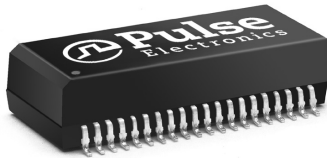


# 10/100Base-TX Transformer Modules

For Auto MDI/MDIX Applications



- RoHS peak reflow temperature rating 245°C
- Symmetrical transmit and receive channels for Auto MDI/MDIX capability
- Approved for use with the Broadcom BCM5226 and Level One LXT9784
- Meets IEEE 802.3 specification

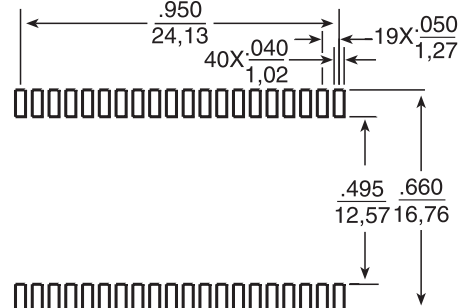
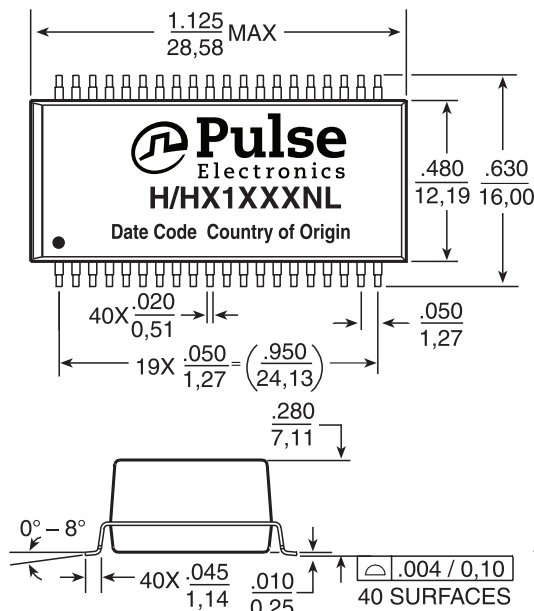
### Electrical Specifications @ 25°C - Operating Temperature 0°C to 70°C

RoHS Compliant Part Number <sup>2</sup>	Insertion Loss (MAX)	Return Loss (dB MIN)				Crosstalk (dB MIN)				Differential to Common Mode Rejection (dB MIN)		Hipot (Vrms MIN)
		0.1-100 MHz	2-30 MHz	40 MHz	50 MHz	60-80 MHz	1 kHz	30 MHz	60 MHz	100 MHz	1-60 MHz	
H1164NL <sup>3d</sup>	-1.0	-18	-14.4	-13.1	-12	-65	-45	-40	-33	-37	-25	1500
HX1234NL <sup>1,3d</sup>	-1.4	-18	-14.4	-13.1	-12	-65	-45	-40	-33	-37	-25	1500

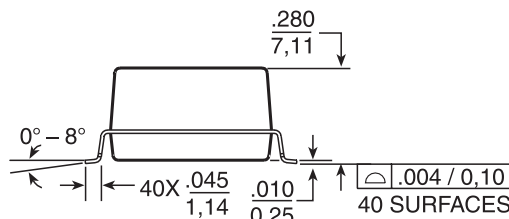
1. Operating Temperature -40°C to +85°C
2. For Tape & Reel packaging, add "T" suffix to the end of the part number when ordering, (Ex. H1164NLT)
3. MSL = Moisture Sensitivity Level a=1 b=2 c=3 d=4

### Mechanicals

#### H1164NL, HX1234NL



#### SUGGESTED PAD LAYOUT



#### HX1234NL

#### H1164NL

Weight .....4.8 grams  
Tape & Reel .....250/reel  
Tube .....15/tube

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

USA 858 674 8100

Germany 49 7032 7806 0

Singapore 65 6287 8998

Shanghai 86 21 62787060

China 86 755 33966678

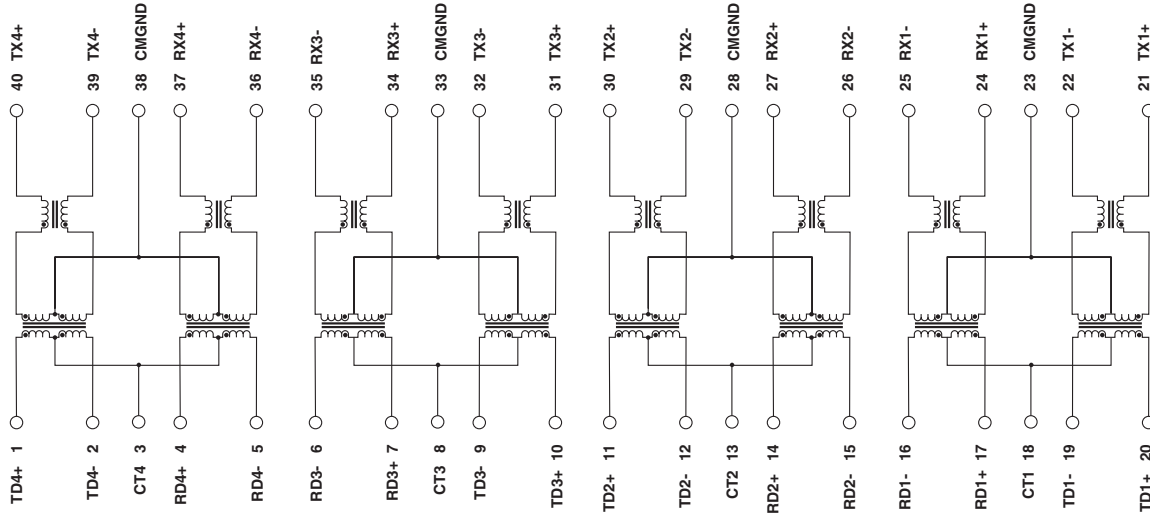
Taiwan 886 3 4356768

# 10/100Base-TX Transformer Modules

For Auto MDI/MDIX Applications

## Schematic

HT164NL, HX1234NL



### For More Information:

Americas - [prodinfonetworkamericas@pulseelectronics.com](mailto:prodinfonetworkamericas@pulseelectronics.com) | Europe - [comms-Apps-Europe@pulseelectronics.com](mailto:comms-Apps-Europe@pulseelectronics.com) | Asia - [prodinfonetworkapac@pulseelectronics.com](mailto:prodinfonetworkapac@pulseelectronics.com)

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