DISCRETE ETHERNET OVERVIEW

HB/HXB PRODUCTS

CONNECTING PEOPLE

VOICE

VIDEO

DATA

NOW AND IN THE FUTURE

Wired Communications Mission Statement

Our goal is to be the preferred technology partner for copper connectivity interface solutions to leading suppliers of communication network services.
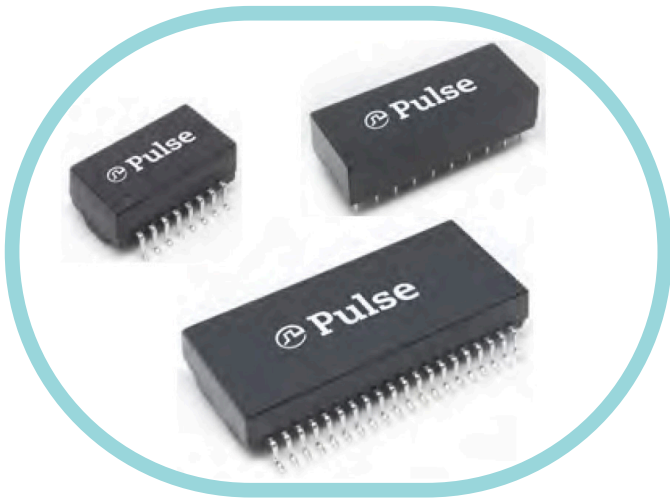
Core Skills

- Demonstrated design/engineering and high volume expertise
- Strong relationships with leading electronic OEM's, CEM's & PHY companies
- Excellent value and outstanding quality products delivered from high-volume production facilities
- Geographic proximity to customers' design and production sites
- Worldwide distribution support

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FAST ETHERNET PRODUCTS

SMT and THT Single, Dual and Quad Port FE Transformer Modules

Pulse's 1Gigabit Ethernet isolation SMT and THT modules are fully RoHS compliant and offer lead and Halogen free designs. Qualified at major PHY suppliers for 100BASE-Tx and Industrial 100Mbps protocols like EtherCAT, Profibus, PowerLINK as well as the latest for TSN communicatioms and backward compatible with connection to slower 10Base-Tx ports.

Each transformer module is optimized for LAN Ethernet connectivity for commercial and industrial applications providing electrical circuit isolation that meets IEEE 802.3u , while maintaining signal integrity and if needed, Power over Ethernet (PoE) upto 30W (over 2 pair) for the critical communications and data transmission.

Features
Wide selection of SMT and THT designs in 16pin, 20pin (THT) and 40pin Headers
Footprint (mm) Single : 12.7 x 9.6 and 12.8 x 9.3
        Dual (THT) : 25.4 x 10.0
        Quad (SMD): 28.0 x 16.1
Support PHY featuring AutoMDIX
Optimized for Power over Ethernet 30W (2pair)
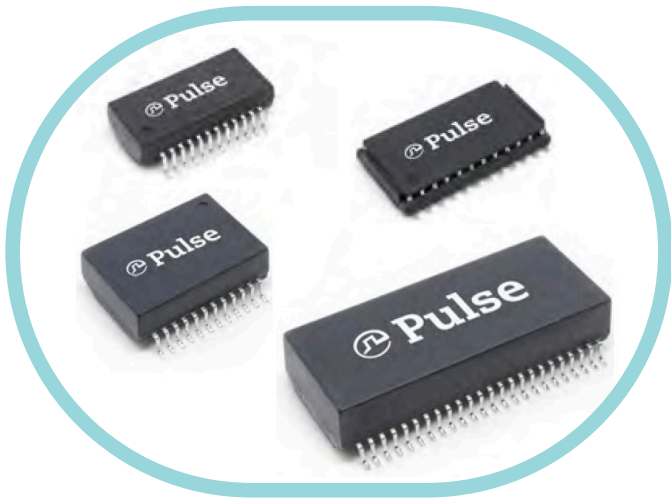Extended Temperature operating range

Applications
Industrial Test and Measurement, Robotics, Automation SoHo Switches and Routers, Access, Security Cameras, Building Sensing and Control, Notebooks, Gaming adn Smart IOT devices.

Part Number	Number of Ports	Mounting Style	Date Rate	Length (mm)	Width (mm)	Height (mm)	Breakdown Voltage	Winding Configuration	Operating Temperature	PoE Rating
HB2003HLT	1	16P in SMD	10/010 BAse-TX	12 .80	9.30	5.65	1500Vrms	3wCMC / XCF	0 to+ 70°C	30W
HB3002HLT	1	16P in SMD	10/010 BAse-TX	12.70	9.60	2.00	1500Vrms	XFM / 2 wCMC	0 to+ 70°C	N/A
HB3003HLT	1	16P in SMD	10/010 BAse-TX	12.70	9.60	2.00	1500Vrms	CMC/XFM, XFM/CMC	0 to+ 70°C	N/A
HB3004HLT	1	16P in SMD	10/010 BAse-TX	12.80	9.30	5.65	1500Vrms	XFM / 2 wCMC	0 to+ 70°C	N/A
HB3005HLT	1	16P in SMD	10/010 BAse-TX	12.80	9.30	5.65	1500Vrms	2wCMC / XCF	0 to+ 70°C	N/A
HB3006HLT	1	16P in SMD	10/010 BAse-TX	28.00	16.10	5.70	1500Vrms	XFM / 2 wCMC	0 to+ 70°C	N/A
HXB2001HLT	1	16P in SMD	10/010 BAse-TX	12.80	9.30	5.65	1500Vrms	2wCM / XCF	-40 to +85°C	30W
HXB2002HLT	1	16P in SMD	10/010 BAse-TX	12.80	9.30	5.65	1500Vrms	XFM / 2wCMC	-40 to +85°C	30W
HB3601NL	2	20P in THT	10/010 BAse-TX	25.40	10.00	6.60	1500Vrms	XFM / 2wCMC	0 to+ 70°C	N/A
HB3602NL	2	20P in THT	10/010 BAse-TX	25.40	10.00	6.60	1500Vrms	2wCMC/ XCF	0 to+ 70°C	N/A

1GIGABIT ETHERNET PRODUCTS

SMT Single and Dual port 1G PoE Transformer modules

Pulse's 1Gigabit Ethernet isolation modules are fully RoHS compliant and offer lead and Halogen free designs. Qualified at major PHY suppliers for 1000BASE-T and backward compatible with connection to slower 10/100Base-Tx ports - they can also double as high density Fast Ethernet dual port modules.

Each transformer module is optimized for Gigabit Ethernet connectivity for commercial and industrial applications providing electrical circuit isolation that meets IEEE 802.3ab , while maintaining signal integrity and if needed, Power over Ethernet (PoE) upto 30W for the critical communications and data transmission.
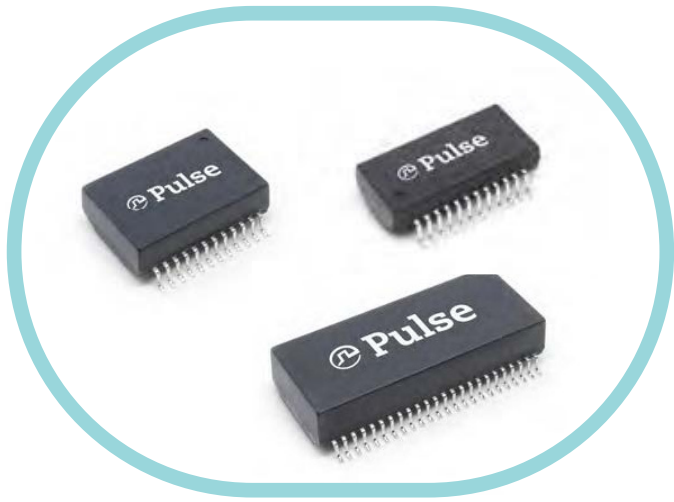
Features

Wide selection of SMT designs in standard 24pin and 48pin MSL1 open Headers
Footprint (mm) Single : 15.6x9,5 (PCMCIA)
    Single : 15.1 x10.0 and 17.6x9.3
    Quad : 27.8x15.21
Optimized for Power over Ethernet 30W (2pair)
Extended Temperature operating range
High Isolation and Surge compliant

Applications

Industrial Test and Measurement, Robotics, Automation SoHo Switches and Routers, Romote Access, Security Cameras, Building Sensing and control.

Part Number	Number of Ports	Mounting Style	Date Rate	Length (mm)	Width (mm)	Height (mm)	Breakdown Voltage	Winding Configuration	Operating Temperature	PoE Rating
HB5004HLT	1	24 PinS MD	1Gigabit	15.10	10.00	4.0	1500Vrms	XFM/ 2wCMC	0 to +70°C	30W
HB5005HLT	1	24 PinS MD	1Gigabit	15.10	10.00	4.0	1500Vrms	XFM/ 2wCMC	0 to +70°C	30W
HB5006HLT	1	24 PinS MD	1Gigabit	15.10	10.00	4.0	1500Vrms	2wCMC / XFM	0 to +70°C	30W
HB5009HLT	1	24 PinS MD	1Gigabit	15.10	10.00	4.0	1500Vrms	3wCMC / XFM	0 to +70°C	30W
HB5010HLT	1	24 PinS MD	1Gigabit	15.10	10.00	4.0	1500Vrms[2]	XFM/ 2wCMC	0 to +70°C	30W
HB5011HLT	1	24 PinS MD	1Gigabit	15.60	9.47	2.30	1500Vrms	XFM/ 2wCMC	0 to +70°C	30W
HB5012HLT	1	24 PinS MD	1Gigabit	17.55	15.90	6.00	1500Vrms	XFM/ 2wCMC	0 to +70°C	N/A
HB5013HLT	2	48 PinS MD	1Gigabit	27.80	15.20	7.20	3000Vrms[1]	XFM / 2wCMC	0 to +70°C	N/A
HB5014HLT	2	48 PinS MD	1Gigabit	27.80	15.20	7.20	4000Vrms[1]	2wCMC / XFM	0 to +70°C	N/A
HXB5008HLT	1	24 PinS MD	1Gigabit	15.10	10.00	4.00	1500Vrms	XFM/ 2wCMC	-40 to +85°C	30W
HXB5007HLT	1	24 PinS MD	1Gigabit	15.10	10.00	4.00	1500Vrms	2wCMC / XFM	-40 to +85°C	30W
HXB5011HLT	1	24 PinS MD	1Gigabit	15.60	9.47	2.30	3000Vrms[1]	2wCMC / X FM	-40 to +85°C	30W
HXB5012HLT	1	24 PinS MD	1Gigabit	17.55	15.90	6.00	1500Vrms	XFM/ 2wCMC	-40 to +85°C	30W
HXB5017HLT	1	24 PinS MD	1Gigabit	15.10	10.00	4.00	1500Vrms	2wCMC / X FM	-40 to +85°C	30W

1GIGABIT ETHERNET PRODUCTS
SMT Single and Dual port 1G PoE/PoE+ Transformer Modules

Pulse's high Power PoE 1Gigabit Ethernet isolation modules are fully RoHS compliant and offer lead and Halogen free designs. Qualified at major PHY suppliers for 1000BASE-T and backward compatible with connection to slower 10/100Base-Tx ports - they can also double as high density Fast Ethernet dual port modules.

Each transformer module is optimized for network connectivity where remote DC Power over Ethernet cabling for commercial and industrial applications if needed. They provide electrical circuit isolation that meets IEEE 802.3ab/af/at/bt, while maintaining signal integrity with 1Amp current loading, supplying up to 90W of PoE for critical communications and data transmission.

Features
Wide selection of SMT designs in standard 24pin and 48pin MSL1 open Headers
Footprint (mm) Single : 15.6x9,5 and 17.6x9.3
Quad : 27.8x15.21 and 32.8x18.5
Optimized for Power over Ethernet 90W (4pair)
Extended Temperature operating range
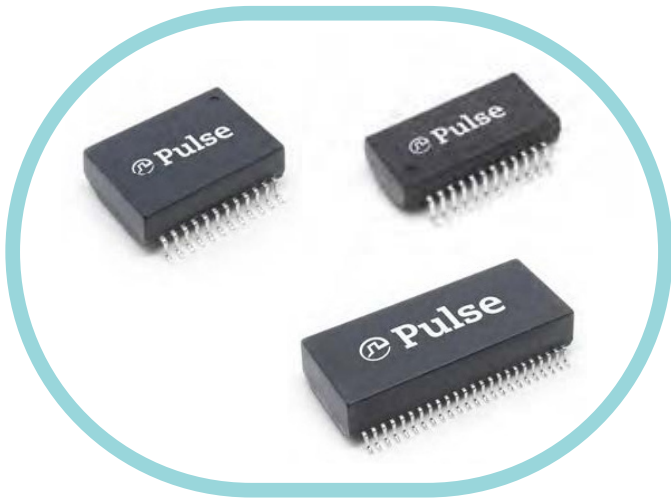High Isolation and Surge compliant

Applications
Industrial Sensors, Automation, PoE Switches and Routers, Remote Access, Security Cameras, Building Sensing and Control, RANs, WAPs and Base Stations

Part Number	Number of Ports	Mountig Style	Date Rate	Length (mm)	Width (mm)	Height (mm)	Breakdown Voltage	Winding Configuration	Operating Temperature	PoE Rating
HB6002HLT	1	24 Pin SMD	1Gigabit	17.55	15.90	6.00	1500Vrms	XFM/ 2wCMC/Shunt	0 to +70°C	60W
HB6003HLT	1	24 Pin SMD	1Gigabit	17.55	15.90	6.00	1500Vrms	XFM/ 2wCMC	0 to +70°C	60W
HB6006HLT	1	24 Pin SMD	1Gigabit	17.55	15.90	6.00	5000Vrms	XFM/ 2wCMC	0 to +70°C	30W
HB6007HLT	1	24 Pin SMD	1Gigabit	17.55	15.90	6.00	5000Vrms[1]	XFM/ 2wCMC	0 to +70°C	60W
HB6010HLT	2	24 Pin SMD	1Gigabit	27.80	15.20	7.20	1500Vrms	2wCMC / XFM	0 to +70°C	30W
HB6011HLT	2	48 Pin SMD	1Gigabit	27.80	15.20	7.20	1500Vrms	XFM/ 2wCMC	0 to +70°C	30W
HB6012HLT	2	48 Pin SMD	1Gigabit	27.80	15.20	7.20	1500Vrms	XFM/ 2wCMC	0 to +70°C	60W
HXB6004HLT	1	24 Pin SMD	1Gigabit	17.55	15.90	6.00	1500Vrms	XFM/ 2wCMC	-40 to +85°C	60W
HXB6005HLT	1	24 Pin SMD	1Gigabit	17.55	15.90	6.00	1500Vrms	2wCMC / XFM	-40 to +85°C	60W
HXB6008HLT	1	24 Pin SMD	1Gigabit	17.55	15.90	6.00	1500Vrms	2wCMC / XFM	-40 to +85°C	90W
HXB6009HLT	1	24 Pin SMD	1Gigabit	17.55	15.90	6.00	1500Vrms[3]	2wCMC / XFM	-40 to +85°C	60W
HXB6013HLT	2	48 Pin SMD	1Gigabit	27.80	15.20	7.20	3000Vrms[3]	2wCMC / XFM	-40 to +85°C	60W
HXB6014HLT	2	48 Pin SMD	1Gigabit	27.80	15.20	7.20	1500Vrms	2wCMC / XFM	-40 to +85°C	60W
HXB6015HLT	2	48 Pin SMD	1Gigabit	32.80	18.50	7.30	1500Vrms	2wCMC / XFM	-40 to +85°C	90W
HXB6020HLT	1	24 Pin SMD	1Gigabit	15.10	10.00	5.80	1500Vrms	2wCMC / XFM	-40 to +85°C	60W

MULTI-RATE 2.5 GIGABIT PRODUCTS

SMT Single and Dual port 2.5G PoE/PoE+ Transformer Modules

Pulse's Multi-Rate Gigabit Ethernet isolation modules are fully RoHS compliant and offer lead and Halogen free designs. Qualified at major PHY suppliers for 2.5GBASE-T and backward compatible with connection to slower 1000Base-T port. they comply to IEEE802.3bz

Each transformer module is optimized for network connectivity and a few designs support remote DC Power feeding over Ethernet cabling for commercial and industrial applications if needed. They provide electrical circuit isolation that meets IEEE 802.3, while maintaining signal integrity with over 1Amp current loading, supplying upto 90W of PoE for critical communications and data transmission.

Features

Wide selection of options in standard 24 and 48 pin, MSL1 open Header designs
Footprint (mm) Single : 15x10 and 17.5x16.0
         Dual : 27.8x15.2 and 32.8x17.6
Optimized for Power over Ethernet - up to 90W
Commercial and Extended operating Temperature High Isolation and surge compliant designs
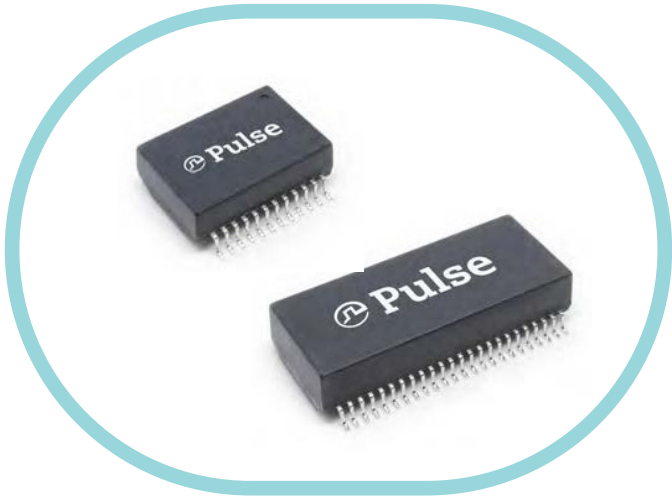
Applications

Industrial Sensors, Automation, PoE Switches and Routers, Remote Access, Security Cameras, Building Sensing and Control, RANs, WAPs and Base Stations

Part Number	Number of Ports	Mounting Style	Date Rate	Length (mm)	Width (mm)	Height (mm)	Breakdown Voltage	Winding Configuration	Operating Temperature	PoE Rating
HB4009HLT	1	24 Pin SMD	2.5Gigabit	15.10	10.00	4.00	1500Vrms	2wCMIC X FM	0 to +70°C	N/A
HB4010HLT	1	24 Pin SMD	2.5Gigabit	17.55	15.90	6.00	1500Vrms	2wCMIC X FM	0 to +70°C	N/A
HB4011HLT	1	24 Pin SMD	2.5Gigabit	17.55	15.90	6.00	3000Vrms[3]	2wCMIC X FM	0 to +70°C	N/A
HB4012HLT	2	24 Pin SMD	2.5Gigabit	27.80	15.20	7.20	1500Vrms	2wCMIC X FM	0 to +70°C	N/A
HB4013HLT	1	24 Pin SMD	2.5Gigabit	17.55	15.90	6.00	1500Vrms	2wCMIC X FM	0 to +70°C	60W
HB4015HLT	1	24 Pin SMD	2.5Gigabit	17.55	15.90	6.00	1500Vrms[1]	XFM/ 2 wCMC	0 to +70°C	60W
HB4018HLT	2	24 Pin SMD	2.5Gigabit	32.80	18.50	7.30	1500Vrms	2wCMIC X FM	0 to +70°C	60W
HXB4009HLT	1	24 Pin SMD	2.5Gigabit	15.10	10.00	4.00	1500Vrms	2wCMIC X FM	-40 to +85°C	N/A
HXB4016HLT	1	24 Pin SMD	2.5Gigabit	17.55	15.90	6.00	1500Vrms	2wCMIC X FM	-40 to +85°C	90W
HXB4017HLT	1	24 Pin SMD	2.5Gigabit	17.55	15.90	6.00	1500Vrms[2]	2wCMIC X FM	-40 to +85°C	90W
HXB4019HLT	2	48 Pin SMD	2.5Gigabit	32.80	17.60	7.30	1500Vrms	2wCMIC X FM	-40 to +85°C	90W

Note 1. Surge DM 4.3KV   2. Surge CM 3KV   3. Surge DM 7KV

MULTI-RATE 5 GIGABIT PRODUCTS

SMT Single and Dual port 5G PoE/PoE+ Transformer Modules

Pulse's Multi-Rate Gigabit Ethernet isolation modules are fully RoHS compliant and offer lead and Halogen free designs. Qualified at major PHY suppliers for 5Gigabit and backward compatible with connection to slower 2.5G and 1000Base-T port.

Each transformer module is optimized for network connectivity and a few designs support remote DC Power feeding over Ethernet cabling for commercial and industrial applications if needed. They provide electrical circuit isolation that meets IEEE 802.3, while maintaining signal integrity with over 1Amp current loading, supplying upto 90W of PoE for critical communications and data transmission.

Features

Wide selection of options in standard 24 and 48 pin, MSL1 open Header designs Footprint (mm)
Single : 17.5x16.0
        Dual : 27.8x15.2 and 32.8x17.6
Optimized for Power over Ethernet - up to 90W Commercial and Extended operating Temperature High Isolation and surge compliant options
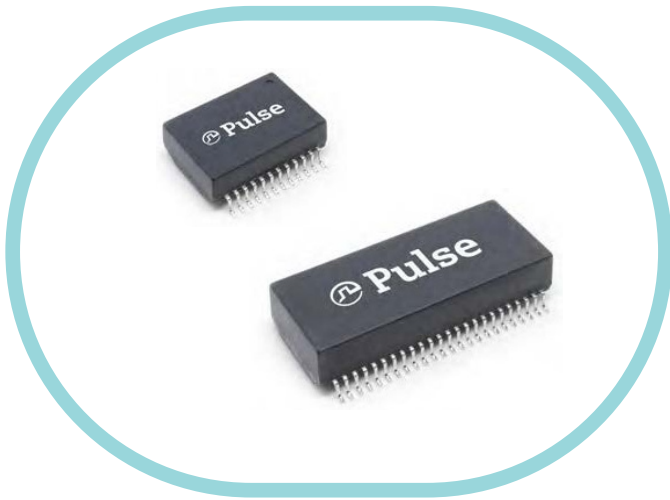
Applications

Industrial Sensors, Automation, PoE Switches and Routers, Remote Access, Security Cameras, Building Sensing and Control, RANs, WAPs and Base Stations

Part Number	Number of Ports	Mountig Style	Date Range	Length	Width	Height	Breakdown Voltage	Winding Configuration	Operating Temperature	PoE Rating
HB5G005HLT	1	24 Pin SMD	5Gigabit	17.55	15.90	6.00	1500Vrms	XFM/ 2wCMC	0 to +70°C	N/A
HB5G006HLT	1	24 Pin SMD	5Gigabit	17.55	15.90	6.00	1500Vrms	2wCMIC X FM	0 to +70°C	N/A
HB5G007HLT	1	24 Pin SMD	5Gigabit	17.55	15.90	6.00	4000Vrms[1]	XFM/ 2wCMC	0 to +70°C	N/A
HB5G009HLT	1	24 Pin SMD	5Gigabit	17.55	15.90	6.00	4000Vrms[2]	2wCMIC X FM	0 to +70°C	N/A
HB5G015HLT	1	24 Pin SMD	5Gigabit	27.80	15.20	7.20	1500Vrms	2wCMIC X FM	0 to +70°C	N/A
HXB5G010HLT	2	24 Pin SMD	5Gigabit	17.55	15.90	6.00	1500Vrms	2wCMIC X FM	-40 to +85°C	60W
HXB5G011HLT	1	24 Pin SMD	5Gigabit	17.55	15.90	6.00	1500Vrms	XFM/ 2wCMC	-40 to +85°C	60W
HXB5G012HLT	1	24 Pin SMD	5Gigabit	17.55	15.90	6.00	4000Vrms[2]	2wCMIC X FM	-40 to +85°C	60W
HXB5G013HLT	1	24 Pin SMD	5Gigabit	17.55	15.90	6.00	1500Vrms	2wCMIC X FM	-40 to +85°C	90W
HXB5G014HLT	1	24 Pin SMD	5Gigabit	17.55	15.90	6.00	1500Vrms[3]	2wCMIC X FM	-40 to +85°C	90W
HB5G016HLT	1	48 Pin SMD	5Gigabit	27.80	15.20	7.20	1500Vrms	2wCMIC X FM	0 to +70°C	60W
HB5G018HLT	2	48 Pin SMD	5Gigabit	32.80	17.60	7.30	4000Vrms[1]	2wCMIC X FM	0 to +70°C	N/A
HB5G019HLT	2	48 Pin SMD	5Gigabit	32.80	17.60	7.30	4000Vrms[1]	2wCMIC X FM	0 to +70°C	60W
HXB5G008HLT	2	48 Pin SMD	5Gigabit	32.80	18.50	7.30	1500Vrms	2wCMIC X FM	-40 to +85°C	60W
HXB5G017HLT	2	48 Pin SMD	5Gigabit	27.80	15.20	7.20	1500Vrms	2wCMIC X FM	-40 to +85°C	60W
HXB5G020HLT	2	48 Pin SMD	5Gigabit	32.80	17.60	7.30	1500Vrms	2wCMIC X FM	-40 to +85°C	90W

Note 1. Surge DM 4.3KV   2. Surge CM 6KV   3. Surge DM 7KV

MULTI-RATE 10GIGABIT PRODUCTS

SMT Single and Dual port 10G PoE/PoE+ Transformer Modules

Pulse's 10Gigabit Ethernet isolation modules are fully RoHS compliant and offer lead and Halogen free designs. Qualified at major PHY suppliers for 10Gigabit and backward compatible with connection to slower 2.5/5G and 1000Base-T port.

Each transformer module is optimized for network connectivity and a few designs support remote DC Power feeding over Ethernet cabling for commercial and industrial applications if needed. They provide electrical circuit isolation that meets IEEE 802.3, while maintaining signal integrity with over 1Amp current loading, supplying up to 90W of PoE for critical communications and data transmission.

Features

Wide selection of options in standard 24 and 48 pin, MSL1 open Header designs
Footprint (mm) Single : 17.5x16.0
   Dual : 27.8x15.2 and 32.8x17.6
Optimized for Power over Ethernet - up to 90W
Commercial and Extended operating
Temperature High Isolation and surge compliant options
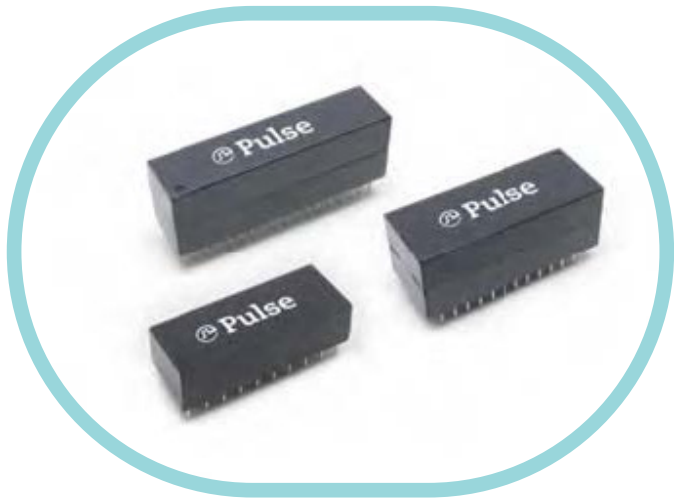
Applications

Industrial and Commercial Servers, Switches and file storage devices, Routers, Remote WAPs and Base Stations

Part Number	Number of Ports	Mounting Style	Date Rate	Length (mm)	Width (mm)	Height (mm)	Breakdown Voltage	Winding Configuration	Operating Temperature	PoE Rating
HXB7008HLT	1	24 Pin SMD	10Gigabit	17.55	15.90	6.00	1500Vrms[2]	2wCMI XCF	-40 to +90℃	N/A
HXB7009HLT	1	24 Pin SMD	10Gigabit	17.55	15.90	6.00	1500Vrms	XFM/ 2 wCMC	-40 to +90℃	N/A
HXB7010HLT	1	24 Pin SMD	10Gigabit	17.55	15.90	6.00	4000Vrms[1]	2wCMC / XCF	-40 to +90℃	N/A
HXB7011HLT	1	24 Pin SMD	10Gigabit	17.55	15.90	6.00	1500Vrms	2wCMC / XCF	-40 to +90℃	60W
HXB7012HLT	1	24 Pin SMD	10Gigabit	17.55	15.90	6.00	1500Vrms	2wCMC / XCF	-40 to +90℃	90W
HXB7013HLT	2	48 Pin SMD	10Gigabit	32.80	18.50	7.30	1500Vrms	2wCMC / XCF	-40 to +90℃	N/A
HXB7014HLT	2	48 Pin SMD	10Gigabit	32.80	18.50	7.30	4000Vrms[1]	2wCMC / XCF	-40 to +90℃	N/A
HXB7015HLT	2	48 Pin SMD	10Gigabit	32.80	18.50	7.30	1500Vrms	2wCMC / XCF	-40 to +90℃	90W
HXB7016HLT	2	48 Pin SMD	10Gigabit	32.80	18.50	7.30	1500Vrms	2wCMC / XCF	-40 to +90℃	60W

Note 1. Surge DM 2.5KV,CM 6KV 2 .SurgeDM 7KV

1 GIGABIT ETHERNET PRODUCTS

THT Single and Dual port 1G PoE Transformer modules

Pulse's 1Gigabit Ethernet isolation modules are fully RoHS compliant and offer lead and Halogen free designs. Qualified at major PHY suppliers for the latest 1GBASE-T silicon and backward compatible with connection to slower data rates they comply to 10/100Base-Tx and IEE802.3at/bt for PoE

Each transformer module is optimized for network connectivity and a few designs support remote DC Power feeding over Ethernet cabling for commercial and industrial applications if needed. They provide electrical circuit isolation that meets IEEE 802.3, while maintaining signal integrity with over 1Amp current loading, supplying upto 90W of PoE for critical communications and data transmission.

Features

Wide selection of options in standard 18, 24, 36 and 48 pin, closed DIP Header designs
Footprint (mm) Single : 15.65x11.0(18pin) and 16.8x8,5(18pin)
        Dual : 32.5x8.5(36pin) and 28.1x11.1(48pin)
Optimized for Power over Ethernet - up to 90W
Commercial and Extended operating temperature High Isolation and surge compliant options
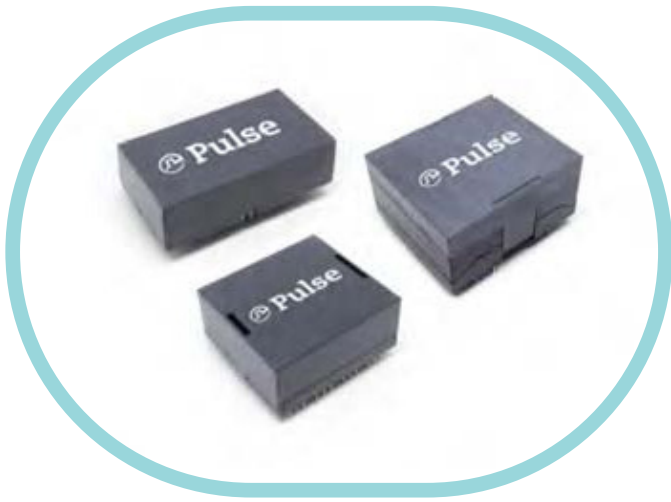
Applications

IIndustrial Servers, NIC card for file storage and data handling. Medical and Industrial image processing, LTE WAPs and Base Stations

Part Number	Number of Ports	Mounting Style	Date Rate	Length (mm)	Width (mm)	Height (mm)	Breakdown Voltage	Winding Configuration	Operating Temperature	PoE Rating
HB5601NL	1	24 Pin DIP	1Gigabit	15.65	11.00	11.20	1500Vrms	2wCMC / XFM	0 to +70℃	N/A
HB5602NL	1	24 Pin DIP	1Gigabit	15.65	11.00	11.20	4000Vrms[1]	2wCMC / XFM	0 to +70℃	N/A
HB5604NL	1	18 Pin DIP	1Gigabit	16.80	8.50	11.60	1500Vrms	XFM/ 2wCMC	0 to +70℃	N/A
HB5605NL	2	48 Pin DIP	1Gigabit	28.10	11.10	11.00	1500Vrms	XFM/ 2wCMC	0 to +70℃	N/A
HB5606NL	2	48 Pin DIP	1Gigabit	28.10	11.10	11.00	1500Vrms	2wCMC / XFM	0 to +70℃	N/A
HB5608NL	2	36 Pin DIP	1Gigabit	32.50	8.50	11.60	1500Vrms[1]	XFM/ 2wCMC	0 to +70℃	N/A
HB5609NL	2	36 Pin DIP	1Gigabit	32.50	8.50	11.60	1500Vrms	XFM/ 2wCMC	0 to +70℃	N/A
HB6601NL	2	48 Pin DIP	1Gigabit	28.10	11.10	11.00	1500Vrms	XFM/ 2wCMC	0 to +70℃	30W
HB6602NL	2	48 Pin DIP	1Gigabit	28.10	11.10	11.00	4000Vrms[1]	2wCMC / XFM	0 to +70℃	30W
HXB5603NL	2	18 Pin DIP	1Gigabit	16.80	8.50	11.60	1500Vrms[2]	2wCMC / XFM	-40 to +85℃	N/A
HXB5607NL	2	36 Pin DIP	1Gigabit	32.50	8.50	11.60	1500Vrms[2]	XFM / 2wCMC	-40 to +85℃	N/A

Note 1. Surge DM 2.5KV,CM 6KV 2 .SurgeDM 7KV

1 GIGABIT ETHERNET PRODUCTS

THT QUAD port 1G PoE/PoE+ Transformer Modules

Pulse's 1Gigabit THT Ethernet isolation modules are fully RoHS compliant and offer lead and Halogen free designs. Qualified at major PHY suppliers for the latest1GBASE-T silicon and backward compatible withconnection to slower data rates they comply to10/100Base-Tx and IEE802.3at/bt for PoE

Each transformer module is optimized for network connectivity and a few designs support remote DC Power feeding over Ethernet cabling for commercial and industrial applications if needed. They provide electrical circuit isolation that meets IEEE 802.3, while maintaining signal integrity with over 1Amp current loading, supplying up to 90W of PoE for critical communications and data transmission.

Features

Wide selection of THT options in standard 72pin, 88pin and 96pin closed DIP Header designs
Footprint (mm) 72pin : 17.5x16.0
　　　　88pin : 29.0x26.5
　　　　96pin : 29.0x33.5
Optimized for Power over Ethernet - up to 90W
Commercial and Extended operating temperature High Isolation and surge compliant options

Applications

Industrial Servers, NIC card for file storage and data handling. Medical and Industrial image processing, LTE WAPs and Base Stations

Part Number	Number of Ports	Mounting Style	Data Rate	Length (mm)	Width (mm)	Height (mm)	Breakdown Voltage	Winding Configuration	Operating Temperature	PoE Rating
HB5610NL	4	88 Pin DIP	1Gigabit	29.00	26.50	13.00	1500Vrms	3wCMC / XFM	0 to +70°C	N/A
HB5611NL	4	88 Pin DIP	1Gigabit	29.00	26.50	13.00	1500Vrms	2wCMC / XFM	0 to +70°C	N/A
HB5612NL	4	96 Pin DIP	1Gigabit	29.00	33.50	16.80	1500Vrms	2wCMC / XFM	0 to +70°C	N/A
HB5613NL	4	72 Pin DIP	1Gigabit	29.00	19.00	10.40	1500Vrms	XFM / 2wCMC	0 to +70°C	N/A
HB5614NL	4	72 Pin DIP	1Gigabit	29.00	33.50	16.80	1500Vrms	2wCMC / XFM	0 to +70°C	N/A
HB6603NL	4	88 Pin DIP	1Gigabit	29.00	26.50	13.00	1500Vrms	XFM / 2wCMC	0 to +70°C	60W
HB6604NL	4	88 Pin DIP	1Gigabit	29.00	26.50	13.00	1500Vrms	2wCMC / XFM	0 to +70°C	60W
HB6605NL	4	88 Pin DIP	1Gigabit	29.00	26.50	13.00	1500Vrms	3wCMC / XFM	0 to +70°C	60W
HXB6606NL	4	96 Pin DIP	1Gigabit	29.00	33.50	16.80	1500Vrms	2wCMC / XFM	-40 to +85°C	90W
HXB6607NL	4	96 Pin DIP	1Gigabit	29.00	33.50	16.80	1500Vrms	2wCMC / XFM	-40 to +85°C	60W

2.5/5G AND 10G GIGABIT ETHERNET PRODUCTS

THT QUAD port 2.5/5G and 10G PoE/PoE+ Transformer modules

Pulse' newest range of high density through hole (THT) products for 2.5G/5G and 10G multi-rate Ethernet are now released. These isolation modules are fully RoHS compliant and offer lead and Halogen free designs. Qualified at major PHY suppliers for easy design-in and ideal for Industrial or commercial switches and routers.

Each transformer module is optimized for network connectivity where high port density is needed. The THT design can be wave or hand soldered alongside the 1xN or 2xN RJ45 connector saving process costs.

They provide electrical circuit isolation that exceeds the IEEE 802.3an/af/at/bt/bz standards while maintaining signal integrity with up to 1Amp current loading, supplying 90W of PoE for critical communications and data transmission.

Features

Wide selection of THT options in a standard 96pin closed DIP Header design
        Footprint (mm) : QUAD: 29.0 x 33.5
Commercial and Extended operating temperature up to +105oC with PoE loading
Optimized for Power over Ethernet - up to 90W
IEEE802.3 an/bz compliant for mGIG Etherne

Applications

Industrial, Commercial and Consumer PoE Switches and Routers, SoHo WAPs and DSL Modems

Part Number	Number of Ports	Mounting Style	Date Rate	Length (mm)	Width (mm)	Height (mm)	Breakdown Voltage	Winding Configuration	Operating Temperature	PoE Rating
HB5G601NL	4	96 Pin DIP	2.5/5Gigabit	29.00	33.50	16.80	1500Vrms	2wCMC / XFM	0 to +70°C	60W
HB5G603NL	4	96 Pin DIP	2.5/5Gigabit	29.00	33.50	16.80	1500Vrms	XFM / 2wCMC	0 to +70°C	N/A
HXB5G602NL	4	96 Pin DIP	2.5/5Gigabit	29.00	33.50	16.80	1500Vrms	2wCMC / XFM	-40 to +85°C	90W
HXB7601NL	4	96 Pin DIP	10Gigabit	29.00	33.50	16.80	1500Vrms	2wCMC / XFM	-40 to +105°C	90W
HXB7602NL	4	96 Pin DIP	10Gigabit	29.00	33.50	16.80	1500Vrms	2wCMC / XFM	-40 to +90°C	60W
HXB7603NL	4	96 Pin DIP	10Gigabit	29.00	33.50	16.80	1500Vrms	XFM / 2wCMC	-40 to +90°C	N/A

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