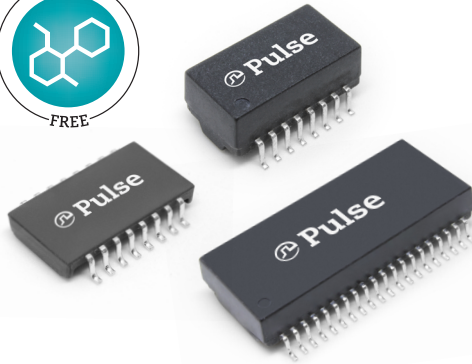


Single and Quad 100BASE-TX SMD Modules

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 ration 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:

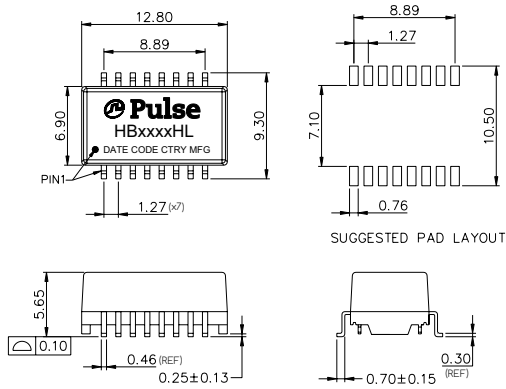
1. Storage Temperature:
HBxxxxHL = -20 to +125°C
HXBxxxxHL = -50 to +125°C
2. Compliance to JEDEC-J-STD 020:
i. Moisture Sensitive Level 1
ii. Maximum peak Reflow Solder temperature 245°C
3. All parts come in 13" (330mm) Diameter Tape and reel - see page 4-5 for details
4. Header: Black Thermoset Plastic - 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 Quad 100BASE-TX SMD Modules

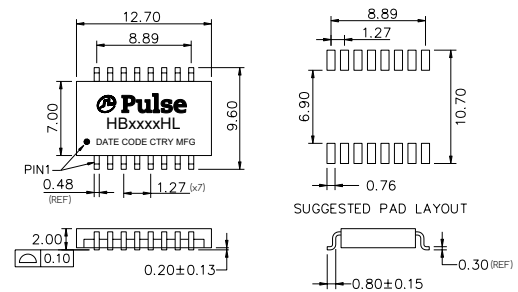
HB3005HLT, HXB2001HLT, HXB2002HLT, HB3004HLT, HB2003HLT, HB3006HLT, HB3002HLT, HB3003HLT

Mechanicals

HB2003HLT, HB3004/5HLT, HXB2001/2HLT



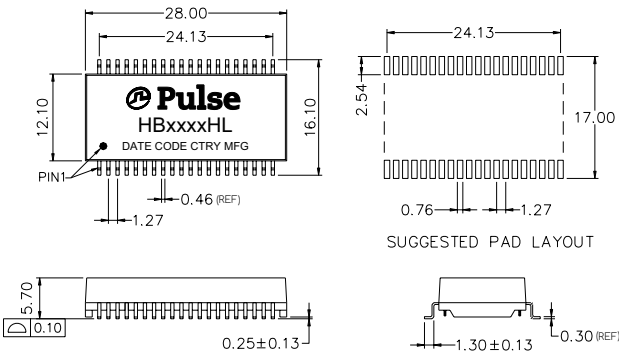
HB3002HLT, HB3003HLT



Dimensions: mm

Unless otherwise specified, all tolerances are ± 0,25

HB3006HLT

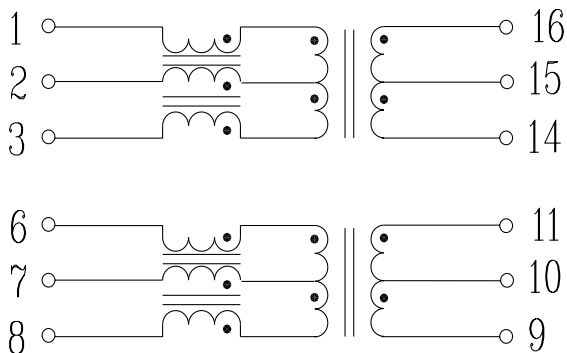


Dimensions: mm

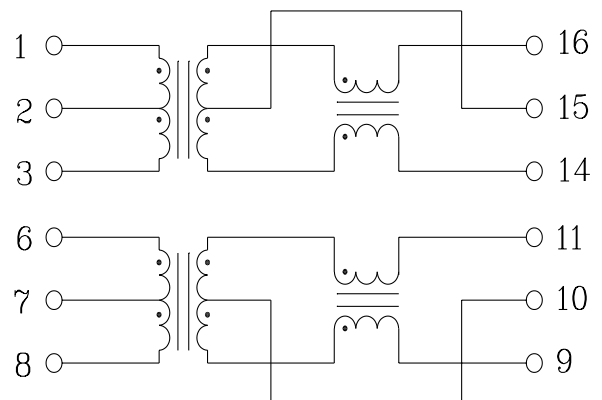
Unless otherwise specified, all tolerances are ± 0,25

Schematics

HB2003HLT



HB3004HLT, HXB2002HLT

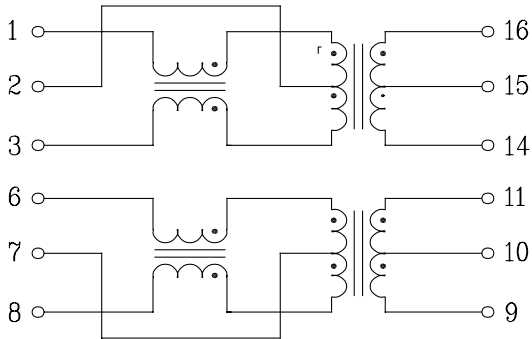


Single and Quad 100BASE-TX SMD Modules

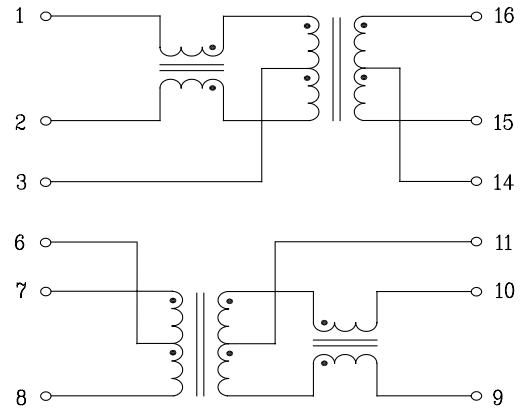
HB3005HLT, HXB2001HLT, HXB2002HLT, HB3004HLT, HB2003HLT,
HB3006HLT, HB3002HLT, HB3003HLT

Schematics

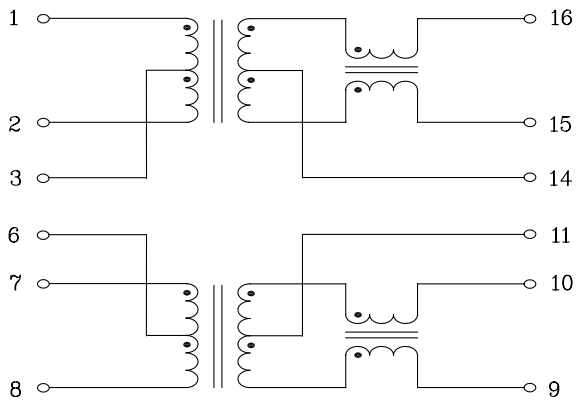
HB3005HLT, HXB2001HLT



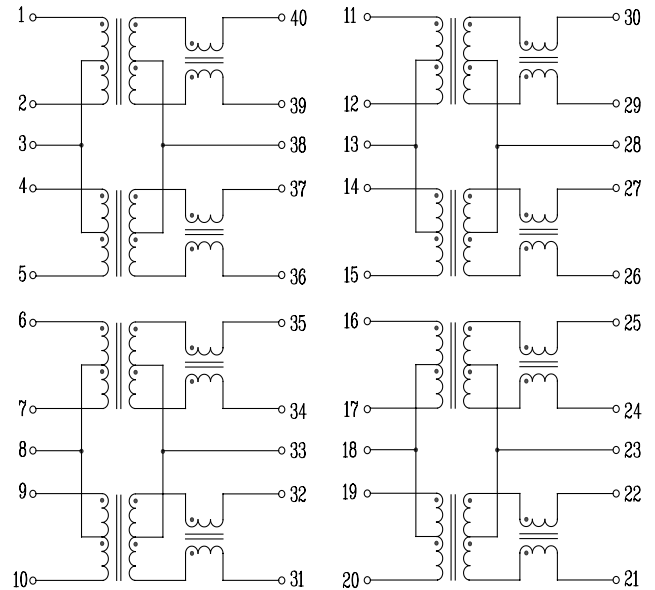
HB3003HLT



HB3002HLT



HB3006HLT

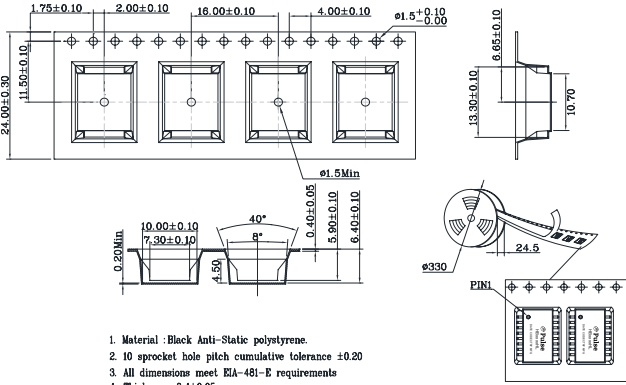


Single and Quad 100BASE-TX SMD Modules

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

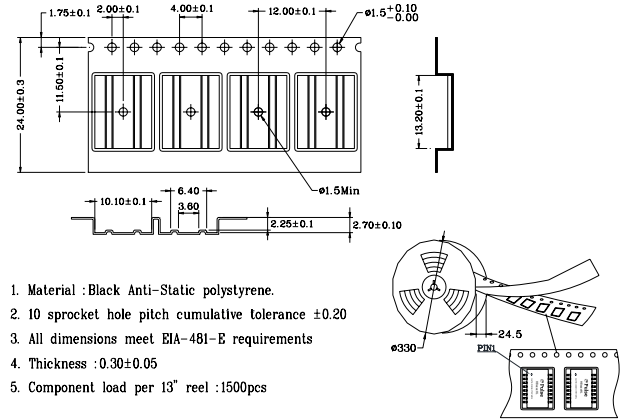
Tape & Reel

HB2003HLT, HB3004/5HLT, HXB2001/2HLT



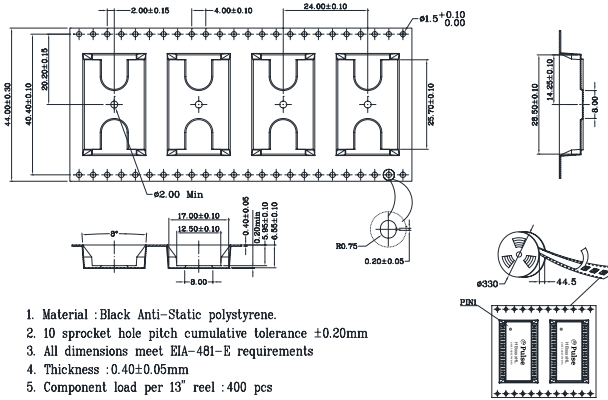
1. Material : Black Anti-Static polystyrene.
2. 10 sprocket hole pitch cumulative tolerance ± 0.20
3. All dimensions meet EIA-481-E requirements
4. Thickness : 0.4 ± 0.05 mm
5. Component load per 13" reel : 600 pcs

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 ± 0.05
5. Component load per 13" reel : 1500 pcs

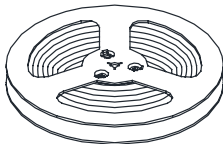
HB3006HLT



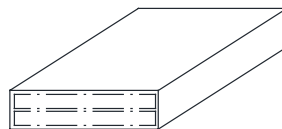
1. Material : Black Anti-Static polystyrene.
2. 10 sprocket hole pitch cumulative tolerance ± 0.20 mm
3. All dimensions meet EIA-481-E requirements
4. Thickness : 0.40 ± 0.05 mm
5. Component load per 13" reel : 400 pcs

Carton Package

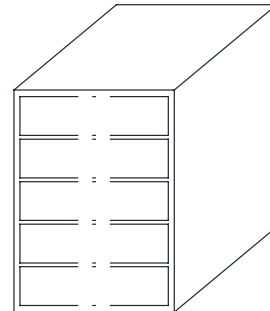
HB2003HLT, HB3004/5HLT, HXB2001/2HLT



REEL



INNER BOX 347x347x82



OUTER CARTON: 375x375x470

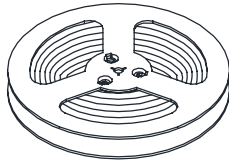
1. 1 REEL=600PCS
2. 1 INNER BOX=2 REELS=1200PCS
3. 1 OUTER CARTON=5 INNER BOXES=6000PCS

Single and Quad 100BASE-TX SMD Modules

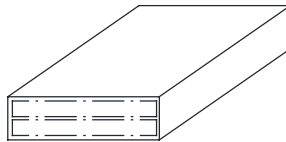
HB3005HLT, HXB2001HLT, HXB2002HLT, HB3004HLT, HB2003HLT,
HB3006HLT, HB3002HLT, HB3003HLT

Carton Package

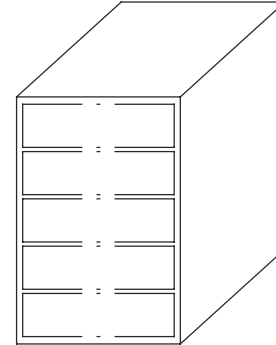
HB3002/3HLT



REEL



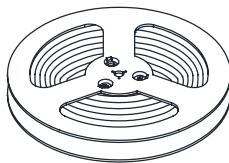
INNER BOX: 347x347x82



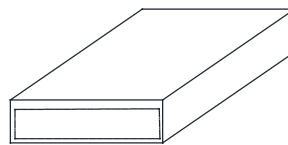
OUTER CARTON: 375x375x470

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

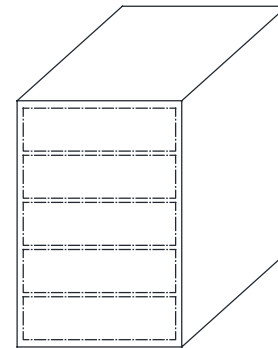
HB3006HLT



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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[H5019EFNL](#) [CX2045ALNLT](#) [TG1G-E201NV6LF](#) [MGPWT-00059-P](#) [MGPWT-00266-P](#) [MGPWT-00278-P](#) [MGPWT-00431-P](#) [TTC-100](#)
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