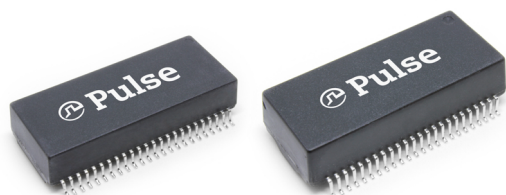


Dual Port 1Gigabit SMD PoE Magnetic Modules

HB5013HLT, HB5014HLT, HB6010HLT, HB6011HLT, HB6012HLT, HXB6013HLT, HXB6014HLT, HXB6015HLT



- ⦿ Fully RoHS and Halogen Free
- ⦿ Dual Port with high Isolation and Surge options
- ⦿ Supports up to 60Watt, 4pair Power over Ethernet
- ⦿ Meet or exceed IEEE802.3 ab/af for 1000Base-T
- ⦿ Compatible with all 1:1 turns ratio PHYs
- ⦿ Commercial and Industrial Temperature
- ⦿ Reliable SMD packages support 245°C pk Reflow
- ⦿ All components Supplied in Tape and Reel

Electrical Specification @ 25°C (OCL@ 8mA 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	1-40MHz	40< f ≤ 100 MHz				
HB5013HLT	350	-1.0	-16	-(10-20 log10(f/80))	-	0° to 70°	3000Vrms	Surge CM 6KV
HB5014HLT	350	-1.0	-16	-(10-20 log10(f/80))	-	0° to 70°	4000Vrms	Surge CM 6KV
HB6010HLT	350	-1.0	-16	-(10-20 log10(f/80))	350	0 to 70°	1500Vrms	30W 4pair PoE+
HB6011HLT	350	-1.0	-16	-(10-20 log10(f/80))	350	0° to 70°	1500Vrms	30W 4pair PoE+
HB6012HLT	350	-1.0	-16	-(10-20 log10(f/80))	720	0° to 70°	1500Vrms	60W 4pair PoE+
HXB6013HLT	350	-1.0	-16	-(10-20 log10(f/80))	720	-40° to 85°	3000Vrms	60W PoE, Surge CM 6KV
HXB6014HLT	350	-1.0	-16	-(10-20 log10(f/80))	600	-40° to 85°	1500Vrms	60W 4pair PoE+

Note: * Specifications listed above refer to the base component part number that is printed on the product - ie HXB6014HLT will be HXB6014HL

Electrical Specification @ 25°C (OCL@ 15mA 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	1-40MHz	40< f ≤ 100 MHz				
HXB6015HLT	350	-1.4	-16	-(10-20 log10(f/80))	1000	-40° to 85°	1500Vrms	90W 4pair PoE+

Note: * Specifications listed above refer to the base component part number that is printed on the product - ie HXB6015HLT will be HXB6015HL

Process and Materials

Notes:

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

Dual Port 1Gigabit SMD PoE Magnetic Modules

HB5013HLT, HB5014HLT, HB6010HLT, HB6011HLT, HB6012HLT, HXB6013HLT,
HXB6014HLT, HXB6015HLT

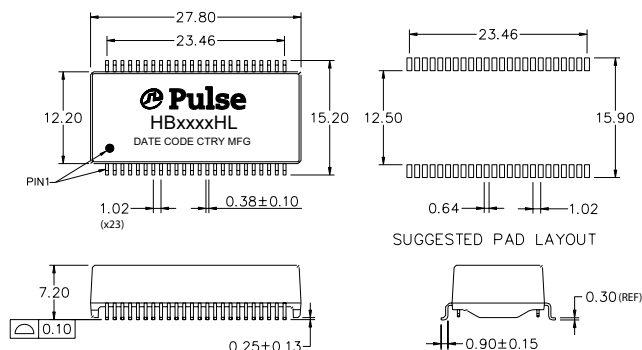


Pulse

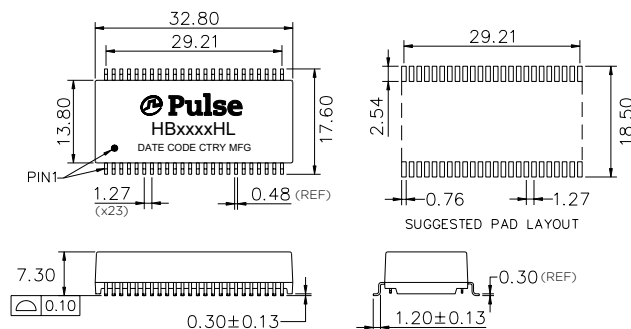
a YAGEO company

Mechanicals

HB5/601xHLT, HXB601xHLT



HXB6015HLT



Dimensions: mm

Unless otherwise specified the following tolerances apply:

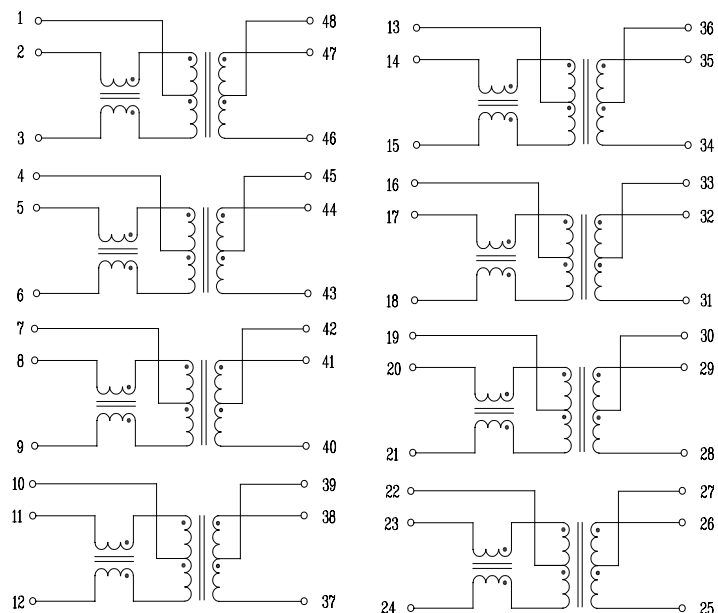
xx.xx = ±0.25

x.xx = ±0.25

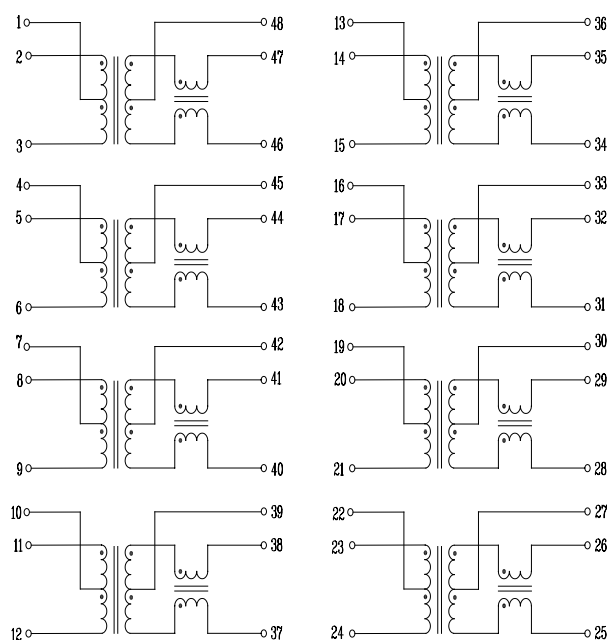
0.xx = ±0.13

Schematics

HB5014HLT, HB6010HLT, HXB6014HLT, HXB6015HLT



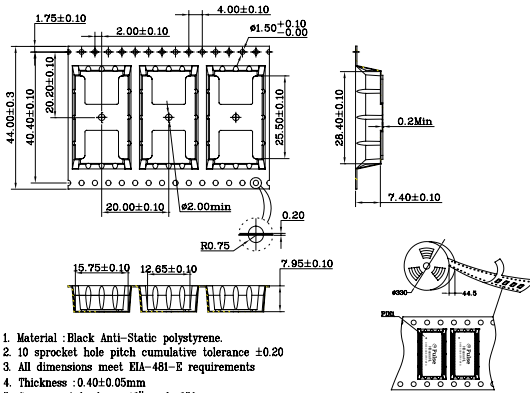
HB5013HLT, HB6011HLT, HB6012HLT, HXB6013HLT



HB5013HLT, HB5014HLT, HB6010HLT, HB6011HLT, HB6012HLT, HXB6013HLT, HXB6014HLT, HXB6015HLT

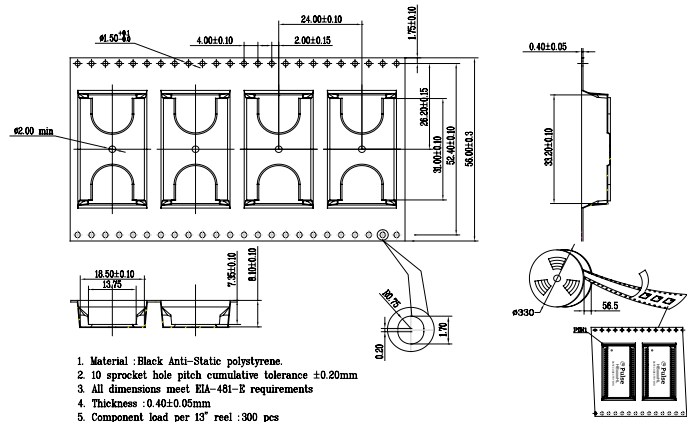
Tape & Reel

HB501xHLT, HB601xHLT, HXB601xHLT



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 : $0.40 \pm 0.05 \text{mm}$
5. Component load per 13" reel : 350pcs

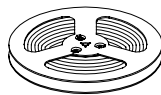
HXB6015HLT



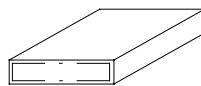
1. Material : Black Anti-Static polystyrene.
2. 10 sprocket hole pitch cumulative tolerance $\pm 0.20\text{mm}$
3. All dimensions meet EIA-481-E requirements
4. Thickness : $0.40 \pm 0.05\text{mm}$
5. Component load per 13" reel : 300 pcs

Carton Package

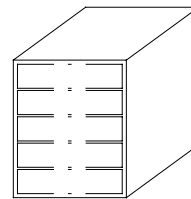
HB501xHLT, HB601xHLT, HXB601xHLT



REEL



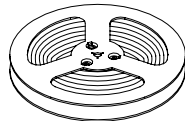
INNER BOX: 347x347x82



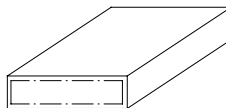
OUTER CARTON: 375x375x470

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

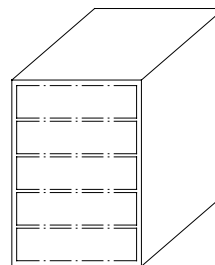
HXB6015HLT



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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