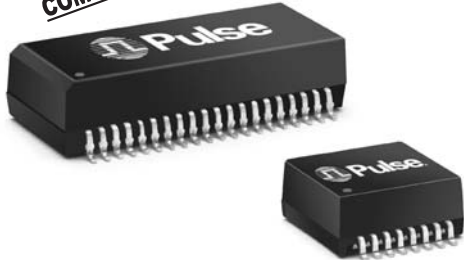





# 10/100BASE-TX TRANSFORMER MODULES

## For Auto MDI/MDIX Applications



-  Symmetrical TX and RX channels for Auto MDI/MDIX capability
-  Approved for use with the Broadcom BCM5226 and Level One LXT9784
-  Meets IEEE 802.3 specification

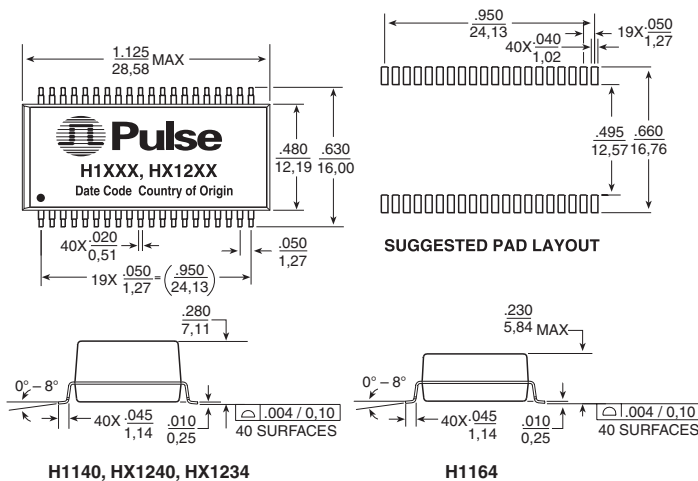
### Electrical Specifications @ 25°C — Operating Temperature 0°C to 70°C

RoHS-6 <sup>2</sup> Compliant Part Number	RoHS-5 <sup>2</sup> Compliant Part Number	Insertion Loss (MAX)	Return Loss (dB MIN)				Crosstalk (dB MIN)				Differential to Common Mode Rejection (dB MIN)		Hipot (Vrms MIN)
			0.1-100MHz	2-30MHz	40MHz	50MHz	60-80MHz	1kHz	30MHz	60MHz	100MHz	1-60MHz	
H1140NL <sup>3c</sup>	H1140	-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>	H1164	-1.0	-18	-14.4	-13.1	-12	-55	-45	-40	-33	-37	-25	1500
HX1234NL <sup>3c</sup>	HX1234 <sup>1</sup>	-1.4	-18	-14.4	-13.1	-12	-55	-45	-40	-33	-37	-25	1500
—	HX1240 <sup>1</sup>	-1.0	-16.5	-16	-15.5	-12	-60	-43	-38	-33	-43	-27	1500

1. Operating Temperature -40°C to +85°C
2. For Tape & Reel packaging, add a "T" suffix at the end of the part number when ordering, e.g. H1164T
3. MSL=Moisture Sensitivity Level a=1 b=2 c=3 d=4

## Mechanicals

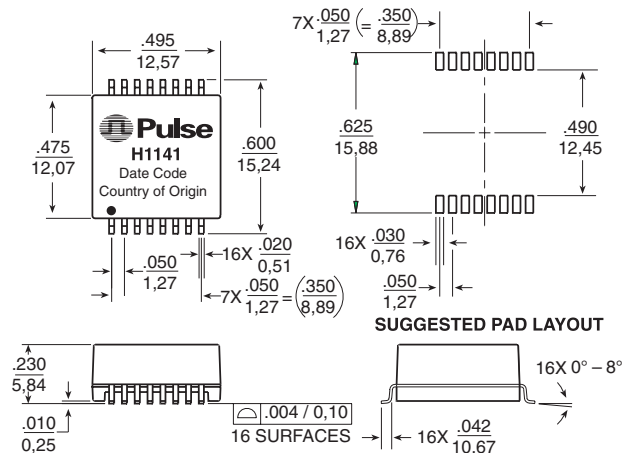
### H1140, H1164, HX1234, HX1240



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

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

### H1141



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

USA 858 674 8100 • Germany 49 7032 7806 0 • Singapore 65 6287 8998 • Shanghai 86 21 32181071 • China 86 755 33966678 • Taiwan 886 3 4643715

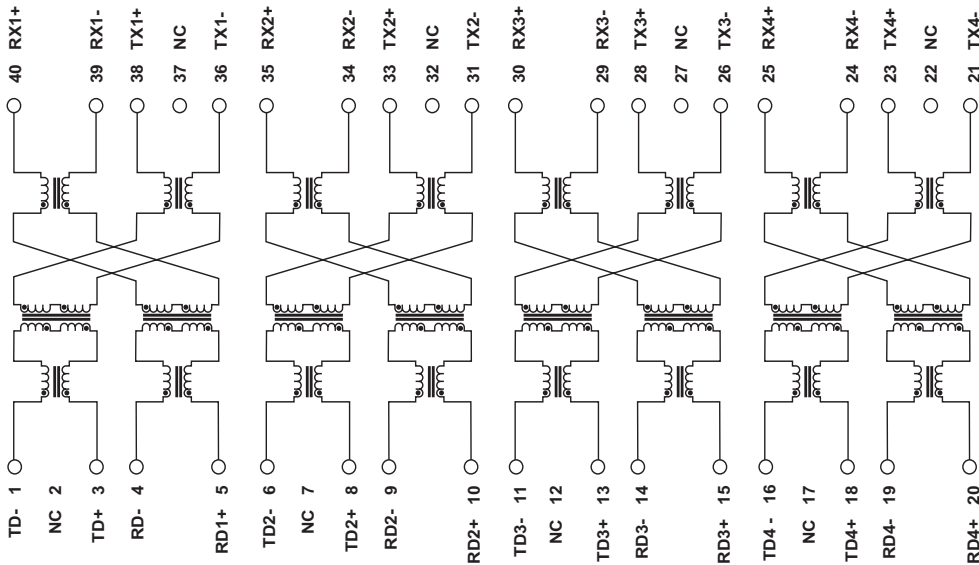
# 10/100BASE-TX TRANSFORMER MODULES

## For Auto MDI/MDIX Applications

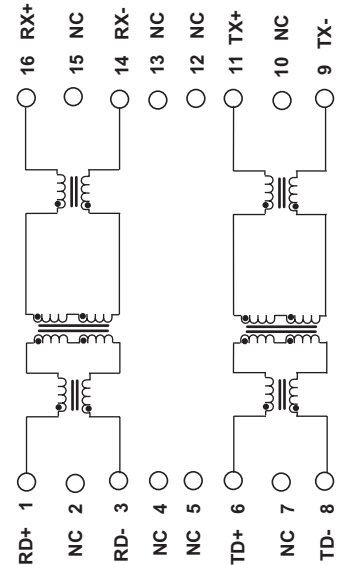


### Schematics

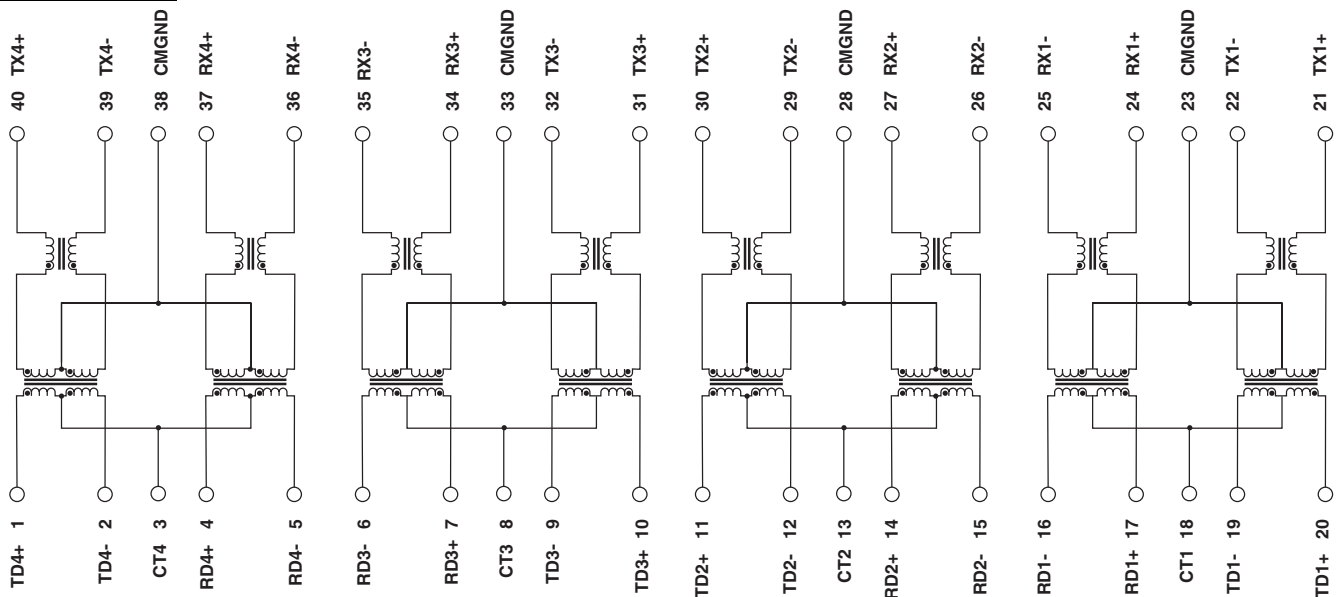
**H1140, HX1240**



**H1141**



**H1164, HX1234**



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