

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



- For RoHS part add suffix **NL**<sup>4</sup>
- Peak solder temperature rating per Table 5-2 in IPC/JEDEC J-STD-020C
- 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

Part <sup>1</sup> Number	RoHS <sup>4</sup>	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		30MHz	60MHz	80MHz	30MHz	50MHz	100MHz	30MHz	60MHz	100MHz	
H1100	2, 3c	2:1	1:1	-1.1	-20	-14	-11.5	-42	-37	-33	-45	-40	-35	1500
H1101	NL <sup>3a</sup>	1.25:1	1:1	-1.1	-20	-14	-11.5	-42	-37	-33	-45	-40	-35	1500
H1102	NL <sup>3c</sup>	1:1	1:1	-1.1	-20	-14	-11.5	-42	-37	-33	-45	-40	-35	1500
H1121	NL <sup>3c</sup>	1:1.414	1:1	-1.1	-18	-12	-11.5	-42	-37	-30	-45	-40	-35	1500
H1183NL	NL <sup>3a</sup>	1:1	1:1	-1.0	-18	-14	-12	-40	-40	-40	-35	-35	-35	1500
H1199	2, 3a	1:1	1:1	-0.9	-18	-12	-11	-40	-35	-30	-45	-45	-37	1500
HX1188*	NL <sup>3c</sup>	1:1	1:1	-1.0	-20	-14	-12	-42	-37	-32	-45	-40	-35	1500
HX1198*	NL <sup>3c</sup>	1:1	1:1	-1.0	-20	-14	-12	-42	-37	-32	-45	-40	-35	1500
H1302	NL <sup>3a</sup>	1:1	1:1	-1.1	-16	-10	-10	-42	-37	-32	-35	-30	-30	1500

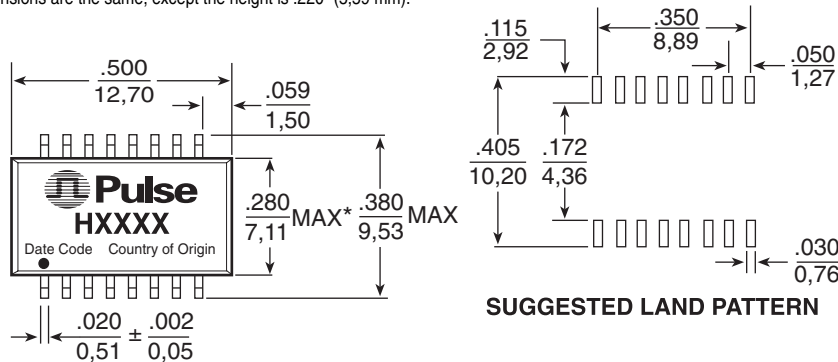
\*Operating temperature -40°C to +85°C

- For Tape & Reel packaging, add a "T" suffix at the end of the part number when ordering, e.g. H1102T
- Contact Pulse for RoHS compliant part availability
- MSL=Moisture Sensitivity Level a=1 b=2 c=3 d=4
- Add suffix **NL** for RoHS compliant parts, e.g. H1102 changes to H1102NL or H1102NLT (for Tape & Reel)

## 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:** Inches  
mm  
Unless otherwise specified,  
all tolerances are  $\pm \frac{.010}{0.25}$

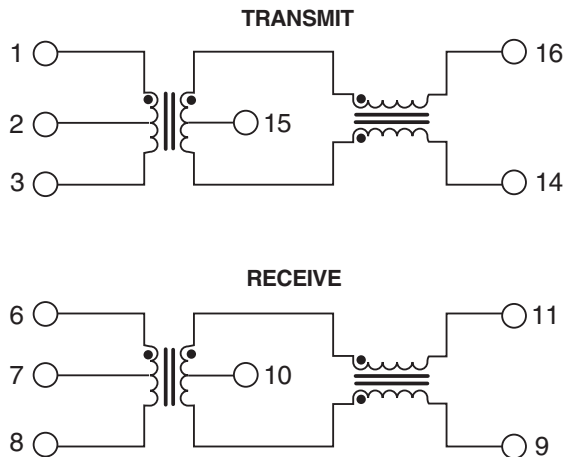
**Weight** . . . . . 2.8 grams  
**Tube** . . . . . 45/tube  
**Tape & Reel** . . . . . 600/reel

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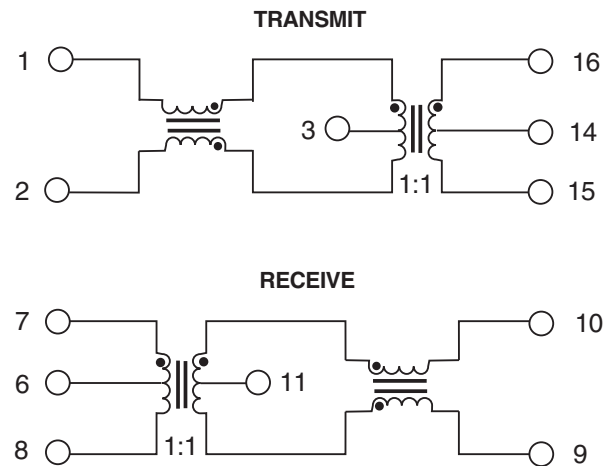


## Schematics

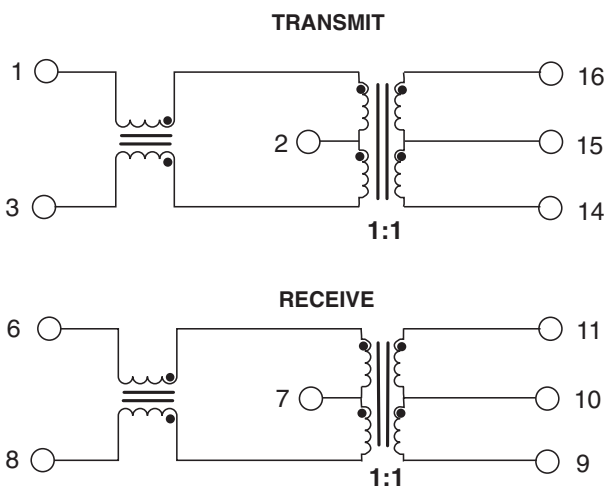
H110X, H1121, HX1188



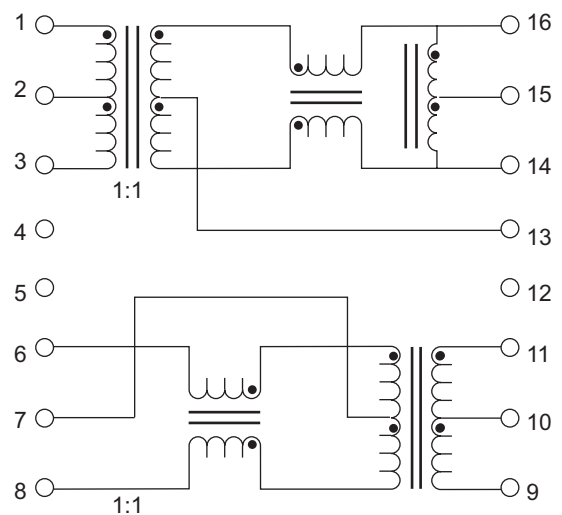
H1199



HX1198, H1183



H1302

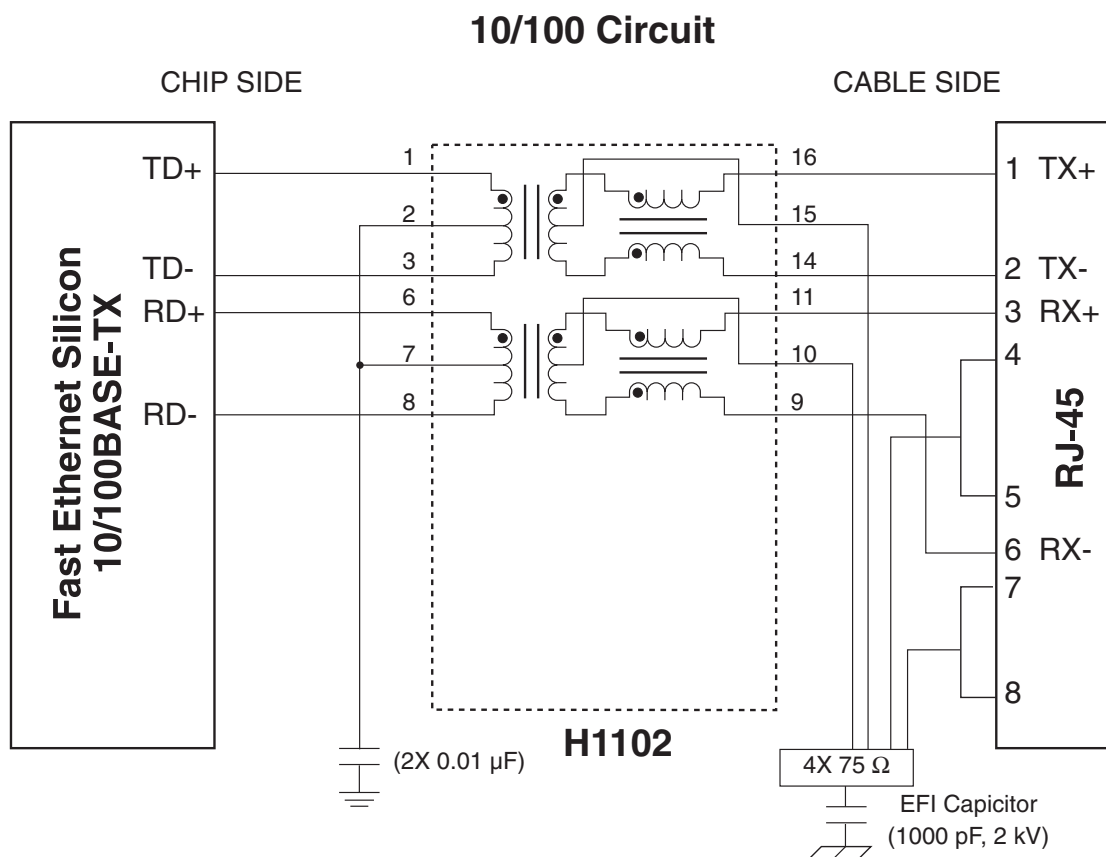


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## Typical Application Circuit

H1102



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