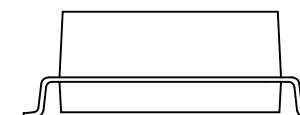


NOTES:

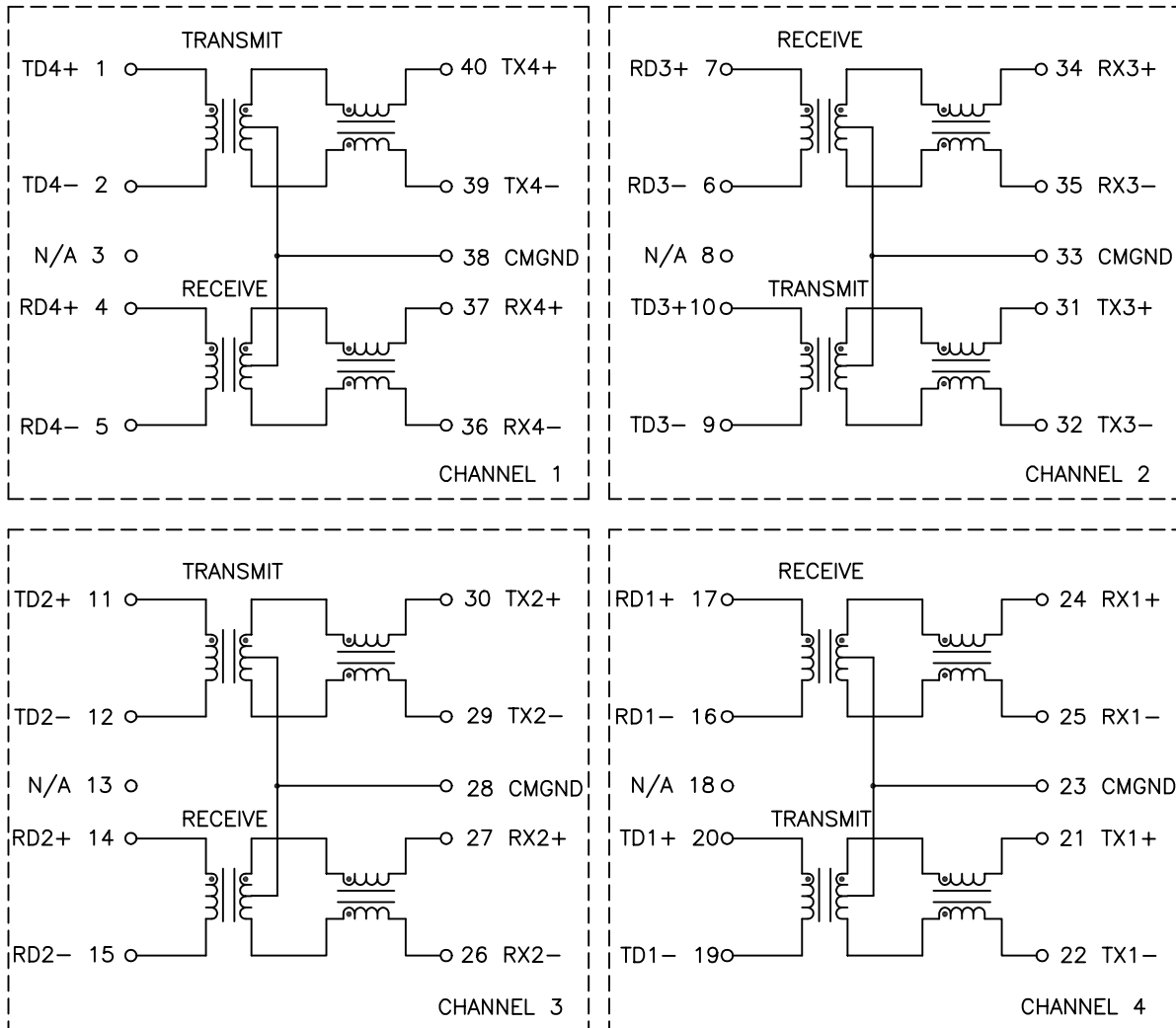
1. ROHS COMPLIANT
2. HEADER: THERMOSET PLASTIC MATERIAL WITH FLAMMABILITY RATING UL 94V-0 OR BETTER.
3. STORAGE TEMPERATURE: -20°C TO +125°C
4. COMPLIANCE TO J-STD:
 - A. J-STD-002: SOLDERABILITY AT 245°C REFLOW PROFILE
 - B. J-STD-020: LEVEL 1, NO MOISTURE SENSITIVE
 - C. J-STD-075: R7, 245°C MAXIMUM THROUGH REFLOW SOLDER
5. TO ORDER TAPE & REEL PACKAGING ADD A "T" SUFFIX TO THE PART NUMBER(i.e H1664NL BECOMES H1664NLT).



FINAL OUTLINE

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| PRODUCT DESCRIPTION | TLA DRAWING | PS DRAWING | SHEET | PART NO. | DATASHEET REV. |
|-------------------------|-------------|---------------|--------|----------|----------------|
| MDL,QUAD,100D,1:1,SM,TU | H1664NL-11 | PS-0002.002-B | 1 OF 3 | H1664NL | A |



SCHEMATIC

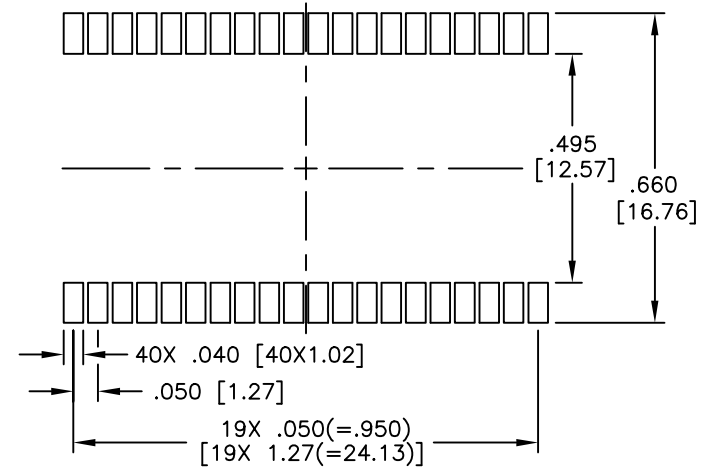
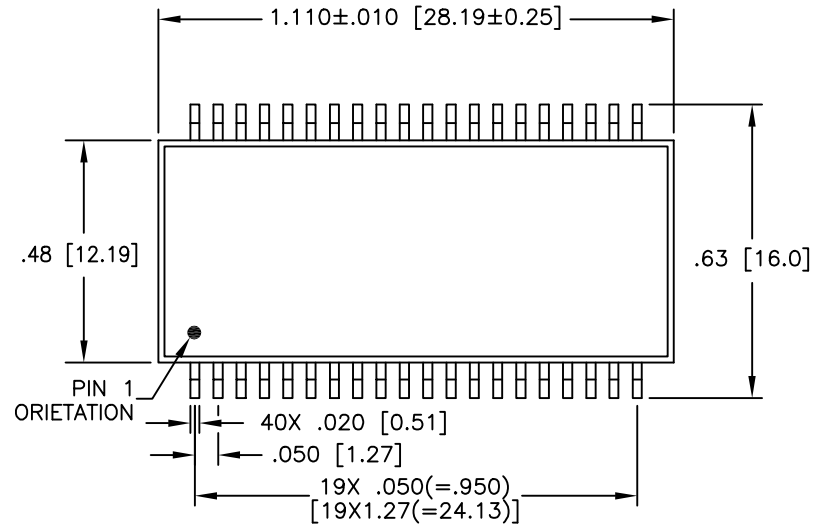
ELECTRICAL CHARACTERISTICS AT +25°C UNLESS OTHER SPECIFIED
MEETS IEEE 802.3 SPECIFICATION

| PARAMETER | SPECIFICATIONS | |
|---|--|---|
| OPERATING TEMP | 0°C - 70°C | |
| TURNS RATIO | 1.00 ± 2% | |
| POLARITY | PER SCHEMATIC | |
| INSERTION LOSS | 100 KHz | 1-125 MHz |
| | -1.2 dB MAX | -0.2-0.002*f ^{1.4} dB MAX |
| RETURN LOSS, 1000BT (Z OUT = 100 OHM ±15%) | .1-30 MHz | 30-60 MHz |
| | -16 dB MIN | -10+20*LOG ₁₀ (f/60 MHz) dB MIN |
| INDUCTANCE (OCL) (MEDIA SIDE, 0°C-70°C) | 350 uH MIN (MEASURED AT 100 KHz, 100 mVRMS AND WITH 8 mA DC BIAS) | |
| | 1 MHz | 10-100 MHz |
| CROSSTALK, ADJACENT CHANNELS | -50 dB MIN | -55+22*LOG ₁₀ (f/10) dB MIN |
| | 2 MHz | 30-200 MHz |
| DIFFERENTIAL TO COMMON MODE REJECTION | -50 dB MIN | -43+22*LOG ₁₀ (f/30) 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 | |

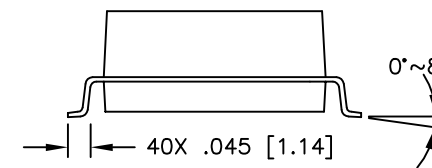
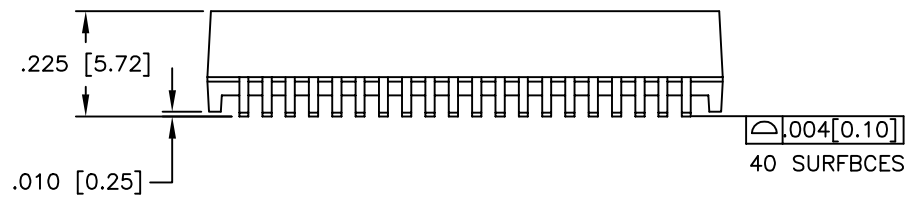
NOTE: f IS FREQUENCY IN MHz.

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| PRODUCT DESCRIPTION | TLA DRAWING | PS DRAWING | SHEET | PART NO. | DATASHEET REV. |
|-------------------------|-------------|---------------|--------|----------|----------------|
| MDL,QUAD,100D,1:1,SM,TU | H1664NL-11 | PS-0002.002-B | 2 OF 3 | H1664NL | A |



SUGGESTED LBND PBTERN



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,QUAD,100D,1:1,SM,TU | H1664NL-11 | PS-0002.002-B | 3 OF 3 | H1664NL | A |