




# 10/100BASE-T SINGLE PORT SURFACE MOUNT MAGNETICS

## With Various Turns Ratios



-  RoHS peak reflow temperature rating: 245°C
-  Meets IEEE 802.3 specification
-  Compact footprint for use in the most space-restrictive applications

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

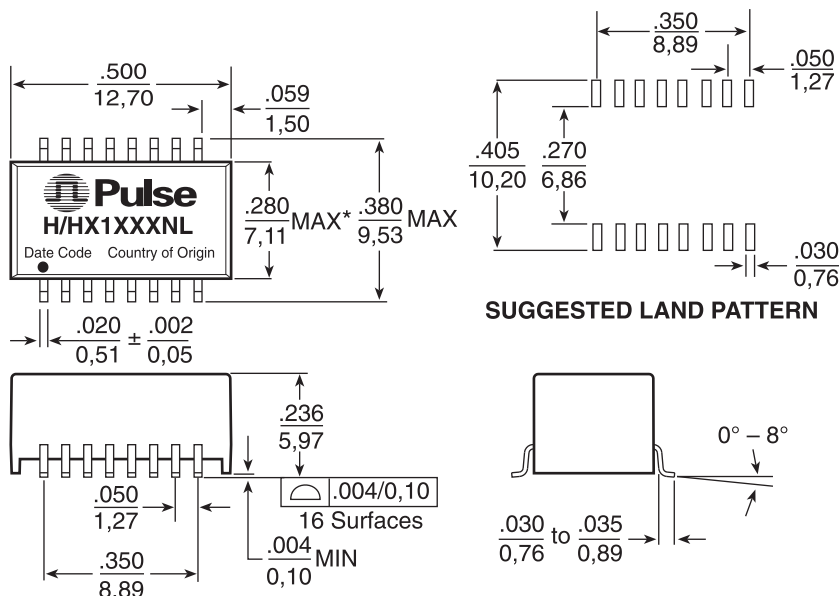
RoHS Compliant Part Number	Turns Ratio		Insertion Loss 100 kHz-100 MHz (dB MAX)	Return Loss (dB TYP)			Differential to Common Mode Rejection (dB TYP)			Crosstalk (dB TYP)			Hipot (Vrms MIN)
	TX	RX		30 MHz	60 MHz	80 MHz	30 MHz	50 MHz	100 MHz	30 MHz	60 MHz	100 MHz	
H1100NL <sup>3a</sup>	2:1	1:1	-1.1	-20	-14	-11.5	-42	-37	-33	-45	-40	-35	1500
H1101NL <sup>3a</sup>	1.25:1	1:1	-1.1	-20	-14	-11.5	-42	-37	-33	-45	-40	-35	1500
H1102NL <sup>3a</sup>	1:1	1:1	-1.1	-20	-14	-11.5	-42	-37	-33	-45	-40	-35	1500
H1121NL <sup>3c</sup>	1:1.414	1:1	-1.1	-18	-12	-11.5	-42	-37	-30	-45	-40	-35	1500
H1183NL <sup>3a</sup>	1:1	1:1	-1.0	-18	-14	-12	-40	-40	-40	-35	-35	-35	1500
H1199NL <sup>3a</sup>	1:1	1:1	-0.9	-18	-12	-11	-40	-35	-30	-45	-45	-37	1500
HX1188NL <sup>1, 3a</sup>	1:1	1:1	-1.0	-20	-14	-12	-42	-37	-32	-45	-40	-35	1500
HX1198 NL <sup>1, 3a</sup>	1:1	1:1	-1.0	-20	-14	-12	-42	-37	-32	-45	-40	-35	1500
H1302NL <sup>3a</sup>	1:1	1:1	-1.1	-16	-10	-10	-42	-37	-32	-35	-30	-30	1500

1. **Operating** temperature -40°C to +85°C
2. **For Tape & Reel** packaging, add a "T" suffix at the end of the part number when ordering, e.g. H1102NLT.
3. **MSL** = Moisture Sensitivity Level a=1 b=2 c=3 d=4

## Mechanical

### H11XXNL, H1121NL, \*H1183NL, H1199NL, HX1188NL, HX1198NL, H1302NL

\* For part number H1183NL, all dimensions are the same, except the height is .220" (5,59 mm).

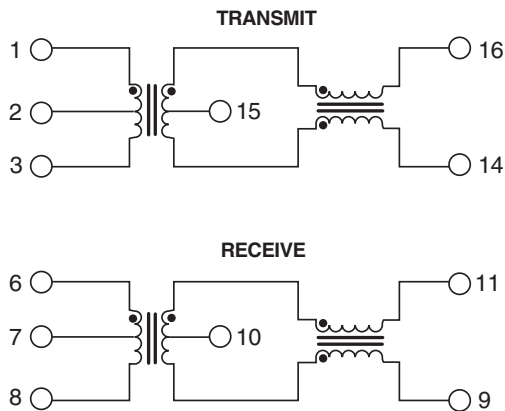


# 10/100BASE-T SINGLE PORT SURFACE MOUNT MAGNETICS With Various Turns Ratios

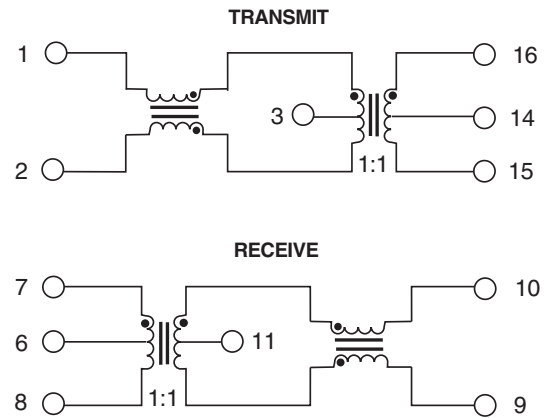


## Schematics

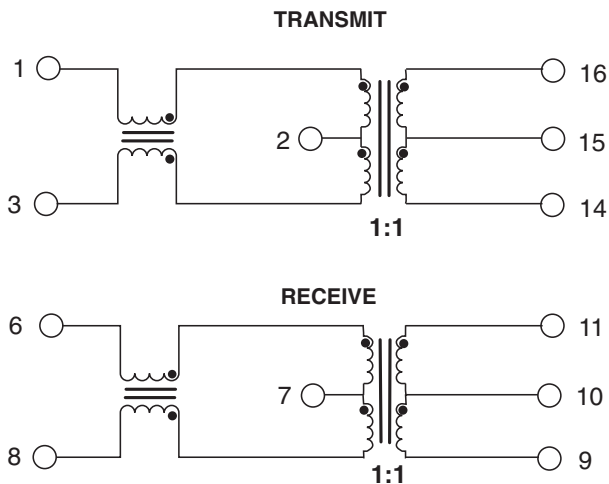
**H110XNL, H1121NL, HX1188NL**



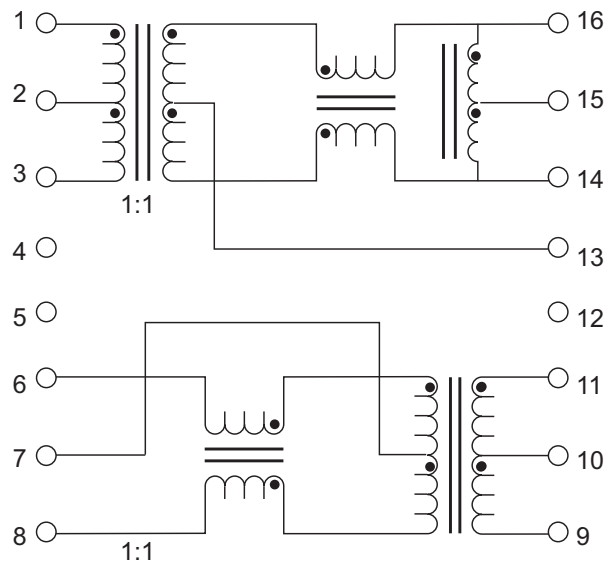
**H1199NL**



**HX1198NL, H1183NL**



**H1302NL**

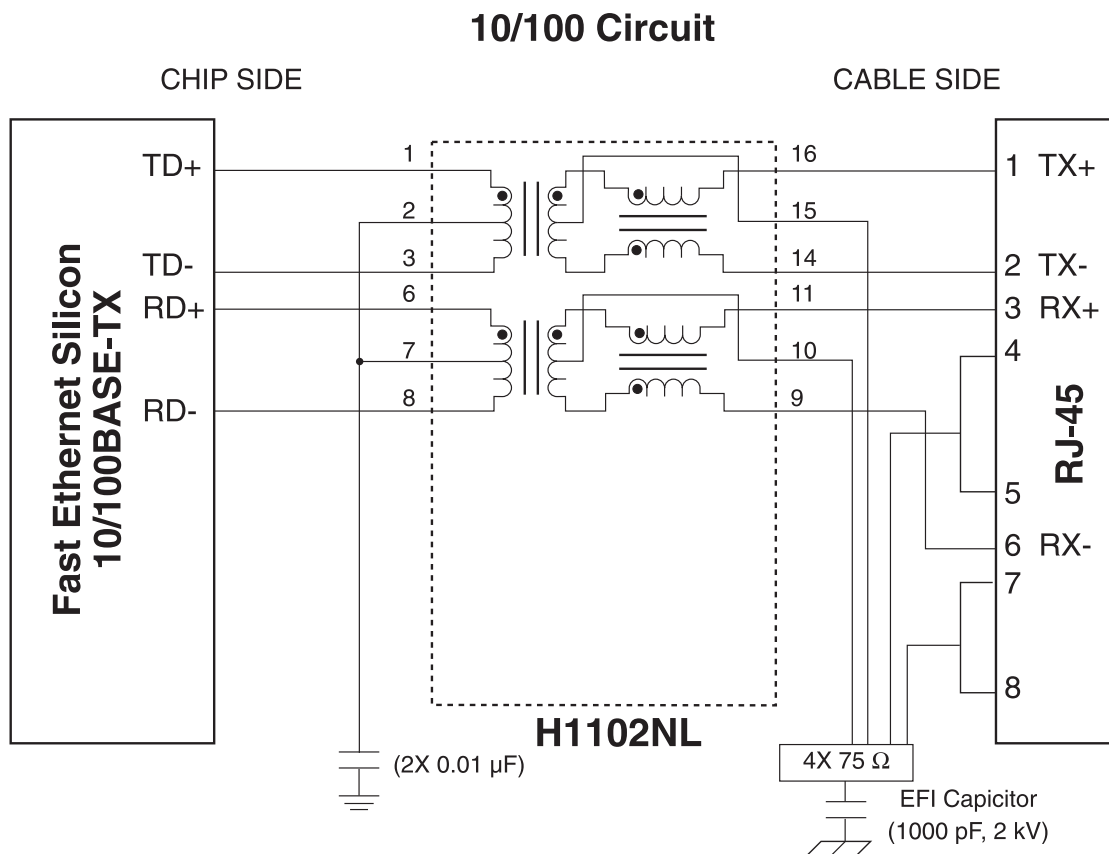


# 10/100BASE-T SINGLE PORT SURFACE MOUNT MAGNETICS With Various Turns Ratios



## Typical Application Circuit

H1102NL



### For More Information:

Pulse Worldwide Headquarters	Pulse Europe	Pulse China Headquarters	Pulse North China	Pulse South Asia	Pulse North Asia
12220 World Trade Dr. San Diego, CA 92128 U.S.A.	Einsteinstrasse 1 D-71083 Herrenberg Germany	B402, Shenzhen Academy of Aerospace Technology Bldg. 10th Kejinan Rd. Hwigh-Tech Zone Nanshan District Shenzen, PR China 518057	Room 2704/2705 Super Ocean Finance Ctr. 2067 Yan An Rd. West Shanghai 200336 China	135 Joo Seng Rd. #03-02 PM Industrial Bldg. Singapore 368363	No. 26, Kao Ching Rd. Yang Mei Chen Taoyuan Hsien Taiwan R. O. C.
<a href="http://www.pulseeng.com">www.pulseeng.com</a> Tel: 858 674 8100 Fax: 858 674 8262	Tel: 49 7032 7806 0 Fax: 49 7032 7806 135	TEL: 86 755 33966678 FAX: 86 755 33966700	Tel: 86 21 62787060 Fax: 86 2162786973	TEL: 65 6287 8998 FAX: 65 6280 0080	Tel: 886 3 4643715 Fax: 886 3 4641911

Performance warranty of products offered on this data sheet is limited to the parameters specified. Data is subject to change without notice. Other brand and product names mentioned herein may be trademarks or registered trademarks of their respective owners.

© Copyright, 2009. Pulse Engineering, Inc. All rights reserved.