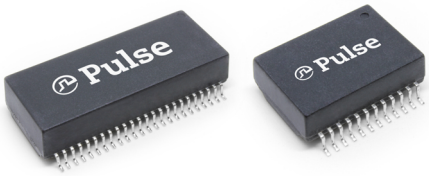
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Single and Dual 10GBase-T Magnetic Modules

HXB7008HLT, HXB7009HLT, HXB7010HLT, HXB7011HLT, HXB7012HLT, HXB7013HLT, HXB7014HLT, HXB7015HLT and HXB7016HLT

Pulse a YAGEO company



- *Fully RoHS and Halogen Free*
- *Standard and High Isolation options*
- *Supports 4 pair Power over Ethernet (PoE) up to 90W*
- *Meet or exceed IEEE802.3an/at/bt*
- *Backward compatible with 1G, 2.5G and 5G PHYs*
- *Ideal for Industrial gateways and switches*
- *Reliable SMD packages support 245°C pk reflow*
- *All components supplied in Tape and Reel*

Electrical Specification @ 25°C (OCL@ 11mA DC)

Part Number*	Media side Inductance (@100KHz/0.1Ve) uH min	Insertion Loss (dB max)			Return Loss (dB min)			PoE (Current Per Pair mA)	Operating Temperature (°C)	Isolation (Pri:Sec)	Note
		1-100 MHz	100-400 MHz	500 MHz	1-40 MHz	40< f ≦ 400 MHz	400< f ≦ 500 MHz				
HXB7011HLT	120	-1.0	-1.5	-2.0	-18	- (18-10 log10(f /40))	- (8-30 log10(f /400))	720	-40° to 90°	1500Vrms	60W 4 pair PoE+
HXB7016HLT	100	-1.0	-1.5	-2.0	-18	- (18-10 log10(f /40))	- (8-30 log10(f /400))	600	-40° to 90°	1500Vrms	Dual Port, 60W 4 pair PoE+

Electrical Specification @ 25°C (OCL@ 16mA DC)

Part Number*	Media side Inductance (@100KHz/0.1Ve) uH min	Insertion Loss (dB max)			Return Loss (dB min)			PoE (Current Per Pair mA)	Operating Temperature (°C)	Isolation (Pri:Sec)	Note
		1-100 MHz	100-400 MHz	500 MHz	1-40 MHz	40< f ≦ 500 MHz	400< f ≦ 500 MHz				
HXB7012HLT	120	-1.0	-1.5	-2.0	-18	- (18-10 log10(f /40))	- (8-30 log10(f /400))	1000	-40° to 90°	1500Vrms	90W 4 pair PoE+
HXB7015HLT	120	-1.0	-1.5	-2.0	-18	- (18-10 log10(f /40))	- (8-30 log10(f /400))	1000	-40° to 90°	1500Vrms	Dual Port, 90W 4 pair PoE+

Electrical Specification @ 25°C

Part Number*	Media side Inductance (@100KHz/0.1Ve) uH min	Insertion Loss (dB max)			Return Loss (dB min)			PoE (Current Per Pair mA)	Operating Temperature (°C)	Isolation (Pri:Sec)	Note
		1-100 MHz	100-400 MHz	500 MHz	1-40 MHz	40< f ≦ 400 MHz	400< f ≦ 500 MHz				
HXB7008HLT	100	-1.0	-1.5	-2.0	-18	- (18-10 log10(f /40))	- (8-30 log10(f /400))	-	-40° to 90°	1500Vrms	Surge DM/CM 2KV
HXB7009HLT	100	-1.0	-1.5	-2.0	-18	- (18-10 log10(f /40))	- (8-30 log10(f /400))	-	-40° to 90°	1500Vrms	-
HXB7010HLT	100	-1.0	-1.5	-2.0	-18	- (18-10 log10(f /40))	- (8-30 log10(f /400))	-	-40° to 90°	4000Vrms	Surge DM/CM 6KV
HXB7013HLT	100	-1.0	-1.5	-2.0	-18	- (18-10 log10(f /40))	- (8-30 log10(f /400))	-	-40° to 90°	1500Vrms	Dual Port
HXB7014HLT	100	-1.0	-1.5	-2.0	-18	- (18-10 log10(f /40))	- (8-30 log10(f /400))	-	-40° to 90°	4000Vrms	Dual Port, Surge 6KV

Note: ** Specifications listed above refer to the base component part number that is printed on the product - ie HXB7013HLT will be HXB7013HL*

Process and Materials

Notes:

1. Storage Temperature:
   HBxxxxHL = -20 to +125°C
   HXBxxxxHL = -50 to +125°C
2. Compliance to JEDEC-J-STD 020:
   i. Moisture Sensitive Level 1
   ii. Maximum peak Reflow Solder temperature 245°C
3. All parts come in 13" (330mm) Diameter Tape and reel - see page 3 for details
4. Header: Black Thermoset Plastic - Material flammability rating UL 94V-0
5. Lead Frame: Cooper Alloy
6. Underplate / Overplate: Tin electro-deposited over Nickel
7. Finish: Matte finish Tin solder

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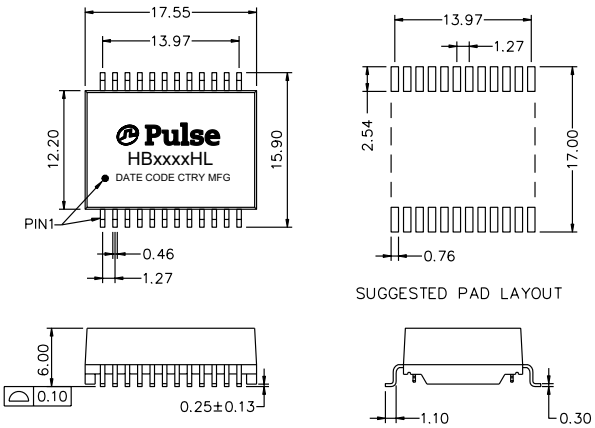
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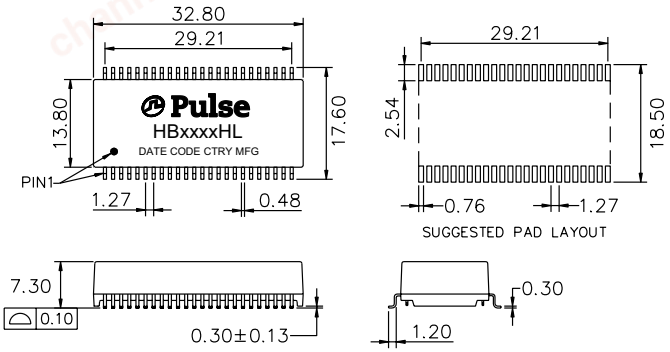
Pulse a YAGEO company

Mechanicals

HXB7008/9/10/11/12HLT,



HXB7013/14/15/16HLT

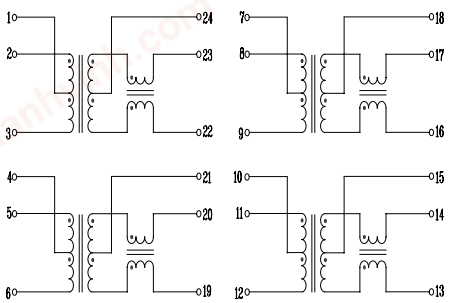


Dimensions: mm

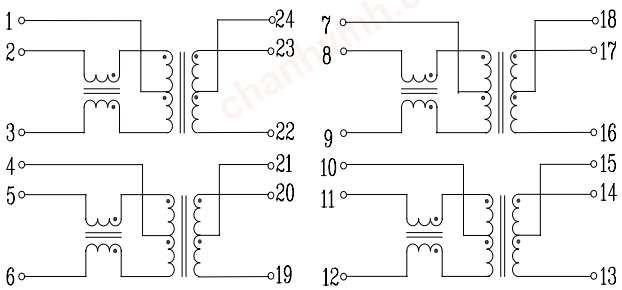
Unless otherwise specified the following tolerances apply:
xx.xx = ±0.25
x.xx = ±025
0.xx = ±0.13

Schematic

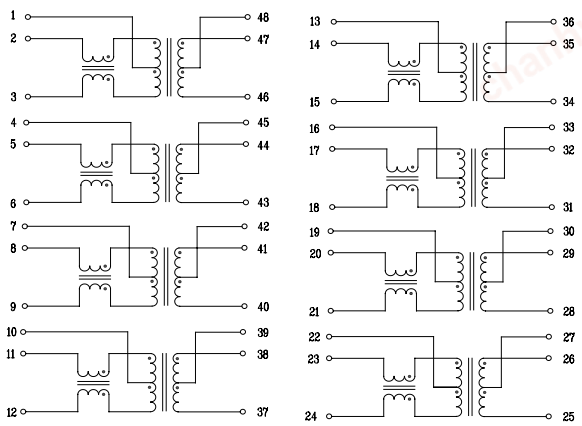
HXB7009HLT



HXB7008HLT, HXB7010HLT, HXB7011HLT, HXB7012HLT



HXB7013HLT, HXB7014HLT, HXB7015HLT, HXB7016HLT



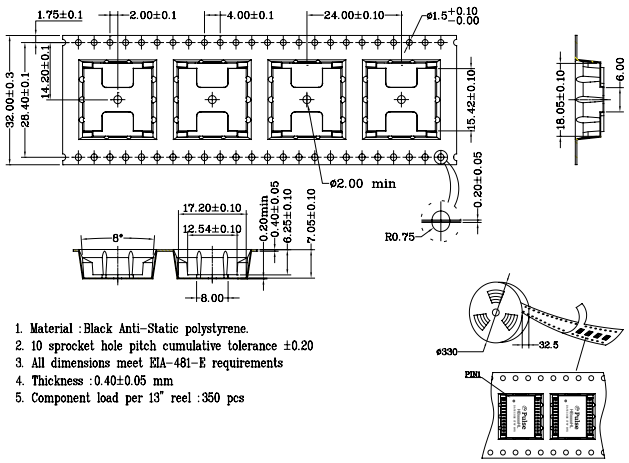
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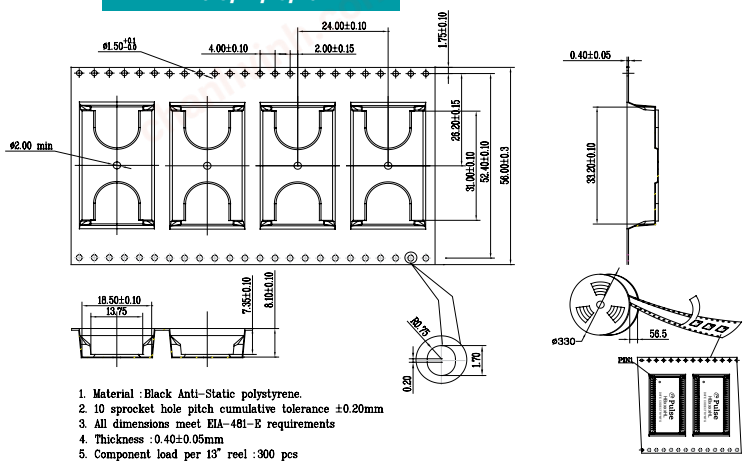
Tape & Reel

HXB7008/9/10/11/12HLT



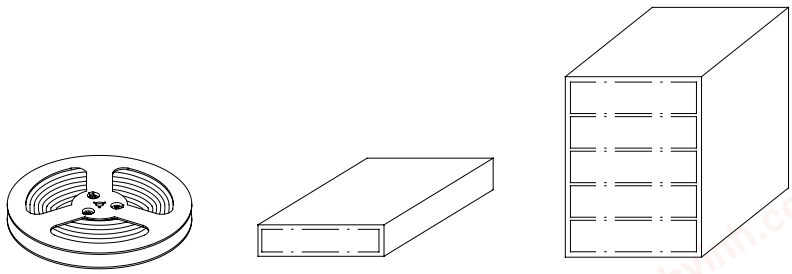
1. Material : Black Anti-Static polystyrene.
2. 10 sprocket hole pitch cumulative tolerance ±0.20
3. All dimensions meet EIA-481-E requirements
4. Thickness : 0.40±0.05 mm
5. Component load per 13" reel : 350 pcs

HXB7013/14/15/16HLT



1. Material : Black Anti-Static polystyrene.
2. 10 sprocket hole pitch cumulative tolerance ±0.20mm
3. All dimensions meet EIA-481-E requirements
4. Thickness : 0.40±0.05mm
5. Component load per 13" reel : 300 pcs

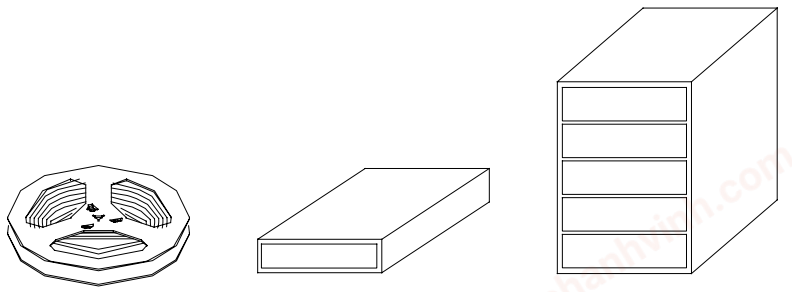
HXB7008/9/10/11/12HLT



REEL | INNER BOX: 347x347x82 | OUTER CARTON: 375x375x470

1. 1 REEL=350PCS
2. 1 INNER BOX=1 REEL=350PCS
3. 1 OUTER CARTON=5 INNER BOXES=1750PCS

HXB7013/14/15/16HLT



REEL | INNER BOX: 347x347x82 | OUTER CARTON: 375x375x470

1. 1 REEL=300PCS
2. 1 INNER BOX=1 REEL=300PCS
3. 1 OUTER CARTON=5 INNER BOXES=1500PCS

For More Information:

Americas - prodinfo_network_americas@yageo.com | **Europe -** prodinfo_network_emea@yageo.com | **Asia -** prodinfo_network_asia@yageo.com

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