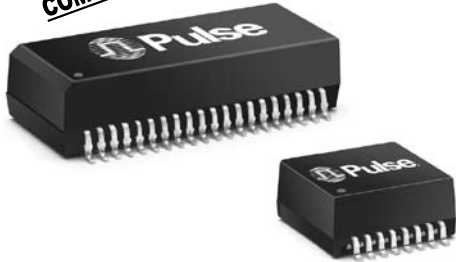


# 10/100BASE-TX TRANSFORMER MODULES

## 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

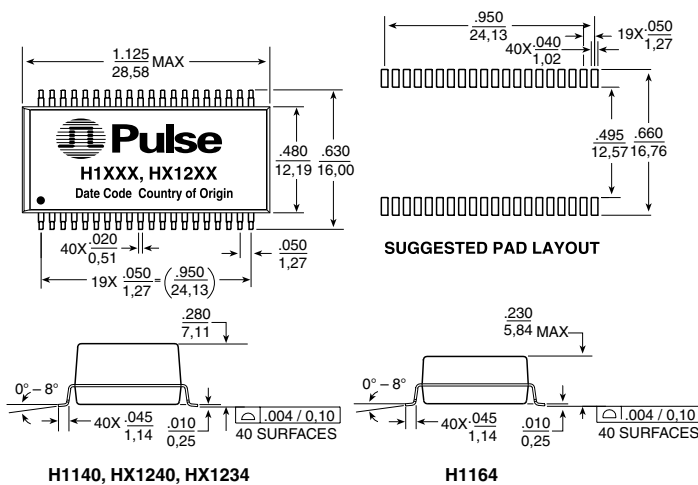
### Electrical Specifications @ 25°C — Operating Temperature 0°C to 70°C

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 <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>	H1164 <sup>3d</sup>	-1.0	-18	-14.4	-13.1	-12	-55	-45	-40	-33	-37	-25	1500
HX1234NL <sup>1,3c</sup>	HX1234 <sup>1,3c</sup>	-1.4	-18	-14.4	-13.1	-12	-55	-45	-40	-33	-37	-25	1500
—	HX1240 <sup>3c</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



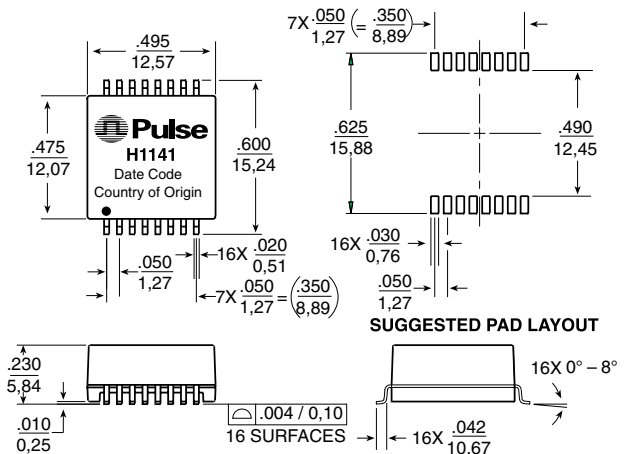
Weight . . . . . 5.6 grams\*  
Tape & Reel . . . . . 250/reel  
Tube . . . . . 15/tube

\*H1164 = 4.4 grams

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

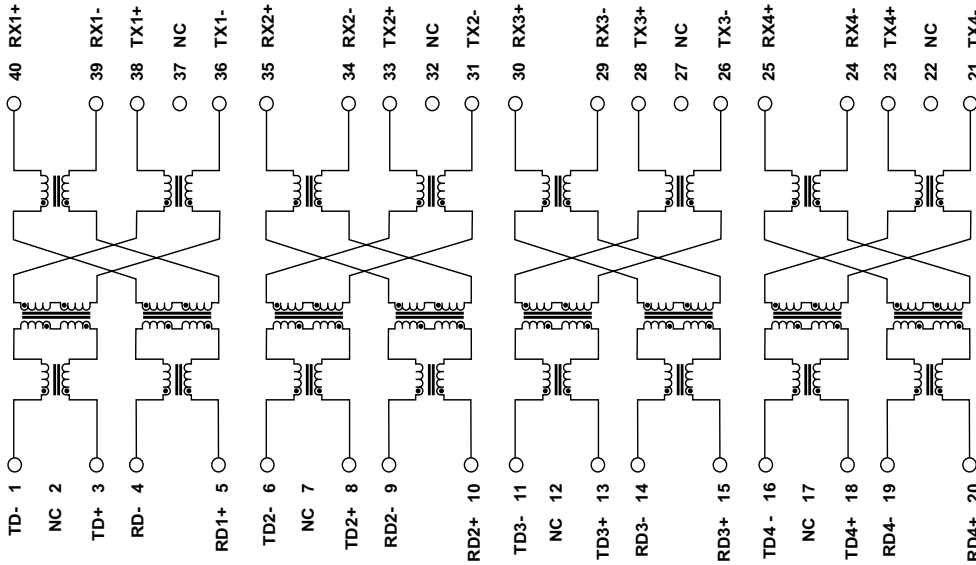
# 10/100BASE-TX TRANSFORMER MODULES

## For Auto MDI/MDIX Applications

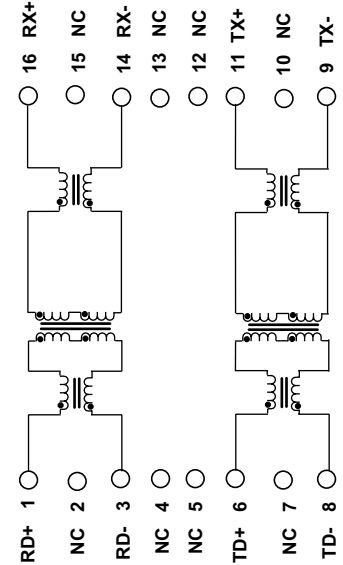


### Schematics

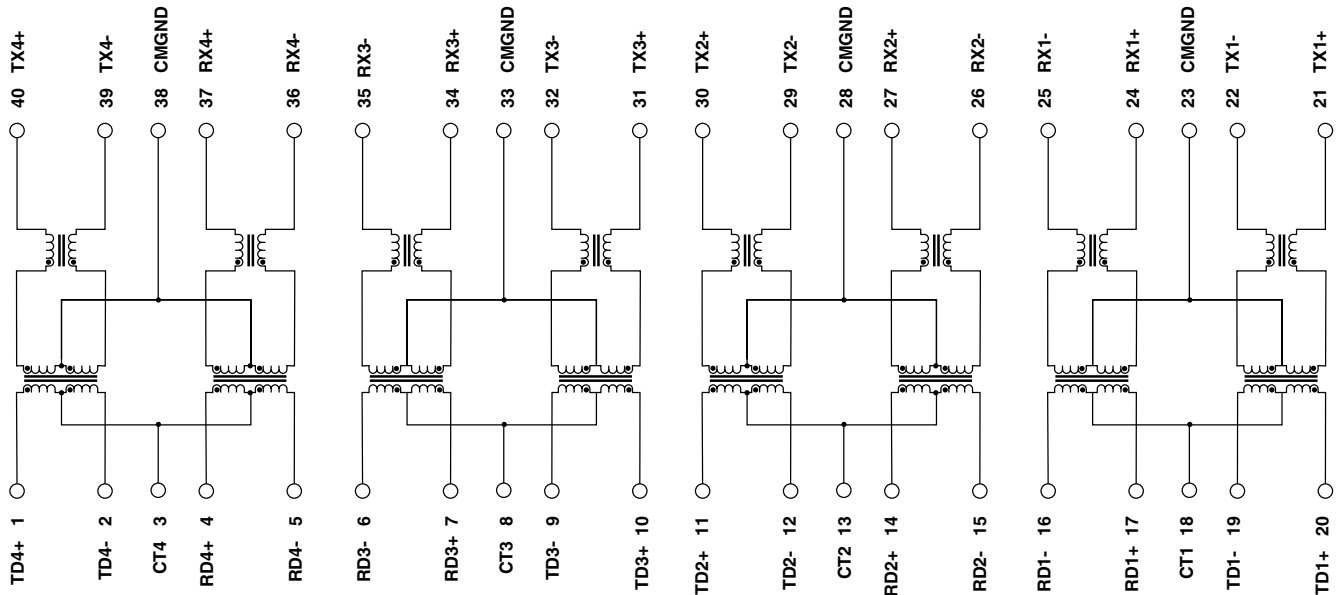
#### H1140, HX1240



#### H1141



#### H1164, HX1234



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