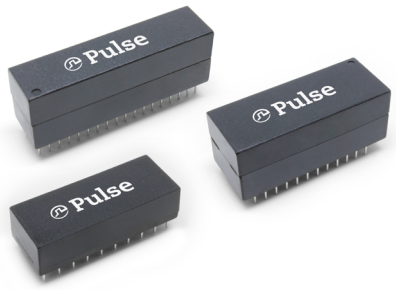
THT Dual port 100/1000Base-T Magnetic Modules

HB3601NL, HB3602NL, HB5605NL, HB5606NL, HB5608NL, HB5609NL, HB6601NL, HB6602NL and HXB5607NL

Pulse
a YAGEO company



- *THT Modules offering 2port, high density options in 20, 36 and 48pin packages with/without PoE*
- *Meets of exceeds IEEE 802.3u/ab standards*
- *Industrial Temperature, PoE and <7KV Surge options*
- *Compatible with all leading PHYs*
- *Fully RoHS compliant*
- *THT Parts Hand or Wave Solder 260°C/5secs*

Electrical Specification @ 25°C (For 100 Base-TX)

Part Number	Media side Inductance (@100KHz/0.1Ve DC8mA) uH min	Insertion Loss (dB max)	Return Loss (dB min)			PoE (Current Per Pair mA)	Operating Temperature (°C)	Isolation (Pri:Sec)	Note
		0.3-100 MHz	2-30MHz	30-60MHz	60-80MHz				
HB3601NL	350	-1.1	-16	-(16-20log10(f/30))	-10	-	0° to 70°	1500Vrms	-
HB3602NL	350	-1.1	-16	-(16-20log10(f/30))	-10	-	0° to 70°	1500Vrms	-

Electrical Specification @ 25°C (For 1G)

Part Number	Media side Inductance (@100KHz/0.1Ve DC8mA) 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				
HB5605NL	350	-1.0	-16	-(10-20 log10(f/80))	-	0° to 70°	1500Vrms	-
HB5606NL	350	-1.0	-16	-(10-20 log10(f/80))	-	0° to 70°	1500Vrms	-
HB6601NL	350	-1.0	-16	-(10-20 log10(f/80))	350	0° to 70°	1500Vrms	30W 4 pair PoE
HB6602NL	350	-1.1	-16	-(10-20 log10(f/80))	350	0° to 70°	4000Vrms	30W 4 pair PoE / Surge DM 2.5KV/CM 6KV
HB5608NL	350	-1.1	-16	-(10-20 log10(f/80))	-	0° to 70°	1500Vrms	-
HB5609NL	350	-1.1	-16	-(10-20 log10(f/80))	-	0° to 70°	1500Vrms	-

Electrical Specification @ 25°C (For 1G)

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				
HXB5607NL	350	-1.1	-16	-(10-20 log10(f/80))	-	-40° to 85°	1500Vrms	Surge DM 7KV

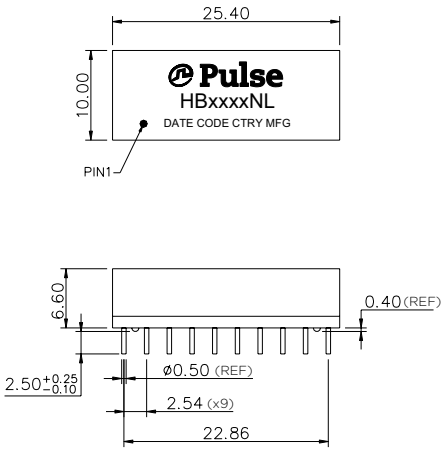
Process and Materials

Notes:

1. Storage Temperature:
   HBxxxxNL = -20 to +125°C
   HXBxxxxNL = -50 to +125°C
2. Compliance to JEDEC-J-STD 020:
   i. Moisture Sensitive Level 1
3. All parts are packaged in tubes - see page 4 for details
4. Header: Black Thermoset Plastic - Material flammability rating UL 94V-0
5. Lead Frame: Copper-clad Steel
6. Underplate / Overplate: Tin electro-deposited over Nickel
7. Finish: Matte finish Tin solder

Mechanicals

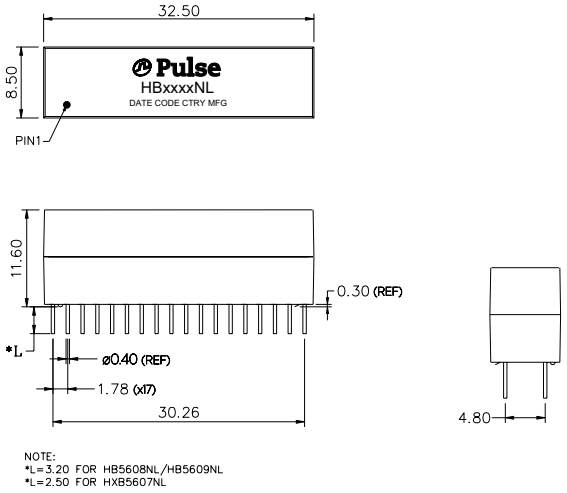
HB3601NL,HB3602NL



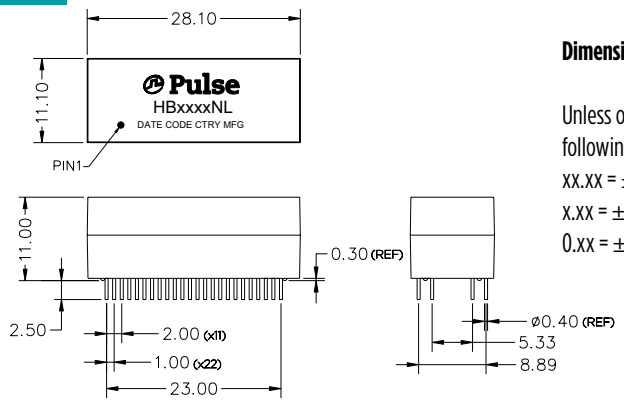
Dimensions: mm

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

HB5608NL,HB5609NL,HXB5607NL



HB5605NL,HB5606NL,HB6601NL,HB6602NL



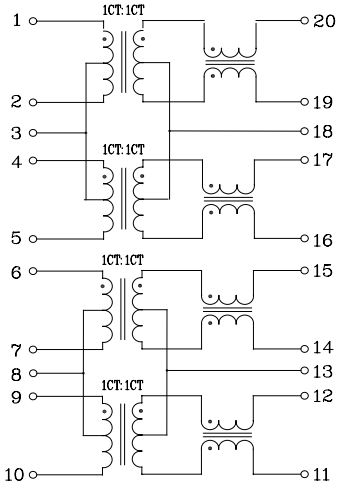
Dimensions: mm

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

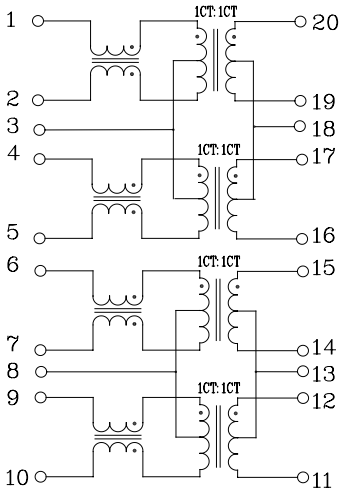
*See PCB layout on page 3 for actual pin positions

Schematics

HB3601NL



HB3602NL



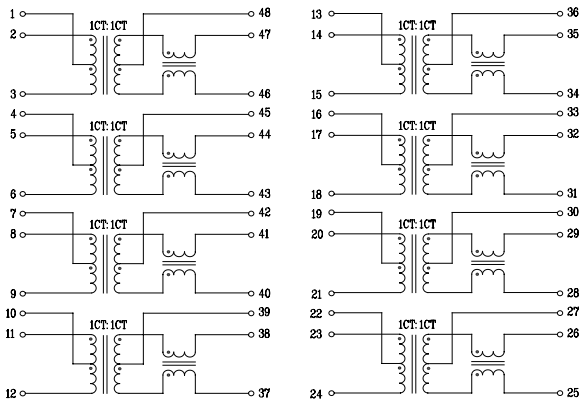
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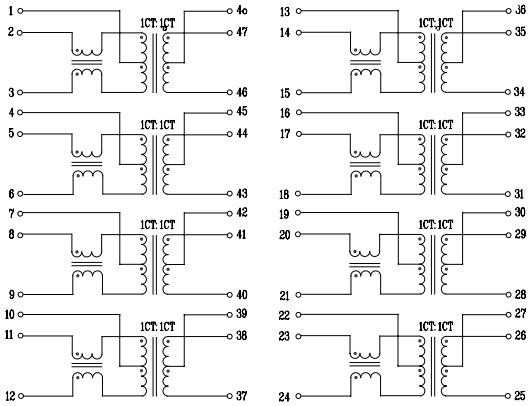
Pulse a YAGEO company

Schematics

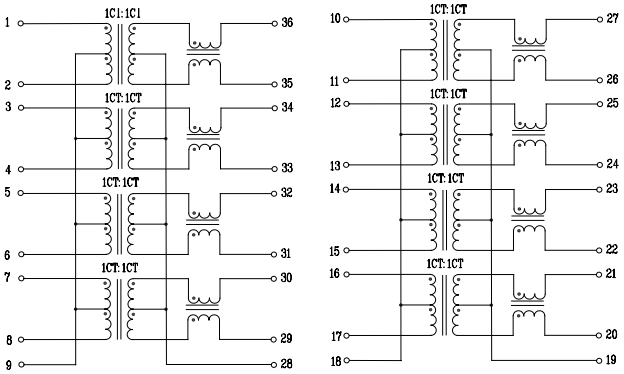
HB5605NL, HB6601NL



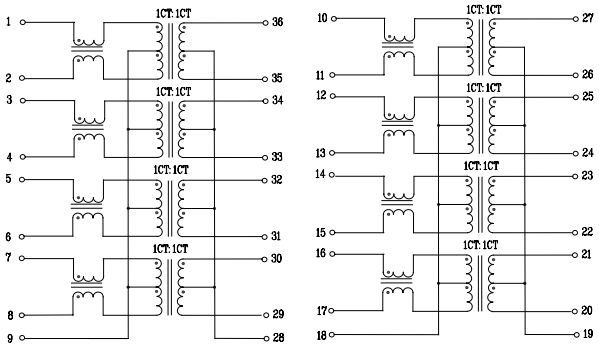
HB5606NL, HB6602NL



HXB5607NL, HB5608NL

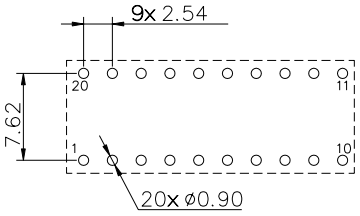


HB5609NL

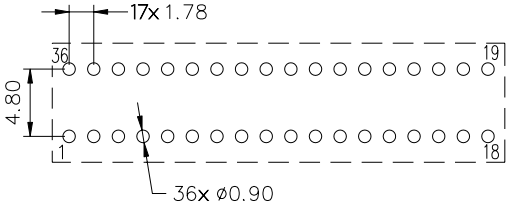


PCB Layout mounting Hole (Top View)

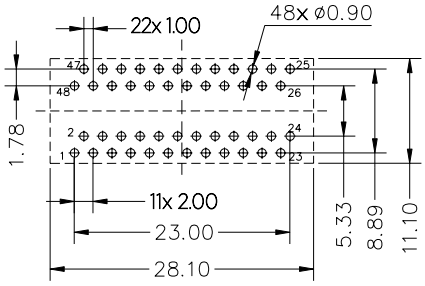
HB3601NL,HB3602NL



HB5608NL,HB5609NL,HXB5607NL



HB5605NL,HB5606NL,HB6601NL,HB6602NL

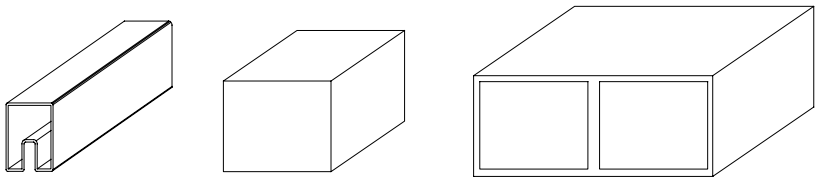


Dimensions: mm

Unless otherwise specified, all tolerances are ± 0.08

Carton Package

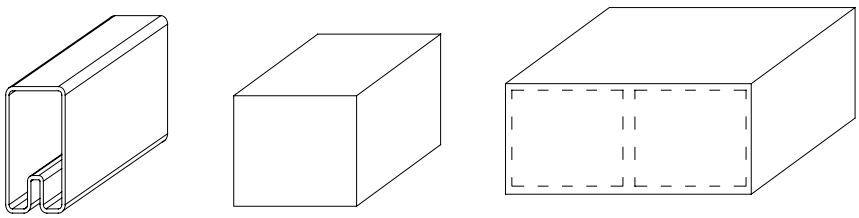
HB3601NL,HB3602NL



TUBE INNER BOX: 567x135x125 OUTER CARTON: 598x287x150

1 .TUBE=20 PCS
2. INNER BOX=90 TUBES=1800PCS
3. OUTER CARTON=2 INNER BOXES=3600PCS

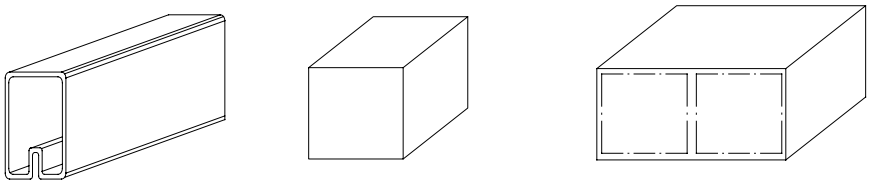
HB5608NL,HB5609NL,HXB5607NL



TUBE INNER BOX: 567x135x125 OUTER CARTON: 598x287x150

1. 1 TUBE=16PCS
2. 1 INNER BOX=70 TUBES=1120PCS
3. 1 OUTER CARTON=2 INNER BOXES=2240PCS

HB5605NL,HB5606NL,HB6601NL,HB6602NL



TUBE INNER BOX: 567x135x125 OUTER CARTON: 598x287x150

1. TUBE=18PCS
2. INNER BOX=48 TUBES=864PCS
3. OUTER CARTON=2 INNER CARTON BOXES=1728PCS

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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