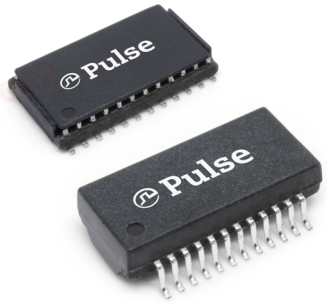
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Single Port 1Gigabit PoE SMD Magnetic Modules

HB5005HLT, HB5006HLT, HXB5008HLT, HB5004HLT, HB5009HLT, HXB5007HLT, HB5010HLT, HB5011HLT, HXB5011HLT, HXB5017HLT and HXB6020HLT

Pulse 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	40< f ≦ 100 MHz				
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
HXB5017HLT	350	-1.0	-16	-(10-20 log10(f/80))	350	-40° to 85°	1500Vrms	30W PoE 4 Pair
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	40< f ≦ 100 MHz				
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

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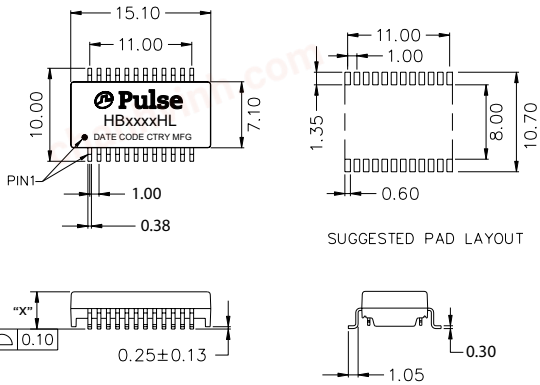
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Mechanicals

HB5004/5/6/9/10HLT, HXB5007/8/17HLT, HXB6020HLT



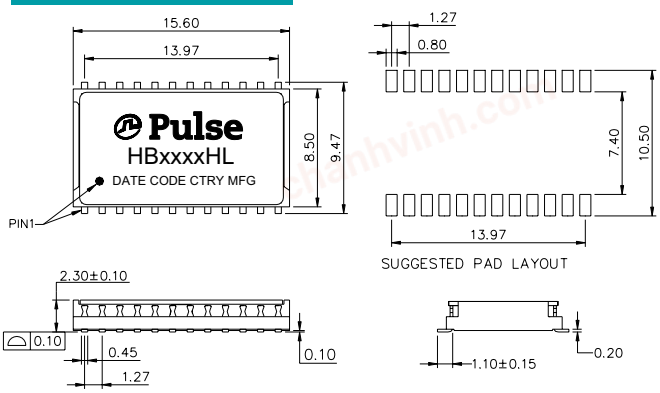
Dimensions: mm

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

Dimensions "X"

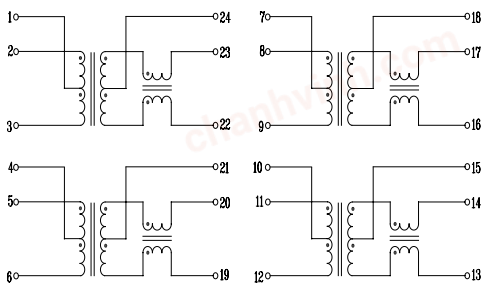
All parts the height is 4.00mm except for HXB6020HLT when it is 5.80mm

HB5011HLT, HXB5011HLT

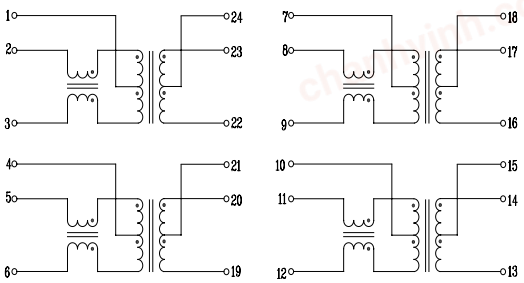


Schematics

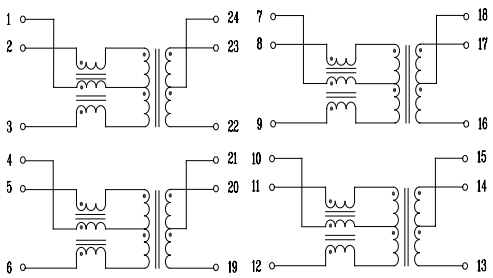
HB5005HLT, HXB5007HLT, HB5010HLT



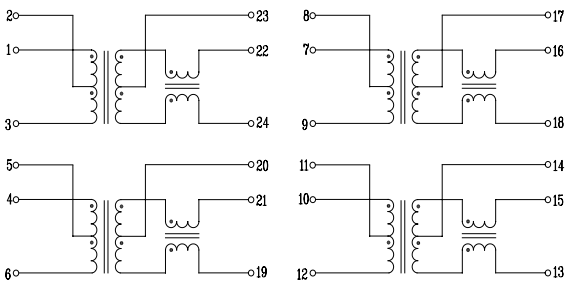
HB5006HLT, HXB5008HLT, HXB6020HLT



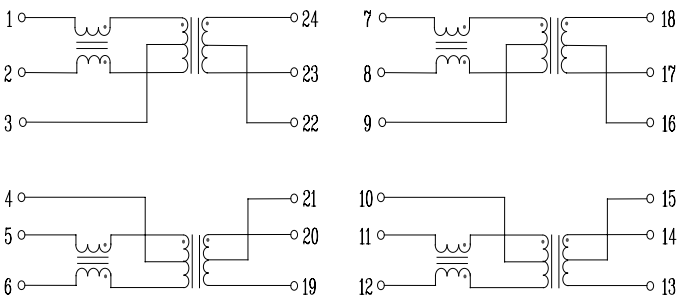
HB5009HLT



HB5004HLT, HXB5017HLT



HXB/HB5011HLT



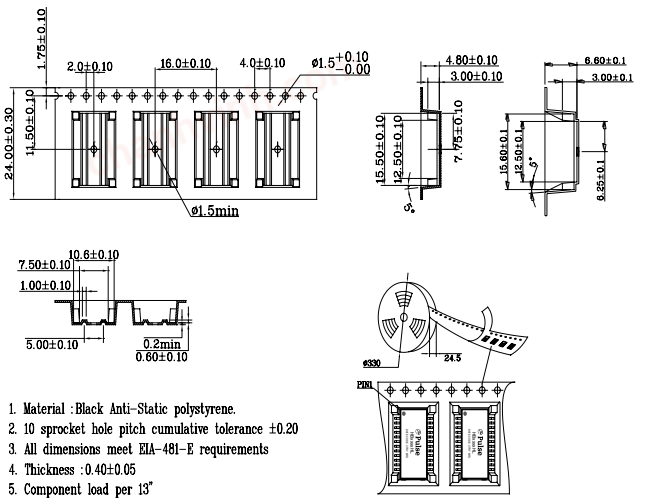
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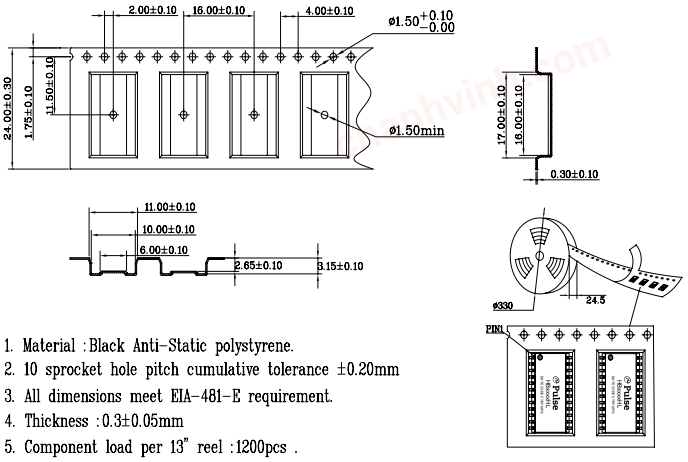
Tape & Reel

HB5004/5/6/9/10HLT, HXB5007/8/17HLT, 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"

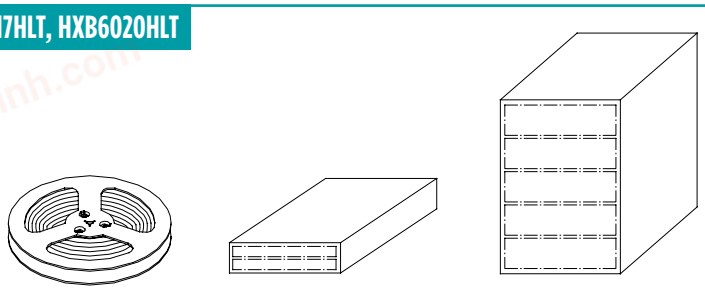
HB5011HLT, HXB5011HLT



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

Carton Package

HB5004/5/6/9/10HLT, HXB5007/8/17HLT, HXB6020HLT



REEL INNER BOX: 347x347x82 OUTER CARTON: 375x375x470

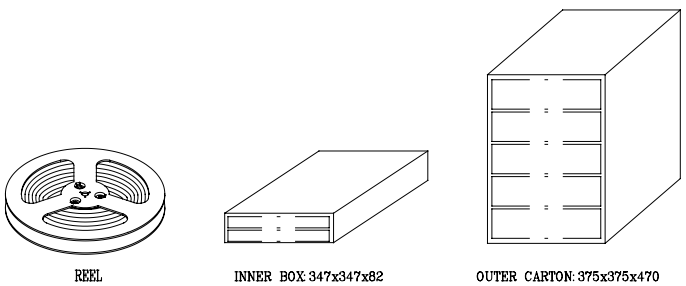
HB/HXB50xxHLT

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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