

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

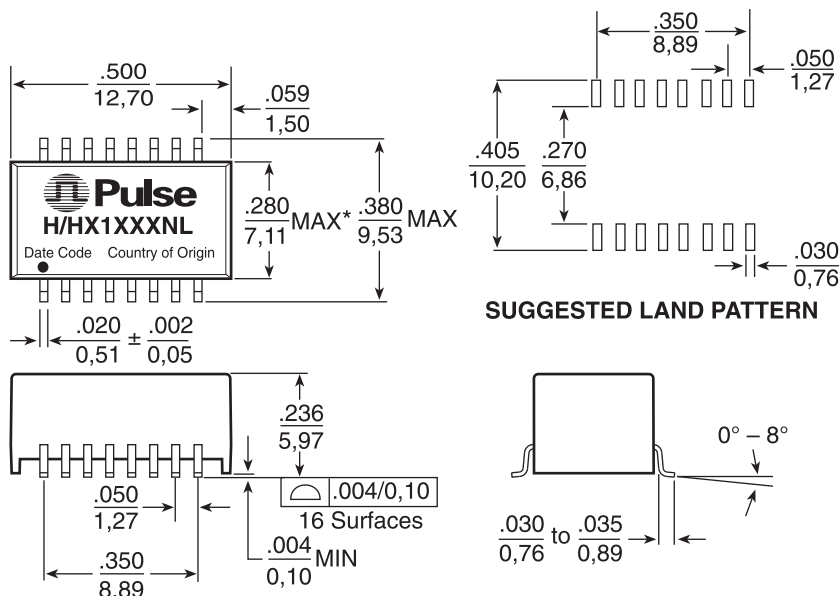
| RoHS Compliant Part Number | Turns Ratio | | Insertion Loss 100 kHz-100 MHz (dB MAX) | Return Loss (dB TYP) | | | Differential to Common Mode Rejection (dB TYP) | | | Crosstalk (dB TYP) | | | Hipot (Vrms MIN) |
|----------------------------------|-------------|-----|---|-------------------------|--------|--------|--|--------|---------|-----------------------|--------|---------|---------------------|
| | TX | RX | | 30 MHz | 60 MHz | 80 MHz | 30 MHz | 50 MHz | 100 MHz | 30 MHz | 60 MHz | 100 MHz | |
| H1100NL ^{3a} | 2:1 | 1:1 | -1.1 | -20 | -14 | -11.5 | -42 | -37 | -33 | -45 | -40 | -35 | 1500 |
| H1101NL ^{3a} | 1.25:1 | 1:1 | -1.1 | -20 | -14 | -11.5 | -42 | -37 | -33 | -45 | -40 | -35 | 1500 |
| H1102NL ^{3a} | 1:1 | 1:1 | -1.1 | -20 | -14 | -11.5 | -42 | -37 | -33 | -45 | -40 | -35 | 1500 |
| H1121NL ^{3c} | 1:1.414 | 1:1 | -1.1 | -18 | -12 | -11.5 | -42 | -37 | -30 | -45 | -40 | -35 | 1500 |
| H1183NL ^{3a} | 1:1 | 1:1 | -1.0 | -18 | -14 | -12 | -40 | -40 | -40 | -35 | -35 | -35 | 1500 |
| H1199NL ^{3a} | 1:1 | 1:1 | -0.9 | -18 | -12 | -11 | -40 | -35 | -30 | -45 | -45 | -37 | 1500 |
| HX1188NL ^{1, 3a} | 1:1 | 1:1 | -1.0 | -20 | -14 | -12 | -42 | -37 | -32 | -45 | -40 | -35 | 1500 |
| HX1198 NL ^{1, 3a} | 1:1 | 1:1 | -1.0 | -20 | -14 | -12 | -42 | -37 | -32 | -45 | -40 | -35 | 1500 |
| H1302NL ^{3a} | 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. H1102NLT.
- 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 $\pm \frac{.010}{0,25}$

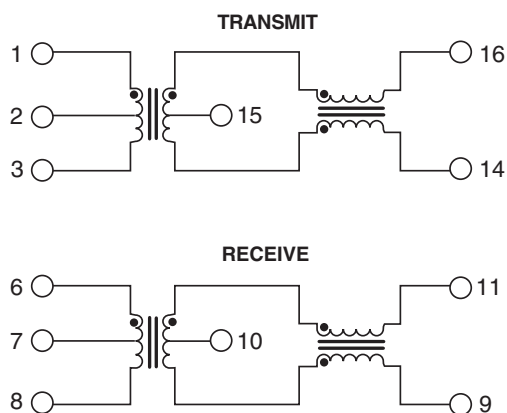
Weight 0.9 grams
 Tube 40/tube
 Tape & Reel 600/reel

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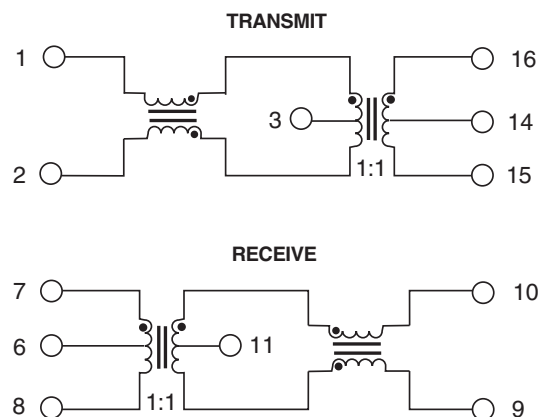


Schematics

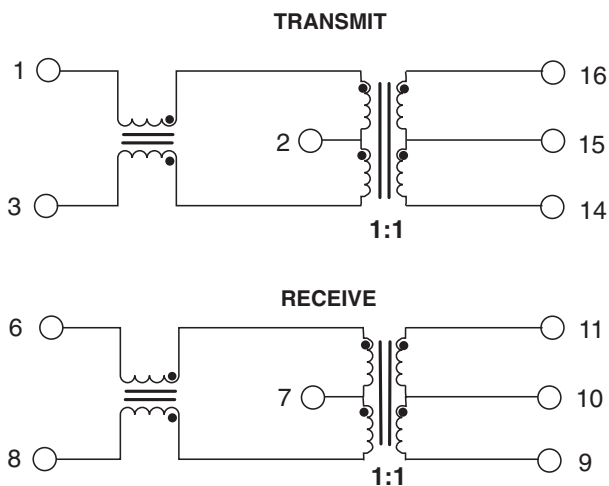
H110XNL, H1121NL, HX1188NL



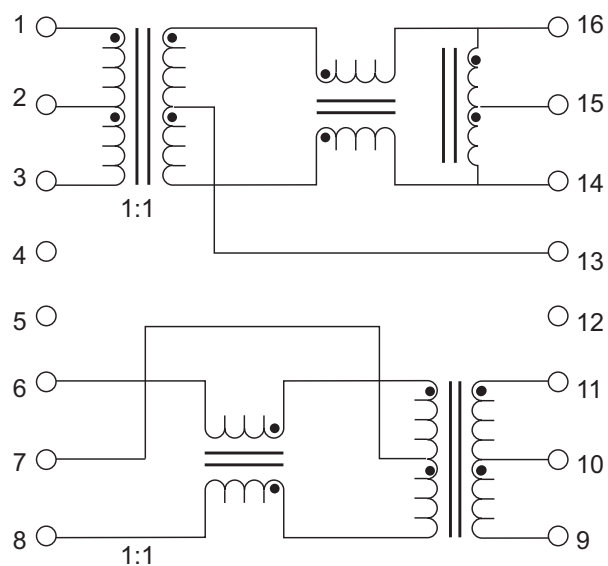
H1199NL



HX1198NL, H1183NL



H1302NL

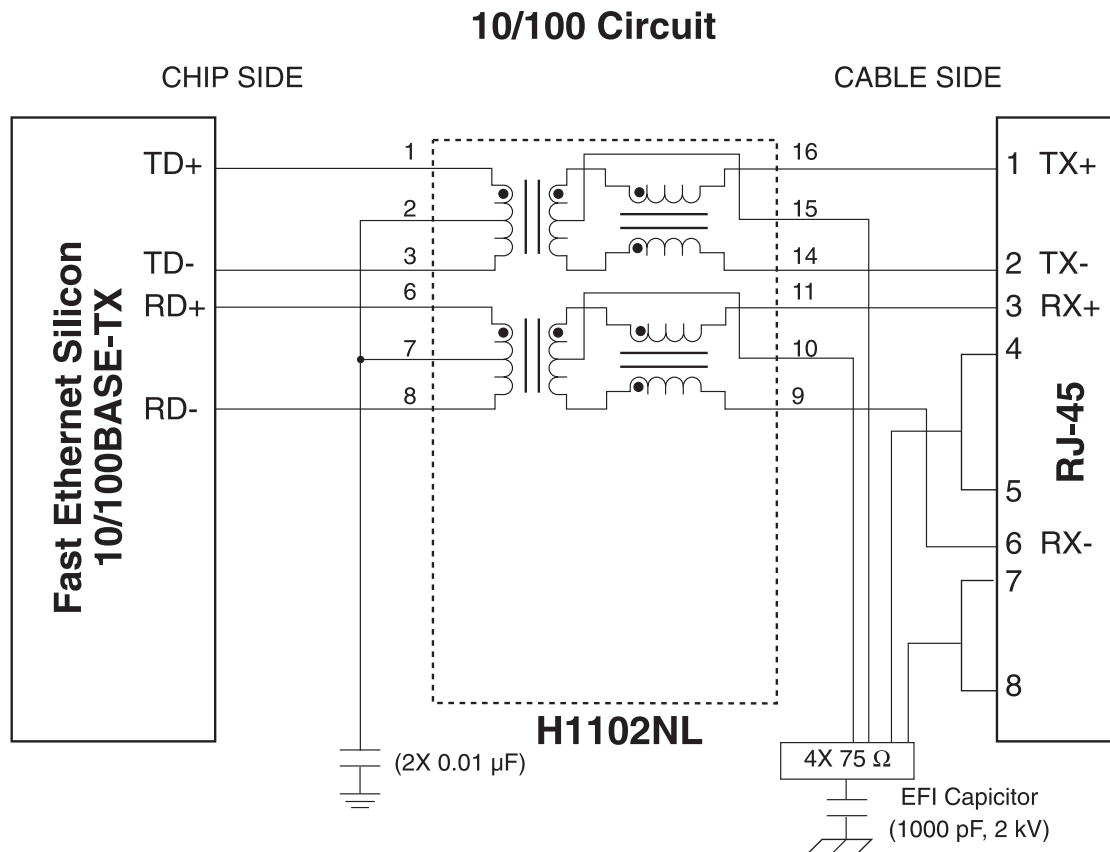


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Typical Application Circuit

H1102NL



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