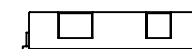
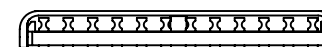
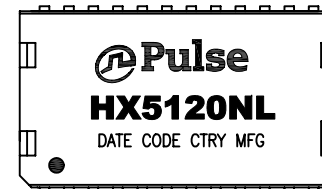


NOTES:

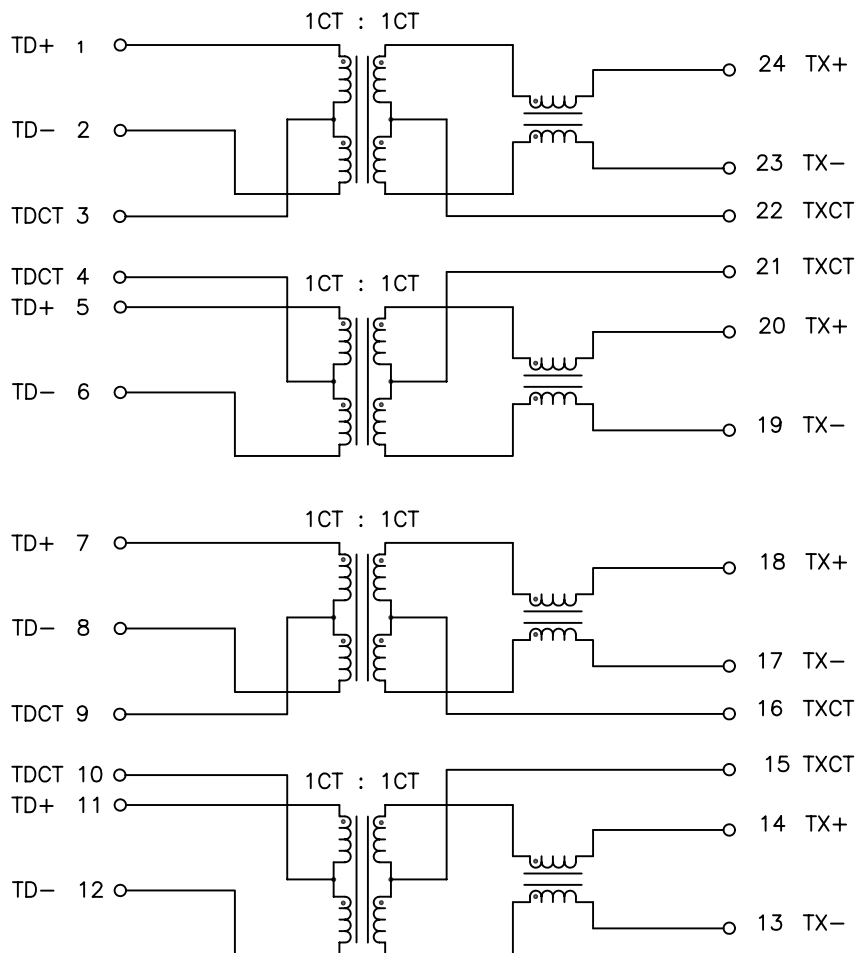
1. ROHS COMPLIANT
2. HEADER: DAP (DIALLYL PHTHALATE) WITH FLAMMABILITY RATING UL 94V-0 OR BETTER.
3. STORAGE TEMPERATURE: -50°C TO +125°C
4. COMPLIANCE TO J-STD:
  - A. J-STD-002: SOLDERABILITY AT 245°C REFLOW PROFILE
  - B. J-STD-020: LEVEL 1, NO MOISTURE SENSITIVE
  - C. J-STD-075: R7, 245°C MAXIMUM THROUGH REFLOW SOLDER
5. TO ORDER TAPE & REEL PACKAGING ADD A "T" SUFFIX TO THE PART NUMBER(i.e HX5120NL BECOMES HX5120NLT).



FINAL OUTLINE

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| PRODUCT DESCRIPTION   | TLA DRAWING | PS DRAWING    | SHEET  | PART NO. | DATASHEET REV. |
|-----------------------|-------------|---------------|--------|----------|----------------|
| MDL,SIN,1GD,1:1,SM,TU | HX5120NL-10 | PS-2422.001-B | 1 OF 3 | HX5120NL | A              |



SCHEMATIC

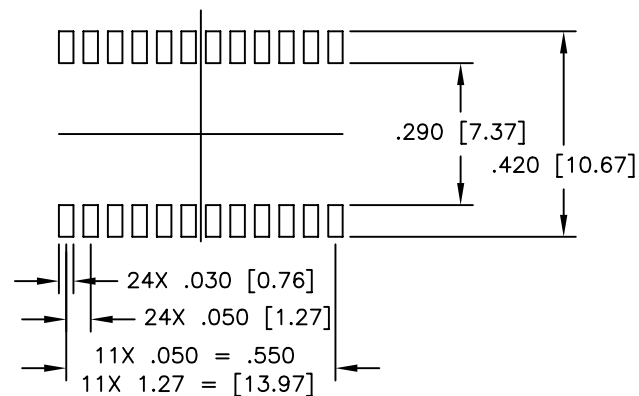
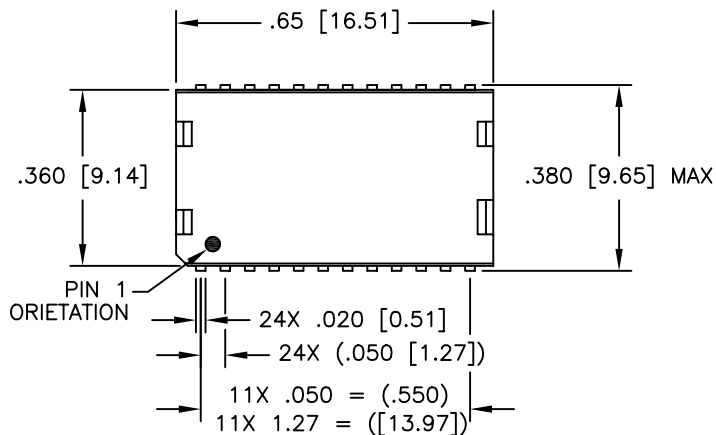
ELECTRICAL CHARACTERISTICS AT +25°C UNLESS OTHER SPECIFIED  
MEETS IEEE 802.3 SPECIFICATION

| PARAMETER                                     | SPECIFICATIONS   |  |
|---|--|--|
| OPERATING TEMPERATURE                         | -40°C ~ +85°C  |  |
| URNS RATIO                                    | 1 : 1 ±2%  |  |
| POLARITY                                      | PER SCHEMATIC  |  |
| INSERTION LOSS                                | 100 KHz  | 1-125 MHz                                  |
|   | -1.2 dB MAX  | -0.2-0.002*f <sup>1.4</sup> 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 MHz) dB MIN |
| INDUCTANCE (OCL)<br>(MEDIA SIDE, -40°C~+85°C) | 350 uH MIN (MEASURED AT 100 KHz, 100 mVRMS<br>AND WITH 8 mA DC BIAS) |  |
| CROSSTALK, ADJACENT<br>CHANNELS               | 1 MHz  | 10-100 MHz                                 |
|   | -50 dB MIN   | -55+22*LOG <sub>10</sub> (f/10) dB MIN     |
| COMMON MODE<br>REJECTION RATIO                | 2 MHz  | 30-200 MHz                                 |
|   | -42 dB MIN   | -15+20*LOG <sub>10</sub> (f/200) dB MIN    |
| DC RESISTANCE,<br>1/2 WINDING                 | .65 OHMS MAX   |  |
| DC RESISTANCE<br>IMBALANCE                    | ±.065 OHMS MAX (CENTER TAP SYMMETRY)                                 |  |
| INPUT - OUTPUT<br>ISOLATION                   | 1500 VRMS MIN @ 60 SECONDS   |  |

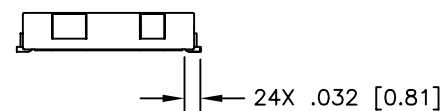
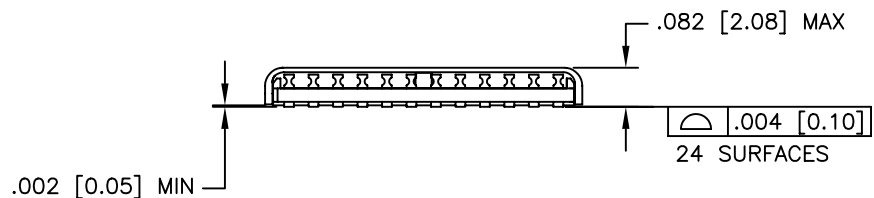
NOTE: f IS FREQUENCY IN MHZ.

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|-----------------------|-------------|---------------|--------|----------|----------------|
| MDL,SIN,1GD,1:1,SM,TU | HX5120NL-10 | PS-2422.001-B | 2 OF 3 | HX5120NL | A              |



SUGGESTED LAND PATTERN



DIMENSIONS ARE IN INCHES [MILLIMETERS] WITH THE FOLLOWING TOLERANCES: [MILLIMETERS] ARE FOR REFERENCE ONLY.  
.XX= ±.01 [±0.25]  
.XXX= ±.005 [±0.13]

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| PRODUCT DESCRIPTION   | TLA DRAWING | PS DRAWING    | SHEET  | PART NO. | DATASHEET REV. |
|-----------------------|-------------|---------------|--------|----------|----------------|
| MDL,SIN,1GD,1:1,SM,TU | HX5120NL-10 | PS-2422.001-B | 3 OF 3 | HX5120NL | A              |