

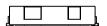


## NOTES:

- 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).







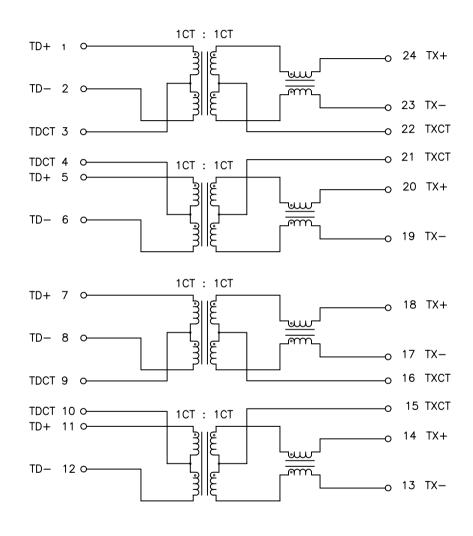
FINAL OUTLINE

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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              |







ELECTRICAL CHARACTERISTICS AT +25°C UNLESS OTHER SPECIFIED

MEETS IEEE 802.3 SPECIFICATION

| PARAMETER                                  | SPECIFICATIONS                       |   |  |  |  |
|--|--------------------------------------|---|--|--|--|
| OPERATING TEMPERATURE                      | −40°C ~ +85°C                        |   |  |  |  |
| TURNS RATIO                                | 1 : 1 ±2%                            |   |  |  |  |
| POLARITY                                   |                                      | PER SCHEMATIC   |  |  |  |
|  | 100 KHz                              | 1-125 MHz   |  |  |  |
| INSERTION LOSS                             | -1.2 dB MAX                          | -0.2-0.002*f <sup>1.4</sup> dB MAX                        |  |  |  |
| RETURN LOSS                                | .1-40 MHz                            | 40-100 MHz  |  |  |  |
| $(Z OUT = 100 OHM \pm 15\%)$               | -16 dB MIN                           | -10+20*LOG <sub>10</sub> (f/80 MHz) dB MIN                |  |  |  |
| INDUCTANCE (OCL) (MEDIA SIDE, -40°C~+85°C) | 350 uH MIN                           | (MEASURED AT 100 KHz, 100 mVRMS)<br>AND WITH 8 mA DC BIAS |  |  |  |
|  | 1 MHz                                | 10-100 MHz  |  |  |  |
| CROSSTALK, ADJACENT<br>CHANNELS            | -50 dB MIN                           | -55+22*LOG <sub>10</sub> (f/10) dB MIN                    |  |  |  |
| COMMON MODE                                | 2 MHz                                | 30-200 MHz  |  |  |  |
| REJECTION RATIO                            | -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.

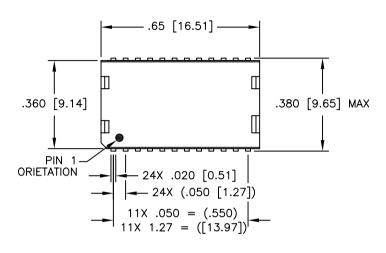
**SCHEMATIC** 

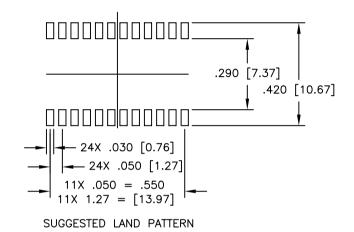
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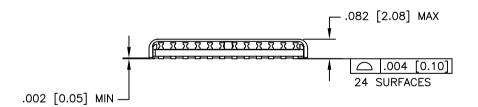
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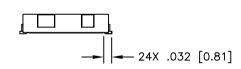












DIMENSIONS ARE IN INCHES [MILLIMETERS] WITH THE FOLLOWING TOLERANCES: [MILLIMETERS] ARE FOR REFERENCE ONLY. .XX=  $\pm$ .01 [ $\pm$ 0.25] .XXX=  $\pm$ .005 [ $\pm$ 0.13]

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