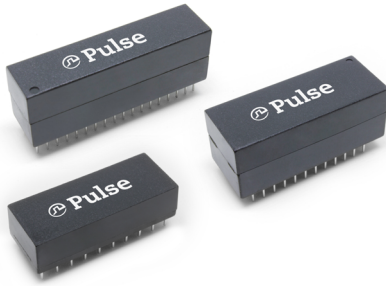


THT Dual port 100/1000Base-T Magnetic Modules

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



- Ⓢ THT Modules offering 2port, high density options in 20, 36 and 48pin packages with/without PoE
- Ⓢ Meets or 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

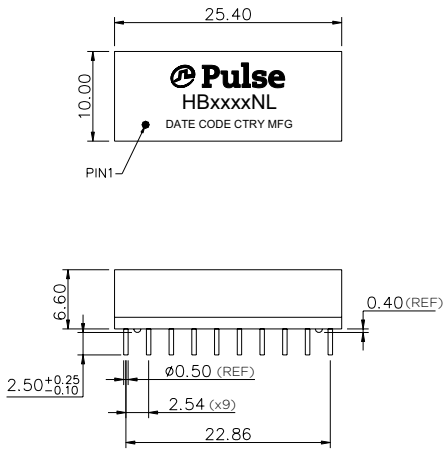
THT Dual port 100/1000Base-T Magnetic Modules

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

Mechanicals

HB3601NL, HB3602NL

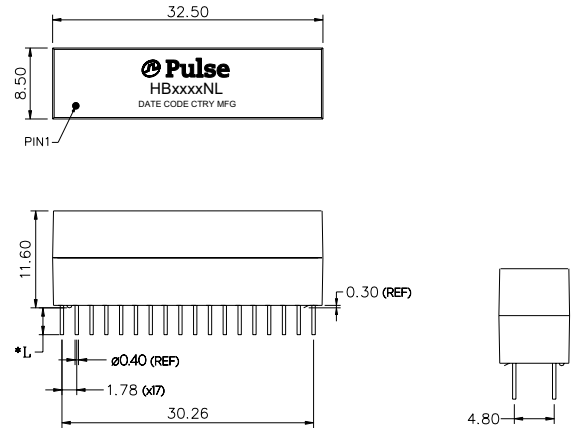
HB5608NL, HB5609NL, HXB5607NL



Dimensions: mm

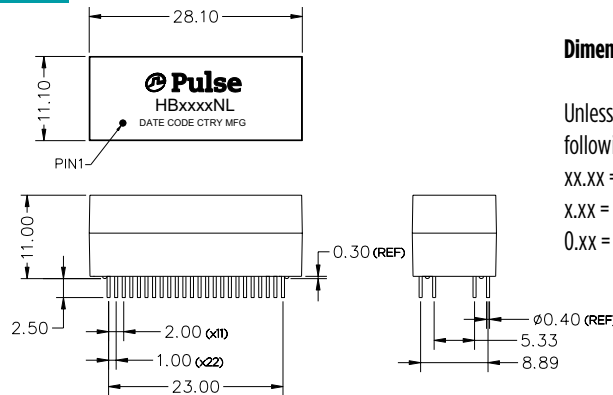
Unless otherwise specified the following tolerances apply:

xx.xx = ±0.25
x.xx = ±0.25
0.xx = ±0.13



NOTE:
*L=3.20 FOR HB5608NL/HB5609NL
*L=2.50 FOR HXB5607NL

HB5605NL, HB5606NL, HB6601NL, HB6602NL



Dimensions: mm

Unless otherwise specified the following tolerances apply:

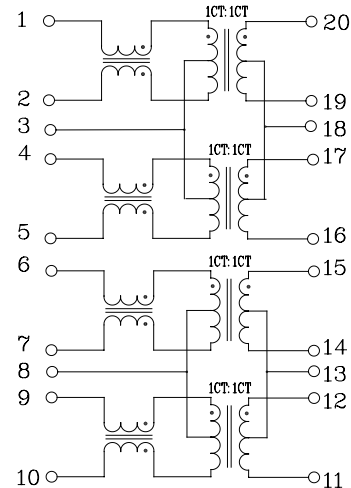
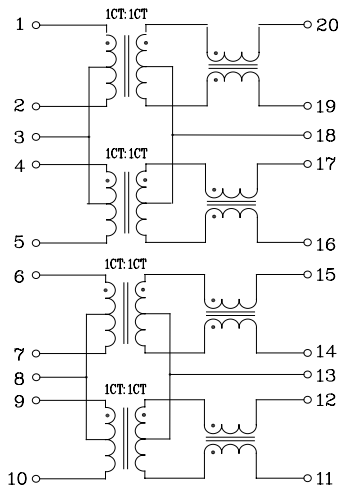
xx.xx = ±0.25
x.xx = ±0.25
0.xx = ±0.13

*See PCB layout on page 3 for actual pin positions

Schematics

HB3601NL

HB3602NL



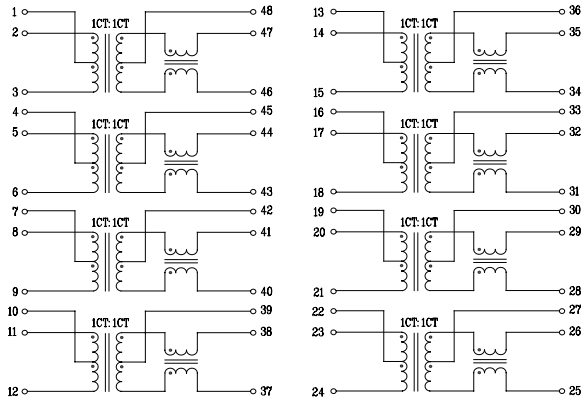
THT Dual port 100/1000Base-T Magnetic Modules

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

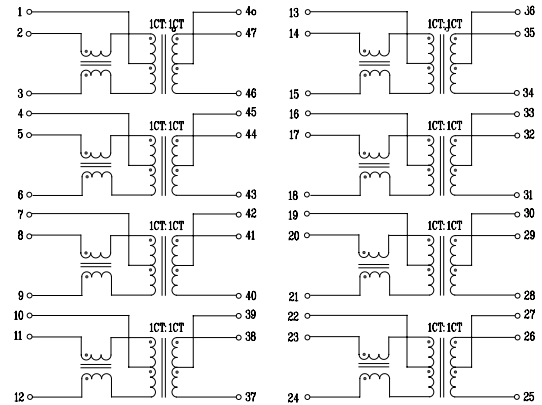


Schematics

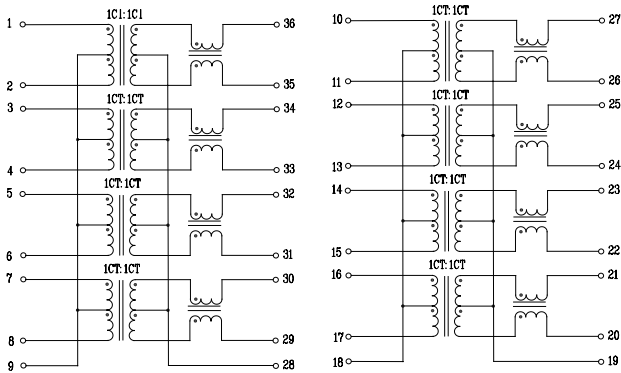
HB5605NL, HB6601NL



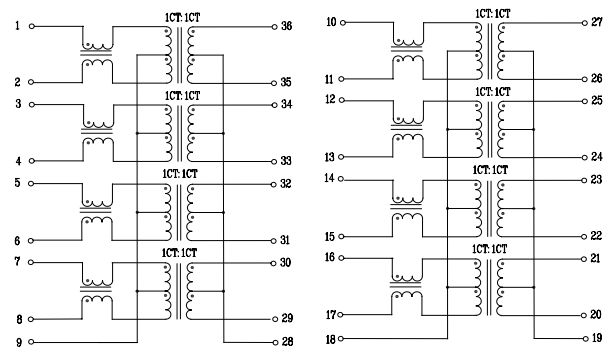
HB5606NL, HB6602NL



HXB5607NL, HB5608NL

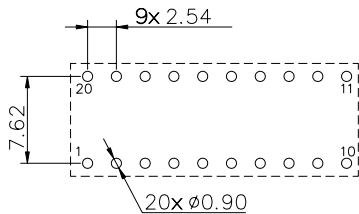


HB5609NL

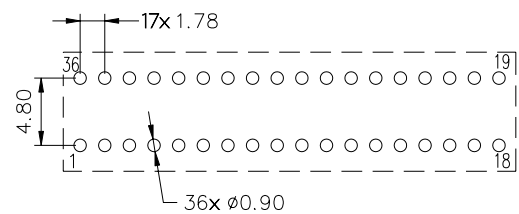


PCB Layout mounting Hole (Top View)

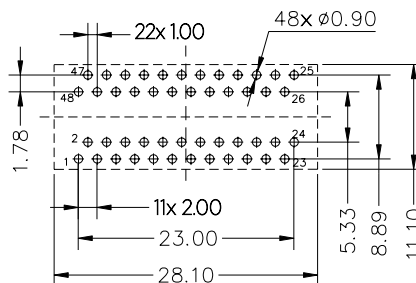
HB3601NL, HB3602NL



HB5608NL, HB5609NL, HXB5607NL



HB5605NL, HB5606NL, HB6601NL, HB6602NL



Dimensions: mm

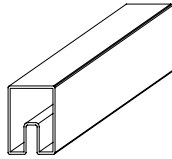
Unless otherwise specified,
all tolerances are ± 0.08

THT Dual port 100/1000Base-T Magnetic Modules

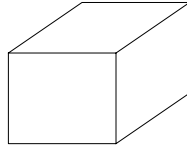
HB3601NL, HB3602NL, HB5605NL, HB5606NL, HB5608NL, HB5609NL,
HB6601NL, HB6602NL and HXB5607NL

Carton Package

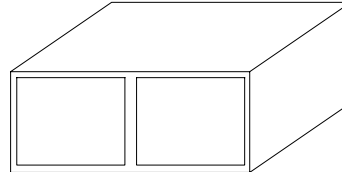
HB3601NL, HB3602NL



TUBE



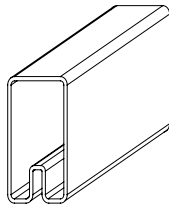
INNER BOX: 567x135x125



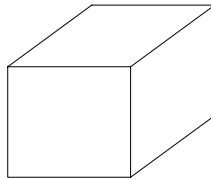
OUTER CARTON: 598x287x150

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

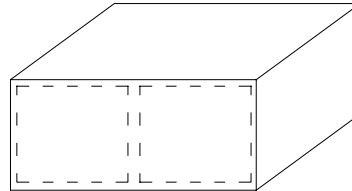
HB5608NL, HB5609NL, HXB5607NL



TUBE



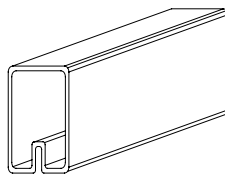
INNER BOX: 567x135x125



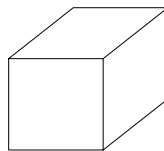
OUTER CARTON: 598x287x150

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

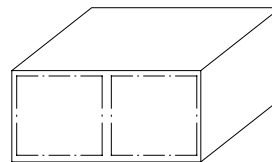
HB5605NL, HB5606NL, HB6601NL, HB6602NL



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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