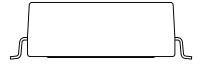


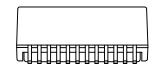


## NOTES:

- 1. ROHS COMPLIANT
- HEADER: THERMOSET PLASTIC MATERIAL WITH FLAMMABILITY RATING UL 94V-0 OR BETTER.
- 3. STORAGE TEMPERATURE: -50°C TO +125°C
- 4. COMPLIANCE TO J-STD:
  - A. J-STD-002: SOLDERABILITY AT 245°C REFLOW PROFILE
  - B. J-STD-020: LEVEL 1, NO MOISTURE SENSITIVE
  - C. J-STD-075: R7, 245°C MAXIMUM THROUGH REFLOW SOLDER
- 5. TO ORDER TAPE & REEL PACKAGING ADD A "T" SUFFIX TO THE PART NUMBER(i.e HX1294NL BECOMES HX1294NLT).







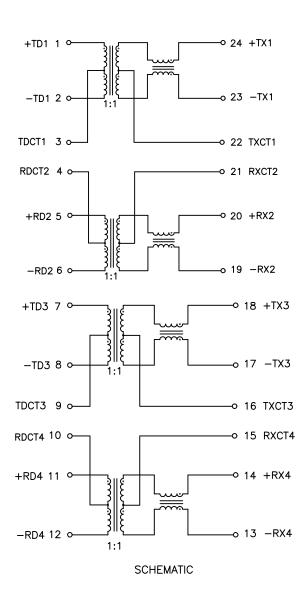
FINAL OUTLINE

@ Copyright, 2015. Pulse Electronics Corp. All rights reserved. Pulse confidential & proprietary. (07/30/15)

| PRODUCT DESCRIPTION     | TLA DRAWING | PS DRAWING    | SHEET  | PART NO. | DATASHEET REV. |
|-------------------------|-------------|---------------|--------|----------|----------------|
| MDL,DUAL,100D,1:1,SM,TU | HX1294NL-12 | PS-2268.001-C | 1 OF 3 | HX1294NL | A              |







## ELECTRICAL CHARACTERISTICS AT +25°C UNLESS OTHER SPECIFIED MEETS IEEE 802.3 SPECIFICATION

| PARAMETER                      | SPECIFICATIONS                             |  |  |  |  |  |
|--------------------------------|--|--|--|--|--|--|
| OPERATING TEMP                 | −40°C ~ +85°C                              |  |  |  |  |  |
| TURNS RATIO                    | 1.00 ± 2%                                  |  |  |  |  |  |
| POLARITY                       | PER SCHEMATIC                              |  |  |  |  |  |
| OCL, TRANSMIT CHANNEL          | 325 uh MIN. WITH 8mA DC BIAS, -40 TO 85 °C |  |  |  |  |  |
| INSERTION LOSS                 | 100 KHz                                    | 1-100 MHz                              | 125 MHz                                |  |  |  |
| INSERTION E033                 | -1.2 dB MA                                 | X -1.0 dB MAX                          | -3.0 dB MAX                            |  |  |  |
| RETURN LOSS                    | 1-40 MHz                                   | 40-10                                  | 40-100 MHz                             |  |  |  |
| $ (Z OUT = 100 OHM \pm 15\%) $ | -16 dB MI                                  | √ −10+20*LOG <sub>10</sub>             | (f/80) dB MIN                          |  |  |  |
| CROSSTALK (TX-RX)              | 1 MHz                                      | 1 MHz 30-100 MHz                       |  |  |  |  |
| CROSSIALK (IX-IX)              | -50 dB MI                                  | √ −55+24*L0G <sub>1</sub>              | -55+24*LOG <sub>10</sub> (f/10) dB MIN |  |  |  |
| DIFFERENTIAL TO COMMON         | 2 MHz                                      | 30-10                                  | 30-100 MHz                             |  |  |  |
| MODE REJECTION                 | -50 dB MI                                  | -43+22*LOG <sub>10</sub> (f/30) dB MIN |  |  |  |  |
| INPUT — OUTPUT<br>ISOLATION    | 1500 VRMS 60 SEC                           |  |  |  |  |  |

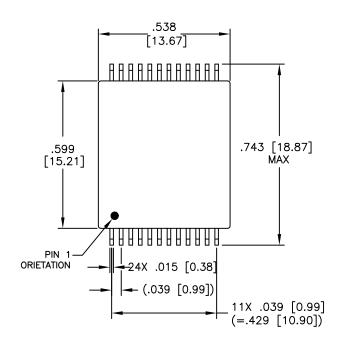
NOTE: f IS FREQUENCY IN MHz.

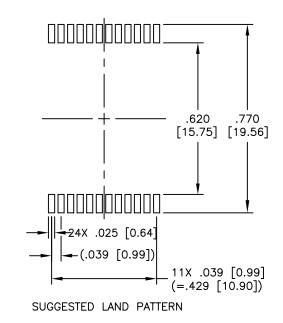
@ Copyright, 2015. Pulse Electronics Corp. All rights reserved. Pulse confidential & proprietary. (07/30/15)

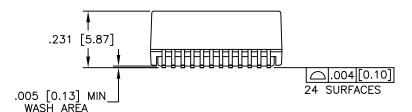
| PRODUCT DESCRIPTION     | TLA DRAWING | PS DRAWING    | SHEET  | PART NO. | DATASHEET REV. |
|-------------------------|-------------|---------------|--------|----------|----------------|
| MDL,DUAL,100D,1:1,SM,TU | HX1294NL-12 | PS-2268.001-C | 2 OF 3 | HX1294NL | A              |
|                         |             |               |        |          |                |

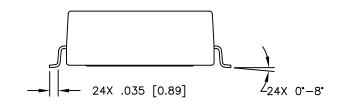












DIMENSIONS ARE IN INCHES [MILLIMETERS] WITH THE FOLLOWING TOLERANCES: [MILLIMETERS] ARE FOR REFERENCE ONLY. .XX=  $\pm$ .02 [ $\pm$ 0.50] .XXX=  $\pm$ .010 [ $\pm$ 0.25]

@ Copyright, 2015. Pulse Electronics Corp. All rights reserved. Pulse confidential & proprietary. (07/30/15)

| PRODUCT DESCRIPTION     | TLA DRAWING | PS DRAWING    | SHEET  | PART NO. | DATASHEET REV. |
|-------------------------|-------------|---------------|--------|----------|----------------|
| MDL,DUAL,100D,1:1,SM,TU | HX1294NL-12 | PS-2268.001-C | 3 OF 3 | HX1294NL | A              |

## **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Pulse: