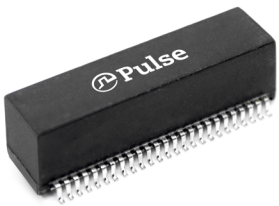
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Dual 1Gigabit Slimline Magnetic Modules

HX5020HL, HX6135HL, and HX6136HL

Pulse
a YAGEO company



- *Fully RoHS and Halogen Free*
- *Designed to exceed IEEE802.3au over Industrial temperature range -40 to +85°C*
- *Up to 35W PoE over 100m of UTP using 4pair connection*
- *Compatible with all Major PHYs*
- *30% PCB saving compared to standard dual port devices*

Electrical Specifications @ 25°C - Operating Temperature -40°C to 85°C

Part Number	Inductance	Turns Ratio	Isolation (Pri:Sec)	Power over Etherent (PoE)	
				DC Current (@ 70°C)	Power Supported (4 pair UTP)
HX5020HL	350uH @ 8mA	1.00 +/- 2%	1500Vrms / 60sec	350mA	35W (PSE)
HX6135HL	350uH @ 8mA	1.00 +/- 2%	1500Vrms / 60sec	350mA	35W (PSE)
HX6136HL	350uH @ 8mA	1.00 +/- 2%	1500Vrms / 60sec	350mA	35W (PSE)

Part Number	Insertion Loss			Return Loss			CMRR		
	100kHz	1-100MHz	125MHz	1-40MHz	60-80MHz	100MHz	2MHz	30-100MHz	200MHz
HX5020HL	-1.2dB	-1.5dB	-2.0dB	-16dB	-10dB	-8dB	-50dB	-20dB	-15dB
HX6135HL	-1.2dB	-0.5dB	-1.0dB	-18dB	-13dB	-11dB	-50dB	-35dB	-30dB
HX6136HL	-1.2dB	-0.5dB	-1.0dB	-18dB	-13dB	-11dB	-50dB	-20dB	-15dB

Notes:

1. Storage Temperature: -50°C to 125°C
   Compliance to J-STD:
   A. J-STD-002: Solderability at 245°C Reflow Profile
   B. J-STD-020: Moisture Sensitive Level 1
   C. J-STD-075: R7, 245°C Maximum Through Reflow Solder
2. The HL suffix part is supplied in tubes with 15pcs/tube. To order tape and reel packaging add a 'T' suffix to the part number (ie: HX6135HL becomes HX6135HLT). Where quantity per 13" reel will be 250pcs - see page 3 for more details.
3. Header: DAP (Diallyl Phthalate) with flammability Rating UL 94V-0 or better
4. Lead Frame: Cooper Alloy
   Under plated: Half Hard Ductile Nickel 50-100" (1.3-2.5um)
   Over plated : 100% Tin electro-deposited per ASTM B545 300 - 50u"(8-13um)
   Finish : Matte finish 100% Tin solder

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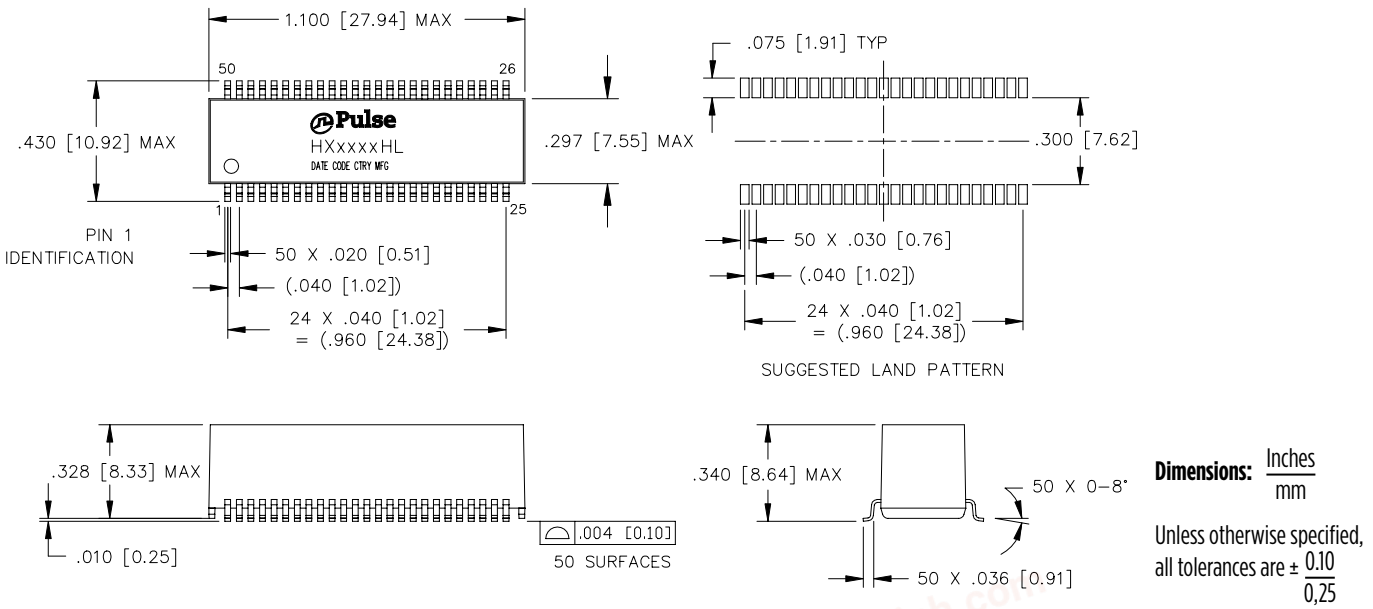
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Mechanical

HXxxxxHL

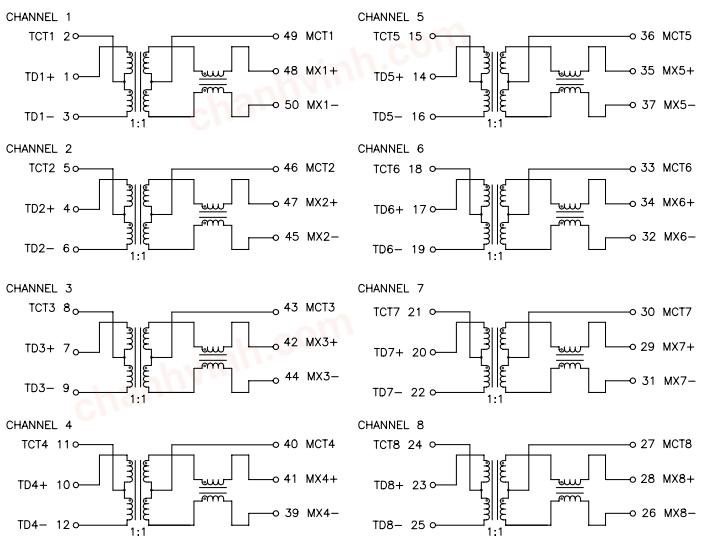


Dimensions: Inches / mm

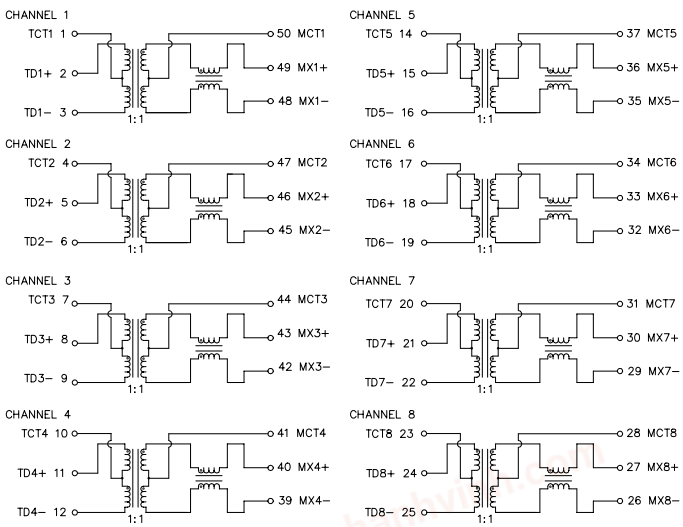
Unless otherwise specified, all tolerances are ± 0.10 / 0,25

Schematics

HX5020HL



HX6136HL



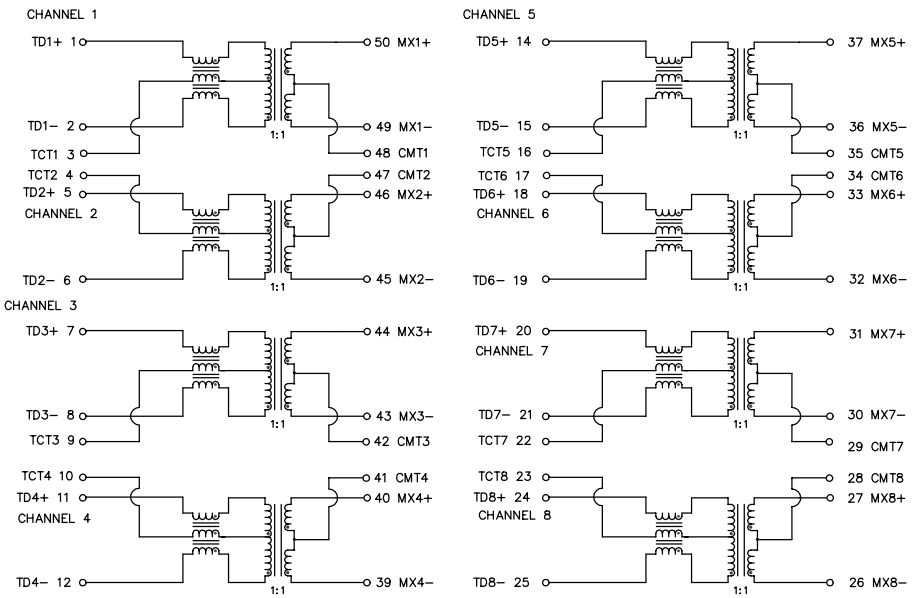
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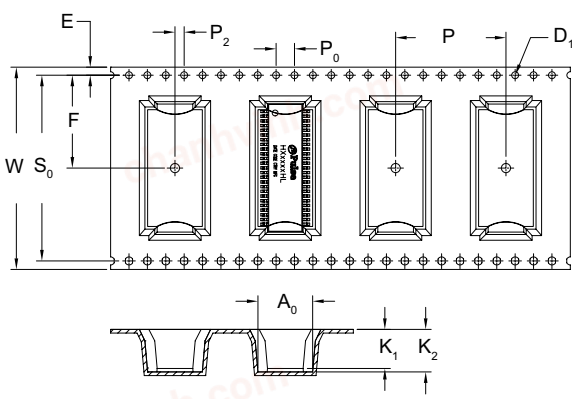
Schematic

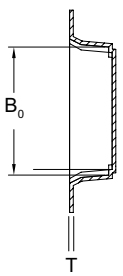
HX6135HL

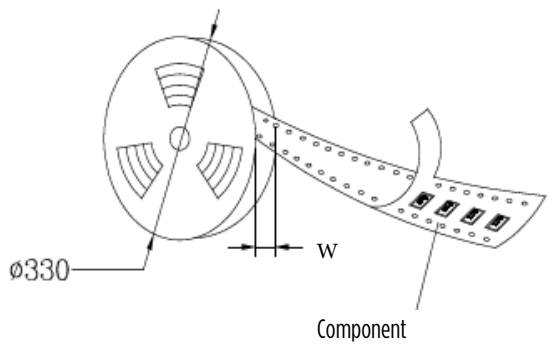


Tape & Reel

HX5020HL, HX6135HL and HX6136HL







W	**44.00**±0.30	P	**24.00**±0.10	A_0	**11.50**±0.10	B_0	**27.85**±0.10
S_0	**40.40**±0.10	P_0	**4.00**±0.10	A_1	--------	B_1	--------
E	**1.75**±0.10	P_2	**2.00**±0.15	A_2	--------	B_2	--------
F	**20.20**±0.15	D_0	--------	K_0	**9.25**±0.10	K_1	**8.50**±0.10
T	**0.50**±0.05	D_1	**1.50** $^{+0.10}_{-0.00}$				**UNIT: mm**

ALL Dimensions meet EIA-481-D requirements.

1. **Material:** Black Conductive Polystyrene
2. **Components per Reel:** 250 pcs
3. **Quantity per box:** 5x reels = 1250 pcs

For More Information:

Americas - prodinfonetworkamericas@yageo.com | **Europe -** prodinfonetworkemea@yageo.com | **Asia -** prodinfonetworkapac@yageo.com

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