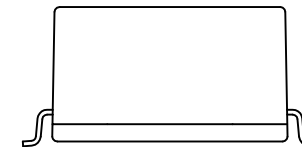
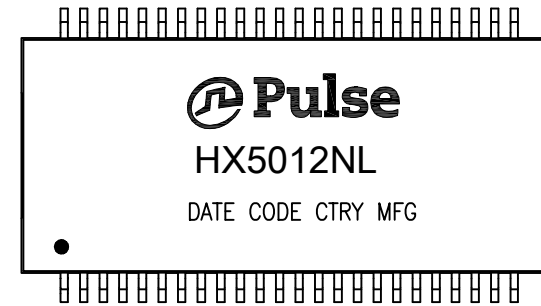


NOTES:

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 HX5012NL BECOMES HX5012NLT).

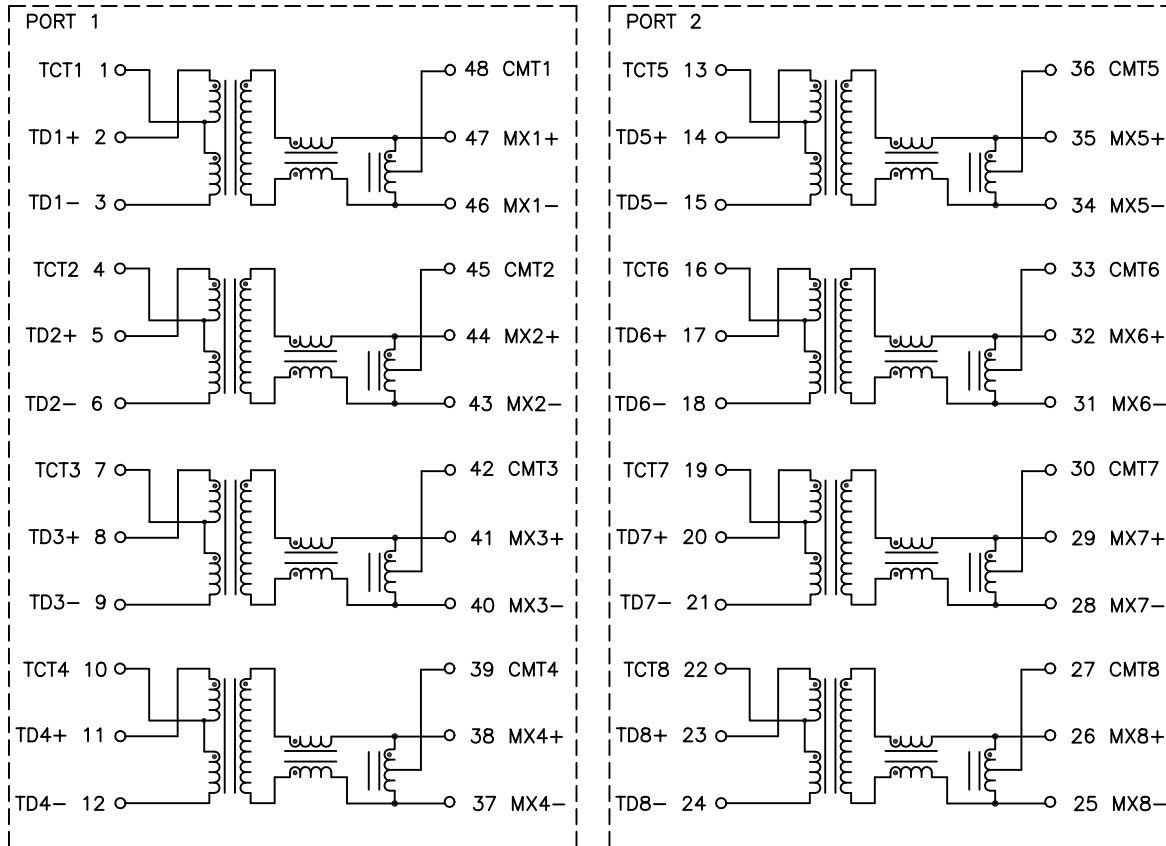


FINAL OUTLINE

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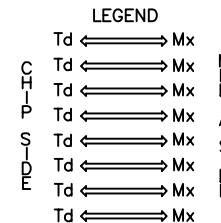
| PRODUCT DESCRIPTION | TLA DRAWING | PS DRAWING | SHEET | PART NO. | DATASHEET REV. |
|------------------------|-------------|---------------|--------|----------|----------------|
| MDL,DUAL,1GD,1:1,SM,TU | HX5012NL-13 | PS-2007.001-C | 1 OF 3 | HX5012NL | A |

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



| PARAMETER | SPECIFICATIONS | | | |
|--|--|--|-------------|-------------|
| OPERATING TEMP | -40°C - +85°C | | | |
| TURNS RATIO | 1 : 1 ± 2% | | | |
| POLARITY | PER SCHEMATIC | | | |
| INSERTION LOSS | 100 KHz | 30-60 MHz | 100 MHz | 125 MHz |
| | -1.2 dB MAX | -1.0 dB MAX | -1.4 dB MAX | -3.0 dB MAX |
| RETURN LOSS (Z OUT = 100 OHM ±15%) | .1-40 MHz | 40-100 MHz | | |
| | -16 dB MIN | -10+20*LOG ₁₀ (f/80 MHz) dB MIN | | |
| INDUCTANCE (OCL) (MEDIA SIDE, -40°C TO +85°C) | 350 uH MIN (MEASURED AT 100 KHz, 100 mVRMS) (AND WITH 8 mA DC BIAS) | | | |
| CROSSTALK, ADJACENT CHANNELS | 1 MHz | 10-100 MHz | | |
| | -50 dB MIN | -55+22*LOG ₁₀ (f/10) dB MIN | | |
| COMMON MODE REJECTION RATIO | 2 MHz | 30-200 MHz | | |
| | -50 dB MIN | -15+20*LOG ₁₀ (f/200) dB MIN | | |
| DC RESISTANCE, 1/2 WINDING | .65 OHMS MAX | | | |
| DC RESISTANCE IMBALANCE | ±.065 OHMS MAX (CENTER TAP SYMMETRY) | | | |
| INPUT - OUTPUT ISOLATION | 1500 VRMS MIN @ 60 SECONDS | | | |

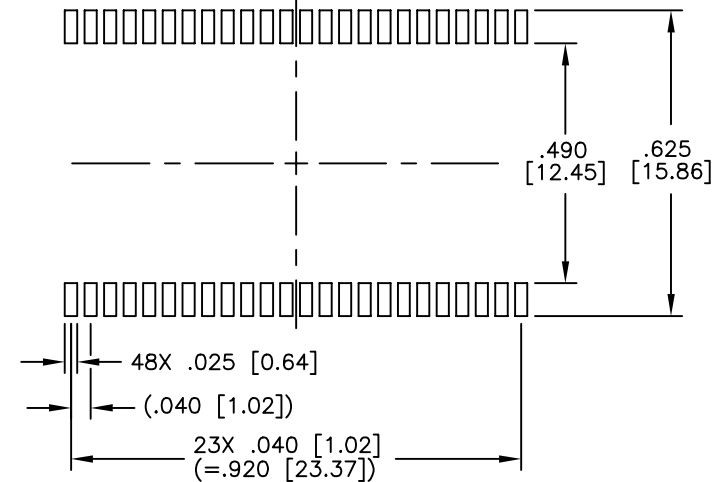
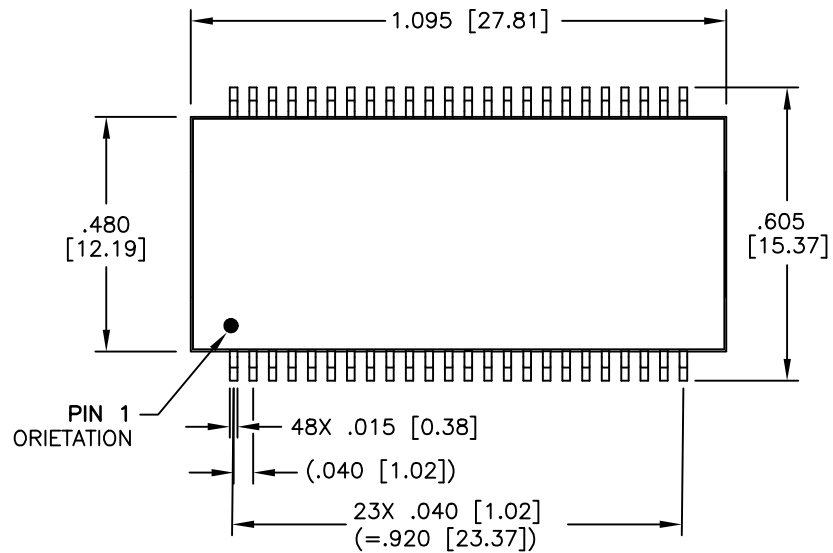
NOTE: f IS FREQUENCY IN MHz.



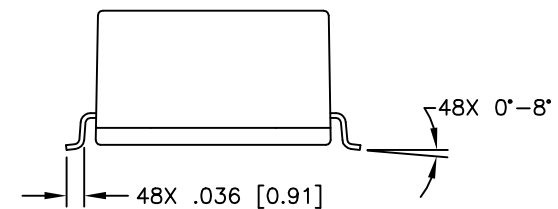
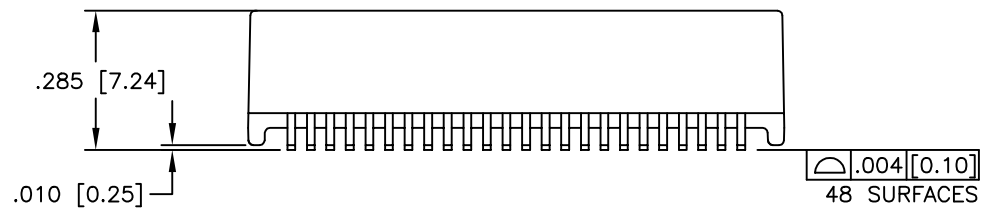
ALL CHANNELS ARE IN PHASE BETWEEN INPUT AND OUTPUT

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| MDL,DUAL,1GD,1:1,SM,TU | HX5012NL-13 | PS-2007.001-C | 2 OF 3 | HX5012NL | 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]

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| PRODUCT DESCRIPTION | TLA DRAWING | PS DRAWING | SHEET | PART NO. | DATASHEET REV. |
|------------------------|-------------|---------------|--------|----------|----------------|
| MDL,DUAL,1GD,1:1,SM,TU | HX5012NL-13 | PS-2007.001-C | 3 OF 3 | HX5012NL | A |