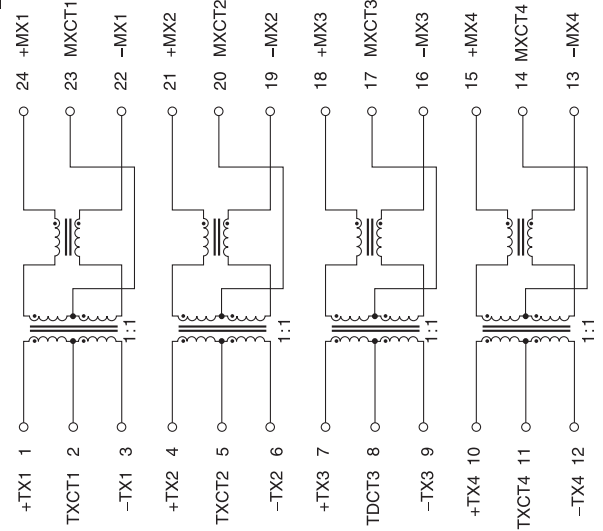
H1200NL



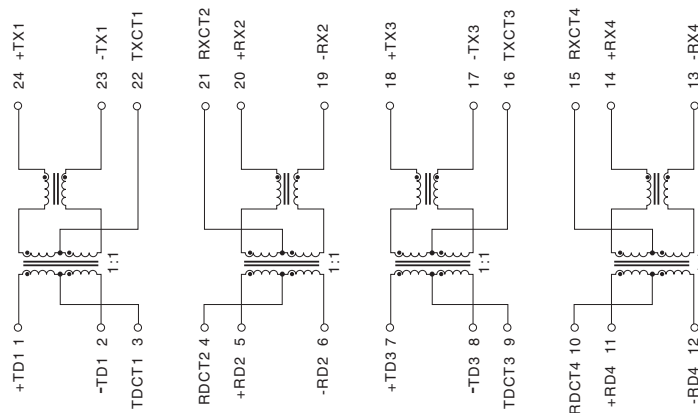
H1174NL



H1244NL



H1270NL, HX1294NL



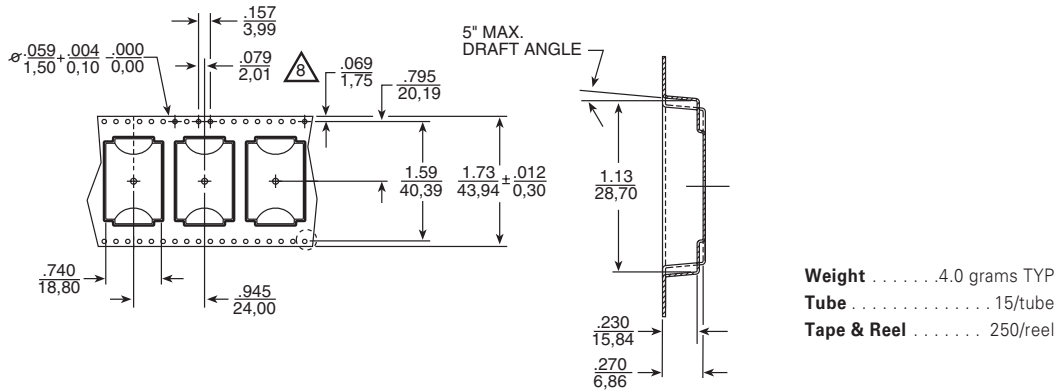
10/100BASE-TX DUAL PORT TRANSFORMER MODULES

For Use with Transceivers Requiring 1:1 Transmit and Receive Turns Ratios

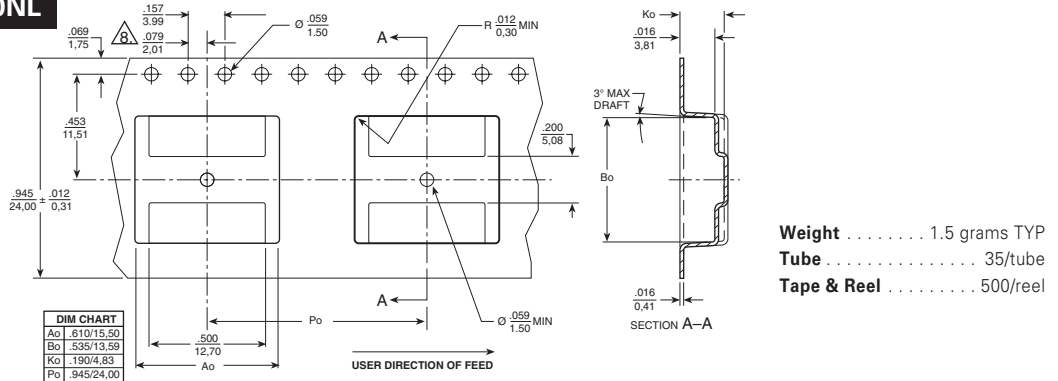


Tape & Reel Specifications

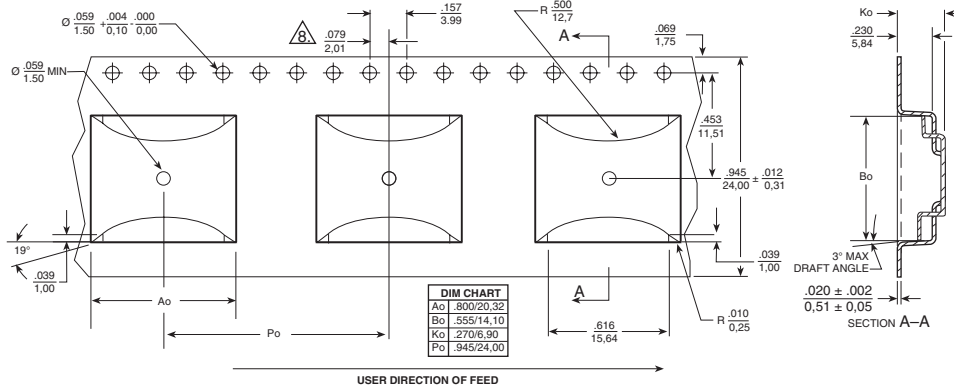
H1XXXNL



H1174NL, H1244NL, H1270NL



HX1294NL



For More Information:

Pulse Worldwide Headquarters
 12220 World Trade Dr.
 San Diego, CA 92128
 U.S.A.

Pulse Europe
 Einsteinstrasse 1
 D-71083 Herrenberg
 Germany

Pulse China Headquarters
 B402, Shenzhen Academy of Aerospace Technology Bldg.
 10th Kejinan Rd.
 Hwigh-Tech Zone
 Nanshan District
 Shenzhen, PR China 518057

Pulse North China
 Room 2704/2705
 Super Ocean Finance Ctr.
 2067 Yan An Rd. West
 Shanghai 200336
 China

Pulse South Asia
 135 Joo Seng Rd.
 #03-02
 PM Industrial Bldg.
 Singapore 368363

Pulse North Asia
 No. 26, Kao Ching Rd.
 Yang Mei Chen
 Taoyuan Hsien
 Taiwan
 R. O. C.

www.pulseeng.com Tel: 49 7032 7806 0
 Tel: 858 674 8100 Fax: 49 7032 7806 135
 Fax: 858 674 8262

TEL: 86 755 33966678
 FAX: 86 755 33966700

Tel: 86 21 62787060
 Fax: 86 2162786973

TEL: 65 6287 8998
 FAX: 65 6280 0080

Tel: 886 3 4643715
 Fax: 886 3 4641911

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, 2010. Pulse Engineering, Inc. All rights reserved.