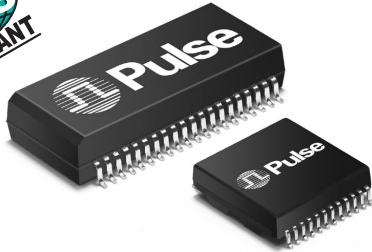


# 10/100BASE-TX DUAL PORT TRANSFORMER MODULES

## 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

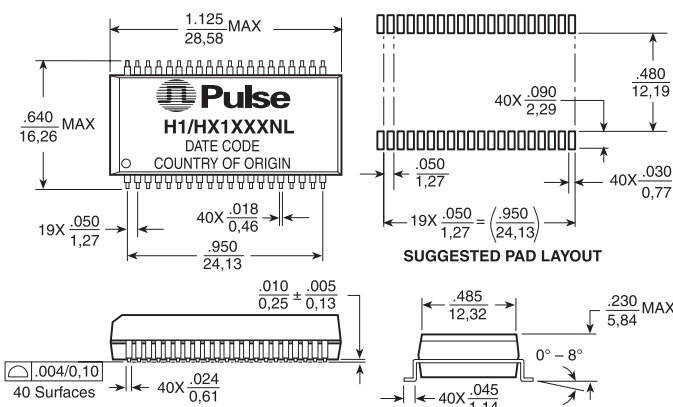
Part Number <sup>1</sup>	Insertion Loss (dB TYP)	Return Loss (dB TYP)					Crosstalk (dB TYP)				Differential to Common Mode Rejection (dB MIN)	
		0.1-100 MHz	2-30 MHz	40 MHz	50 MHz	60-80 MHz	1 MHz	30 MHz	60 MHz	100 MHz	1-60 MHz	60-200 MHz
H1028NL <sup>2d</sup>	-0.5	-21	-17	-14.5	-12	-65	-55	-45	-35	-45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

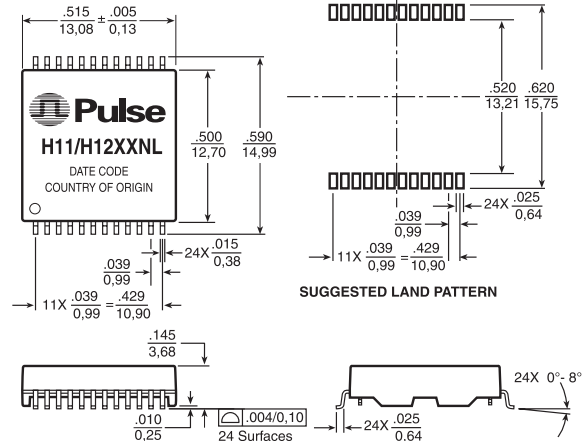
- Operating Temperature -40°C to +85°C
- Suitable for AutoMDIX applications

## Mechanicals

### H1XXXNL



### H1174NL, H1244NL, H1270NL



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

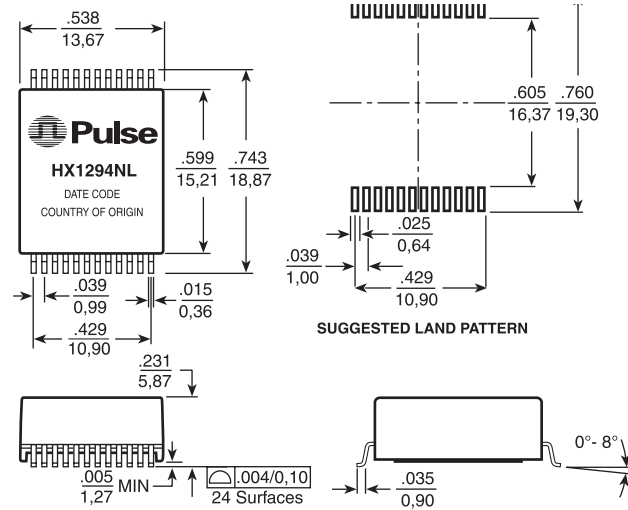
# 10/100BASE-TX DUAL PORT TRANSFORMER MODULES



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

## Mechanicals (continued)

### HX1294NL



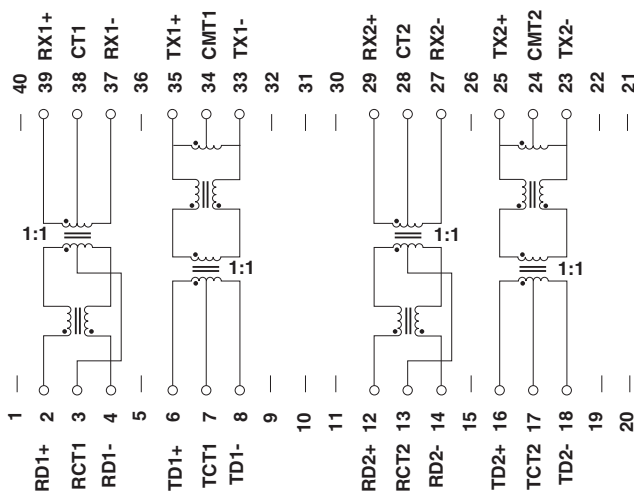
Dimensions:  $\frac{\text{Inches}}{\text{mm}}$

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

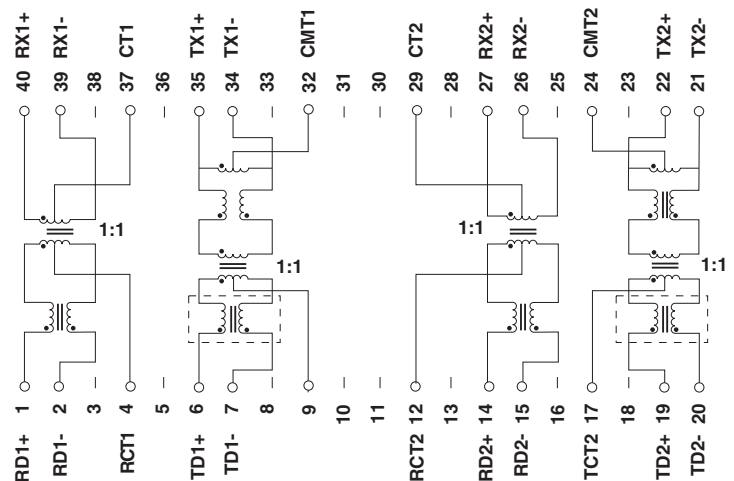
Weight . . . . . 1.6 grams  
Tape & Reel . . . . . 300/reel  
Tube . . . . . 35/tube

## 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.

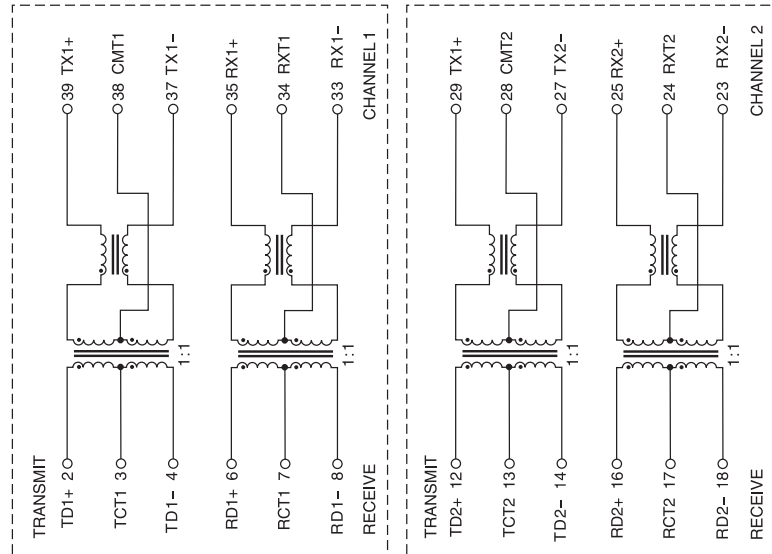
# 10/100BASE-TX DUAL PORT TRANSFORMER MODULES

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

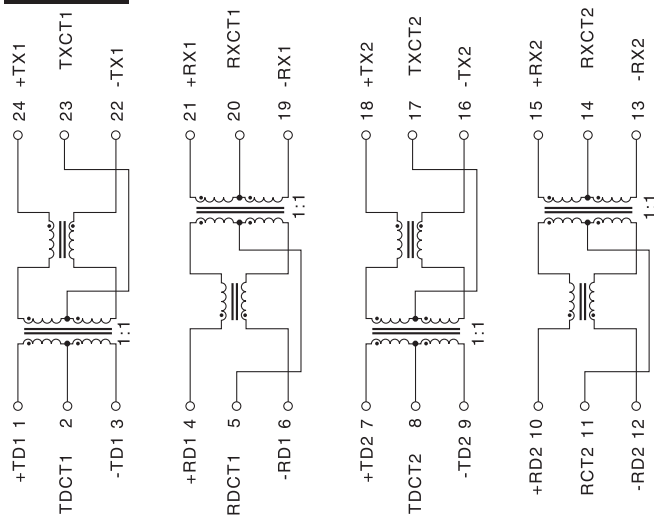


## Schematics (continued)

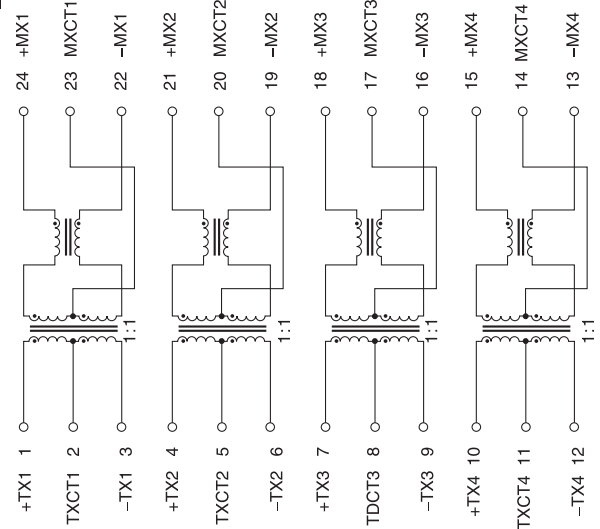
### H1200NL



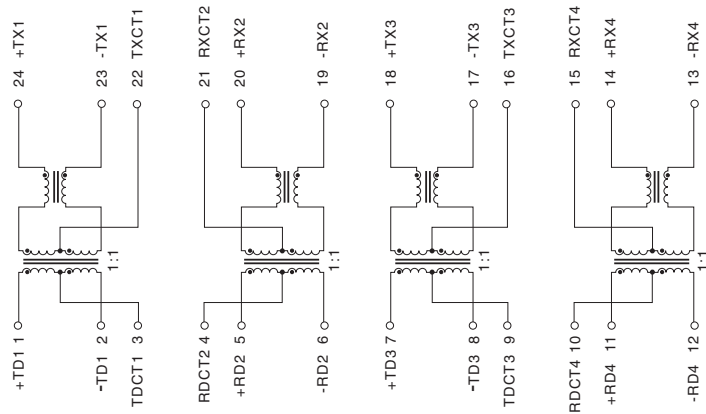
### H1174NL



### H1244NL



### H1270NL, HX1294NL



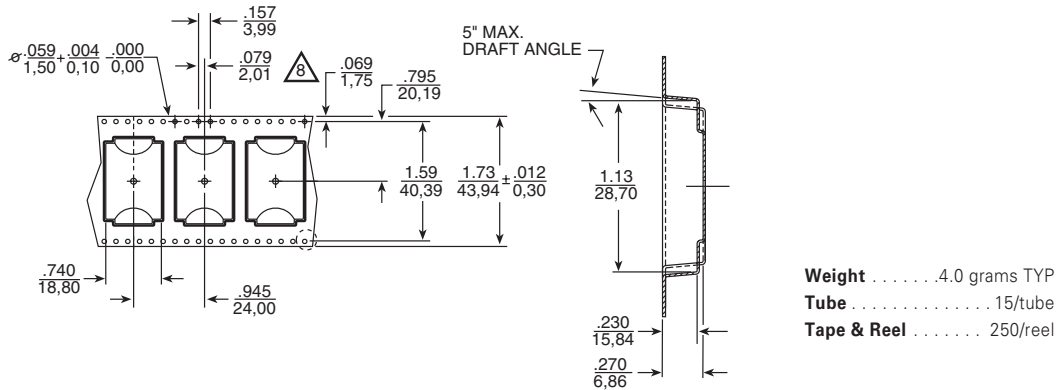
# 10/100BASE-TX DUAL PORT TRANSFORMER MODULES

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

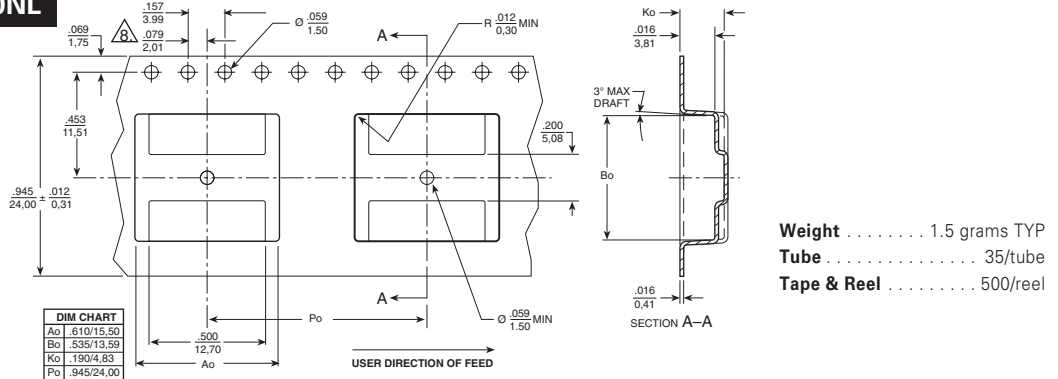


## Tape & Reel Specifications

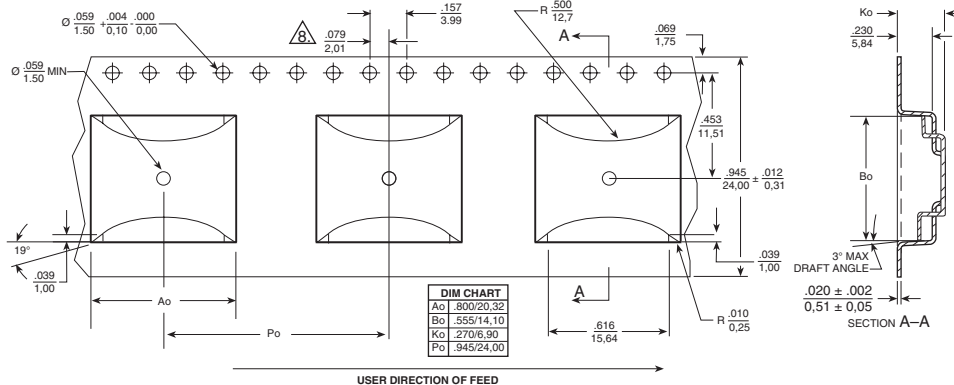
### H1XXXNL



### H1174NL, H1244NL, H1270NL



### HX1294NL



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