

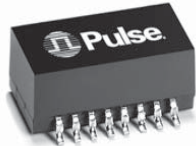






**THE DATASHEET OF  
HX1198NLT**



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

With Various Turns Ratios



-  RoHS-5 peak reflow temperature rating 235°C
-  RoHS-6 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

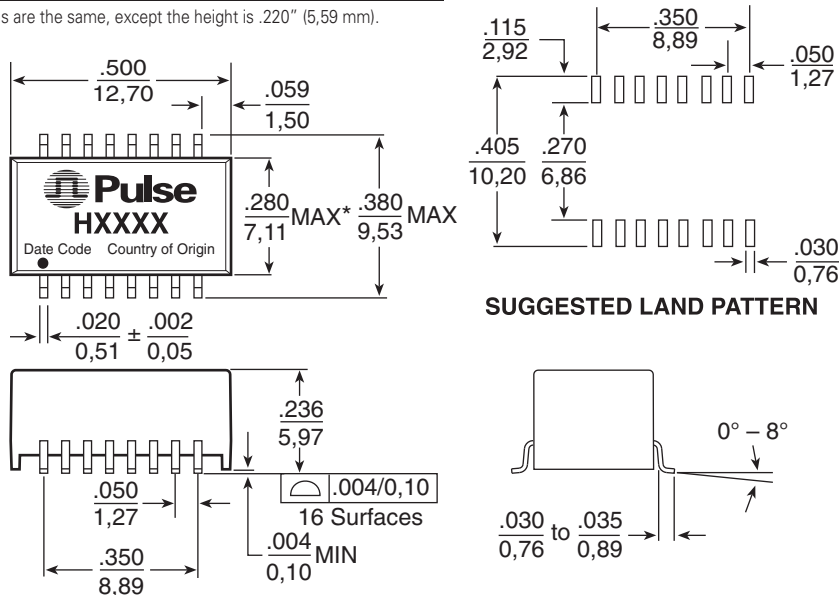
RoHS-6 <sup>5</sup> Compliant Part Number	RoHS-5 <sup>4</sup> Compliant Part Number	Turns Ratio		Insertion Loss 100kHz–100MHz (dB MAX)	Return Loss (dB TYP)			Differential to Common Mode Rejection (dB TYP)			Crosstalk (dB TYP)			Hipot (V <sub>RMS</sub> MIN)
		TX	RX		30MHz	60MHz	80MHz	30MHz	50MHz	100MHz	30MHz	60MHz	100MHz	
H1100NL <sup>3a</sup>	H1100	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>	H1102	1:1	1:1	-1.1	-20	-14	-11.5	-42	-37	-33	-45	-40	-35	1500
H1121NL <sup>3c</sup>	H1121	1:1.414	1:1	-1.1	-18	-12	-11.5	-42	-37	-30	-45	-40	-35	1500
H1183NL <sup>3a</sup>	H1183	1:1	1:1	-1.0	-18	-14	-12	-40	-40	-40	-35	-35	-35	1500
H1199NL <sup>3a</sup>	H1199	1:1	1:1	-0.9	-18	-12	-11	-40	-35	-30	-45	-45	-37	1500
HX1188NL <sup>1, 3a</sup>	HX1188 <sup>1</sup>	1:1	1:1	-1.0	-20	-14	-12	-42	-37	-32	-45	-40	-35	1500
HX1198 NL <sup>1, 3a</sup>	HX1198 <sup>1</sup>	1:1	1:1	-1.0	-20	-14	-12	-42	-37	-32	-45	-40	-35	1500
H1302NL <sup>3a</sup>	H1302	1:1	1:1	-1.1	-16	-10	-10	-42	-37	-32	-35	-30	-30	1500

- Operating** temperature -40°C to +85°C
- For Tape & Reel** packaging, add a "T" suffix at the end of the part number when ordering, e.g. H1102T.
- MSL** = Moisture Sensitivity Level a=1 b=2 c=3 d=4
- RoHS-5:** Product does not contain 5 out of the 6 banned substances specified in the RoHS directive (product contains lead in applications considered solder).
- RoHS-6:** Product does not contain 5 out of the 6 banned substances specified in the RoHS directive. Some internal connections may contain lead in high-temperature solder (solder alloys containing more than 85% lead).

## Mechanical

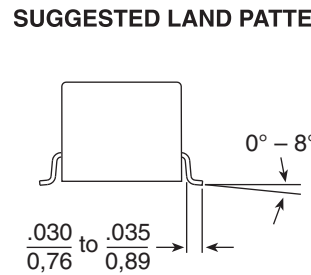
### H110X, H1121, H1183,\* H1199, HX1188, HX1198, H1302

\* For part number H1183, 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  $\pm \frac{.010}{0.25}$



Weight . . . . . 0.9 grams  
 Tube . . . . . 45/tube  
 Tape & Reel . . . . . 600/reel

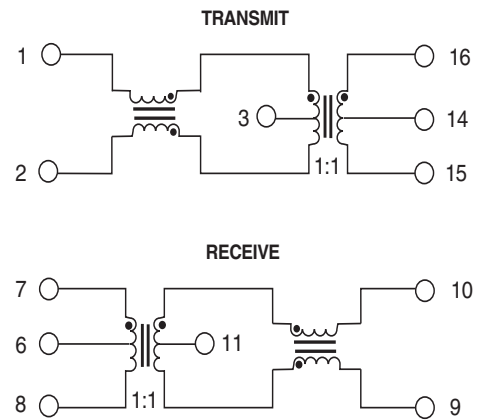
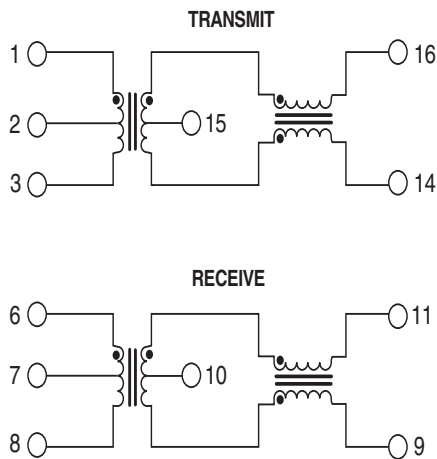
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## Schematics

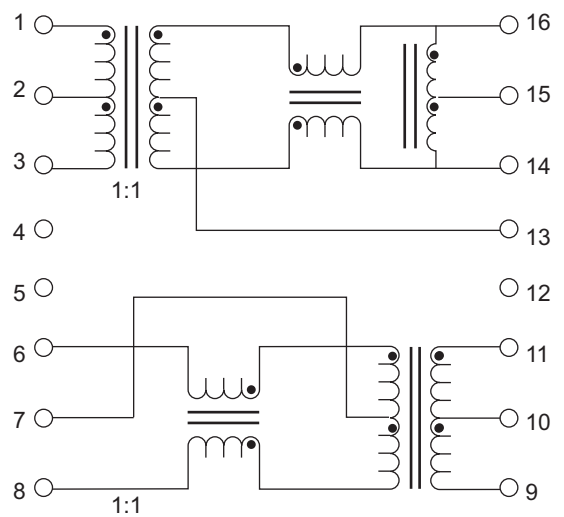
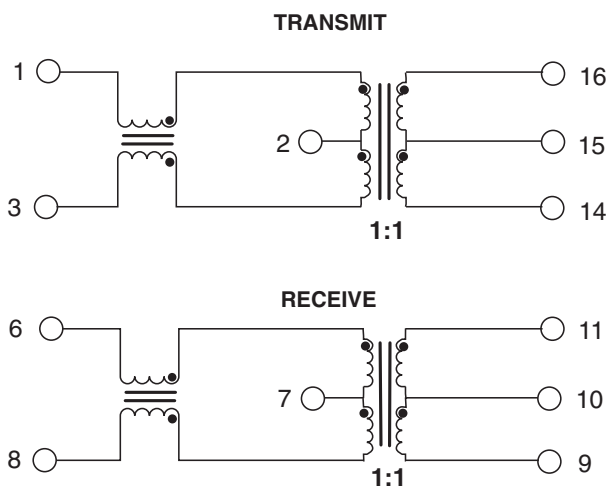
H110X, H1121, HX1188

H1199



HX1198, H1183

H1302

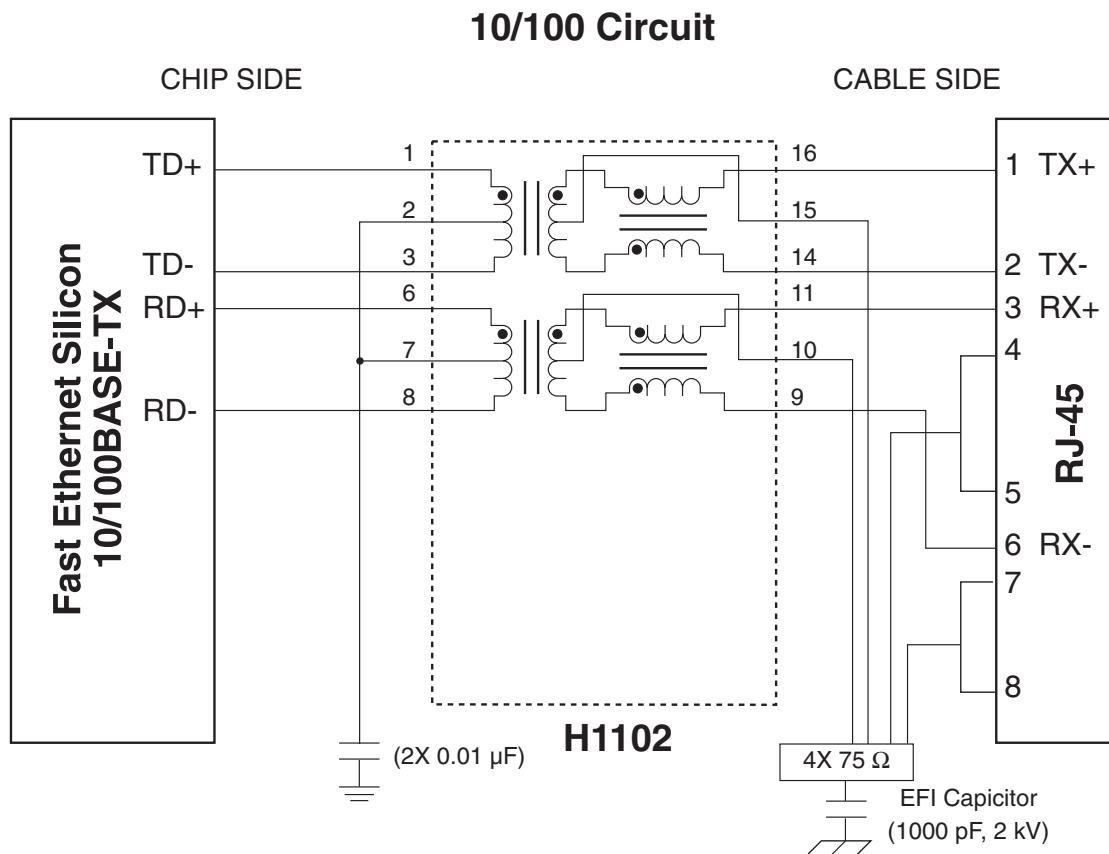


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## Typical Application Circuit

H1102



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