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



Weight . . . . . . . 0.9 grams

**Tube** . . . . . . . . . 40/tube

Tape & Reel . . . . 600/reel

## **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

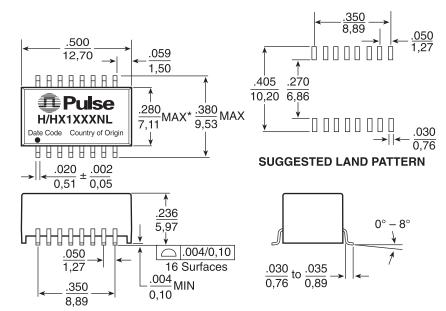
Electrical Specifications @ $25^{\circ}\mathrm{C}$ — Operating Temperature $0^{\circ}\mathrm{C}$ to $70^{\circ}\mathrm{C}$													
RoHS Compliant Part Number	Turns Ratio		Insertion Loss 100 kHz-100 MHz (dB MAX)	Return Loss (dB TYP)			Differential to Common Mode Rejection (dB TYP)			Crosstalk (dB TYP)			<b>Hipot</b> (Vrms MIN)
	TX	RX	(ub IVIAA)	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).



Dimensions: Inches mm

Unless otherwise specified, all tolerances are  $\pm \frac{.010}{.0.25}$ 

USA 858 674 8100 • Germany 49 7032 7806 0 • Singapore 65 6287 8998 • Shanghai 86 21 62787060 • China 86 755 33966678 • Taiwan 886 3 4643715

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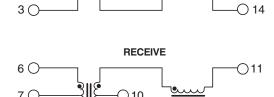


### With Various Turns Ratios

#### **Schematics**

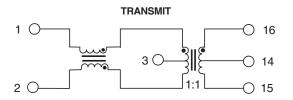
#### H110XNL, H1121NL, HX1188NL

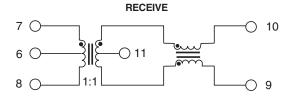
# TRANSMIT 1 0 16



**⊕** 9

#### H1199NL





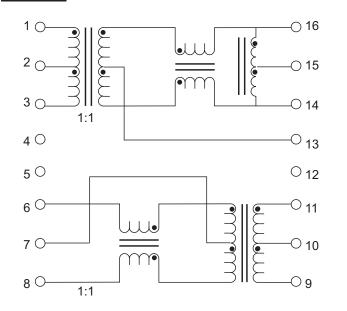
#### HX1198NL, H1183NL

8 🔾

# 1 0 16 2 0 15 3 0 14 RECEIVE 11 7 0 10 8 0 9

**TRANSMIT** 

#### H1302NL



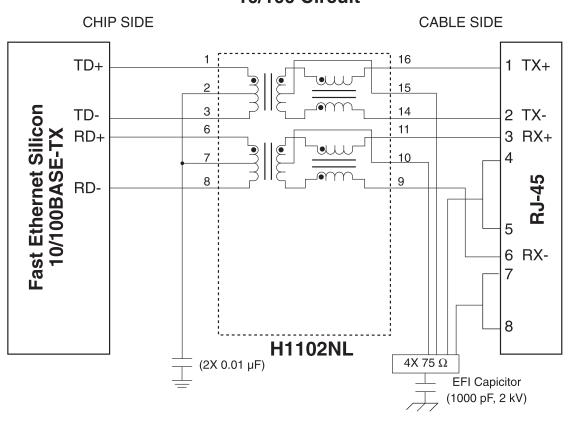
## 10/100BASE-T SINGLE PORT **SURFACE MOUNT MAGNETICS With Various Turns Ratios**



# **Typical Application Circuit**

H1102NL

#### 10/100 Circuit



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