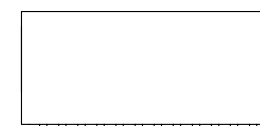


NOTES:

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).

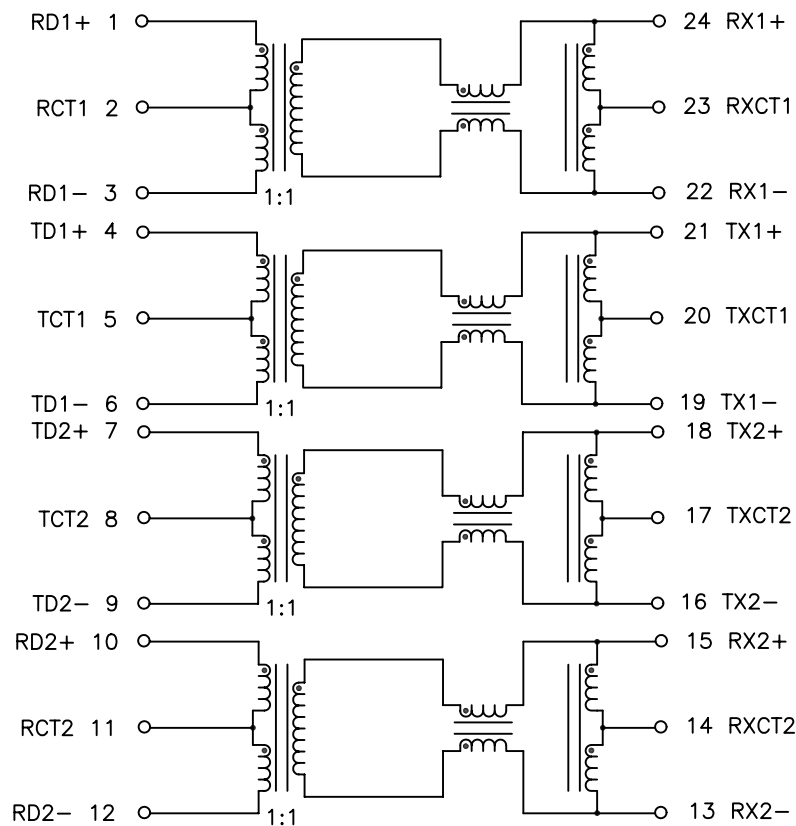


FINAL OUTLINE

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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

LEGEND

DIFF-DIFF      P-P      A-S      DIFF

Rd ←→ Rx  
Td ←→ Tx  
Td ←→ Tx  
Rd ←→ Rx

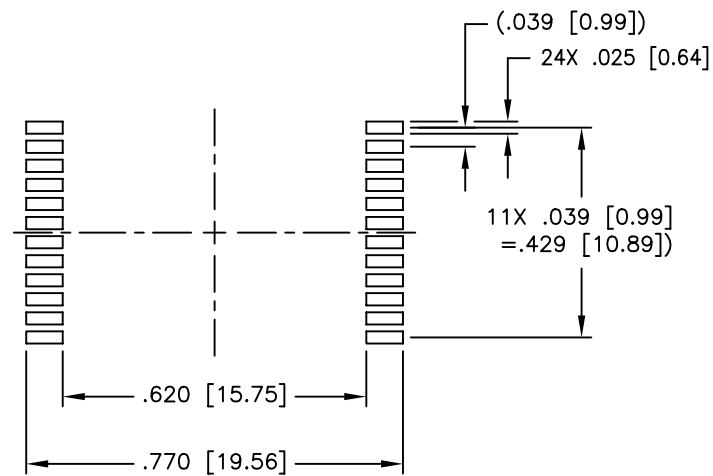
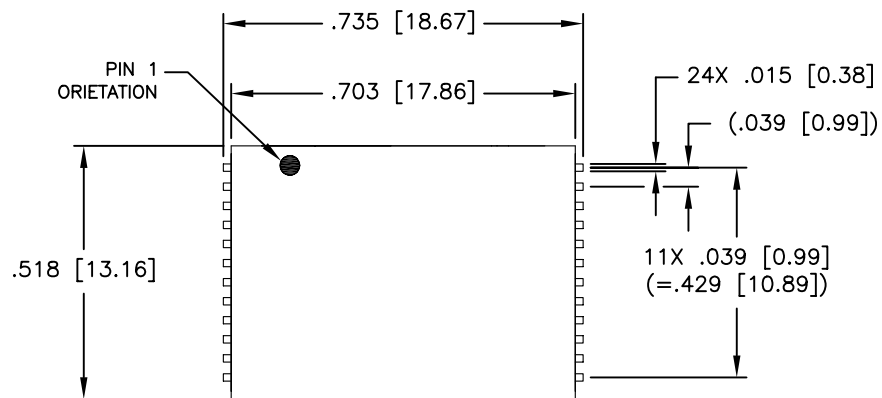
ALL CHANNELS ARE IN-PHASE BETWEEN INPUT AND OUTPUT

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

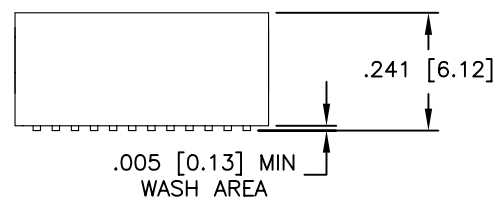
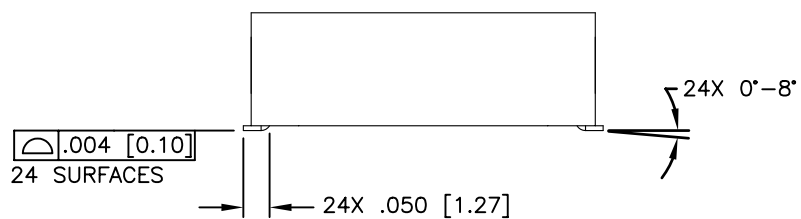
NOTE: f IS FREQUENCY IN MHZ.

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PRODUCT DESCRIPTION	TLA DRAWING	PS DRAWING	SHEET	PART NO.	DATASHEET REV.
MDL,DUAL,100P,1:1,SM,TU	H2009FNL-10	PS-2745.001-A	2 OF 3	H2009FNL	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,DUAL,100P,1:1,SM,TU	H2009FNL-10	PS-2745.001-A	3 OF 3	H2009FNL	A