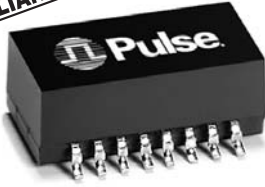






10/100BASE-T SINGLE PORT SURFACE MOUNT MAGNETICS

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

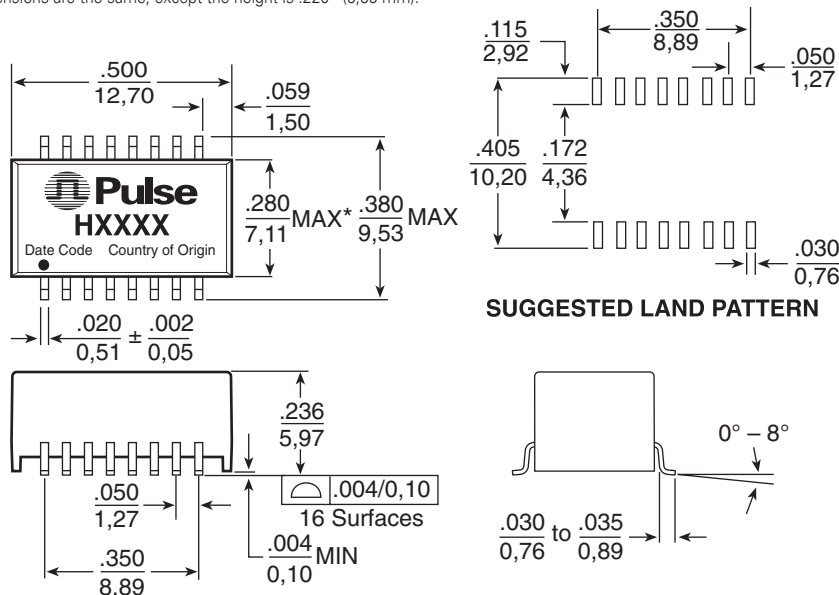
| RoHS-6 ⁵ Compliant Part Number | RoHS-5 ⁴ Compliant Part Number | Turns Ratio | | Insertion Loss 100kHz–100MHz (db MAX) | Return Loss (dB TYP) | | | Differential to Common Mode Rejection (dB TYP) | | | Crosstalk (dB TYP) | | | Hipot (V _{RMS} MIN) |
|--|--|-------------|-----|---|-------------------------|-------|-------|--|-------|--------|-----------------------|-------|--------|------------------------------------|
| | | TX | RX | | 30MHz | 60MHz | 80MHz | 30MHz | 50MHz | 100MHz | 30MHz | 60MHz | 100MHz | |
| H1100NL ^{3a} | H1100 | 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} | H1102 | 1:1 | 1:1 | -1.1 | -20 | -14 | -11.5 | -42 | -37 | -33 | -45 | -40 | -35 | 1500 |
| H1121NL ^{3c} | H1121 | 1:1.414 | 1:1 | -1.1 | -18 | -12 | -11.5 | -42 | -37 | -30 | -45 | -40 | -35 | 1500 |
| H1183NL ^{3a} | H1183 | 1:1 | 1:1 | -1.0 | -18 | -14 | -12 | -40 | -40 | -40 | -35 | -35 | -35 | 1500 |
| H1199NL ^{3a} | H1199 | 1:1 | 1:1 | -0.9 | -18 | -12 | -11 | -40 | -35 | -30 | -45 | -45 | -37 | 1500 |
| HX1188NL ^{1,3a} | HX1188 ¹ | 1:1 | 1:1 | -1.0 | -20 | -14 | -12 | -42 | -37 | -32 | -45 | -40 | -35 | 1500 |
| HX1198 NL ^{1,3a} | HX1198 ¹ | 1:1 | 1:1 | -1.0 | -20 | -14 | -12 | -42 | -37 | -32 | -45 | -40 | -35 | 1500 |
| H1302NL ^{3a} | H1302 | 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. H1102T.
3. **MSL** = Moisture Sensitivity Level a=1 b=2 c=3 d=4
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).
5. **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 2.8 grams
Tube 45/tube
Tape & Reel 600/reel

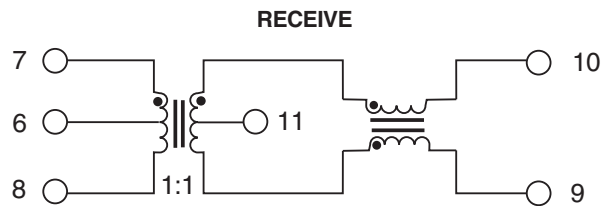
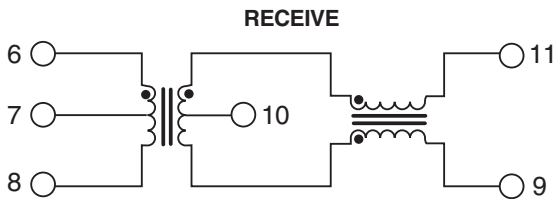
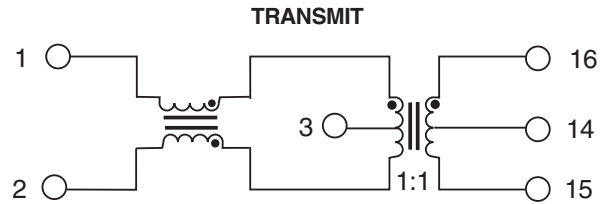
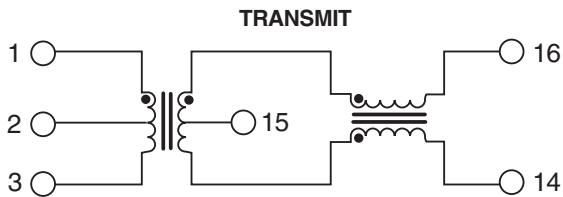
10/100BASE-T SINGLE PORT SURFACE MOUNT MAGNETICS With Various Turns Ratios



Schematics

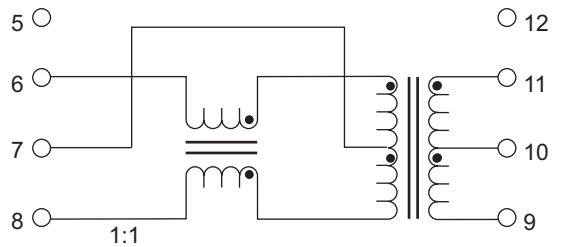
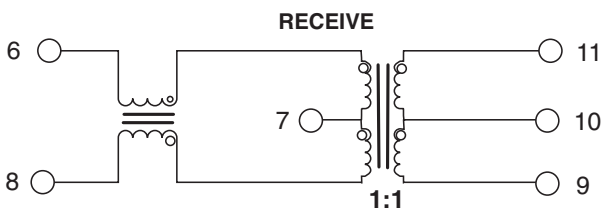
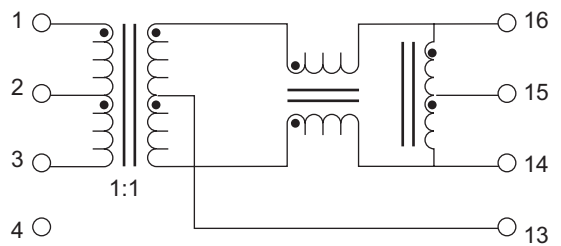
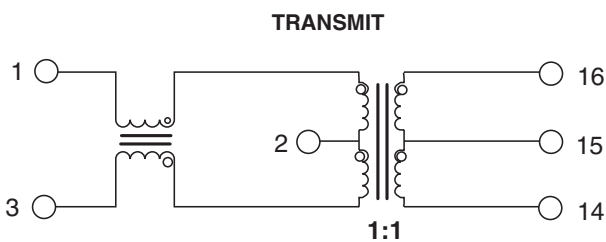
H110X, H1121, HX1188

H1199



HX1198, H1183

H1302

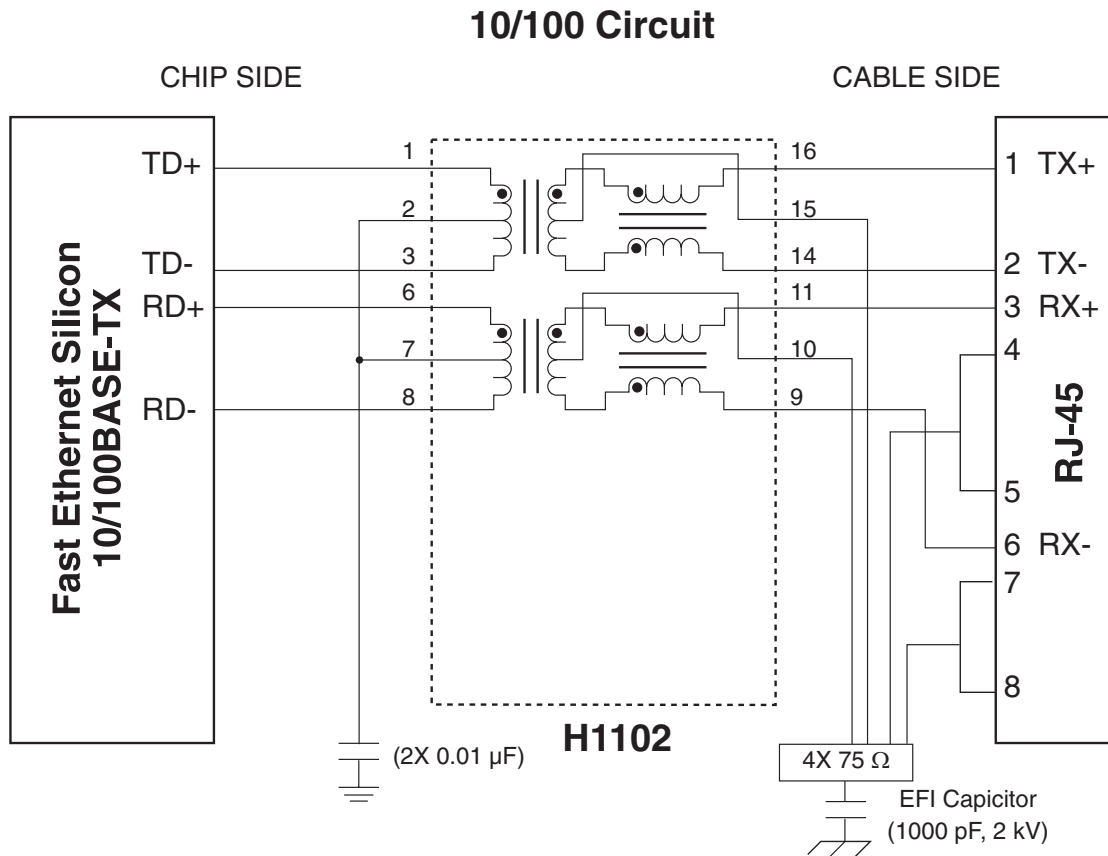


10/100BASE-T SINGLE PORT SURFACE MOUNT MAGNETICS With Various Turns Ratios



Typical Application Circuit

H1102



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