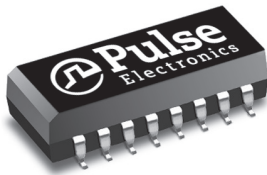


# 10/100 Base-T Single Port Transformer Modules

With 1:1 Transmit Turns Ratios



- RoHS peak reflow temperature rating: 245°C
- Compatible with Broadcom, Intel, Microtel, National Semiconductor, ICS, and TDK Transceivers
- Meets IEEE 802.3 specification

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

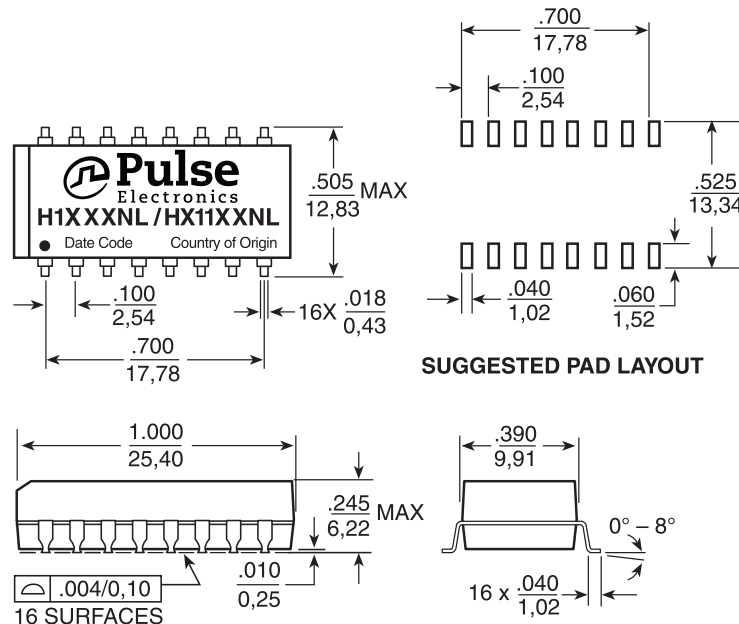
| RoHS<br>Compliant<br>Part Number <sup>3</sup> | Insertion<br>Loss<br>(dB MAX) | Return Loss<br>(dB MIN @ 100 Ω) |        |        |           | Differential to Common<br>Mode Rejection<br>(dB MIN) |        |         | Crosstalk<br>(dB TYP) |        |         | Hipot<br>(Vrms MIN) |
|-----------------------------------------------|-------------------------------|---------------------------------|--------|--------|-----------|------------------------------------------------------|--------|---------|-----------------------|--------|---------|---------------------|
|                                               | 0.1-100 MHz                   | 1-30 MHz                        | 40 MHz | 50 MHz | 60-80 MHz | 30 MHz                                               | 60 MHz | 100 MHz | 30 MHz                | 60 MHz | 100 MHz |                     |
| H1012NL <sup>4c</sup>                         | -1.0                          | -20                             | -20    | -18    | -14       | -42                                                  | -36    | -33     | -50                   | -40    | -40     | 1500                |
| H1086NL <sup>4c</sup>                         | -1.0                          | -22                             | -20    | -18    | -12       | -45                                                  | -40    | -35     | -50                   | -40    | -40     | 1500                |
| HX1148NL <sup>1,4c</sup>                      | -1.5                          | -18                             | -13.5  | -11.5  | -10       | -42                                                  | -37    | -33     | -50                   | -40    | -40     | 1500                |

## Notes:

- HX = Operating temperature: -40 + 85 C.
- Unless specified, operating temperature is 0° to 70° C.
- When ordering Tape & Reel packaging, add a "T" suffix to the end of the part number, e.g. H1012NLT.
- MSL = Moisture Sensitivity Level: a=1, b=2, C=3, d=4

## Mechanical

### H1012NL, H1086NL, HX1148NL



Weight .....3.0 grams

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

### With 1:1 Transmit Turns Ratios

## H1012NL, H1086NL, HX1148NL



## H1012NL, H1086NL, HX1148NL

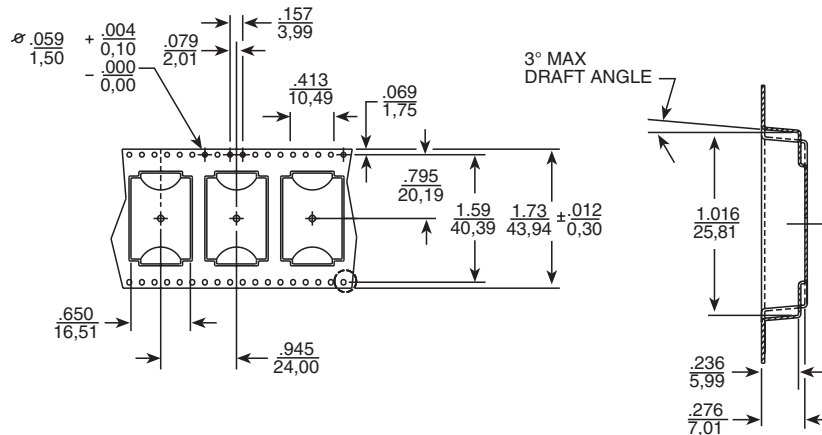


# 10/100 Base-T Single Port Transformer Modules

With 1:1 Transmit Turns Ratios

## Tape & Reel Specifications

H1012NL, H1086NL, HX1148NL



Weight .....3.0 grams  
Tube .....20/tube  
Tape & Reel .....300/reel

### 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)

Performance warranty of products offered on this data sheet is limited to the parameters specified. Data is subject to change without notice. Other brand and product names mentioned herein may be trademarks or registered trademarks of their respective owners. © Copyright, 2019. Pulse Electronics, Inc. All rights reserved.