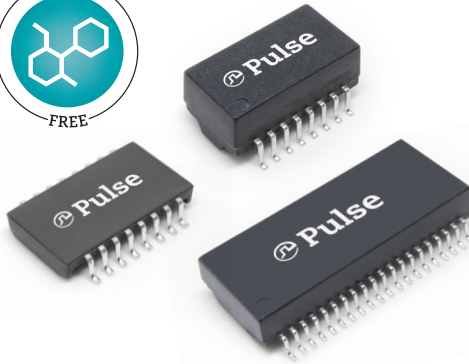


Single and Quad 100BASE-TX SMD Modules

HB3005HLT, HXB2001HLT, HXB2002HLT, HB3004HLT, HB2003HLT,
HB3006HLT, HB3002HLT, HB3003HLT



- Fully RoHS and Halogen Free
- Single, Quad and Power over Ethernet options
- Meet or exceed IEEE802.3u/af/at for 10/100Base-TX
- Compatible with all 1:1 turns ratio PHYs
- Supports AutoMDIX functionality
- Commercial and Industrial Temperature
- Reliable SMD packages support 245°C pk Reflow
- All components Supplied in Tape and Reel

Electrical Specification @ 25°C (OCL@DC8mA)

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
			0.3-100 MHz	2-30MHz	30-60MHz	60-80MHz				
HB3005HLT	350	-1.15	-16	-(16-20log10(f/30))	-10	-	0 to +70	1500Vrms	-	
HXB2001HLT	350	-1.15	-16	-(16-20log10(f/30))	-10	720	-40 to +85	1500Vrms	PoE+	
HXB2002HLT	350	-1.15	-16	-(16-20log10(f/30))	-10	350	-40 to +85	1500Vrms	PoE	
HB3004HLT	350	-1.15	-16	-(16-20log10(f/30))	-10	-	0 to +70	1500Vrms	-	
HB2003HLT	350	-1.15	-16	-(16-20log10(f/30))	-10	720	0 to +70	1500Vrms	PoE+	
HB3006HLT	350	-1.15	-16	-(16-20log10(f/30))	-10	-	0 to +70	1500Vrms	QUAD PORT	

Note: * Specifications listed above refer to the base component part number that is printed on the product - ie HXB2002HLT will be HXB2002HL

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
			0.3-100 MHz	2-30MHz	30-60MHz	60-80MHz				
HB3002HLT	350	-1.15	-16	-(16-20log10(f/30))	-10	-	0 to +70	1500Vrms	PCMCIA	
HB3003HLT	350	-1.15	-16	-(16-20log10(f/30))	-10	-	0 to +70	1500Vrms	PCMCIA	

Note: * Specifications listed above refer to the base component part number that is printed on the product - ie HB3002HLT will be HB3002HL

Process and Materials

Notes:

- Storage Temperature:
HBxxxxHL = -20 to +125°C
HXBxxxxHL = -50 to +125°C
- Compliance to JEDEC-J-STD 020:
i. Moisture Sensitive Level 1
ii. Maximum peak Reflow Solder temperature 245°C
- All parts come in 13" (330mm) Diameter Tape and reel - see page 4-5 for details
- Header: Black Thermoset Plastic - Material flammability rating UL 94V-0
- Lead Frame: Cooper Alloy
- Underplate / Overplate: Tin electro-deposited over Nickel
- Finish: Matte finish Tin solder

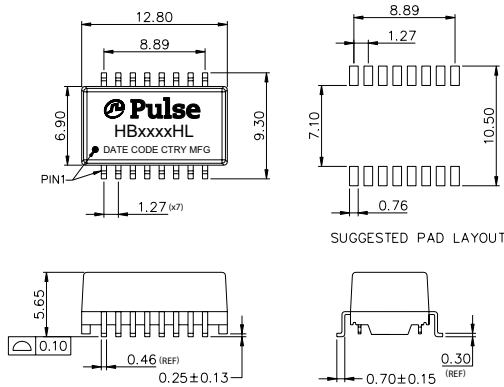
Single and Quad 100BASE-TX SMD Modules

HB3005HLT, HXB2001HLT, HXB2002HLT, HB3004HLT, HB2003HLT,
HB3006HLT, HB3002HLT, HB3003HLT



Mechanicals

HB2003HLT, HB3004/5HLT, HXB2001/2HLT



Dimensions: mm

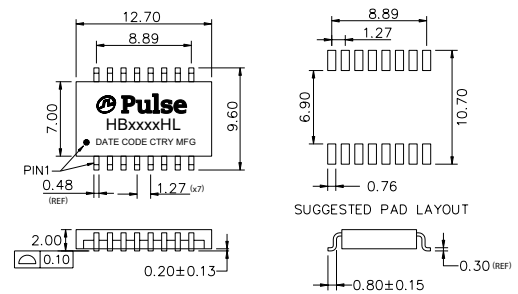
Unless otherwise specified the following tolerances apply:

xx.xx = ± 0.25

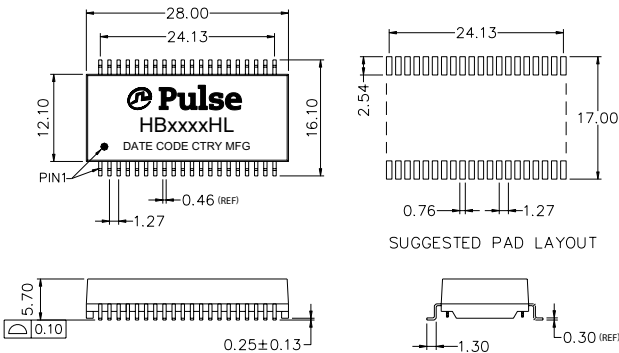
x.xx = ± 0.25

0.xx = ± 0.13

HB3002HLT, HB3003HLT



HB3006HLT



Dimensions: mm

Unless otherwise specified the following tolerances apply:

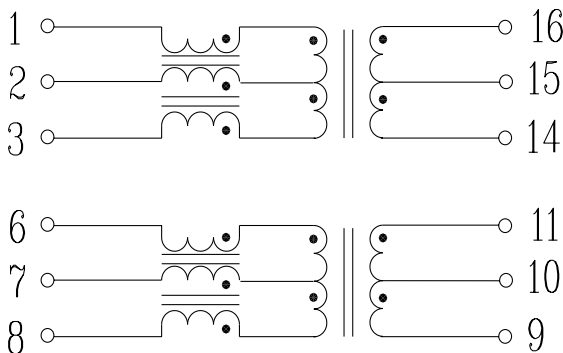
xx.xx = ± 0.25

x.xx = ± 0.25

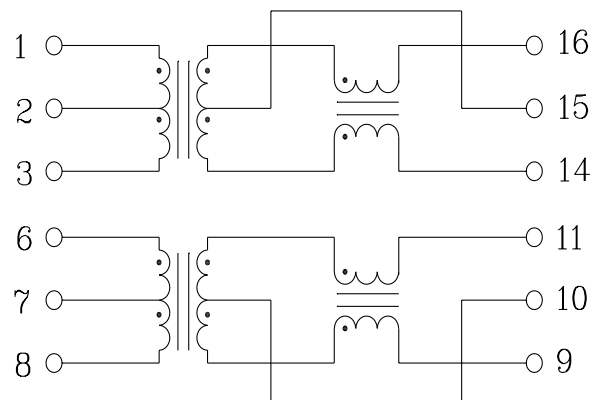
0.xx = ± 0.13

Schematics

HB2003HLT



HB3004HLT, HXB2002HLT



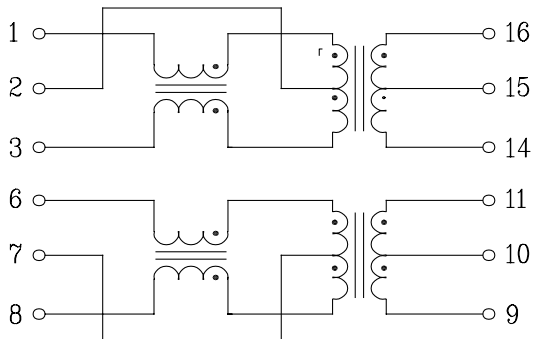
Single and Quad 100BASE-TX SMD Modules

HB3005HLT, HXB2001HLT, HXB2002HLT, HB3004HLT, HB2003HLT,
HB3006HLT, HB3002HLT, HB3003HLT

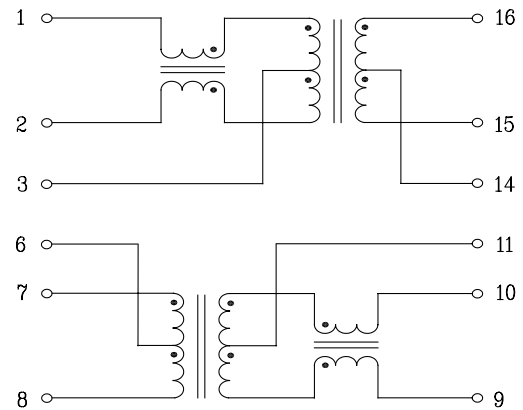


Schematics

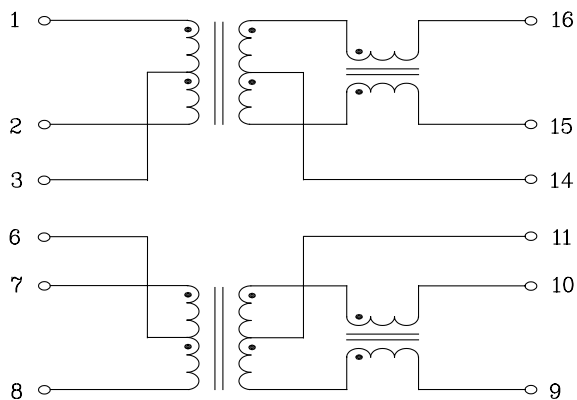
HB3005HLT, HXB2001HLT



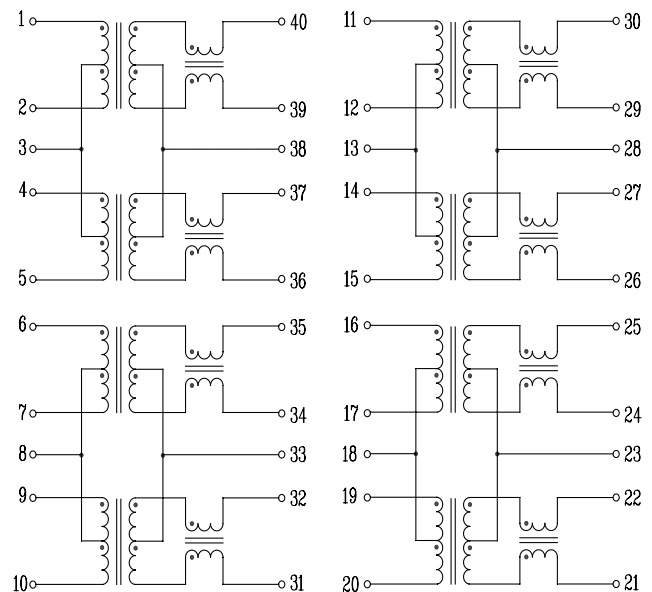
HB3003HLT



HB3002HLT



HB3006HLT



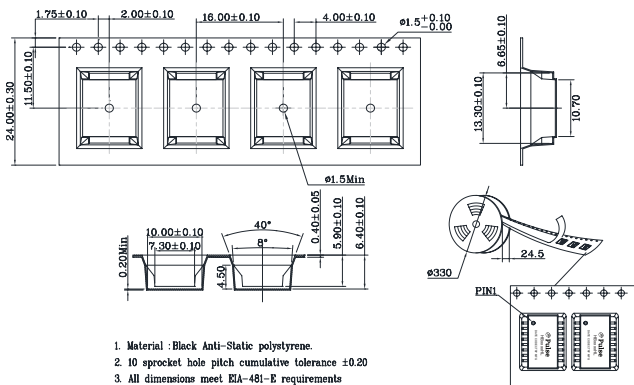
Single and Quad 100BASE-TX SMD Modules

HB3005HLT, HXB2001HLT, HXB2002HLT, HB3004HLT, HB2003HLT, HB3006HLT, HB3002HLT, HB3003HLT



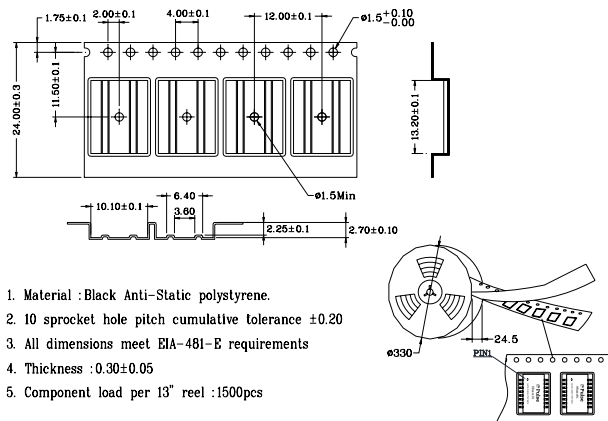
Tape & Reel

HB2003HLT, HB3004/5HLT, HXB2001/2HLT



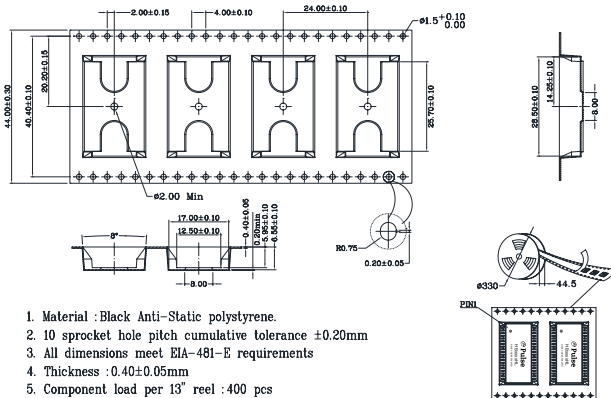
1. Material : Black Anti-Static polystyrene.
2. 10 sprocket hole pitch cumulative tolerance ± 0.20
3. All dimensions meet EIA-481-E requirements
4. Thickness : 0.4 ± 0.05 mm
5. Component load per 13" reel : 600 pcs

HB3002/3HLT



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 :0.30 $\pm$ 0.05
5. Component load per 13" reel :1500pcs

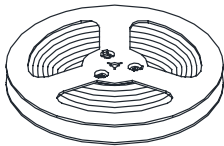
HB3006HLT



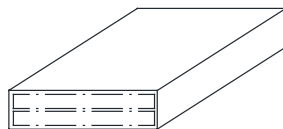
1. Material : Black Anti-Static polystyrene.
2. 10 sprocket hole pitch cumulative tolerance $\pm 0.20\text{mm}$
3. All dimensions meet EIA-481-E requirements
4. Thickness : $0.40 \pm 0.05\text{mm}$
5. Component load per 13" reel : 400 pcs

Carton Package

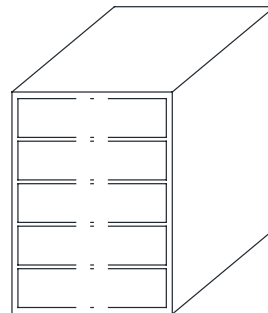
HB2003HLT, HB3004/5HLT, HXB2001/2HLT



REEL



INNER BOX: 347x347x82



OUTER CARTON: 375x375x470

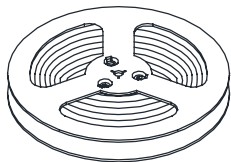
1. 1 REEL=600PCS
2. 1 INNER BOX=2 REELS=1200PCS
3. 1 OUTER CARTON=5 INNER BOXES=6000PCS

Single and Quad 100BASE-TX SMD Modules

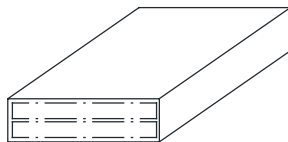
HB3005HLT, HXB2001HLT, HXB2002HLT, HB3004HLT, HB2003HLT,
HB3006HLT, HB3002HLT, HB3003HLT

Carton Package

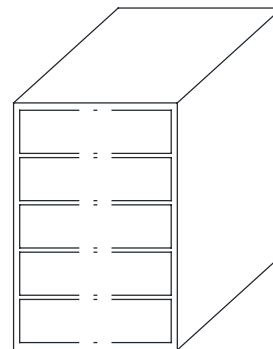
HB3002/3HLT



REEL



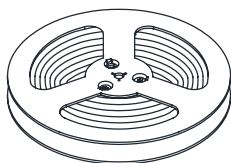
INNER BOX: 347x347x82



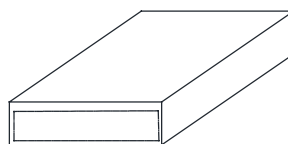
OUTER CARTON: 375x375x470

1. 1 REEL=1500PCS
2. 1 INNER BOX=2 REELS=3000PCS
3. 1 OUTER CARTON=5 INNER BOXES=15000PCS

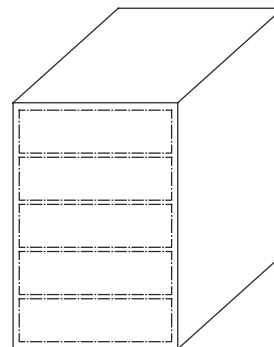
HB3006HLT



REEL



INNER BOX: 347x347x82



OUTER CARTON: 375x375x470

1. 1 REEL=400PCS
2. 1 INNER BOX=1 REEL=400PCS
3. 1 OUTER CARTON=5 INNER BOXES=2000PCS

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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