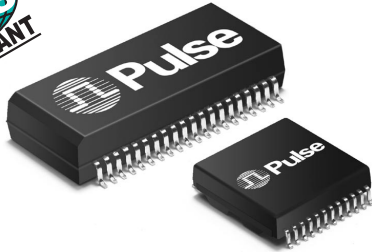


10/100BASE-TX DUAL PORT TRANSFORMER MODULES

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

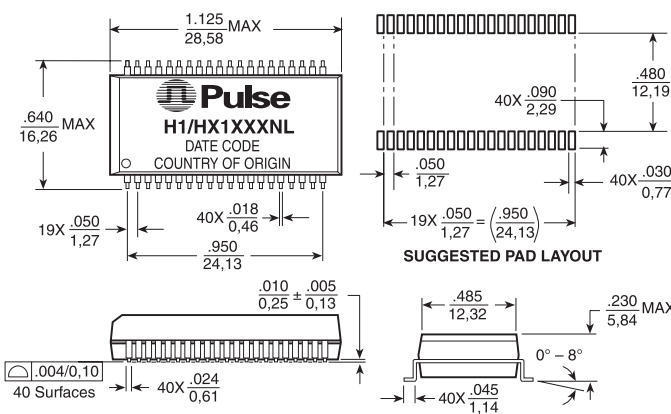
Part Number ¹	Insertion Loss (dB TYP)	Return Loss (dB TYP)				Crosstalk (dB TYP)				Differential to Common Mode Rejection (dB MIN)	
	0.1-100 MHz	2-30 MHz	40 MHz	50 MHz	60-80 MHz	1 MHz	30 MHz	60 MHz	100 MHz	1-60 MHz	60-200 MHz
H1028NL ^{2d}	-0.5	-21	-17	-14.5	-12	-65	-55	-45	-35	-45	-35
H1049NL ^{2d}	-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

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

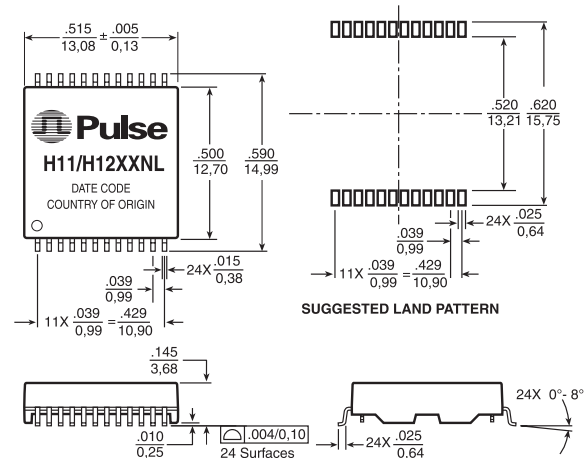
3. Operating Temperature -40°C to +85°C
4. Suitable for AutoMDIX applications

Mechanicals

H1XXXNL



H1174NL, H1244NL, H1270NL



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

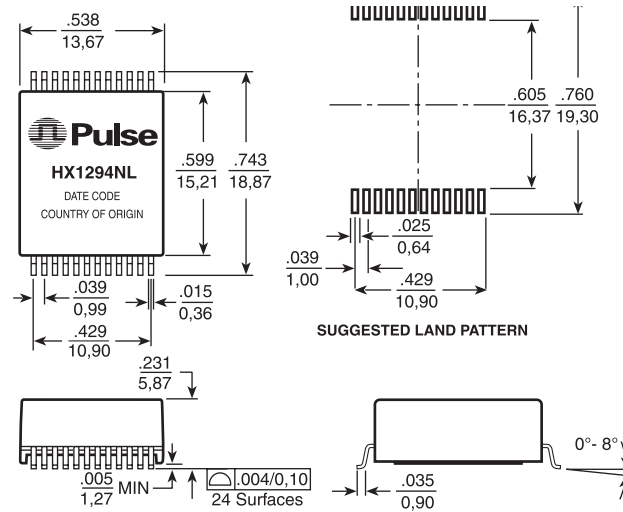
10/100BASE-TX DUAL PORT TRANSFORMER MODULES

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 $\pm \frac{.010}{0,25}$

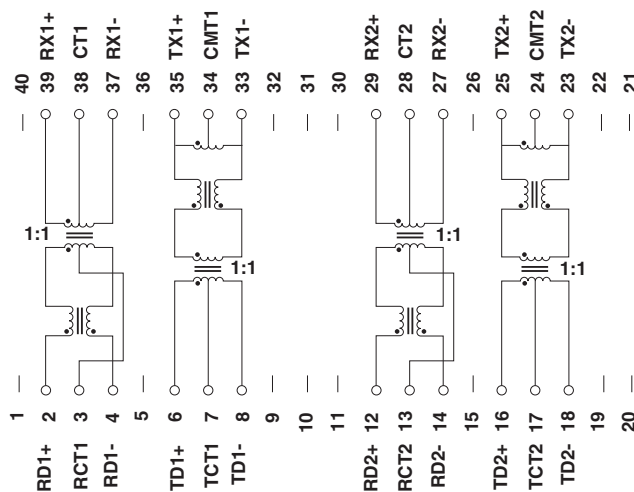
Weight 1.6 grams

Tape & Reel 300/reel

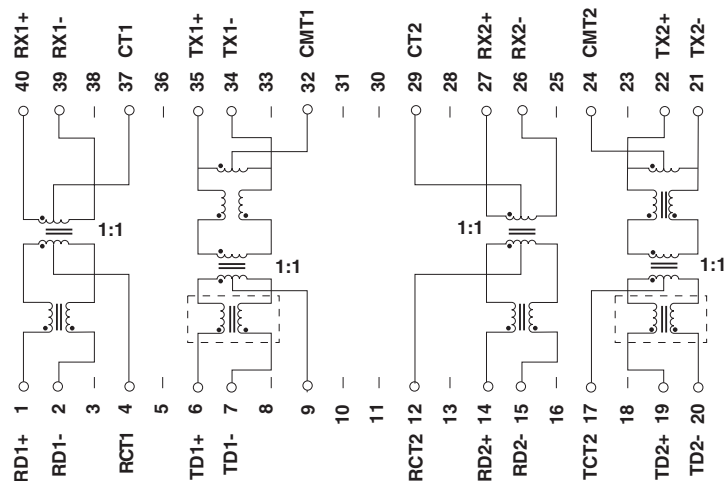
Tube 35/tube

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.

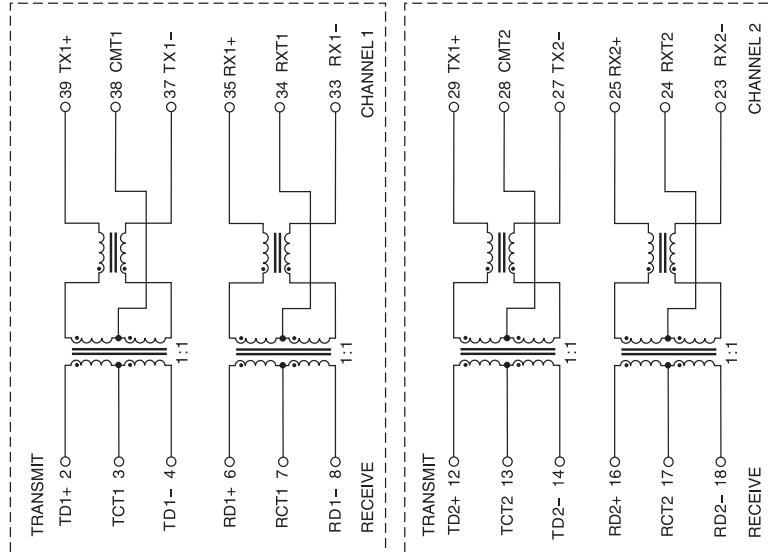
10/100BASE-TX DUAL PORT TRANSFORMER MODULES

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

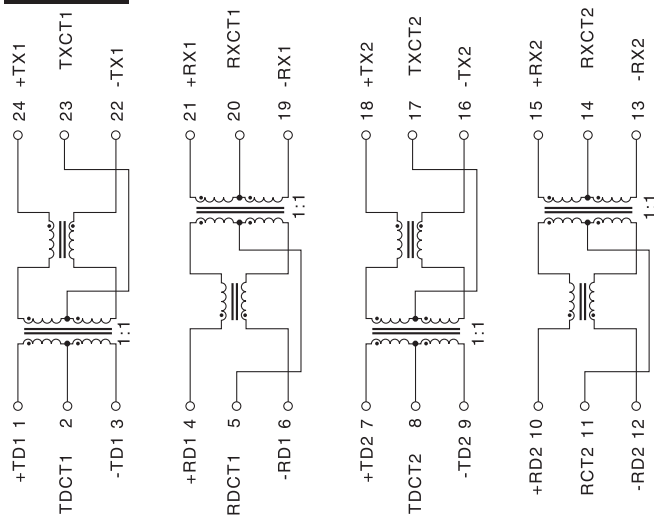


Schematics (continued)

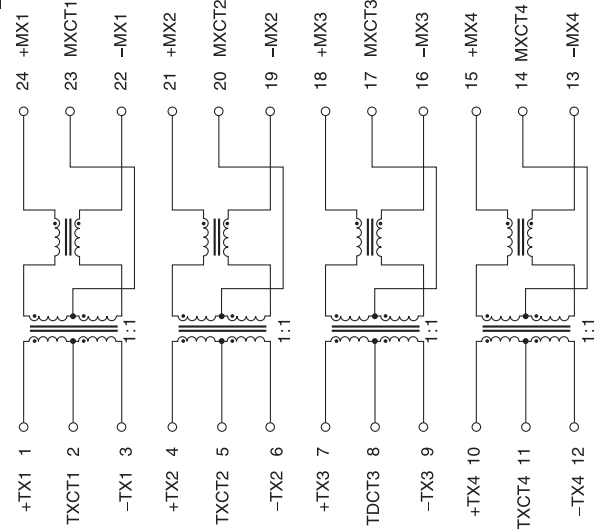
H1200NL



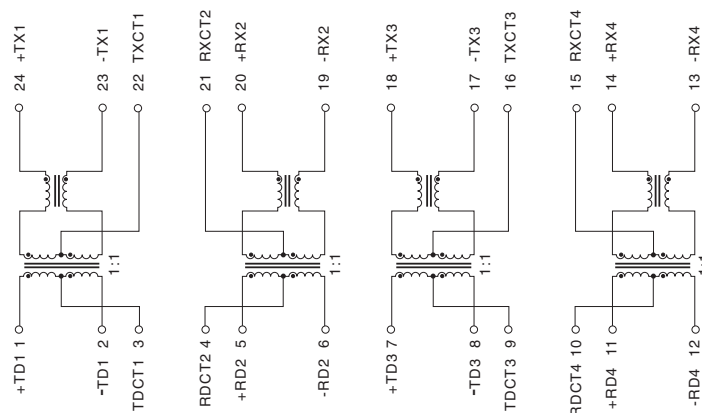
H1174NL



H1244NL



H1270NL, HX1294NL



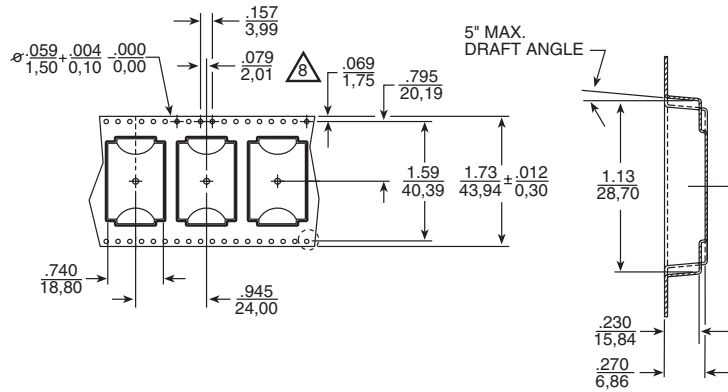
10/100BASE-TX DUAL PORT TRANSFORMER MODULES

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



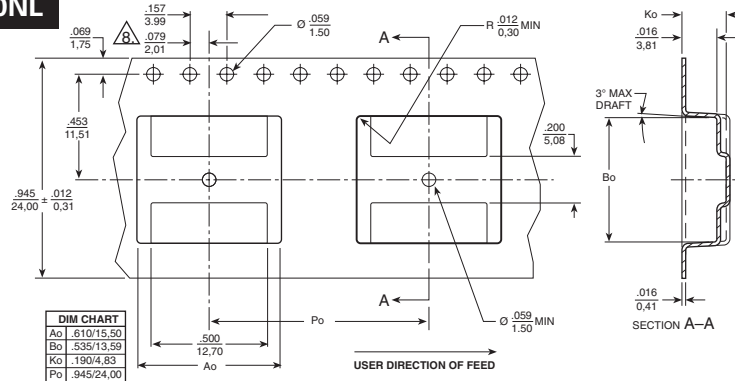
Tape & Reel Specifications

H1XXXNL



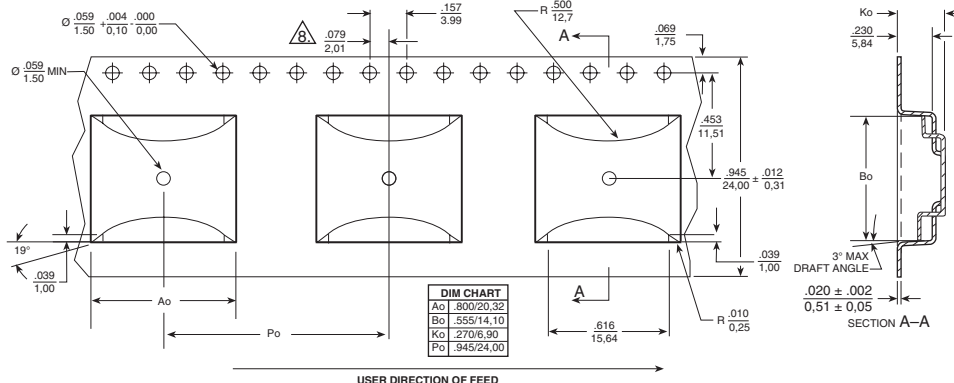
Weight 4.0 grams TYP
Tube 15/tube
Tape & Reel 250/reel

H1174NL, H1244NL, H1270NL



Weight 1.5 grams TYP
Tube 35/tube
Tape & Reel 500/reel

HX1294NL



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