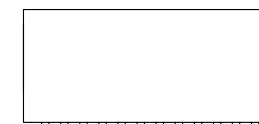
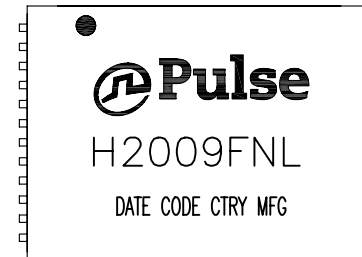


NOTES:

1. ROHS COMPLIANT
2. HEADER: DAP (DIALLYL PHTHALATE) 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 H2009FNL BECOMES H2009FNLT).

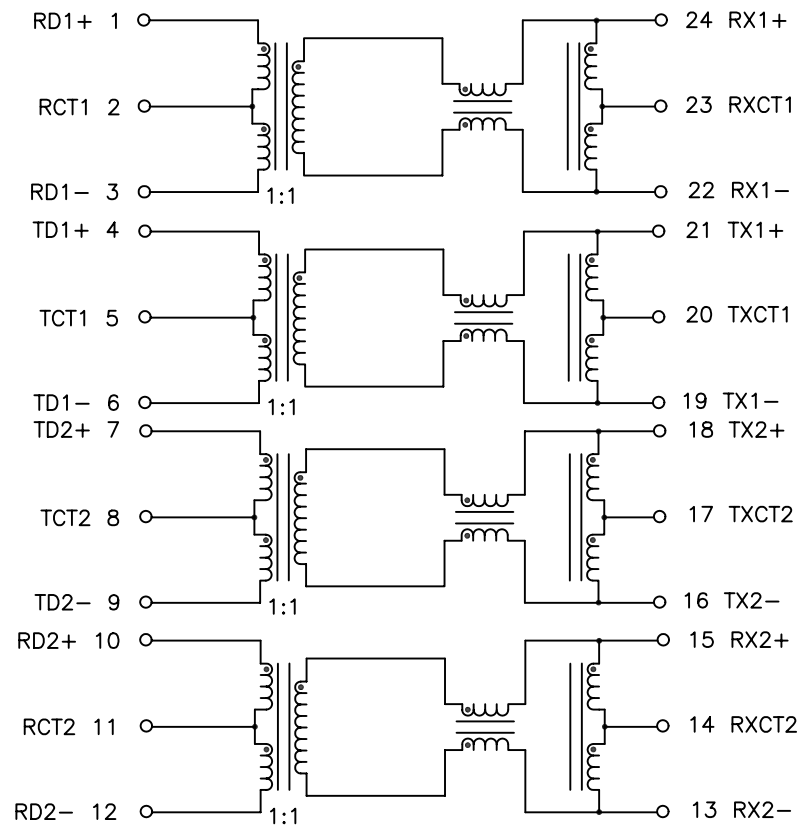


FINAL OUTLINE

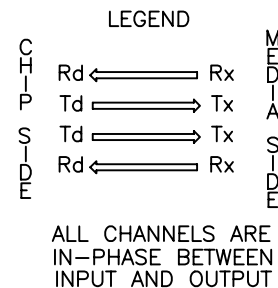
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| PRODUCT DESCRIPTION     | TLA DRAWING | PS DRAWING    | SHEET  | PART NO. | DATASHEET REV. |
|-------------------------|-------------|---------------|--------|----------|----------------|
| MDL,DUAL,100P,1:1,SM,TU | H2009FNL-10 | PS-2745.001-A | 1 OF 3 | H2009FNL | A              |

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



SCHEMATIC

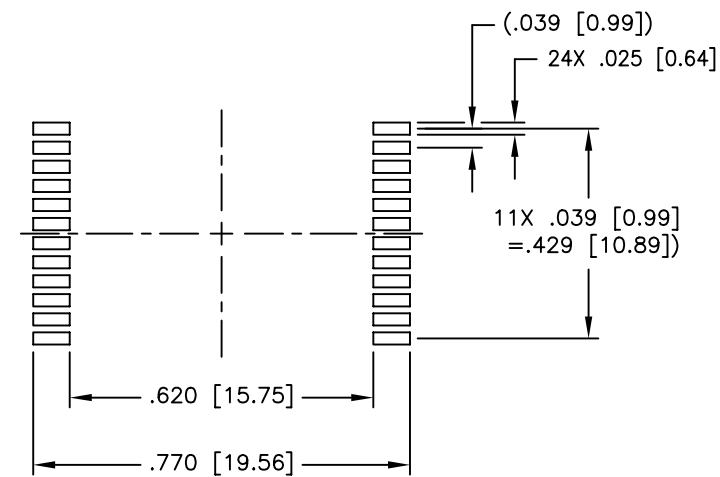
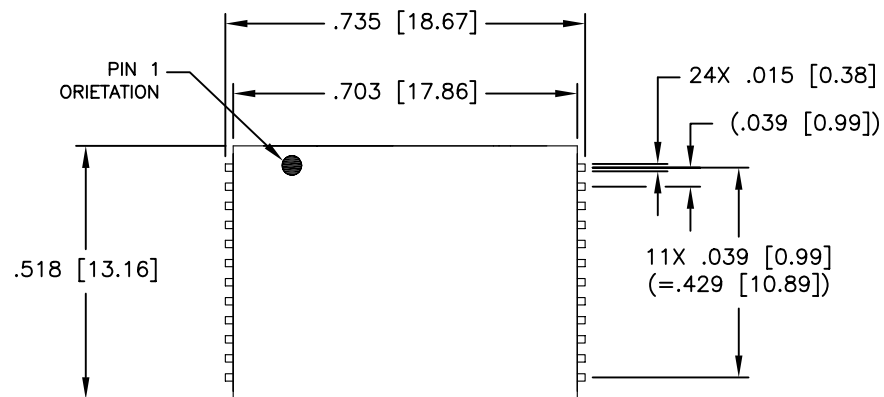


| PARAMETER                                                                               | SPECIFICATIONS                                                                                                                                                                       |                                               |            |
|-----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|------------|
| OPERATING TEMPERATURE                                                                   | 0°C – 70 °C                                                                                                                                                                          |                                               |            |
| URNS RATIO                                                                              | 1.00 ± 2%                                                                                                                                                                            |                                               |            |
| POLARITY                                                                                | PER SCHEMATIC                                                                                                                                                                        |                                               |            |
| INSERTION LOSS                                                                          | 100 KHz                                                                                                                                                                              | 1–100 MHz                                     |            |
|                                                                                         | –1.2 dB MAX                                                                                                                                                                          | –0.2–0.002*f <sup>1.4</sup> dB MAX            |            |
| RETURN LOSS<br>(Z OUT = 100 OHM ±15%)                                                   | .1–30 MHz                                                                                                                                                                            | 30–60 MHz                                     | 60–80 MHz  |
|                                                                                         | –16 dB MIN                                                                                                                                                                           | –10+20*LOG <sub>10</sub><br>(f/60 MHz) dB MIN | –10 dB MIN |
| INDUCTANCE (OCL)<br>(MEDIA SIDE ACROSS PINS<br>13–15, 16–18, 19–21, 22–24),<br>0°C–70°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        |            |
| DIFFERENTIAL TO COMMON<br>MODE REJECTION                                                | 2 MHz                                                                                                                                                                                | 30–200 MHz                                    |            |
|                                                                                         | –50 dB MIN                                                                                                                                                                           | –43+22*LOG <sub>10</sub> (f/30) dB MIN        |            |
| DC RESISTANCE,<br>1/2 WINDING                                                           | .65 OHMS MAX<br>(MEASURED AT PINS 24–23/23–22; 21–20/20–19;<br>18–17/17–16; 15–14/14–13)                                                                                             |                                               |            |
| DC RESISTANCE<br>IMBALANCE                                                              | PIN (24–23) – PIN (23–22) = ±.065 OHMS MAX<br>PIN (21–20) – PIN (20–19) = ±.065 OHMS MAX<br>PIN (18–17) – PIN (17–16) = ±.065 OHMS MAX<br>PIN (15–14) – PIN (14–13) = ±.065 OHMS MAX |                                               |            |
| INPUT – OUTPUT<br>ISOLATION                                                             | 1500 VRMS MIN @ 60 SECONDS                                                                                                                                                           |                                               |            |

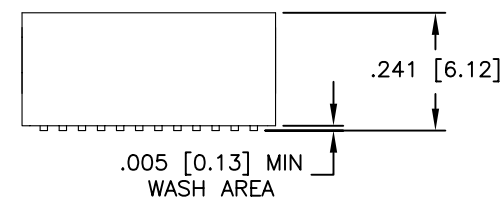
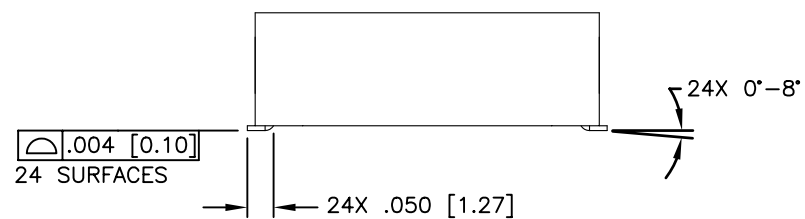
NOTE: f IS FREQUENCY IN MHz.

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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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| MDL,DUAL,100P,1:1,SM,TU | H2009FNL-10 | PS-2745.001-A | 3 OF 3 | H2009FNL | A              |

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