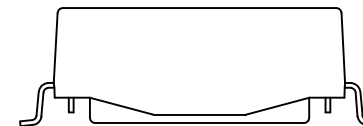
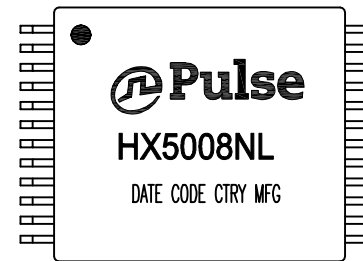


NOTES:

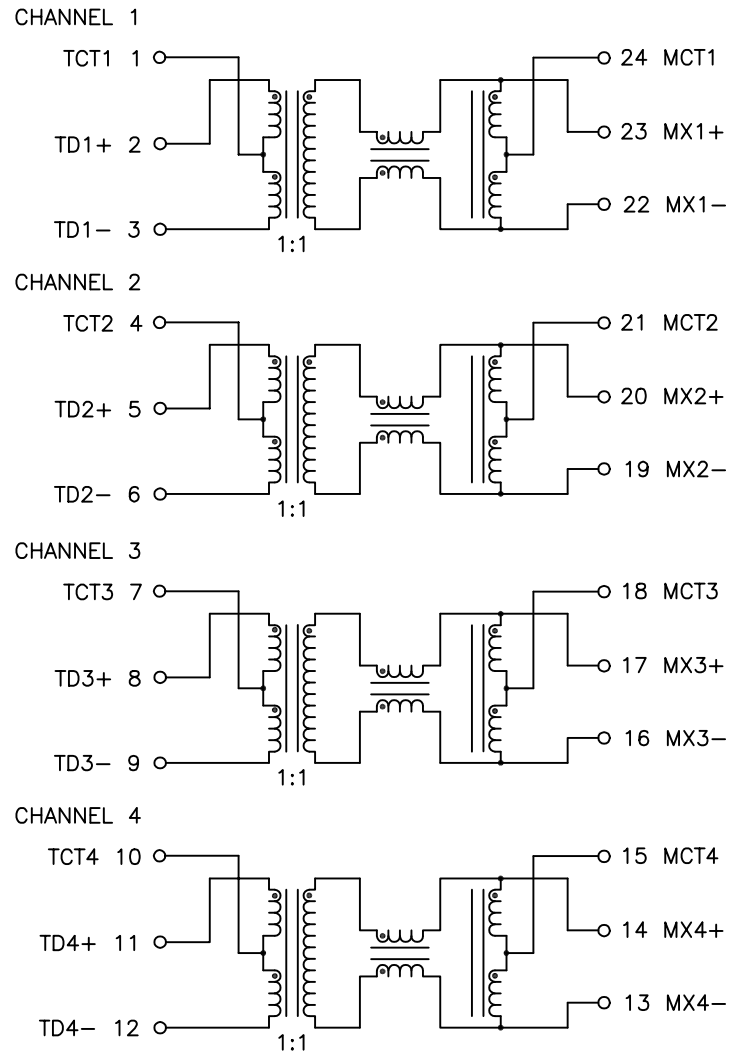
1. ROHS COMPLIANT
2. HEADER: THERMOSET PLASTIC MATERIAL WITH FLAMMABILITY RATING UL 94V-0 OR BETTER.
3. STORAGE TEMPERATURE: -50°C TO +125°C
4. COMPLIANCE TO J-STD:
  - A. J-STD-002: SOLDERABILITY AT 245°C REFLOW PROFILE
  - B. J-STD-020: LEVEL 1, NO MOISTURE SENSITIVE
  - C. J-STD-075: R7, 245°C MAXIMUM THROUGH REFLOW SOLDER
5. TO ORDER TAPE & REEL PACKAGING ADD A "T" SUFFIX TO THE PART NUMBER(i.e HX5008NL BECOMES HX5008NLT).



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,SIN,1GD,1:1,SM,OH | HX5008NL-14 | PS-0118.001-D | 1 OF 3 | HX5008NL | A              |

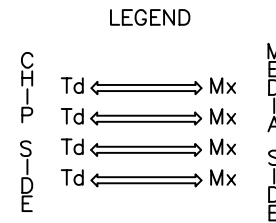


SCHEMATIC

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

| PARAMETER                                | SPECIFICATIONS                             |  |             |
|--|--|--|-------------|
| OPERATING TEMP                           | -40°C - +85 °C                             |  |             |
| TURNS RATIO                              | 1 : 1 ±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     |
|  | -1.2 dB MAX                                | -1.0 dB MAX                            | -3.0 dB MAX |
| RETURN LOSS<br>(Z OUT = 100 OHM ±15%)    | 1-40 MHz                                   | 40-100 MHz                             |             |
|  | -16 dB MIN                                 | -10+20*LOG <sub>10</sub> (f/80) dB MIN |             |
| CROSSTALK (TX-RX)                        | 1 MHz                                      | 30-100 MHz                             |             |
|  | -50 dB MIN                                 | -55+24*LOG <sub>10</sub> (f/10) dB MIN |             |
| DIFFERENTIAL TO COMMON<br>MODE REJECTION | 2 MHz                                      | 30-100 MHz                             |             |
|  | -50 dB MIN                                 | -43+22*LOG <sub>10</sub> (f/30) dB MIN |             |
| INPUT - OUTPUT ISOLATION                 | 1500 VRMS MIN                              |  |             |

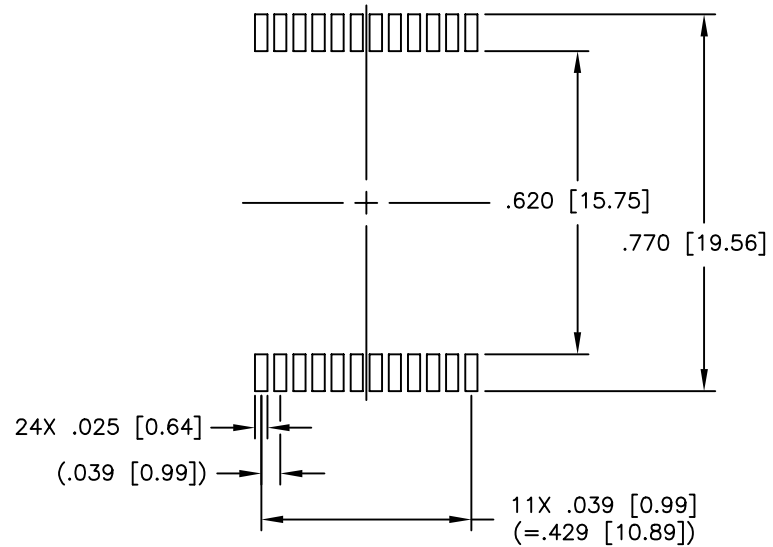
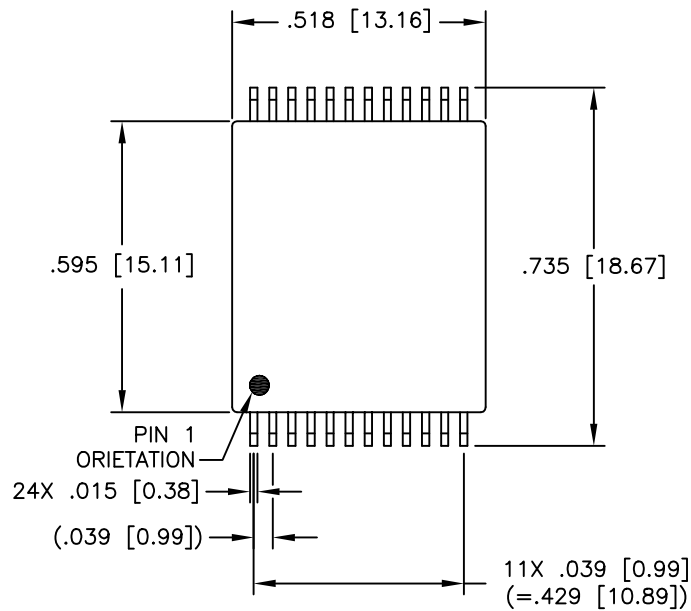
NOTE: f IS FREQUENCY IN MHZ.



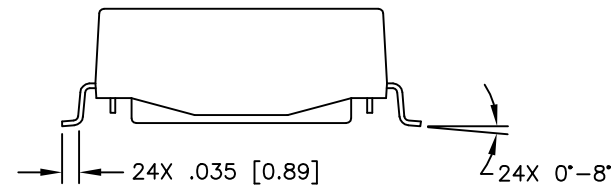
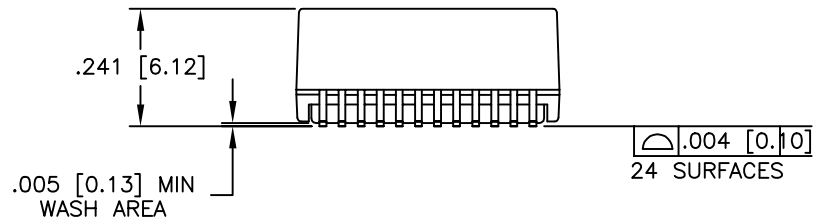
ALL CHANNELS ARE IN PHASE BETWEEN INPUT AND OUTPUT

© 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,SIN,1GD,1:1,SM,OH | HX5008NL-14 | PS-0118.001-D | 2 OF 3 | HX5008NL | A              |



SUGGESTED LAND PATTERN



DIMENSIONS ARE IN INCHES [MILLIMETERS] WITH THE FOLLOWING  
TOLERANCES: [MILLIMETERS] ARE FOR REFERENCE ONLY.  
.XX= ±.02 [±0.5]  
.XXX= ±.010 [±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,SIN,1GD,1:1,SM,OH | HX5008NL-14 | PS-0118.001-D | 3 OF 3 | HX5008NL | A              |