## 10/100Base-T Single Port Surface Mount Magnetics

With Various Turns Ratios







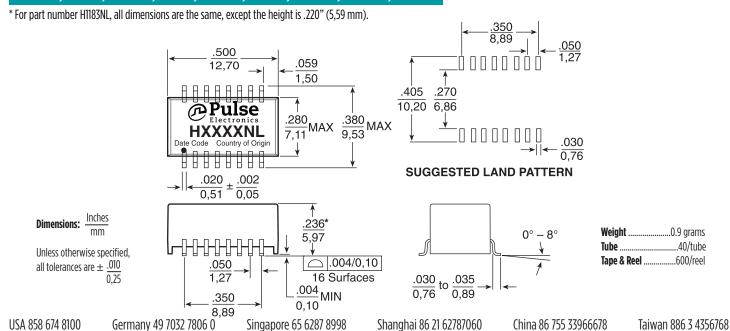
- RoHS peak reflow temperature rating: 245°C
- Meets IEEE 802.3 specification
- Compact footprint for use in the most spacerestrictive applications

Electrical Specifications @ 25°C - Operating Temperature 0°C to 70°C													
	Turns Ratio		Insertion Loss	<b>Return Loss</b> (dB TYP)			Differential to Common Mode Rejection (dB TYP)			<b>Crosstalk</b> (dB TYP)			Hipot
Part Number <sup>2</sup>	TX	RX	100 kHz-100 MHz	30 MHz	60 MHz	80 MHz	30 MHz	50 MHz	100 MHz	30 MHz	60 MHz	100 MHz	(Vrms MIN)
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, 4</sup>	1:1	1:1	-1.1	-20	-14	-11.5	-42	-37	-33	-45	-40	-35	1500
H1121NL <sup>3a</sup>	1:1.414	1:1	-1.1	-18	-12	-11.5	-42	-37	-30	-45	-40	-35	1500
H1183NL <sup>3a, 4</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, 4</sup>	1:1	1:1	-1.0	-20	-14	-12	-42	-37	-32	-45	-40	-35	1500
HX1198NL <sup>1, 3a, 4</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
- **4. Suitable** for Aut-MDIX applications

#### **Mechanical**

### H1100NL, H1101NL, HX1102NL, H1121NL, \*H1183NL, H1199NL, HX1188NL, HX1198NL, H1302NL



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→ 10

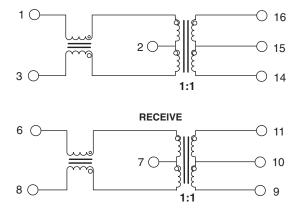
## **Schematics**

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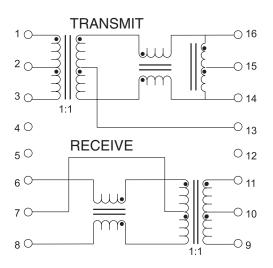
\*See main table for Transmit turns ratio

### HX1198NL, H1183NL

**TRANSMIT** 



#### H1302NL



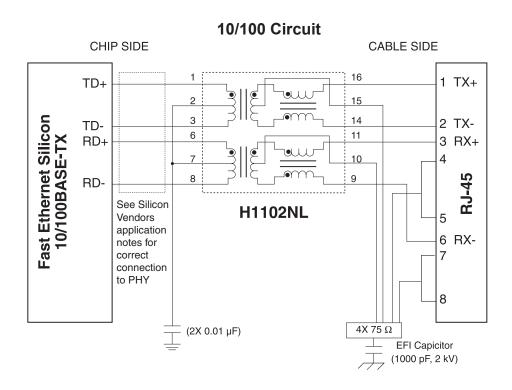
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## **Typical Application Circuit**

H1102NL



### For More Information

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