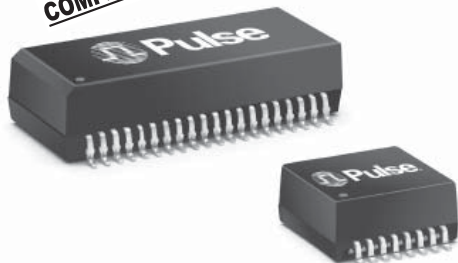






# 10/100BASE-TX TRANSFORMER MODULES

## 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

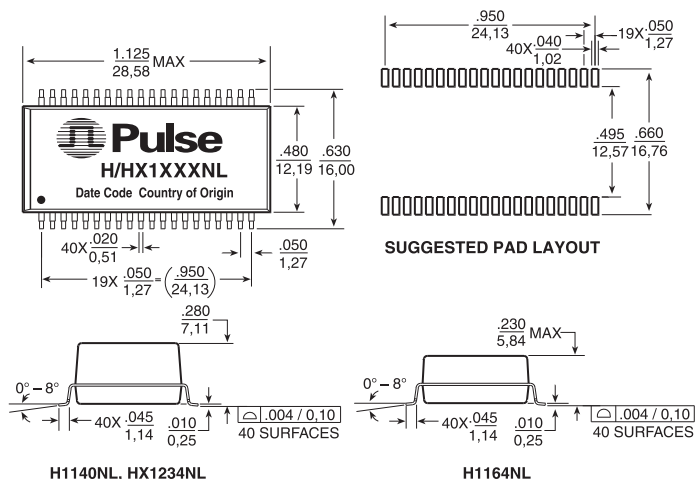
### Electrical Specifications @ 25°C — Operating Temperature 0°C to 70°C

RoHS Compliant Part Number <sup>2</sup>	Insertion Loss (MAX)	Return Loss (dB MIN)				Crosstalk (dB MIN)				Differential to Common Mode Rejection (dBMIN)		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	
H1140NL <sup>3c</sup>	-1.0	-18	-14.4	-13.1	-12	-65	-50	-40	-35	-40	-35	1500
H1141NL <sup>3c</sup>	-1.0	-18	-14.4	-13.1	-12	-65	-50	-40	-35	-40	-35	1500
H1164NL <sup>3d</sup>	-1.0	-18	-14.4	-13.1	-12	-55	-45	-40	-33	-37	-25	1500
HX1234NL <sup>1,3c</sup>	-1.4	-18	-14.4	-13.1	-12	-55	-45	-40	-33	-37	-25	1500

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

## Mechanicals

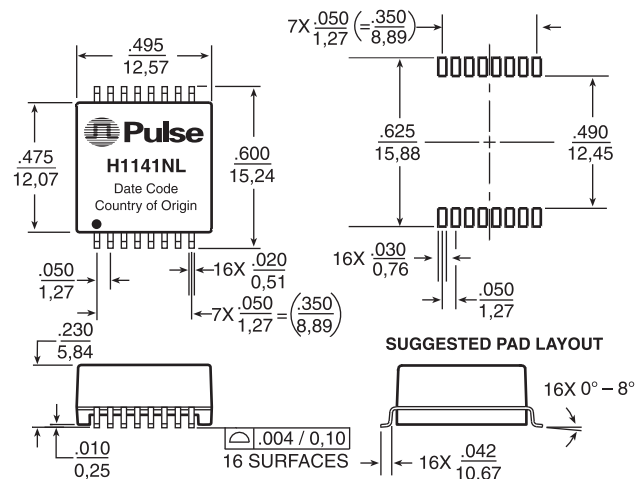
### H1140NL, H1164NL, HX1234NL



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

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

### H1141NL



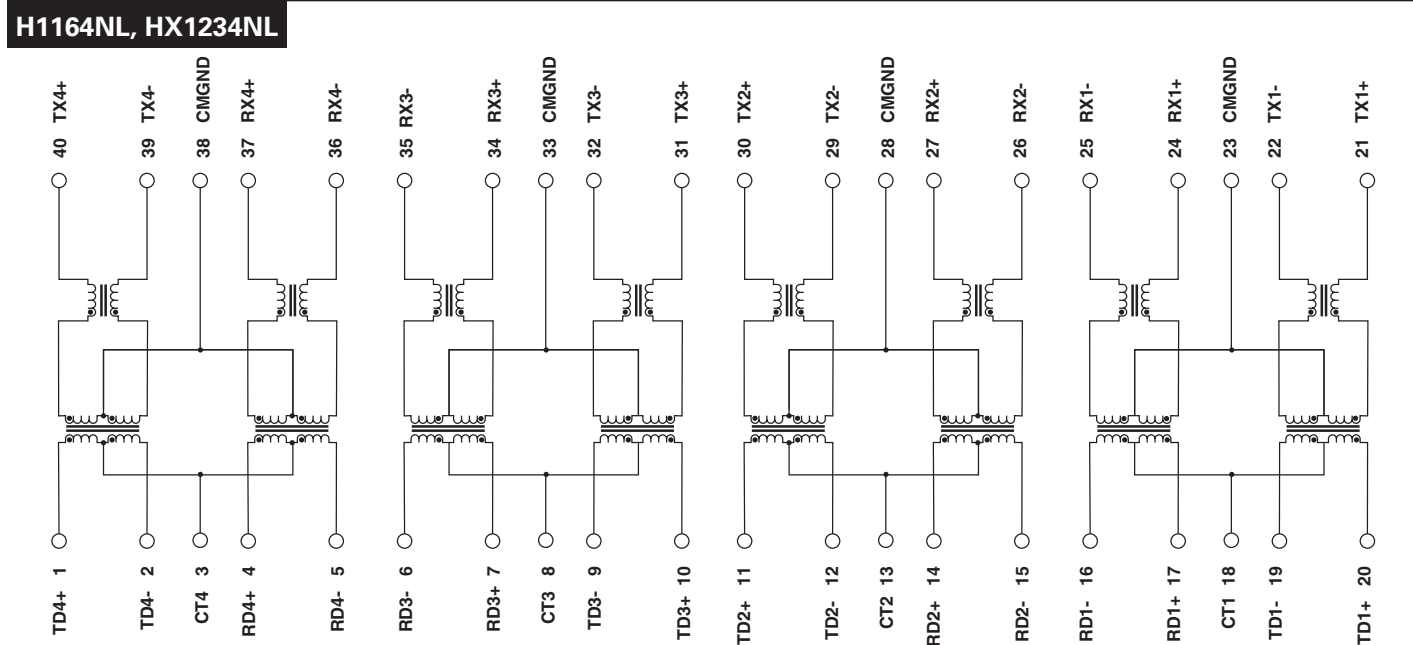
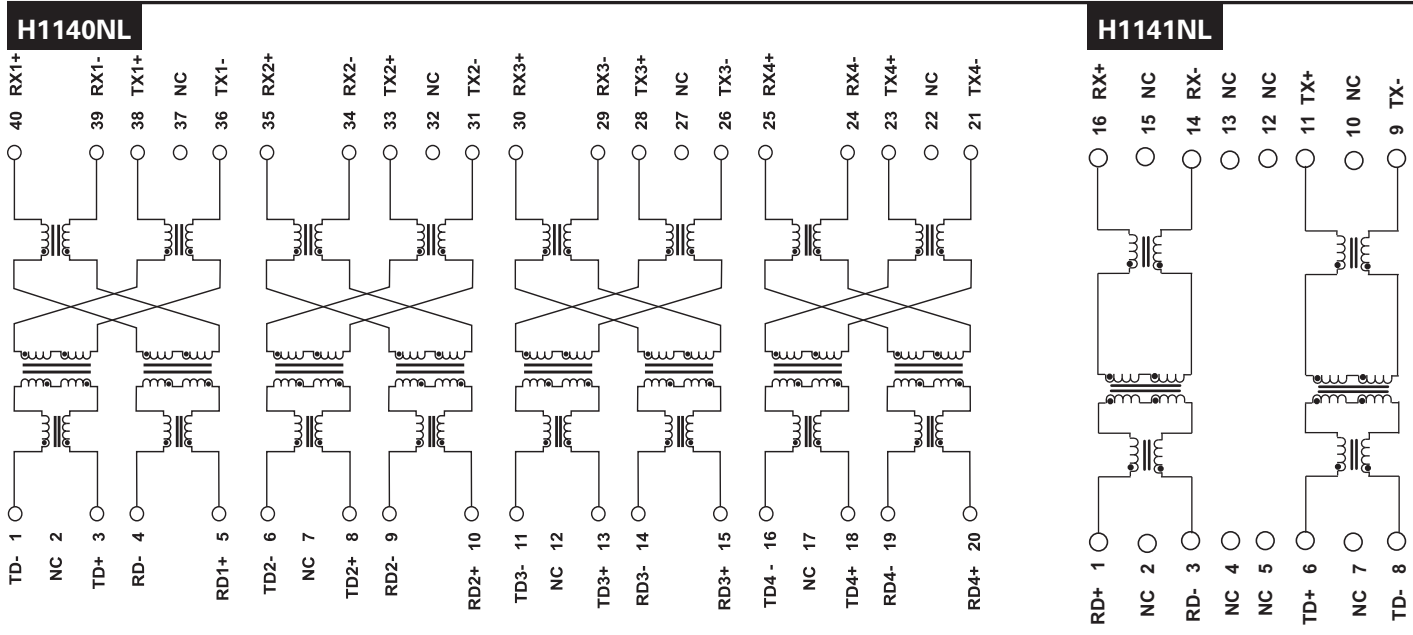
Weight . . . . . 1 gram  
Tape & Reel . . . . . 350/reel  
Tube . . . . . 35/tube

# 10/100BASE-TX TRANSFORMER MODULES

## For Auto MDI/MDIX Applications



### Schematics



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