



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

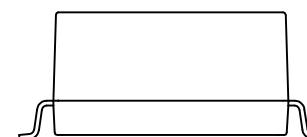
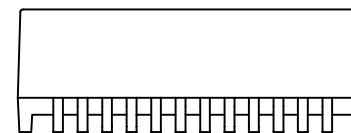
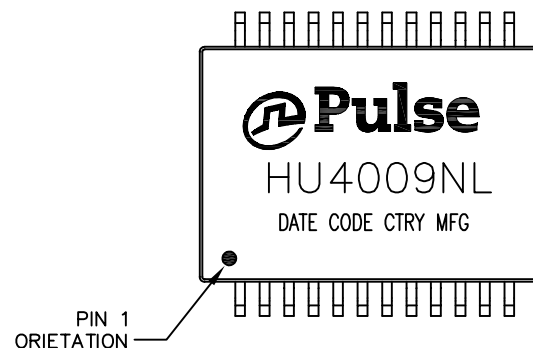
Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



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 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 HU4009NL BECOMES HU4009NLT).

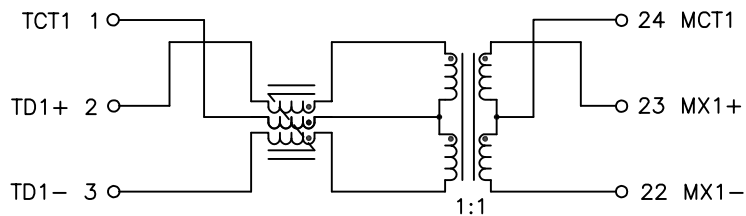


FINAL OUTLINE

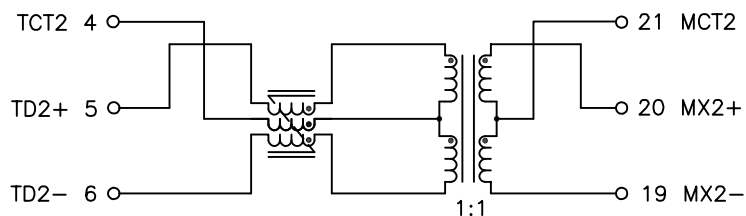
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PRODUCT DESCRIPTION	TLA DRAWING	PS DRAWING	SHEET	PART NO.	DATASHEET REV.
MDL,SIN,2.5GPP,1:1,SM,TU	HU4009NL-P1	PS-2473.001-A	1 OF 3	HU4009NL	B

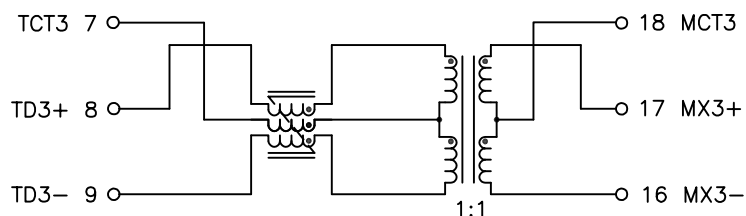
CHANNEL A



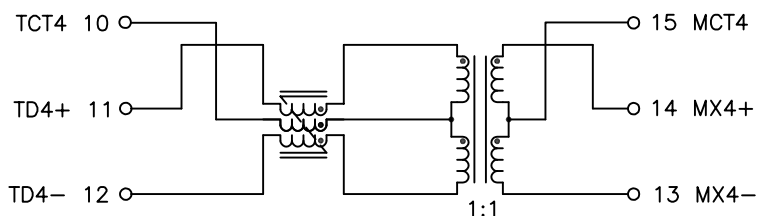
CHANNEL B



CHANNEL C



CHANNEL D



SCHEMATIC

ELECTRICAL CHARACTERISTICS AT +25°C UNLESS OTHER SPECIFIED

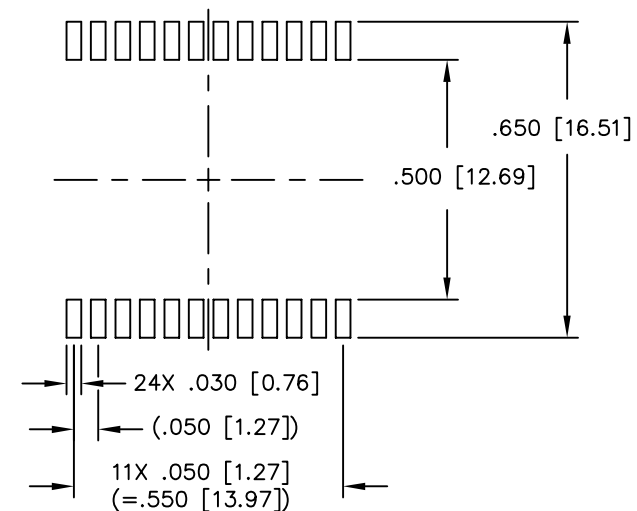
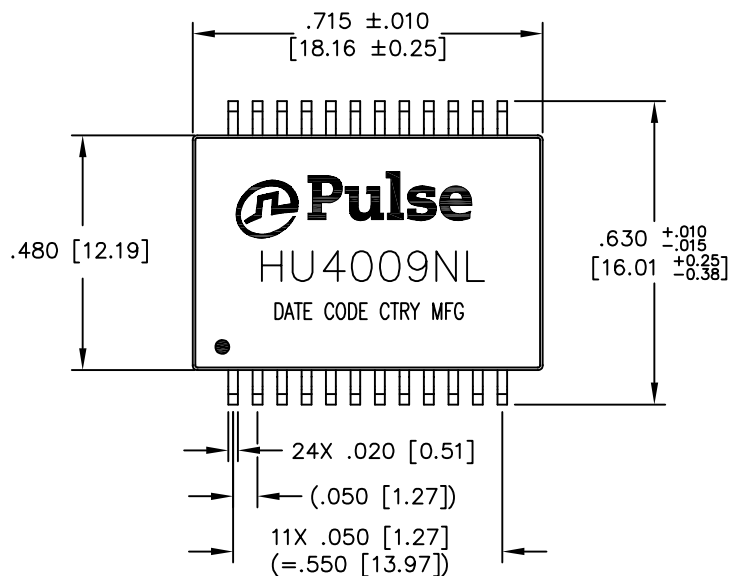
MEETS IEEE 802.3 SPECIFICATION

PARAMETER	SPECIFICATIONS	
OPERATING TEMPERATURE	0°C TO +70°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)	
INPUT - OUTPUT ISOLATION	1500 VRMS MIN @ 60 SECONDS	

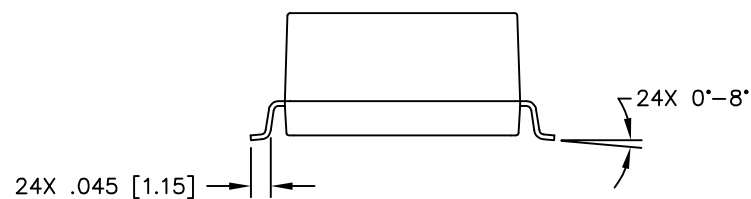
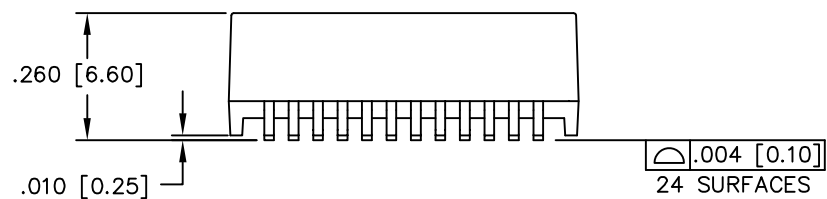
NOTE: f IS FREQUENCY IN MHZ.

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MDL,SIN,2.5GPP,1:1,SM,TU	HU4009NL-P1	PS-2473.001-A	2 OF 3	HU4009NL	B



SUGGESTED LAND PATTERN



DIMENSIONS ARE IN INCHES [MILLIMETERS] WITH THE FOLLOWING TOLERANCES: [MILLIMETERS] ARE FOR REFERENCE ONLY.

.XX =  $\pm 0.01$  [ $\pm 0.25$ ]

.XXX =  $\pm 0.005$  [ $\pm 0.13$ ]

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MDL,SIN,2.5GPP,1:1,SM,TU	HU4009NL-P1	PS-2473.001-A	3 OF 3	HU4009NL	B