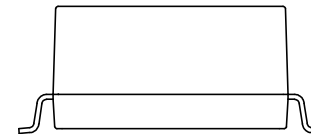
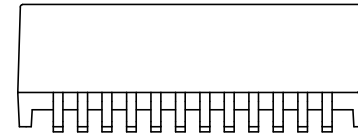
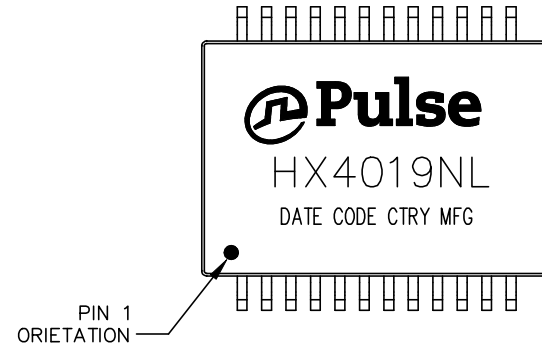




NOTES:

1. 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 250°C REFLOW PROFILE
  - B. J-STD-020: LEVEL 1, NO MOISTURE SENSITIVE
  - C. J-STD-075: R7, 250°C MAXIMUM THROUGH REFLOW SOLDER
5. TO ORDER TAPE & REEL PACKAGING ADD A "T" SUFFIX TO THE PART NUMBER(i.e HX4019NL BECOMES HX4019NLT).
6. PACKING SPECIFICATION:  
 REEL SIZE: 330 mm  
 TAPE WIDTH: 32 mm  
 TAPE PITCH: 24mm  
 COMPONENTS PER REEL: 250 pcs



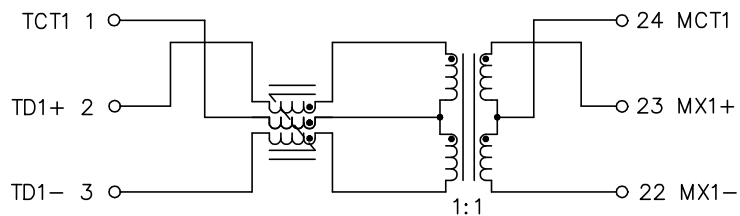
FINAL OUTLINE

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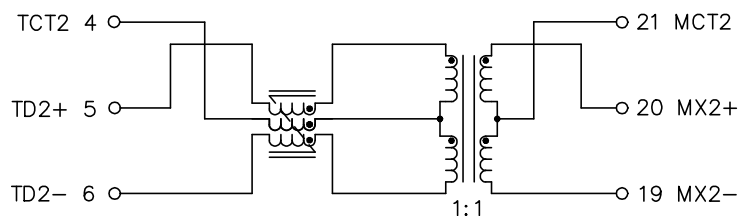
PRODUCT DESCRIPTION	TLA DRAWING	PS DRAWING	SHEET	PART NO.	DATASHEET REV.
MDL,SIN,2.5GPP,1:1,SM,TU	HX4019NL-10	PS-2473.001-B	1 OF 4	HX4019NL	D



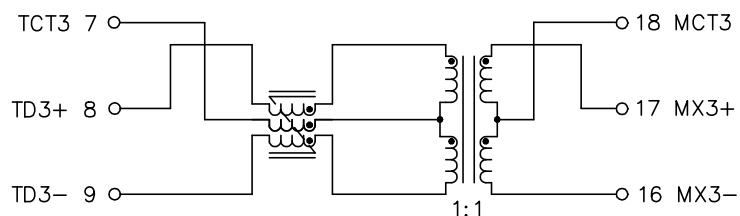
CHANNEL A



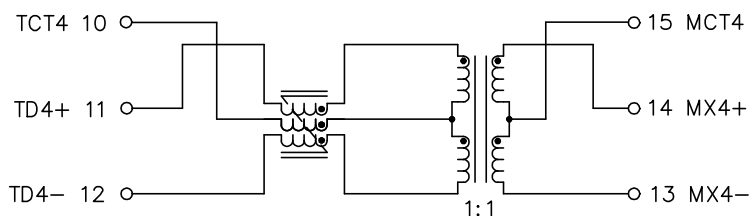
CHANNEL B



CHANNEL C



CHANNEL D



SCHEMATIC

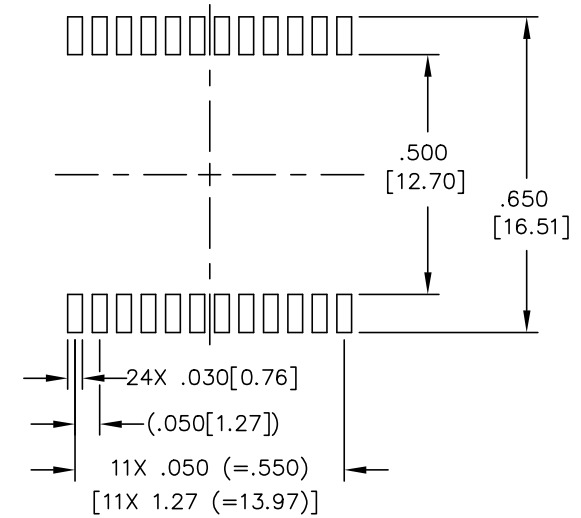
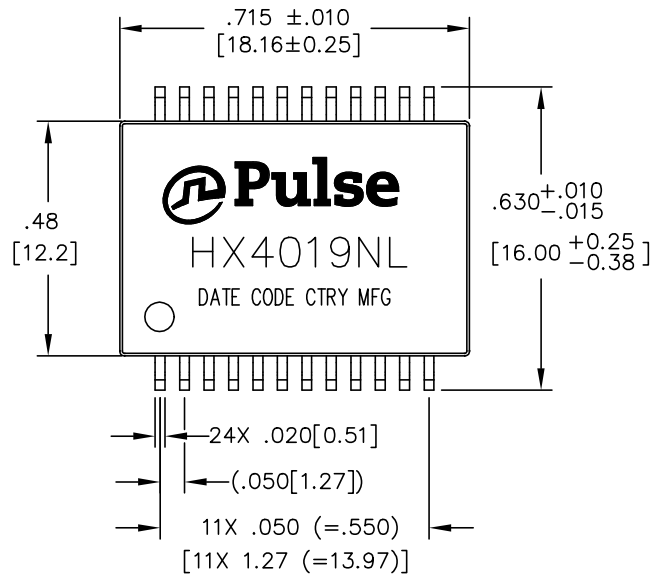
ELECTRICAL CHARACTERISTICS AT +25°C UNLESS OTHER SPECIFIED

MEETS IEEE 802.3 SPECIFICATION

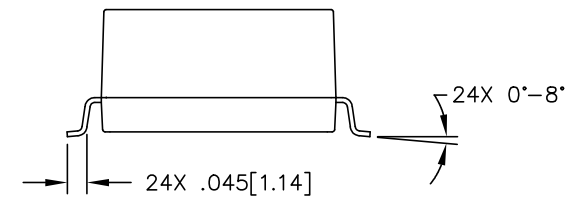
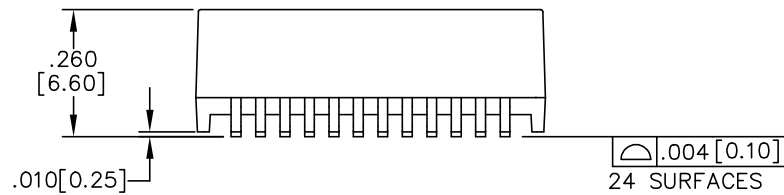
PARAMETER	SPECIFICATIONS	
OPERATING TEMPERATURE	-40°C TO +85°C	
TURNS RATIO	1.00 ± 2%	
POLARITY	PER SCHEMATIC	
INSERTION LOSS (SDD21&SDD12)	1-50 MHz	50-125 MHz
	-0.5 dB MAX	-1.0 dB MAX
PHY-SIDE RETURN LOSS (SDD11 - Zref = 100 OHMS ± 1%)	1 MHz-40 MHz	40 MHz-200 MHz
	-20 dB MIN	-20+15*LOG <sub>10</sub> (f/40) dB MIN
LINE-SIDE RETURN LOSS (SDD22 - Zref = 100 OHMS ± 1%)	1 MHz-40 MHz	40 MHz-200 MHz
	-20 dB MIN	-20+15*LOG <sub>10</sub> (f/40) dB MIN
INDUCTANCE (OCL)	150 uH MIN @ 100 kHz, 100 mV WITH 9 mA DC BIAS	
CROSSTALK, ADJACENT CHANNELS (SDD21 - ADJ.)	1-125 MHz	
	-30 dB MIN	
COMMON MODE REJECTION RATIO (SCC21)	30 MHz-200 MHz	
	-30 dB MIN	
COMM. TO DIFF. REJECTION RATIO (SDC12)	10 MHz-125 MHz	
	-45+f/35 dB MIN	
DC CURRENT/VOLTAGE RATING	600 mA MAX @ 57 V (CONTINUOUS)	
POE POWER (REF)	60W MAX OVER 4 PAIRS @ 50 V	
IMPULSE	4000 V MIN.	
INPUT - OUTPUT ISOLATION	3000 VRMS MIN @ 60 SECONDS	

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MDL,SIN,2.5GPP,1:1,SM,TU	HX4019NL-10	PS-2473.001-B	2 OF 4	HX4019NL	D



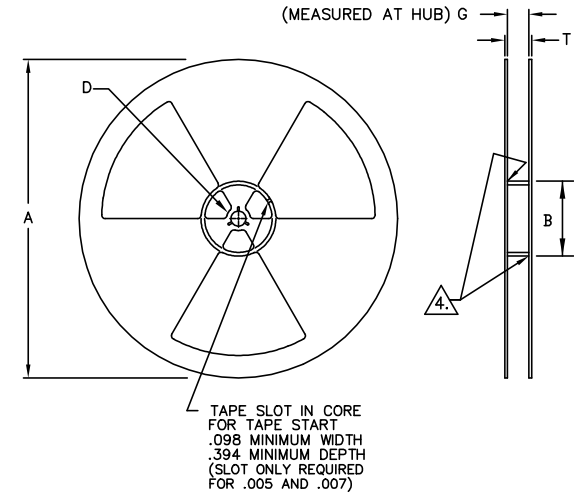
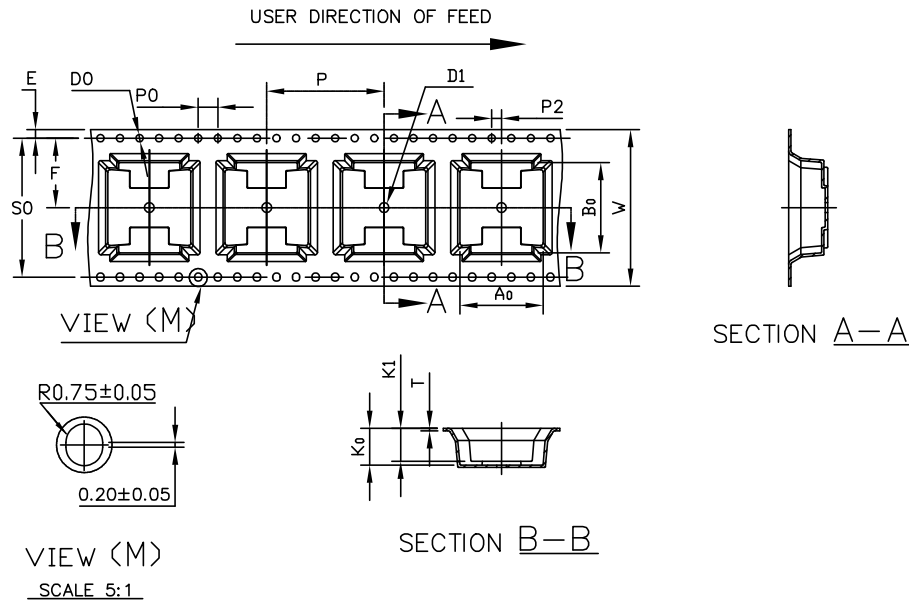
SUGGESTED LAND PATTERN



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

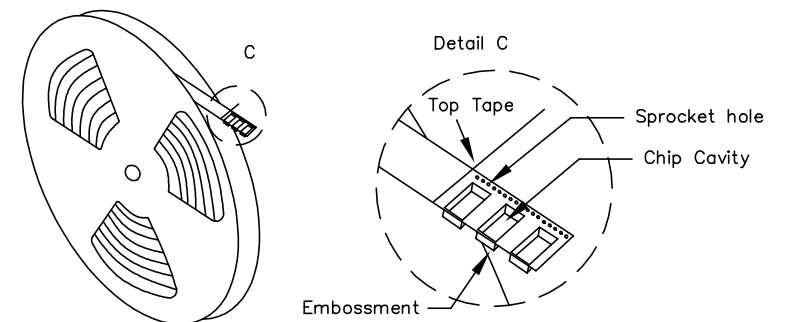
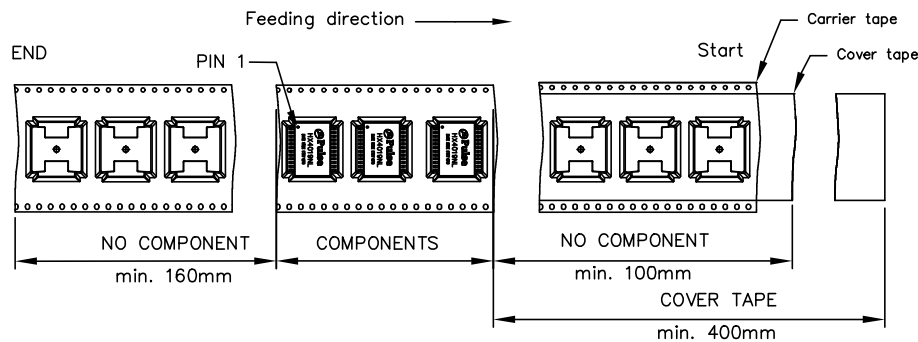
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MDL,SIN,2.5GPP,1:1,SM,TU	HX4019NL-10	PS-2473.001-B	3 OF 4	HX4019NL	D



ITEM	W	A <sub>0</sub>	B <sub>0</sub>	K <sub>0</sub>	K <sub>1</sub>	P	F	E	S <sub>0</sub>	D <sub>0</sub>	D <sub>1</sub>	P <sub>0</sub>	P <sub>2</sub>	T
DIM	32.00 ±0.30	17.00 ±0.10	18.50 ±0.10	7.50 ±0.10	6.75 ±0.10	24.00 ±0.10	14.2 ±0.15	1.75 ±0.10	28.4 ±0.10	1.50 +0.10 -0.00	2.0min	4.00 ±0.10	2.00 ±0.10	0.50 ±0.05

	A	B	D	T	G	G
Tolerance		min.	min.	max.	min.	max.
Tape width mm	330.00	100.00	20.20	38.4	32.4	34.4



DIMENSIONS ARE IN MILLIMETERS WITH THE FOLLOWING TOLERANCES:  
X.XX= ±0.10

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MDL,SIN,2.5GPP,1:1,SM,TU	HX4019NL-10	PS-2473.001-B	4 OF 4	HX4019NL	D