

# 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

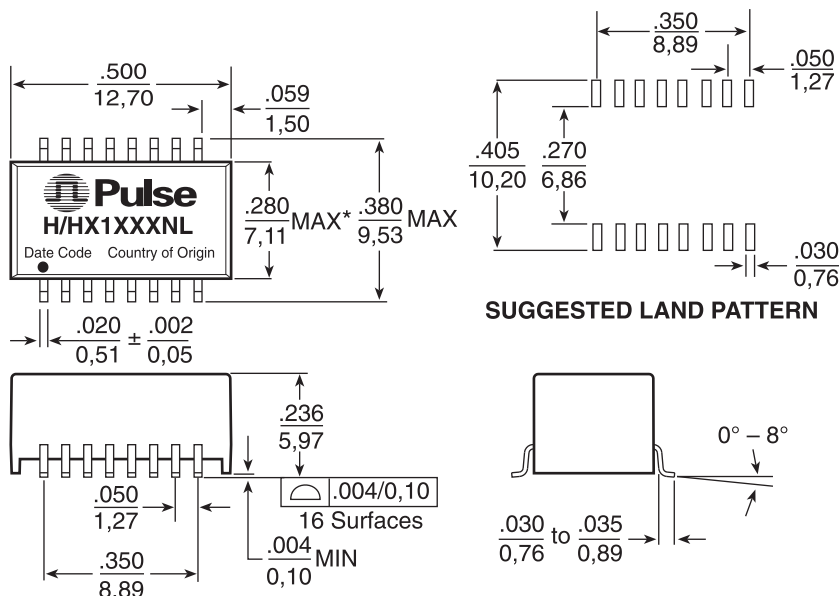
RoHS Compliant Part Number	Turns Ratio		Insertion Loss 100 kHz-100 MHz (dB MAX)	Return Loss (dB TYP)			Differential to Common Mode Rejection (dB TYP)			Crosstalk (dB TYP)			Hipot (Vrms MIN)
	TX	RX		30 MHz	60 MHz	80 MHz	30 MHz	50 MHz	100 MHz	30 MHz	60 MHz	100 MHz	
H1100NL <sup>3a</sup>	2:1	1:1	-1.1	-20	-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).



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

Unless otherwise specified,  
all tolerances are  $\pm \frac{.010}{0,25}$

### SUGGESTED LAND PATTERN

Weight . . . . . 0.9 grams  
 Tube . . . . . 40/tube  
 Tape & Reel . . . . . 600/reel

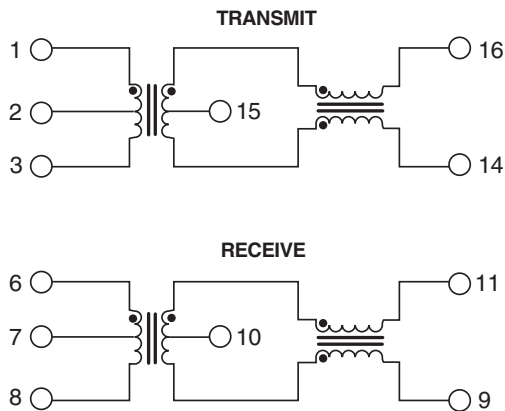
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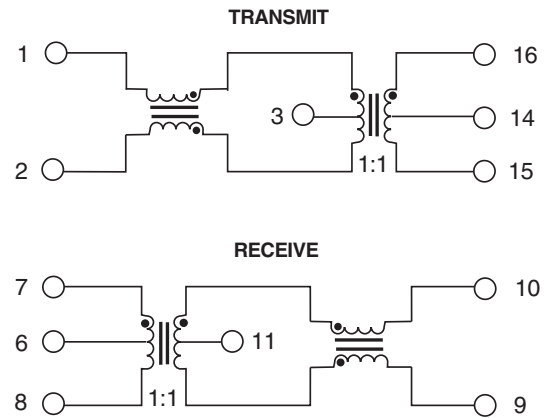


## Schematics

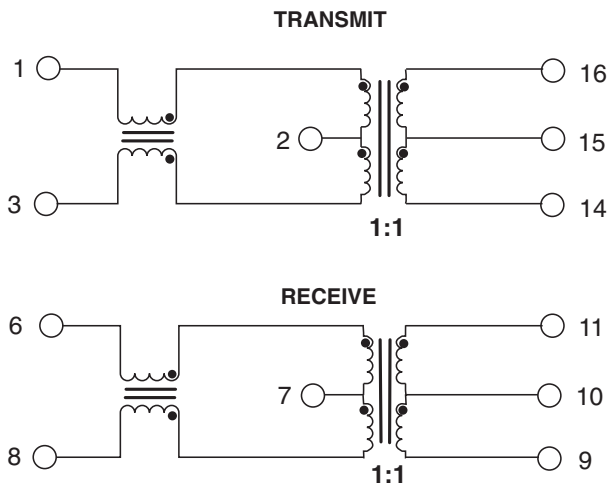
H110XNL, H1121NL, HX1188NL



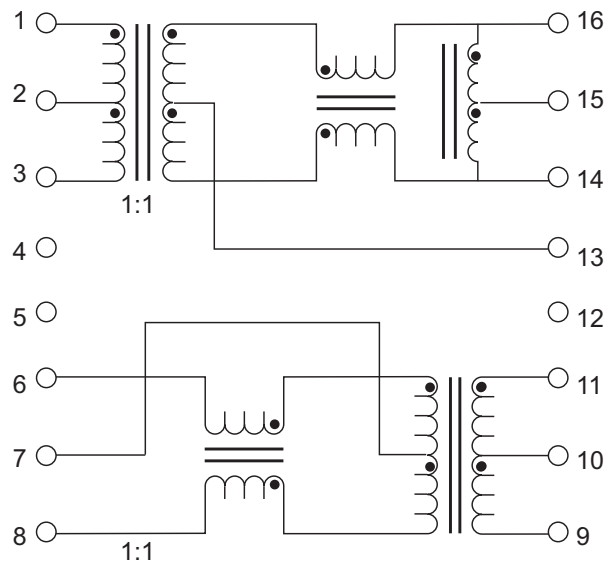
H1199NL



HX1198NL, H1183NL



H1302NL

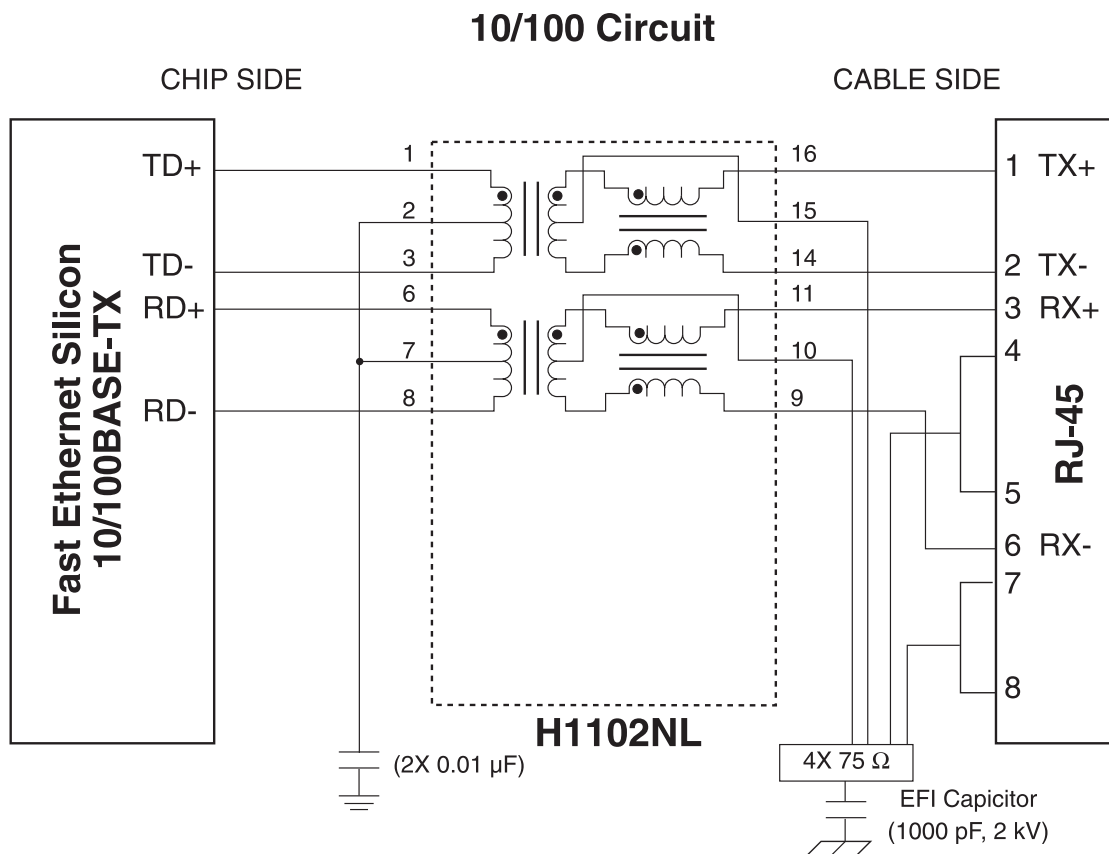


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## Typical Application Circuit

**H1102NL**



### For More Information:

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