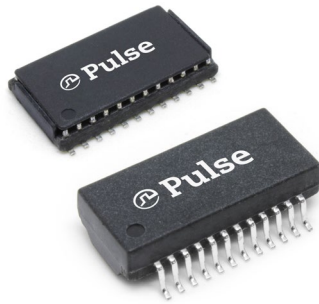


Single Port 1Gigabit PoE SMD Magnetic Modules **Pulse**

HB5005HLT, HB5006HLT, HXB5008HLT, HB5004HLT, HB5009HLT,
HXB5007HLT, HB5010HLT, HB5011HLT, HXB5011HLT and HXB6020HLT

a YAGEO company



- Ⓢ Fully RoHS and Halogen Free
- Ⓢ Single port, Low profile compact footprint
- Ⓢ Supports 30 & 60 Watt, 4pair Power over Ethernet
- Ⓢ Meet or exceed IEEE802.3ab/af/at for 1000Base-T
- Ⓢ Compatible with all 1:1 turns ration 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 | | | | |
| HB5005HLT | 350 | -1.0 | -16 | -(10-20 log10(f/80)) | 350 | 0 to 70° | 1500Vrms | 30W PoE 4 Pair |
| HB5006HLT | 350 | -1.0 | -16 | -(10-20 log10(f/80)) | 350 | 0 to 70° | 1500Vrms | 30W PoE 4 Pair |
| HXB5008HLT | 350 | -1.0 | -16 | -(10-20 log10(f/80)) | 350 | -40° to 85° | 1500Vrms | 30W PoE 4 Pair |
| HB5004HLT | 350 | -1.0 | -16 | -(10-20 log10(f/80)) | 350 | 0 to 70° | 1500Vrms | 30W PoE 4 Pair |
| HB5009HLT | 350 | -1.0 | -16 | -(10-20 log10(f/80)) | 350 | 0 to 70° | 1500Vrms | 30W PoE 4 Pair |
| HXB5007HLT | 350 | -1.0 | -16 | -(10-20 log10(f/80)) | 350 | -40° to 85° | 1500Vrms | 30W PoE 4 Pair |
| HB5010HLT | 350 | -1.0 | -16 | -(10-20 log10(f/80)) | 350 | 0 to 70° | 1500Vrms | 30W PoE, Surge 2.5KV |
| HXB6020HLT | 350 | -1.0 | -16 | -(10-20 log10(f/80)) | 720 | -40° to 85° | 1500Vrms | 60W PoE 4 Pair |

Note: *Specifications listed above refer to the base component part number that is printed on the product - ie HXB5007HLT will be HXB5007HL

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 | | | | |
| HB5011HLT | 350 | -1.0 | -16 | -(10-20 log10(f/80)) | - | 0 to 70° | 1500Vrms | PCMCIA |
| HXB5011HLT | 350 | -1.0 | -16 | -(10-20 log10(f/80)) | - | -40 to 85° | 1500Vrms | PCMCIA |

Note: *Specifications listed above refer to the base component part number that is printed on the product - ie HXB5011HLT will be HXB5011HL

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

Single Port 1Gigabit PoE SMD Magnetic Modules

HB5005HLT, HB5006HLT, HXB5008HLT, HB5004HLT, HB5009HLT,
HXB5007HLT, HB5010HLT, HB5011HLT, HXB5011HLT and HXB6020HLT

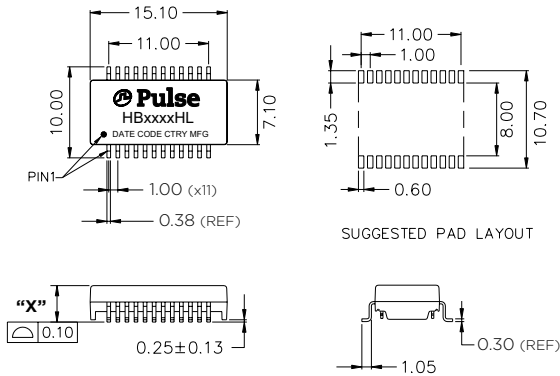


Pulse

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Mechanicals

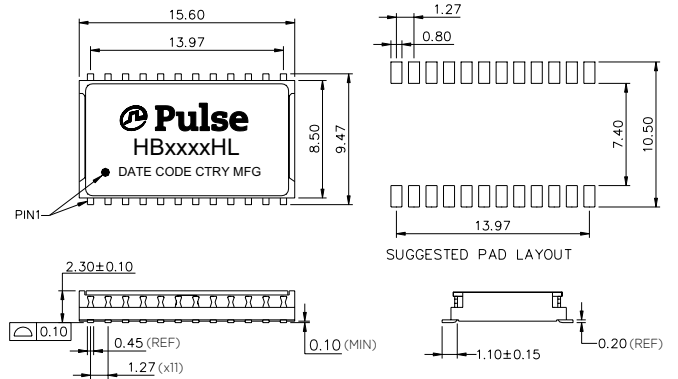
HB5004/5/6/9/10HLT, HXB5007/8HLT, HXB6020HLT



Dimensions "X"

All parts the height is 4.00mm except for HXB6020HLT when it is 5.80mm

HB5011HLT, HXB5011HLT

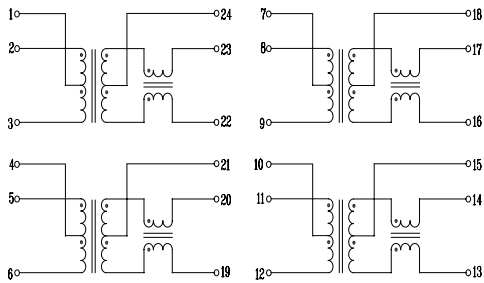


Dimensions: mm

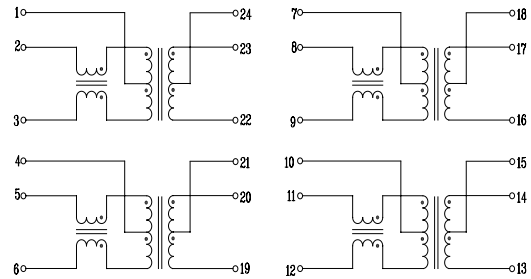
Unless otherwise specified, all tolerances are ± 0,25

Schematics

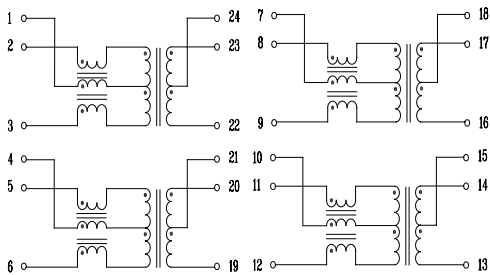
HB5005HLT, HXB5007HLT, HB5010HLT



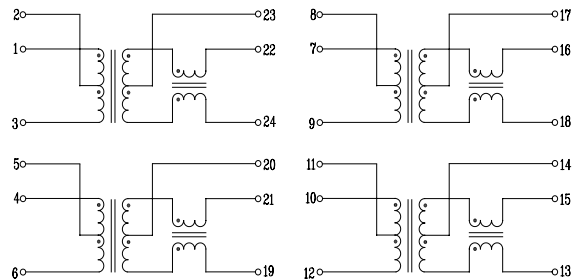
HB5006HLT, HXB5008HLT, HXB6020HLT



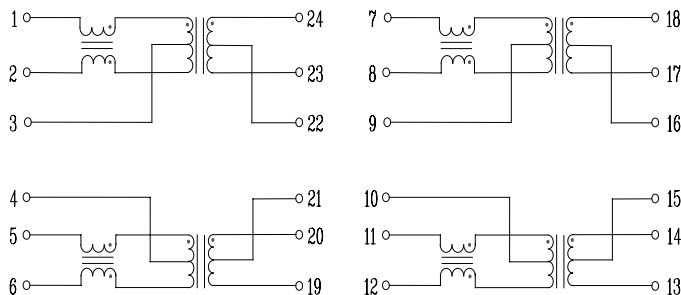
HB5009HLT



HB5004HLT



HXB/HB5011HLT

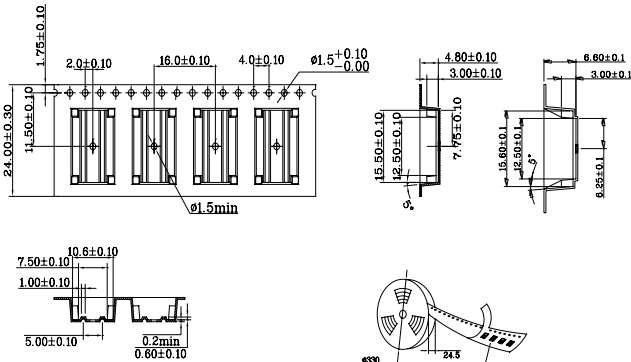


Single Port 1Gigabit PoE SMD Magnetic Modules

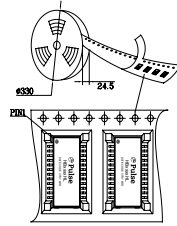
HB5005HLT, HB5006HLT, HXB5008HLT, HB5004HLT, HB5009HLT,
HXB5007HLT, HB5010HLT, HB5011HLT, HXB5011HLT and HXB6020HLT

Tape & Reel

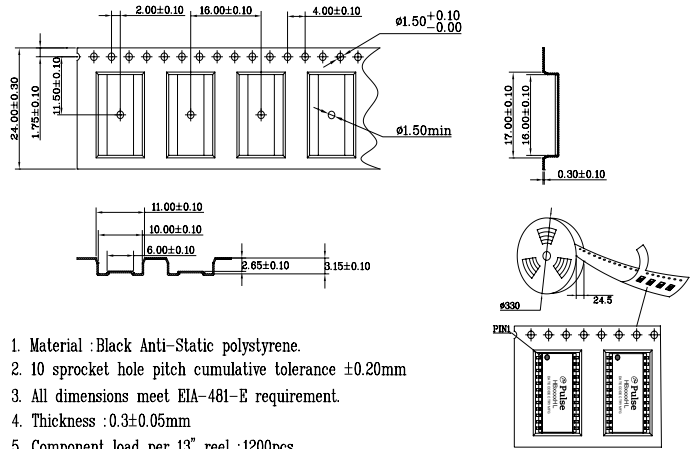
HB5004/5/6/9/10HLT, HXB5007/8HLT, HXB6020HLT



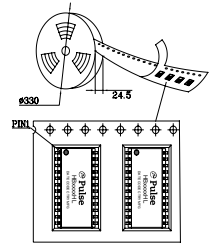
1. Material : Black Anti-Static polystyrene.
2. 10 sprocket hole pitch cumulative tolerance ± 0.20
3. All dimensions meet EIA-481-E requirements
4. Thickness : 0.40 ± 0.05
5. Component load per 13"



HB5011HLT, HXB5011HLT



1. Material : Black Anti-Static polystyrene.
2. 10 sprocket hole pitch cumulative tolerance ± 0.20 mm
3. All dimensions meet EIA-481-E requirement.
4. Thickness : 0.3 ± 0.05 mm
5. Component load per 13" reel : 1200pcs .

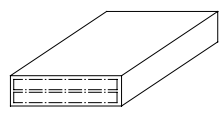


Carton Package

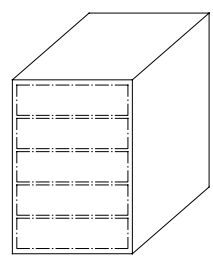
HB5004/5/6/9/10HLT, HXB5007/8HLT, HXB6020HLT



REEL



INNER BOX: 347x347x82

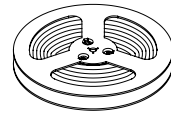


OUTER CARTON: 375x375x470

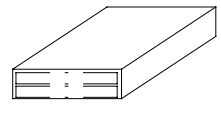
- HB/HXB50xxHLT
1. FULL REEL = 780PCS
 2. INNER BOX = 2 REELS = 1560PCS
 3. OUTER CARTON = 5 INNER BOXES = 7800PCS

- HXB6020HLT
1. FULL REEL = 600PCS
 2. INNER BOX = 2 REELS = 1200PCS
 3. OUTER CARTON = 5 INNER BOXES = 6000PCS

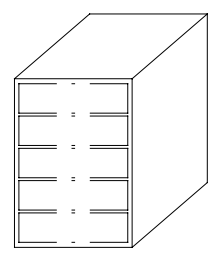
HB5011HLT, HXB5011HLT



REEL



INNER BOX: 347x347x82



OUTER CARTON: 375x375x470

1. 1 REEL=1200PCS
2. 1 INNER BOX=2 REELS=2400PCS
3. 1 OUTER CARTON=5 INNER BOXES=12000PCS

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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[S558-5500-JV](#) [TX1193NLT](#) [T7015NL](#) [T1124NLT](#)