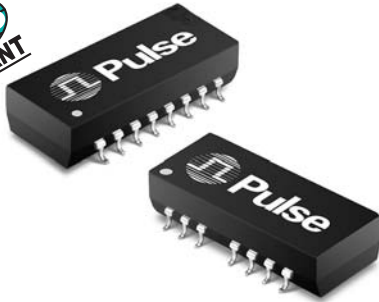






# 10/100BASE-TX SINGLE PORT TRANSFORMER MODULES

With Various Transmit Turns Ratios



-  RoHS-5 peak reflow temperature rating 235°C
-  RoHS-6 peak reflow temperature rating 245°C
-  Meets IEEE 802.3 specification
-  Designed for use with transceivers for AMD & Micrel

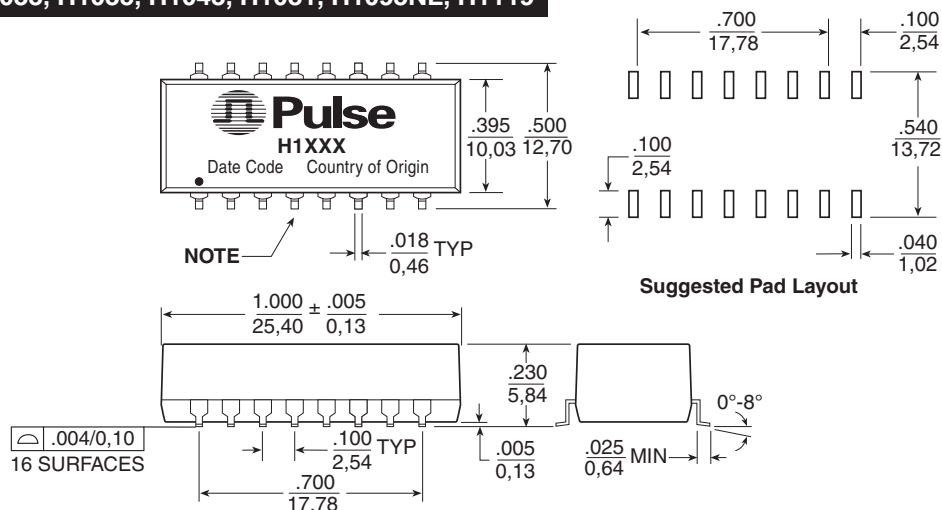
## Electrical Specifications @ 25°C — Operating Temperature 0°C to 70°C

RoHS-5 <sup>3</sup> Compliant Part Number	RoHS-6 <sup>4</sup> Compliant Part Number	Turns Ratio (±5%)		Insertion Loss (db MAX)	Return Loss (db MIN)			Crosstalk (dB MIN)			Hipot (Vrms MIN)
		TX	RX		100 KHz-100 MHz	30 MHz	60 MHz	80 MHz	30 MHz	60 MHz	
H1013	—	1:√2	1:1	-1.0	-16	-12	-10	-45	-38	-34	1500
H1015	H1015NL <sup>2c</sup>	1:√2	1:1	-1.0	-16	-12	-10	-45	-38	-34	1500
H1033	H1033NL <sup>2c</sup>	1:√2	1:1	-1.0	-16	-12	-10	-45	-38	-34	1500
H1035	—	1:√2	1:1	-1.0	-16	-12	-10	-45	-38	-34	1500
H1043	H1043NL <sup>2c</sup>	1:√2	1:1	-1.0	-16	-12	-10	-45	-38	-34	1500
H1081	H1081NL <sup>2d</sup>	1:√2	1:1	-2.0	-18	-12	-11	-45	-38	-34	1500
—	H1093NL <sup>2c</sup>	1:√2	1:1	-1.0	-16	-12	-10	-45	-38	-34	1500
H1119	H1119NL <sup>2c</sup>	1:√2	1:1	-2.0	-16	-11	-10	-45	-38	-34	1500

1. For Tape & Reel packaging, add suffix "T" to the end of the part number when ordering, e.g. H1081T.
2. MSL= Moisture Sensitivity Level a = 1 b = 2 c = 3 d = 4 e = 5.
3. RoHS-5: Product does not contain 5 out of the 6 banned substances specified in the RoHS directive (product contains lead in applications considered solder).
4. RoHS-6: Product does not contain 5 out of the 6 banned substances specified in the RoHS directive. Some internal connections may contain lead in high-temperature solder (solder alloys containing more than 85% lead).  
**NOTE:** The H1093NL has been optimized for use with the Kendin KS8761 (now Micrel).

## Mechanical

H1013, H1015, H1033, H1035, H1043, H1081, H1093NL, H1119



Dimensions: Inches  
mm

Unless otherwise specified, all tolerances are ± .010 / 0.25

**NOTE:** Pin 4 is omitted on the H1015.

# 10/100BASE-TX SINGLE PORT TRANSFORMER MODULES

## With Various Transmit Turns Ratios

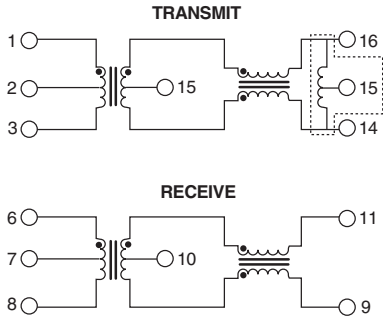


### Schematics

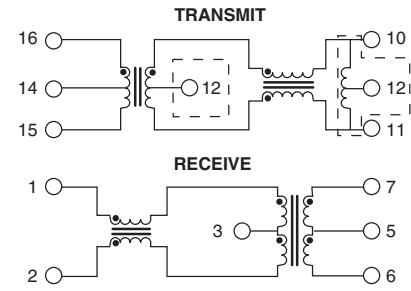
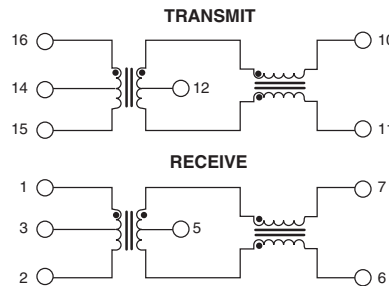
**H1013, H1033, H1043, H1093NL**

**H1015**

**H1035, H1081, H1119**

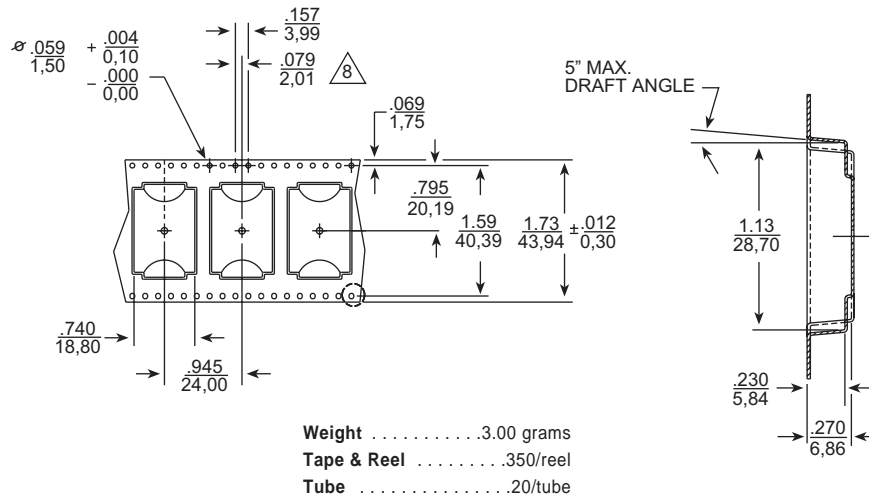


NOTE: H1047 has an autotransformer on



NOTE: The H1081 incorporates an autotransformer, so there is no connection to the TX transformer center tap.

### Tape and Reel Specifications



NOTE: Modules are packaged in tubes, unless Tape & Reel is specified. Add the suffix "T" such as H1013T for Tape & Reel orders.

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