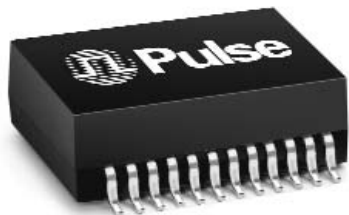


10/100BASE-T SINGLE PORT, SMT TRANSFORMER

For Fast Ethernet to Gigabit Ethernet
Interchangeable Designs



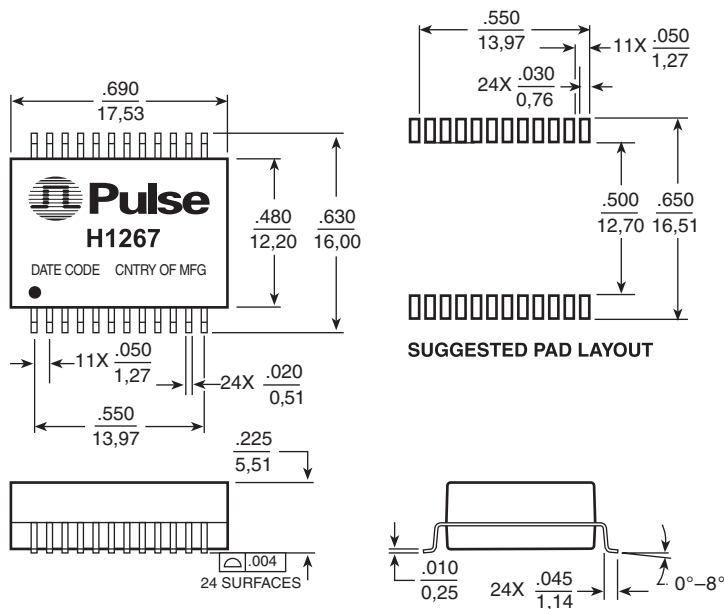
- Meets IEEE802.3 and ANSI X3.263 standards, including 350 μ H OCL with 8 mA DC bias
- Pin-compatible to Pulse Gigabit Ethernet part numbers H5004 and H5007

Electrical Specifications @ 25°C — Operating Temperature 0°C to +70°C

Part Number	Turns Ratio ($\pm 5\%$)		Insertion Loss (dB MAX)	Return Loss (dB MIN)			Crosstalk (dB MIN)			Differential to Common Mode Rejection (db MIN)			Hipot (Vrms MIN)
	Receive	Transmit		30 MHz	60 MHz	80 MHz	30 MHz	60 MHz	80 MHz	30 MHz	60 MHz	100 MHz	
H1267	1CT:1CT	1CT:1CT	-1.0	-16	-12	-12	-40	-40	-35	-42	-37	-33	1500

Mechanical

H1267



Dimensions: $\frac{\text{Inches}}{\text{mm}}$

Unless otherwise specified all tolerances are $\pm .010$
 0.25

When ordering Tape & Reel packaging add the suffix "T" to the part number, such as "H1267T."

Weight 2.7 grams
Tape & Reel 300/reel
Tube 25/tube

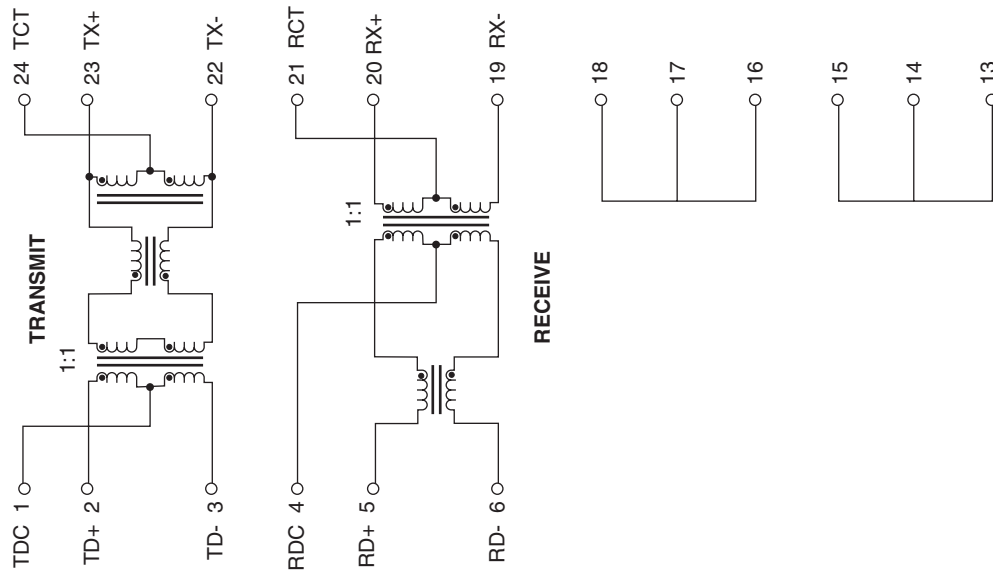
10/100BASE-T SINGLE PORT, SMT TRANSFORMER

For Fast Ethernet to Gigabit Ethernet
Interchangeable Designs



Schematic

H1267



Application Notes

The Fast Ethernet to Gigabit Ethernet interchangeable design is a design concept that allows design engineers to design a network applications board that can support both Fast Ethernet (10/100Base-T) and Gigabit Ethernet (1000Base-T) applications by simply replacing several components without having to re-design the whole board.

Two components that play a part in this design are the Ethernet silicon and the transformer. Both the silicon and the transformer for both 10/100 and gigabit must have footprint compatibility. This footprint compatibility will mean a single board layout for the interface between the Ethernet silicon and the transformer of either 10/100 or gigabit applications.

Presently, if a network design engineer wants to design a 10/100 card, he would have to choose a 10/100 transformer. If the engineer wants to design a gigabit card, he would have to choose a gigabit transformer. This leads to two different designs (board layout) for two different applications.

The objective of interchangeable design is to allow the engineer to utilize the same design (and board layout) for 10/100 and for a gigabit design (and vice versa) with minimal change as possible to the design.

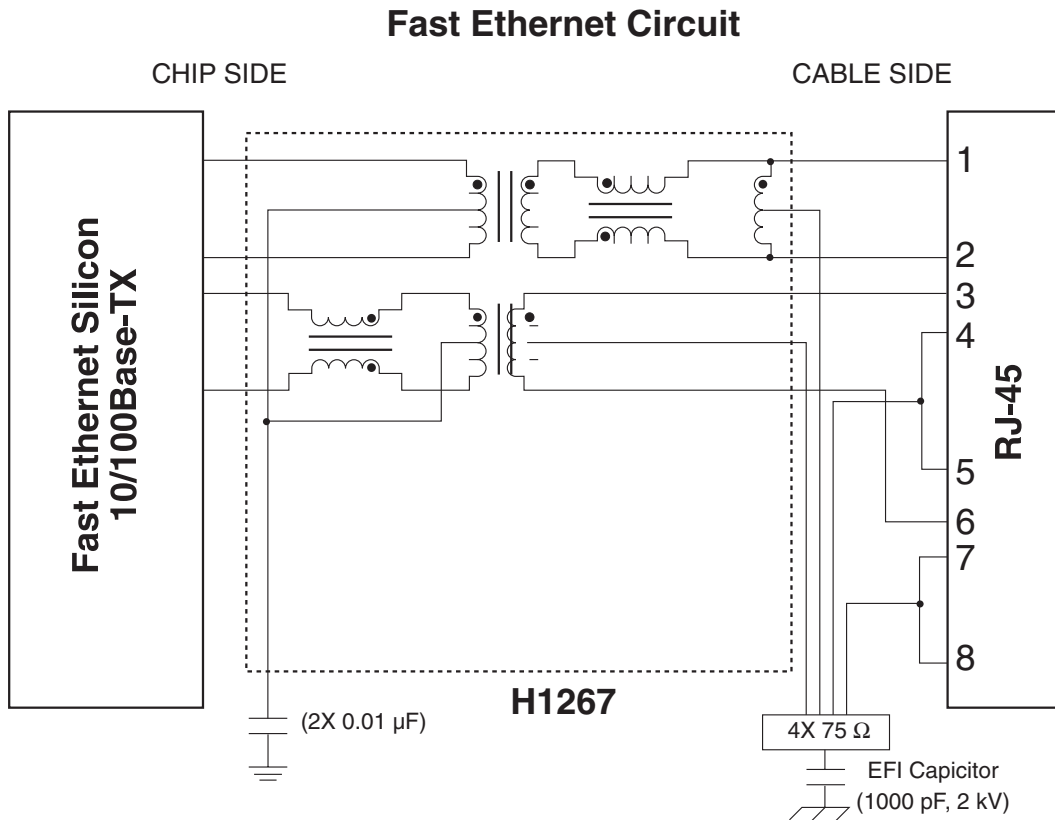
10/100BASE-T SINGLE PORT, SMT TRANSFORMER

For Fast Ethernet to Gigabit Ethernet
Interchangeable Designs



Application Circuit

H1267



The above circuit is a simple interface for a Fast Ethernet transformer connecting to both the Fast Ethernet silicon and the RJ-45 connector. In order to design a gigabit application, simply replace the Fast Ethernet Silicon, the Fast Ethernet transformer and the rest of the passive components with a gigabit ethernet silicon, a gigabit transformer and the rest of the passive components.

It is highly recommended that the cable side Center Taps of each transformer be terminated to 75 Ω resistors and that the four center taps be terminated to an EFI capacitor prior to ground termination.

10/100BASE-T SINGLE PORT, SMT TRANSFORMER

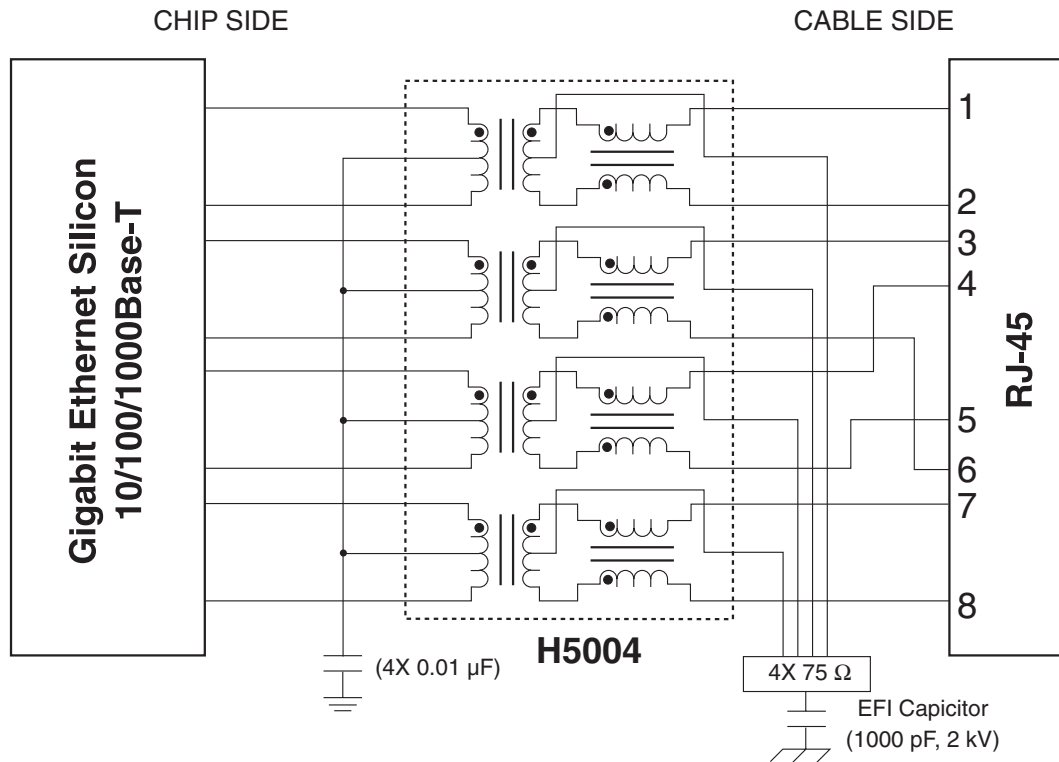
For Fast Ethernet to Gigabit Ethernet
Interchangeable Designs



Application Circuit

H5004

Gigabit Circuit



The above circuit is a simple interface for a gigabit transformer connecting to both the Gigabit Ethernet silicon and the RJ-45 connector.

It is highly recommended that the cable side Center Taps of each transformer be terminated to 75 Ω resistors and that the four center taps be terminated to an EFI capacitor prior to ground termination.

10/100BASE-T SINGLE PORT, SMT TRANSFORMER

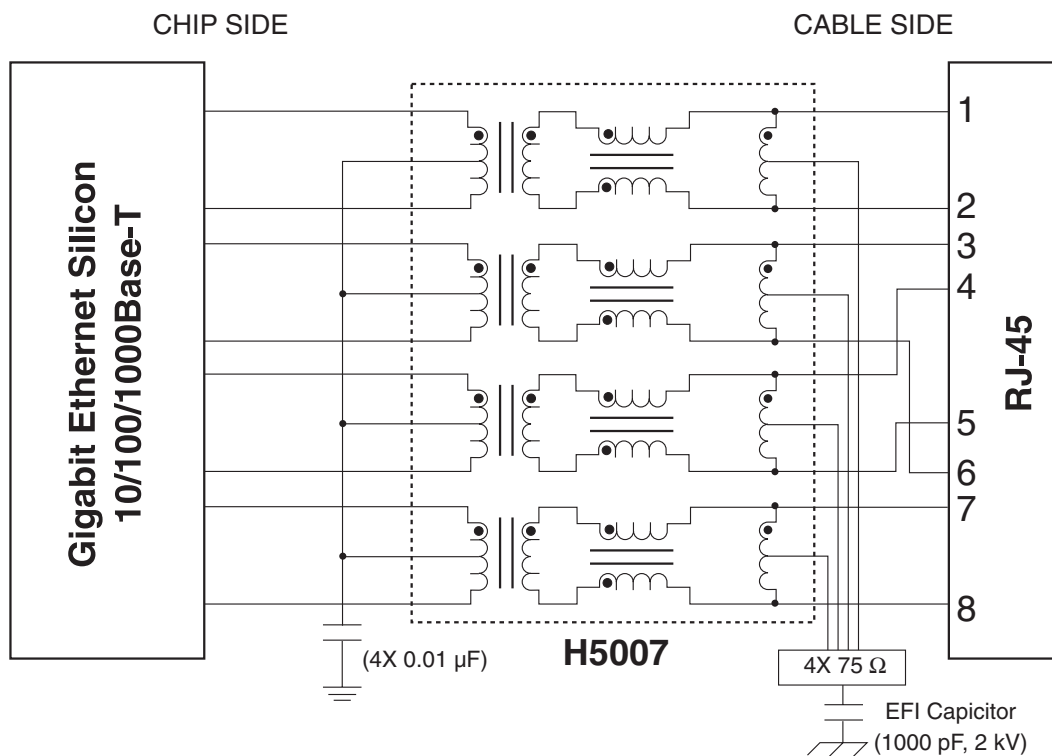
For Fast Ethernet to Gigabit Ethernet
Interchangeable Designs



Application Circuit

H5007

Gigabit Circuit



The above circuit is a simple interface for a gigabit transformer connectiong to both the Gigabit Ethernet silicon and the RJ-45 connector.

It is highly recommended that the cable side Center Taps of each transformer be terminated to 75 Ω resistors and that the four center taps be terminated to an EFI capacitor prior to ground termination.

For More Information:

Pulse Worldwide Headquarters

12220 World Trade Drive
San Diego, CA 92128
U.S.A.
www.pulseeng.com
TEL: 858 674 8100
FAX: 858 674 8262

Pulse Northern Europe

3 Huxley Road
Surrey Research Park
Guildford, Surrey GU2 5RE
United Kingdom
TEL: 44 1483 401700
FAX: 44 1483 401701

Pulse Southern Europe

Zone Industrielle
F-39270
Orgelet
France
TEL: 33 3 84 35 04 04
FAX: 33 3 84 25 46 41

Pulse China Headquarters

No. 1
Industrial District
Changan, Dongguan
China
TEL: 86 769 5538070
FAX: 86 769 5538870

Pulse North China

Room 1002
No. 819
Nanjing West Rd
Shanghai
China
TEL: 86 21 32181071
FAX: 86 21 32181396

Pulse South Asia

150 Kampong Ampat
#07-01/02
KA Centre
Singapore 368324
TEL: 65 6287 8998
FAX: 65 6280 0080

Pulse North Asia

3F-4, No. 81, Sec. 1
Hsin Tai Wu Road
Hsi-Chih
Taipei Hsien
Taiwan
TEL: 886 2 26980228
FAX: 886 2 26980948

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- Оперативные сроки поставки под заказ (от 5 рабочих дней);
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- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

Телефон: 8 (812) 309 58 32 (многоканальный)

Факс: 8 (812) 320-02-42

Электронная почта: org@eplast1.ru

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.