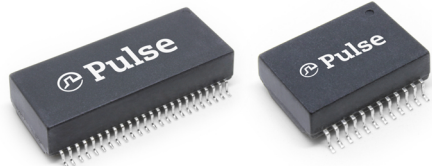


Single and Dual 10GBase-T Magnetic Modules

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



- Ⓢ 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

Single and Dual 10GBase-T Magnetic Modules

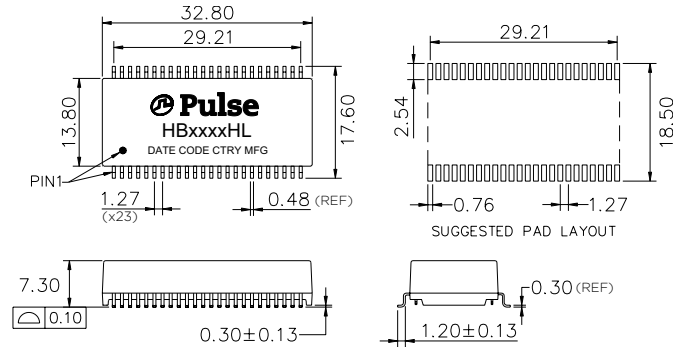
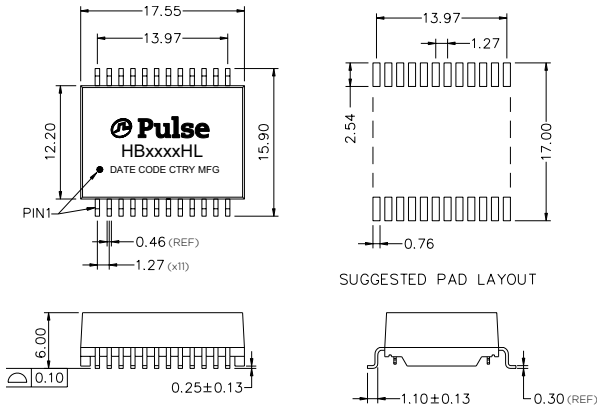
HXB7008HLT, HXB7009HLT, HXB7010HLT, HXB7011HLT, HXB7012HLT,
HXB7013HLT, HXB7014HLT, HXB7015HLT and HXB7016HLT



Mechanicals

HXB7008/9/10/11/12HLT,

HXB7013/14/15/16HLT



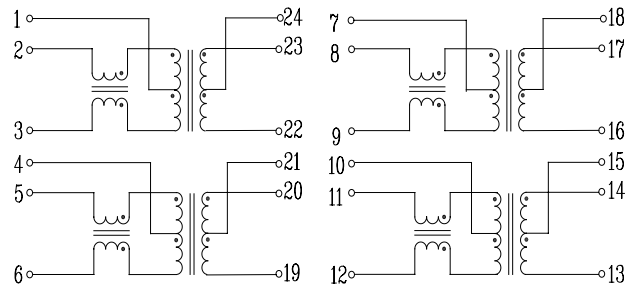
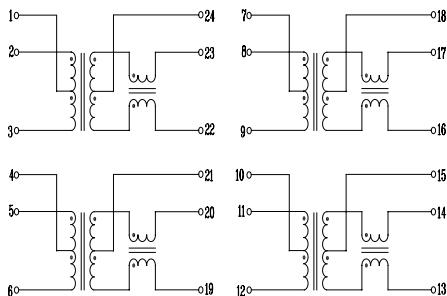
Dimensions: mm

Unless otherwise specified,
all tolerances are $\pm 0,25$

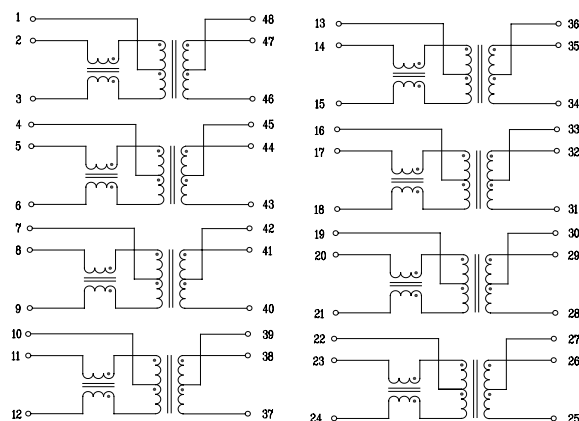
Schematic

HXB7009HLT

HXB7008HLT, HXB7010HLT, HXB7011HLT, HXB7012HLT



HXB7013HLT, HXB7014HLT, HXB7015HLT, HXB7016HLT

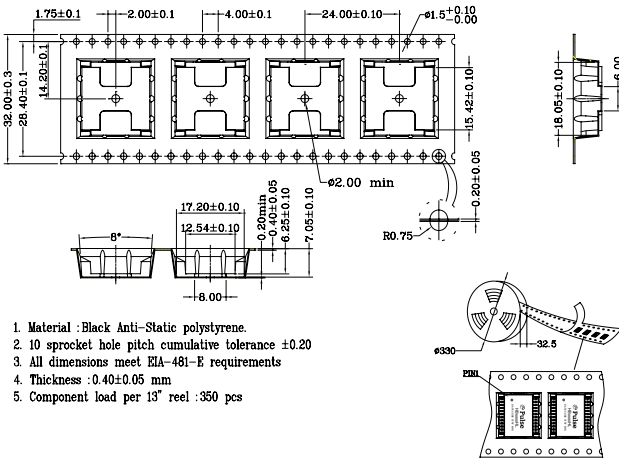


Single and Dual 10GBase-T Magnetic Modules

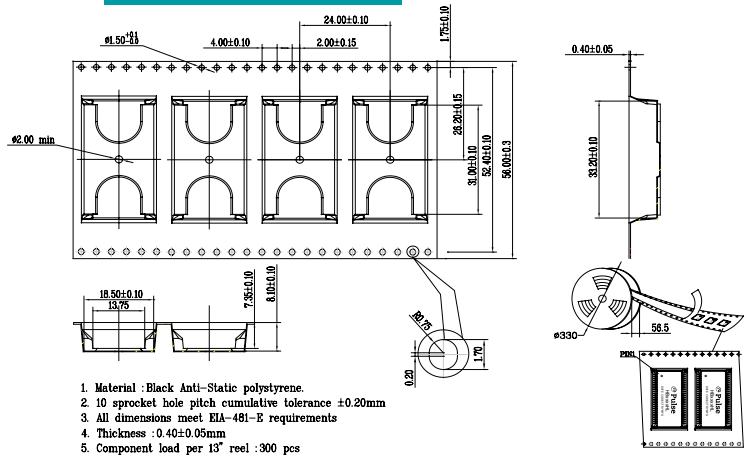
HXB7008HLT, HXB7009HLT, HXB7010HLT, HXB7011HLT, HXB7012HLT,
HXB7013HLT, HXB7014HLT, HXB7015HLT and HXB7016HLT

Tape & Reel

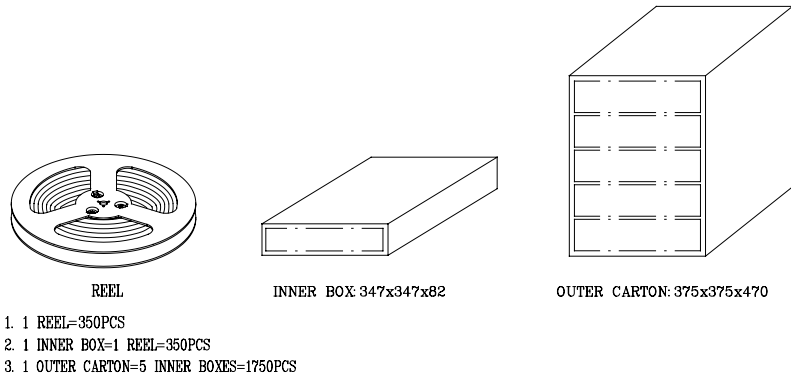
HXB7008/9/10/11/12HLT



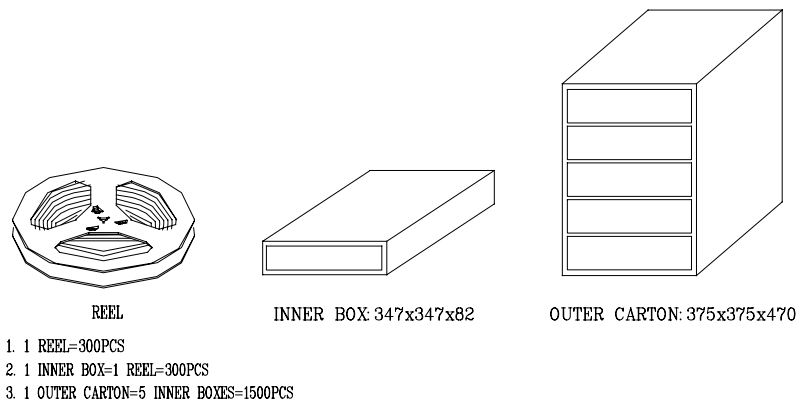
HXB7013/14/15/16HLT



HXB7008/9/10/11/12HLT



HXB7013/14/15/16HLT



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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